



# Ecotourism an approach to the sustainable conservation of biodiversity in the Benue national park of the North Region of Cameroon

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**Abstract**— This study was carried out at the buffer zones of Benue National Park in the North Region of Cameroon. The objective of the study was to assess the governance of ecotourism with an aim to promote sustainable management of biological resources. Primary data was collected with the help of semi-structured questionnaires that were administered to 125 household heads that were involved in the conservation of biodiversity in the study area. Questionnaires and interview guides were design to collect data on: (the level of participation and involvement of communities, stakeholder in the ecotourism business and modalities for participation in the conservation of biological resources). The results showed that two categories of ecotourism actors are involved: Direct actors: conservation service, MINFOF/MINTOUL, eco-guards and indirect actors: NGOs and service providers. The issue of equity remained a major concern for stakeholders, as responsibilities and decision-making among the different actors were not shared equitably. Regarding the level of community participation in ecotourism activities, 79% of stakeholders are not involved in ecotourism activities; however, 21% of stakeholders who were involved are community guards, cooks and tour guides. In ZIC (Area of Cinegetic Interest) N° 1 and 4, 31% of respondents said that only the Union of Village Wildlife Committees (COZIC) have being participating in the ecotourism business. . However, it should be noted that the governance mode most frequently observed in this protected area is dominated by the state with 83% respondents involved even though the laws and policies on ecotourism shows a participatory management of ecotourism in the protected areas.

**Keywords**— Ecotourism, Governance, Protected areas, Local communities, Benue National Park.

## I. INTRODUCTION

Ecotourism is a popular leisure activity in protected areas with tourist visiting protected areas for leisure. This activity has been greeted as a way of conserving our pristine ecosystem, promote rural development and build world peace through cultural diversity and awareness (Balgah and Nfor, 2017). Cameroon is a tourist destination as it welcomes thousands of visitors yearly. Cameroon is also regarded as “African Miniature” because she is a cross road to most African cultures and cuts through all the major climatic and

ecological zones of the African continent. She is also cultural melting pot (Lambi et al., 2010; Mesmin & Fogwe, 2009).

Ecotourism is seen as a responsible travelling to nature conserve areas and improves livelihoods of rural people. The principles of ecotourism implies that it is beneficial to rural people and the environment (Venkatesh & Gouda, 2016). It can also be seen as an activity that promotes economic growth, nature conservation, poverty reduction and rural development (Das & Chatterjee, 2015; Hugo & Nyaupane, 2016; Venkatesh & Gouda, 2016).

During the management of protected areas conflicts do exist between the protected area administrators and neighbouring communities on access to natural resources to sustain their livelihoods and the conservators of these protected areas (Shidiki et al., 2017, Nyamweno et al., 2016). Ecotourism if well organised in protected areas, it will provide positive effects on neighbouring rural communities such as the source of employment and economic development. Protected areas provide several ecosystem services including drinking water, carbon sequestration, improving micro climatic conditions and creating a favourable environment for nature-based tourism destinations (ecotourism) (Naughton-Treves et al., 2005). The definition of ecotourism in this context will involve the participation of the local people in the development of tourism activities. Renard and Wint (2007), stated that, the participation of rural communities is an indispensable element that could contribute to policy reformulation and implementation with regards to ecotourism. It is essential that local people are included in its policy development, especially since they are the ones who will have to live with the consequences (Lequin, 2001). It is necessary to clarify that participation is not limited to the local population, but also refers to the participation of all actors who will be affected by the development of the project, including stakeholders; for example tourists, travel agencies, resorts and local businesses (Balgah and Nfo, 2017; Renard and Wint, 2007). Indeed, participatory governance remains very important in ecotourism development as large operators can often crowd out small local operators. The Benue National Park is one of such parks, covering a total area of 180,000 hectares. At the same time, there has been a shift from an almost strictly biological approach to a multi-disciplinary approach with a broader development framework (Clark and Dickson, 2003).

