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Perceptions on Benefits of Ecotourism Development by Residents of Fringe Communities to Two National Parks in West Africa

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Abstract Fringe communities in protected areas (national parks) are thought to benefit immensely from ecotourism development emanating from such facilities. This study sought to assess the perceived benefits of ecotourism development in nearby communities to two West African national parks namely: Kainji Lake National Park (KLNP) in Nigeria and Mole National Park (MNP) in Ghana. Stratified random sampling was used in selecting 10 households each in both countries. A total of 582 respondents were contacted through semi-structured questionnaires while key informant interviews including focus group discussions were used to obtain data on the direct, indirect and service benefits. Data analysed suggests that at KLNP, the provision of boreholes (45.7%) was the most cited direct benefit whereas 58.8% of respondents to communities adjacent MNP cited provision of health services. The indirect benefits revealed at KLNP were that residents had the opportunity to provide transport services to tourists, while at MNP, residents had an opportunity to display culture at a fee and sell arts and craft to visiting tourists. Service benefits unveiled in the study relate more of employment generation through ecotourism in both parks. A "needs assessment" survey of "flanking" communities is recommended as an appropriate measure to bridging the gap between what benefits the residents need and why such benefits should give the needed impetus to support conservation efforts in both parks.

Keywords Nigeria, Ghana, Protected Areas, National Parks, Ecotourism, Conservation, Kainji Lake National Park, Mole National Park

1. Introduction

It is a well-known fact that since creation, man has always lived in harmony with nature because he draws his sustenance from natures' "fruits". Nonetheless, the fast pace at which human population has grown now is the reason for an over dependence on the resources of the earth. This phenomenon poses a threat to resource conservation and in that light, governments and conservationists in many countries of the world have enacted laws and policies aimed at the conservation of these resources, (especially wildlife) for posterity reasons. Indeed, nations that abound in such natural resources will be doomed in their conservation efforts without stakeholders finding alternative strategies to enable the communities that live with wildlife resources in particular benefit from its use. One such strategies that has been promoted to support conservation and also as an avenue for creating job opportunities and to generate income for residents living in communities adjacent Protected Areas (PAs) especially National Parks is the development of ecotourism [12]. Ecotourism, generally seen as an opportunity for development of rural communities, gives rural dwellers an occasion to participate in the conservation of fragile but threatened areas including endangered species [23,25]. Indeed, rural areas also need development interventions and if stakeholders implement such assistance strategically and convincingly where the benefits are clearly spelled out, local residents are more likely to bring to bear their endogenous knowledge on conservation to make it a success. National parks according to [21] have the potential to provide various opportunities to the communities living around them through provision of benefits such as employment, increased social contacts, improved livelihoods and community development.

The perception of local residents who live on the fringes of famed parks in particular is extremely relevant in conservation related efforts. This has been explained further

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in the literature that, the success of the development of a PA can be measured in terms of the extent to which nature is effectively conserved as well as the perception of benefits obtained by the local residents living in communities that surround these protected areas [31,24,4,28]. Several approaches exist for conservation related efforts in PAs, but effective conservation of parks for instance is achieved basically employing two main approaches [2]: one such approach is to employ the preservation approach, aimed at setting aside national parks to exclude human activities except when tourism related use becomes the philosophy. Through this approach, direct use of natural resources in the park for commercial or subsistence purposes is prohibited.

The other 'tactic', the community-based conservation approach, very often, is proposed to address problems associated with excluding human activities from the park [27]. The community-based conservation approach which involves initiatives aimed at conserving biodiversity in parks is also further geared towards enabling local people benefiting from the park facility [26]. Some other initiatives involved in the community-based conservation approach include signing of resource use agreements such as in the case of the Rwenzori Mountains National Park which grants permission to local people "neighbouring" national parks to access specific resources from the facility for their subsistence purposes [33].

In Nigeria, the Nigerian Conservation Foundation and the Nigerian Game Reserve Authorities are "charged" with the responsibilities of wildlife conservation projects. Of relevance is also to mention that the KLNP is under management of the Federal National Parks Service (FNPS) receiving direct funding from government sources. In 2001, for instance, the Nigerian National Parks generated a total of about three million dollars through ecotourism and entertainment and this makes conserving PAs a gesture worth the effort in that country (source:www.iucnael.org/en/documents/701...wildlife-conservation-and... management.../file). The Wildlife Division of the Forestry Commission of Ghana on the other hand is also responsible for the management and protection of PAs in Ghana and has been keenly interested in the activities at the two most popular national parks in Ghana, ie Kakum National Park (most popular in terms of visits) and Mole National Park (most popular in terms of animal stock). The Kakum National Park for instance in Ghana's Central Region established in 1992 has a three-fold mission: to protect biodiversity, to develop tourism and to improve the livelihood of the fringe communities [3].

Other examples include a scenario whereby local people are given money for infrastructural development, such as in Integrated Conservation and Development Initiative in Korup National Park in Cameroon [16]. In other National Parks (see [36], on Pendjari National Park, in Benin), local people are given a percentage of revenue generated from tourism activities in the park all in the effort of enticing them to embrace conservation for the longevity of such park facilities.