Several studies have demonstrated the importance of taking into account the diverse perceptions, values and interests of communities in the development of ecotourism strategies. Community participation is a prerequisite for political support (Vincent and Thompson, 2002). Over the years, research has shown that the perception of benefits can sometimes outweigh the actual receipt of benefits (Shidiki et al., 2018). Equity is an essential aspect of the long-term sustainability of ecotourism in protected areas such as the

Benue National Park. A key aspect of governance is decision-making, which often involves difficult choices between many competing objectives (trade-offs) (Frank et al., 2018). An understanding of local community dynamics, hierarchies and power sharing is also essential to develop methods to ensure that the most marginalised and deprived in the communities are also included in the benefit sharing mechanisms of the ecotourism sector (Kothari, 2008). For stakeholders, consultation, joint decision-making and advocacy are necessary to move towards equity and governance of ecotourism in protected areas (Kothari, 2008). This paper argues that participatory governance in ecotourism development remains a frequently used strategy for sustainable conservation of biological resources within the protected areas.

## II. MATERIALS AND METHODS

### 2.1 Description of the study area

Benue national park is located in the North Region of Cameroon. It was first established as a wildlife reserve in 1932 and later upgraded to national park status in 1968 (MINFOF, 2019). It covers a surface area of 18000 hectares (Mesmin Tchindjang et al., 2001). Benue National Park is located between latitude 7°55 and 8°40 north latitude and 13°33 and 14°04 east longitude. Administratively, it is found in the Tcholliré sub-division of Mayo Rey division (MINFOF, 2019). The name of this park comes from the fact that river Benue flows through the park and stretches for over 100km along the Eastern borders of the park. This national park is home to a significant number of plant and animal species, some of which are endangered. It is the last remaining strong hold savanna block in the central African region with huge concentrations of large mammals such as elephants, hippopotamus, eland, antelopes, black rhinos, African wild dogs, buffalos and giraffes. Its biodiversity includes 22 types of vegetation with 965 plant species; over 40 diurnal mammal species, 300 types of birds and some 77 fish species. The buffer zones of this park are also divided into nine professional hunting zones (Zone of synergetic interest) with a French acronym ZIC (Zone d'intérêt Cynégétique) with a total area of 520,378 ha (Rod East, 1990).

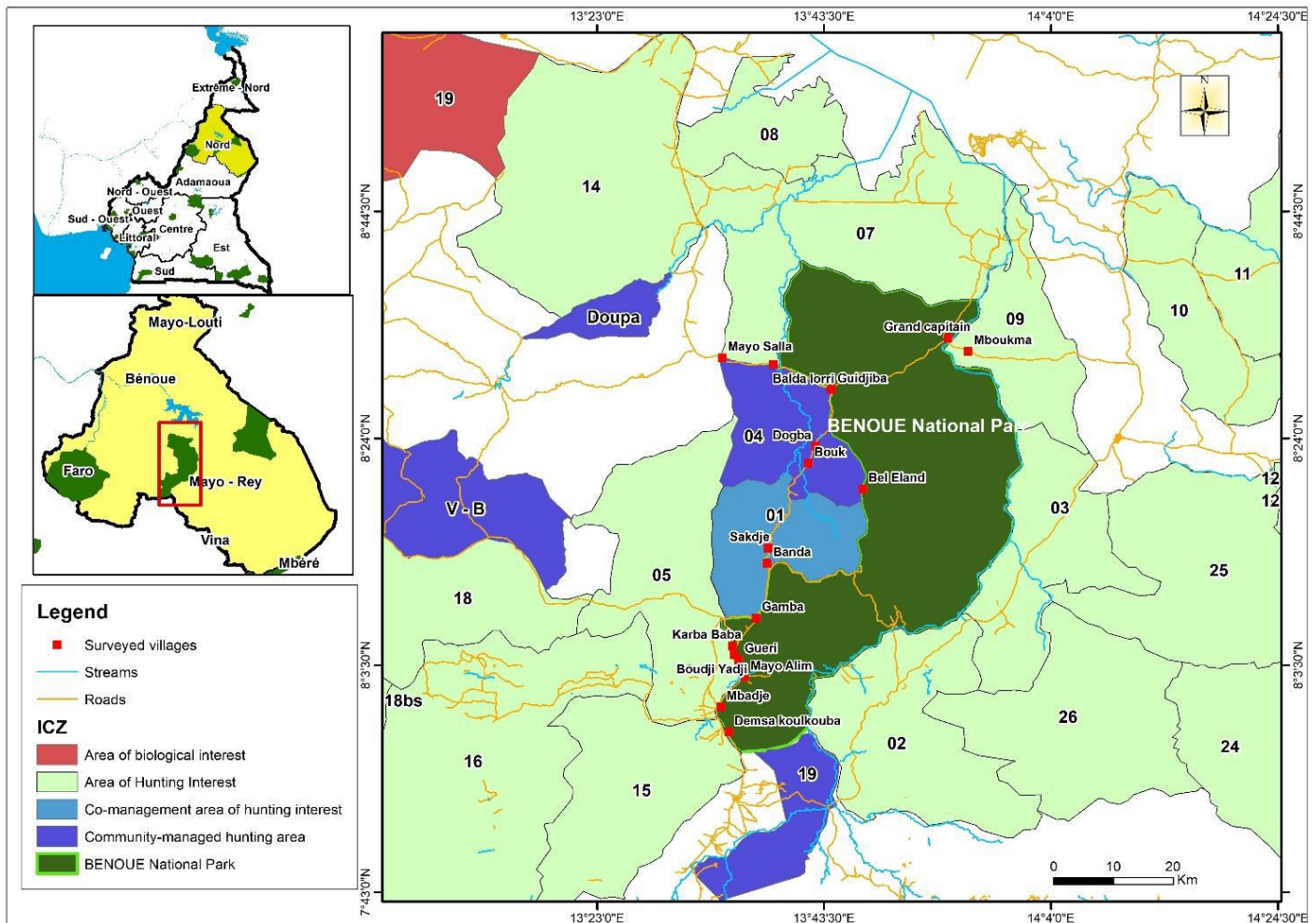


Fig.1: Location of the study area

## 2.2 Sampling

The surveyed villages were chosen based on their proximity to the buffer zones of the Benue National Park (BNP). 125 semi-structured questionnaires were administered to household heads. A two-stage simple random sampling was used. It consisted of a stratification of 16 villages. Using purposeful sampling, we selected 11 villages based on proxy to the park. Due to long distances, insufficient human

resources and insecurity in some localities, only 70% of the villages in the Benue National Park were surveyed. Households were selected according to their activities (farmers and herders) but also according to their status (indigenous, migrant). Village leaders were met to observe the spatial distribution and density of households in each village. Households were selected on convenience. Table 1 shows the number of households surveyed per village.

Table 1: Proportion of households surveyed by village

S/N	Villages	Population of Household per village	Number of households surveyed	% of surveyed households
1	Banda	28	15	54
2	Bouk	32	16	50
3	Boukma	22	09	41
4	Demsa	10	04	40
5	Dogba	26	13	64

6	Gueri	18	10	56
7	Guidjiba	30	16	53
8	Mayo Sala	11	05	45
9	Mayo Alim	12	04	33
10	Mbadje	15	09	60
11	Sakje	40	24	60
<b>Total</b>			125	

**2.3 Data collection**

The data was obtained from primary and secondary sources. The secondary data was collected from books, reports, scientific articles, research works (dissertations and theses) related to the subject. As the issue of ecotourism is a recent one, most of the information used is from the internet. Primary data was collected from 125 households with the use of semi-structured questionnaire. A survey framework was developed to interview stakeholders in the Benue National Park tourism sector (Conservation Service and owners of tourist accommodation, tour guides present in the study area, in order to obtain information on ecotourism governance in the Benue National Park. This was done on the basis of the level of involvement of local communities, stakeholders involved in ecotourism activity, modalities for participation of these stakeholders and the resource distribution system.

**2.4 Data analysis**

The data for the survey was analysis using SPSS version 21. The data was then analysis into graphs on the level of participation of local communities, the modalities of participation and the management system of the ecotourism activity set up in the GNP (Gross National Product). This paper used exclusively descriptive statistics to highlight participatory management in the Benue National Park.

**III. RESULTS**

**1.1 Ecotourism stakeholders in the Benue National Park**

There are a plethora of ecotourism actors in the Benue National Park, divided into two categories: direct actors (conservation service, MINFOF/MINTOUL, community guards,) and indirect actors (NGOs, tour guides). As shown in Figure 2, the main actor in charge of managing ecotourism activities is the conservation service. The issue of equity remains a major concern for ecotourism stakeholders, as responsibilities and decision-making among the different actors remain unshared. This lack of equity and synergy between stakeholders compromises the development of the tourism sector in the locality. The role of each actor involved in the management process of the ecotourism activity remains decisive. However, the conservator of BNP is responsible for the opening of the tourist season, which takes place between November and May each year. The governance of the Benue National Park is in the hands of this body, which collaborates with few local people by granting them the status of community guards. There is also the presence of NGOs such as Bristol, AWF (African Wildlife Foundation), which play a major role in funding conservation projects for the natural heritage of the Benue National Park in order to reduce the threats that hamper the development of tourism in the area.

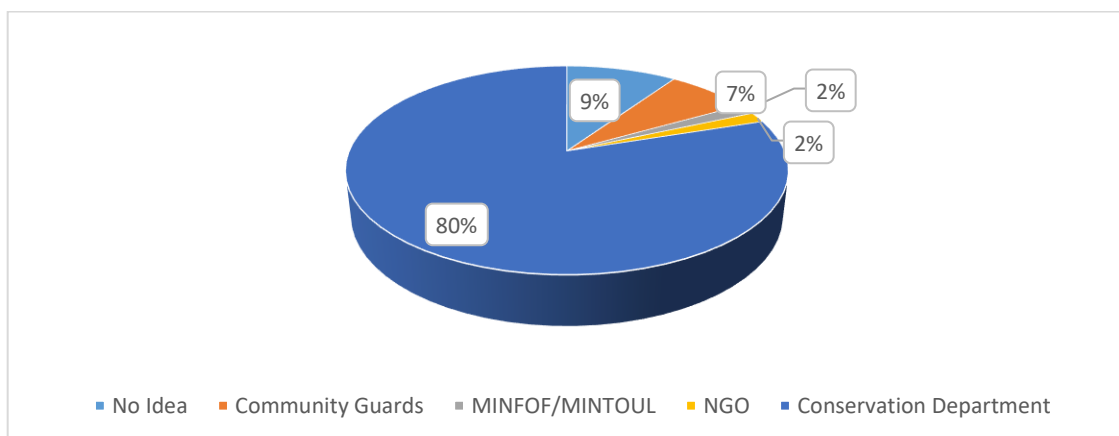


Fig.2: Ecotourism stakeholders in the Benue National Park

### 3.2 Level of stakeholder participation in ecotourism activities in the Benue National Park.

The results in figure 3 shows that 79% of stakeholders are not involved in ecotourism activities. However, the 21% that are involved in the Eco touristic activities are transporters, community guard, cook and tour guide.

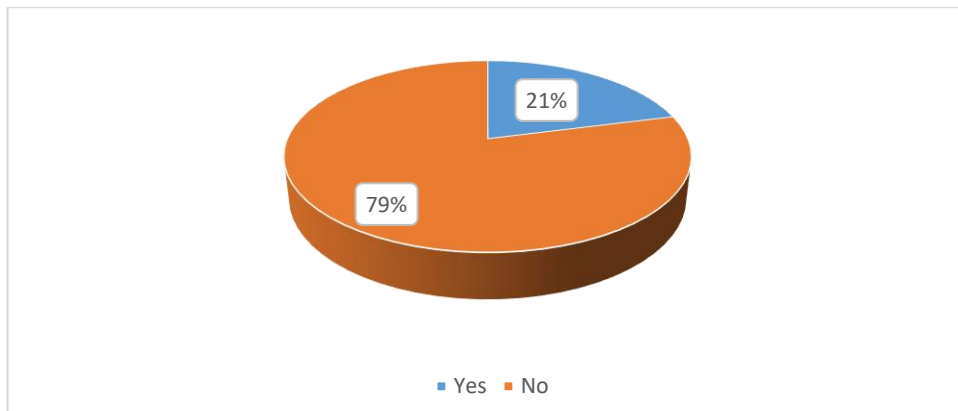


Fig.3: Participation in ecotourism activities by communities living around the BNP

This low involvement of stakeholders in eco-tourism activities is due to: the absence of an information framework on tourism, the lack of knowledge about ecotourism and the inaccessibility of local communities to the Benue National Park (Figure 4).

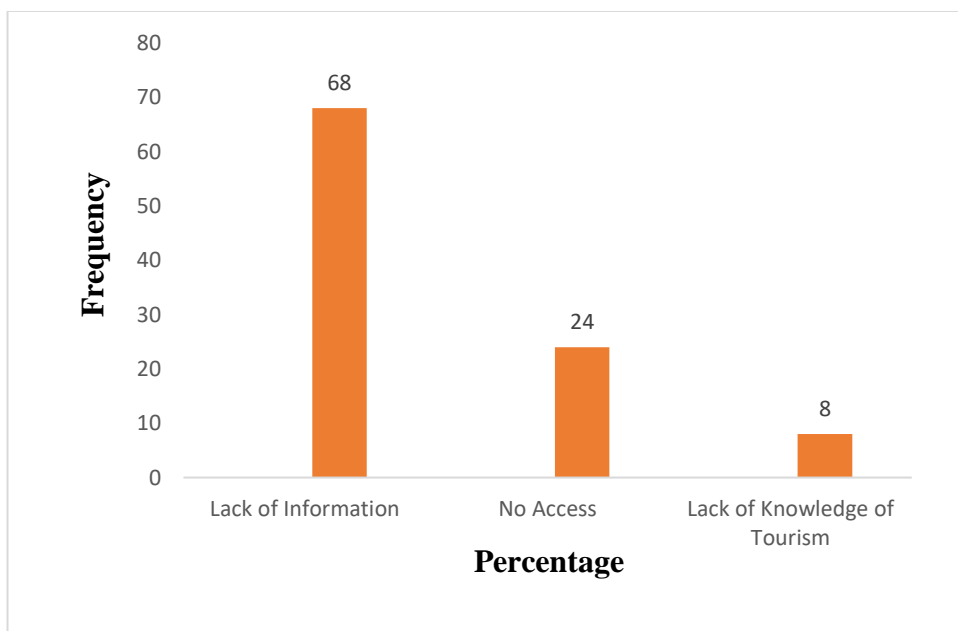


Fig.4: Reasons for the low involvement of local communities in ecotourism in the BNP

The results revealed that 68% of the households heads interviewed said that they had no information on tourism-related activities in the Benue National Park, while 24% mentioned that they were not allowed to access the national park and that the only area they had access to was the multiple use area (MUA) in the buffer zone. In this buffer zone, use rights are limited to collecting straw for

roofing of tacked houses, collecting dead wood and collecting bark and leaves for medicines. In view of the above, it is appropriate to question the modes of community participation in ecotourism activities in the Benue National Park.

### 3.3 Modes of participation of local communities in ecotourism activities in the BNP

The mode of participation of local communities in ecotourism activities in the Benue National Park is centred on the buffer zone, informative, resource-benefit, interactive and passive approach. However, the main mode of participation of local communities is limited to the buffer zone approach (1500 meters from the park entrance) with 63% respondents affirming this. This zone is where the local populations have the right to carry out certain activities, such as collecting firewood for domestic consumption; cutting straw, which is conditional on identifying the site, estimating the potential of the area and

negotiating use within the COZIC (Area of Cinegetic Interest with Co-management); sustainable harvesting of medicinal plants and roots; and use of the Park's water points. Similarly, the local communities (community guards) play the role of information relays for conservation with regard to threats and dangers to the survival of the Benue National Park. There is also participation based on benefits in relation to resources, which refers to the fact that when a tourist arrives and practices sport hunting, he needs the trophies and the meat goes to the guide or the hunters who accompany him. It should also be mentioned that there is no clearly defined and enforced status for ecotourism activity in the Benue National Park. This leads us to question the management system for ecotourism.

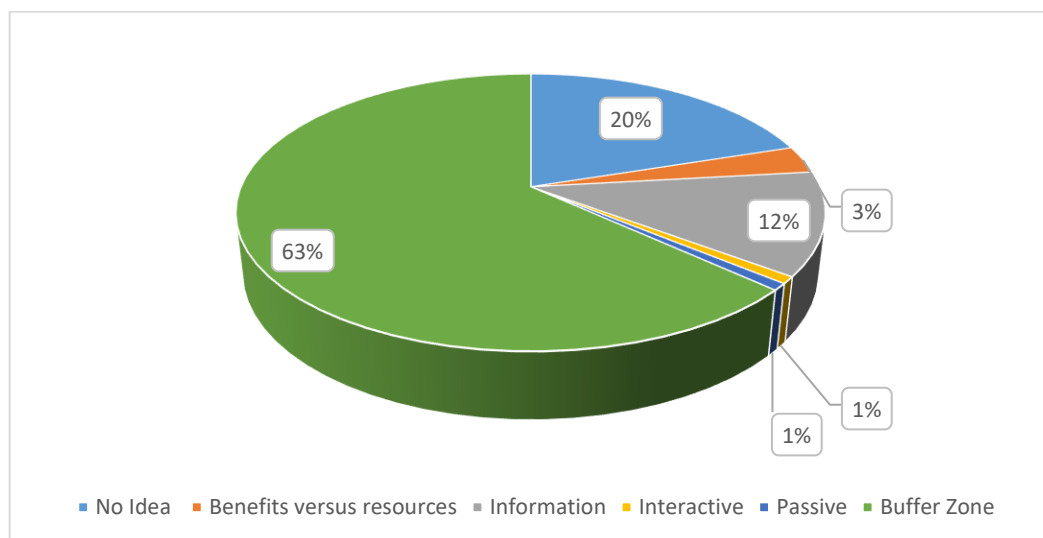


Fig.5: Modes of participation of local communities in ecotourism activities in the BNP

### 3.4 Ecotourism management system in the Benue National Park

The ecotourism management system in the Park is in constant search of legitimacy. The concept of co-management is found in the sectorial policies of the administrative documents without being the subject of a concrete law or decree on ecotourism management in the BNP. The results showed that 48% of the population interviewed stated that the ecotourism management system is not concerted. The causes of this lack of concerting are mainly related to: the non-existence of laws defining and governing ecotourism, the responsibilities of ecotourism actors are poorly defined, and the institutional framework

for co-management is not well defined. However, 31% of the population mentioned an existing concertation between ZIC (Area of Cinegetic Interest) 1 and 4 with emphasis on a management body for ecotourism activity, the Union of village wildlife committees. This body is subdivided into COZICs, which ensure the sharing of revenues generated by wildlife. It should be noted that there is coordination between ZIC (Area of Cinegetic Interest) 1 and 4 in the use of resources and the benefits of ecotourism, although at first glance it appears that the distribution of these benefits is uneven across the Park's ZICs. Twenty-one percent of the local population mentioned a concerted effort to use the Park's resources, but did not mention the development of ecotourism in the area.

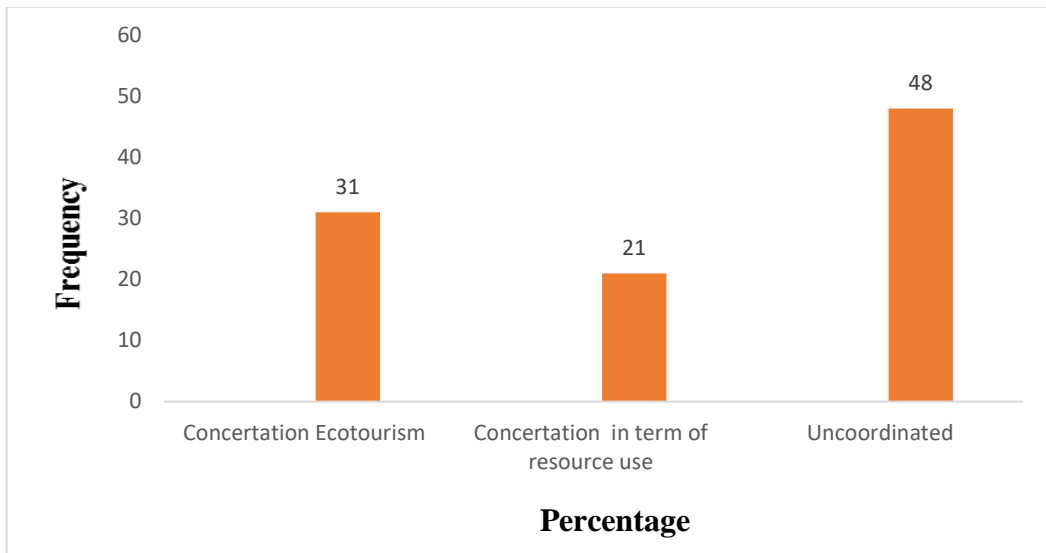


Fig.6: Ecotourism management system in the Benue National Park

### 3.5 Mode of Governance of ecotourism in the Benue National Park

The mode of governance observed in the Benue National Park is diversified. There is the state represented by the conservator and in the other hand we have private sector represented by the NGOs who are usually the financial donors. The results also showed that majority of respondents 83% said that the state is the sole administrator of BNP. However, it should be noted that the governance mode most frequently observed in the Park is

public governance represented by the conservators who is usually a civil savant working for the ministry of forestry and wildlife (MINFOF). This form of governance is centralized around the public management. Conservation in real sense should take the form of sharing responsibilities between the public and the private partners, which can take several forms, including shared governance. However, it is deplorable to observe the absence of joint governance of this Park which, in an ideal situation the local communities should be involve in the management of the park (Public Private Partnerships).

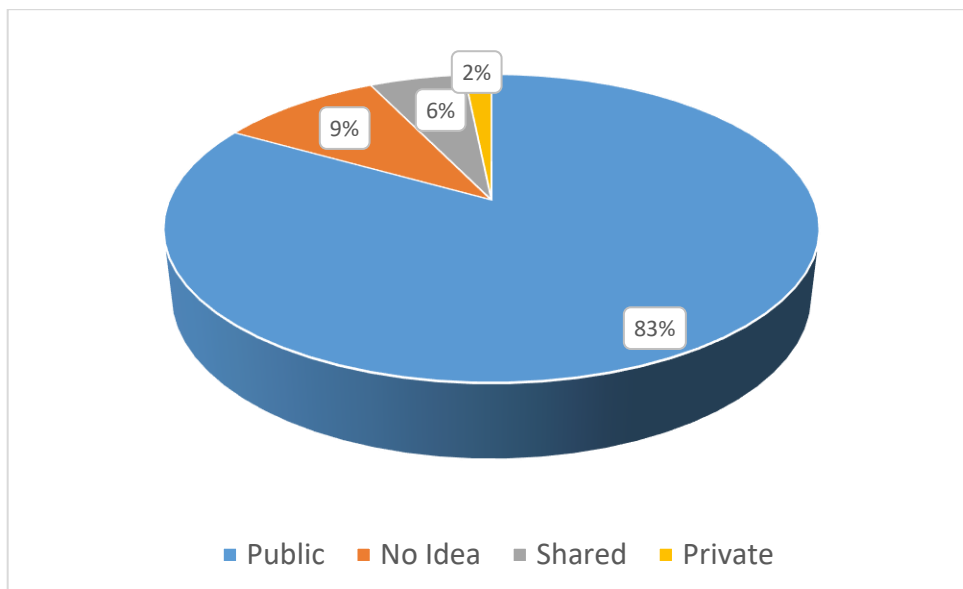


Fig.7: Mode of governance of ecotourism in Benue National Park

## IV. DISCUSSION

### 4.1 Ecotourism stakeholders in the Benue National Park

The governance of ecotourism in the Benue National Park is still in its infancy and faces enormous difficulties in its implementation. Whether it is in the distribution of roles and responsibilities of the actors in charge of the activity, the involvement of communities, poverty reduction and improvement of living conditions, the park management is lagging behind. The lack of a clear and defined application of the laws on ecotourism weakens the activity and the development of the region. This is justified by the low contributions of ecotourism in Gross National Product (GNP). The results showed that 79% of stakeholders are not involved in any tourism-related activity. Similarly, 68% of the households interviewed said that they had no information on tourism related activities in the Benue National Park, due to the lack of a tourism information framework, ignorance of the concept of tourism and inaccessibility of the communities bordering the park. If ecotourism development in the park is to be successful, it will be necessary to put in place a participatory management system that takes into account all stakeholders, regardless of gender. This corroborates Clarke in 2014, Schreckenberget *al.*, (2016), Franks *et al.* (2018), who argue that the participation of rural communities is an indispensable element that could contribute to the reformulation and implementation of policies put in place. As with ecotourism, it is crucial that rural people are included in its development, especially as they are the ones who will have to live with the consequences. Cheung (2015) states that ecotourism has the potential to provide local stakeholders with socio-economic benefits while achieving conservation objectives.

### 4.2 Ecotourism management system in the Benue National Park

Similarly, the Park's management system is in constant search of legitimacy, as 48% of the population interviewed said that there is no consultation between the different stakeholders in the management and decision-making of ecotourism-related activities in the BNP. This lack of consultation is due to the non-existence of a legal and policy framework for planning ecotourism activities, which generally translates into regulations or behaviours to be adopted within the Park. This finding is in harmony with that of Forje *et al.*, (2020) in his study entitled "An appraisal of ecotourism's impact on biodiversity conservation", where he states that there is no legislation in place and applicable to ecotourism. However, it should be noted with Sama (2019) that ecotourism in itself is not a panacea to resolving rural poverty. There are so many factors that should be put

in place for the success of this sector because without these factors, the resulting businesses can alienate, rather than benefit the local communities.

### 4.3 Mode of Governance of ecotourism in the Benue National Park

The results revealed that out of the 125 stakeholder's interviewed, 83% said that the mode of governance frequently observed in the Park was public governance. This centralised form of governance, which excludes local communities, hinders the development of tourism activities and most at times generates conflicts between the conservation service and rural communities. It is possible to put in place a more inclusive form of governance. This result is at odds with those of Agnangoye, (2015) and Gami, (2016) who state that Public-Private-Partnerships are the most appropriate governance approach for protected areas and offer solutions to certain governance problems, which may lead to the inability of the state to secure operating budgets for protected areas; the low capacity of protected areas to mobilise funding at several levels; the aggravation of threats and pressures on biodiversity; and the low attraction and economic value of protected areas. The observations of Lausche in (2012), who suggested the adoption of the "bottom-top" approach in the sustainable management of protected areas enables the collective decision-making that connects the decisions to the rural communities who are the ones to respect the decision.

## V. CONCLUSION

The study concludes that ecotourism governance in the Benue National Park and its peripheral zone is managed by different stakeholders, classified into two types: direct stakeholders (conservation service, MINTOUL/MINFOF, community guards) and indirect stakeholders (NGOs). Faced with this diversity of actors. The issue of equity remains a major concern for ecotourism, as responsibilities and decision-making among the different actors remain unshared. However, the level of participation of local communities in ecotourism remains low due to the lack of information on ecotourism development, inaccessibility of communities to the Park and a lack of understanding of the concept of ecotourism itself. The ecotourism management system in the Park is uncoordinated and struggling to be implemented. There are no clearly defined roles and texts for ecotourism in the Benue National Park. We recommend that policy makers and the government clearly define the roles of each stakeholder in ecotourism management and decision making, involve local communities more in ecotourism



activities, and implement ecotourism policies and legislation in the Park.

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