The rich biodiversity potentials of Africa has indeed attracted numerous ecotourists, holiday seekers and/or vacationers from other countries interested in visiting tropical landscape, engaging in game viewing and learning about or immersing themselves in local cultures [9]. In both Nigeria and Ghana, as well as other developing countries of the world, local communities, have always depended on their natural resources as a source of livelihood, with these "assets" providing benefits and related services, ranging from provision of food, water, herbal medicine, fodder for livestock, raw materials for craftwork including other cultural services such as recreation, [34]. Thus the dependence on natural resources and products from the environment according to [35] is considered to be critical to the sustainable livelihood of local people in particular who live near PAs.

It is a truism that the creation of PAs and their associated benefits oftentimes come with some painful but necessary sacrifices, ie some forms of restrictions of access to forest resources are put on the local communities who live within and adjacent to these resources leading to economic losses [5]. The irony realized in this whole mêlée however is that, in most developing countries, the local communities who often are affected by these restrictions are generally poor. They are largely also noted to derive their livelihood from these very forest resources to which they have been dispossessed of [3]. The most cited "gimmick" touted to persuade local people many a time is that; tourism will be introduced, which will be the hub of local economic activities [3].

In a similar genre, tourism when introduced brings about high hopes among the local populace, ie the panacea, an economic, social and environmental "cure all". Does the introduction of tourism/ecotourism serve beneficial purposes all the time especially to many of the issues hinging on livelihood enhancements? Meanwhile there is also a lack of convincing empirical evidence to justify the claim that increased tourism/ecotourism development will lead to significant benefits for the local poor in particular [7]. It is in the context of this scenario that this study, coming at this time and delving into the perceptions of residents of fringe communities to national parks namely the Kainji Lake National Park (Nigeria) and the Mole National Park (Ghana) is considered germane, especially coming at a time where these perceived benefits have always come from the perspectives of conservation related stakeholders but not from those who live with these resources, hence the necessity of the study.

2. Problem Statement

The economies of both Nigeria and Ghana are heavily depended on the export of natural resources (both renewable and non-renewable), such as oil, cocoa, timber and in more recent times have veered into service oriented industries such as tourism. It has been noted in the literature

that, most rural dwellers in Africa (the two countries inclusive), especially in rural communities adjacent to national parks, still utterly rely on subsistence farming whilst also drawing from what their immediate natural environments can provide such as bush meat, fruits, fuelwood, fish, herbs, and housing materials [1] When this source of livelihood sustenance is taken away through the establishment of PAs, it becomes a difficulty for the local people to find alternative support for the sustenance of their families and other dependants. The very survival of such PAs are therefore thrown into a state of limbo especially if the park's creation and or development related activities have negatively impacted on their traditional sources of livelihood [17]. It is only when other alternative benefits begin to come their way that the local people often tend to appreciate the relevance of such conservation related initiatives. Despite the fact that benefits may also accrue to the local people from ecotourism related activities in fringe communities, it is also a truism that the distribution of such benefits may in the end pose a problem, especially when clique systems become the order of the day with a privilege few (elite) being the ultimate recipients to the displeasure of the less powerful majority. Thus, the Social Exchange Theory (SET) oftentimes has proven to be a suitable theoretical framework for analysing residents' perceptions of and attitudes toward tourism development [19]. SET is based on the disciplines of psychology, economics and sociology and as such is suitable in this particular area of tourism research where resident's perceptions are being explored. Its psychological philosophies explain why human beings by nature will engage in social relations and interaction anticipating potential benefits rather than risks and once the risks outweigh the benefits, they are likely to terminate the relationship. It is therefore generally suggested that residents who perceive tourism to be personally valuable and believe that the costs associated with tourism does not exceed the benefits will likely show a greater support for tourism development [19]. Conversely, should local communities perceive the costs of tourism to outweigh the benefits, they will withdraw their support for tourism [29]. The study therefore posed the following research questions: What are the perceived benefits of ecotourism development in the PAs to the local fringe communities in both countries? and to what extent have their expectations been met while embracing ecotourism development?

3. Methodology

Study Area

The study covers communities flanking two national parks in West Africa, Kainji Lake National Park, (KLNP in Nigeria) and Mole National Park (MNP in Ghana). The two national parks are in category II according to the categorization of International Union for the Conservation of Nature (IUCN). These are usually large, natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities [32].

3.1. Kainji Lake National Park (Profile)

The Kainji Lake National Park (KLNP) was established in 1979 by the merger of two non-contiguous sectors: the Zugurma Sector (1,370 km^2) and Borgu Sector (3,970 km^2). The KLNP is located on the boundary between the north of the Guinea Savannah and south of the Sudan Savannah vegetation zones, which is rich in biodiversity of plant and animal species. It is located between latitude 9°40$'$N and 10°30$'$ and longitude 3°30$'$N and 5°50$'$ and has a total land mass of 5,340.82km^2.

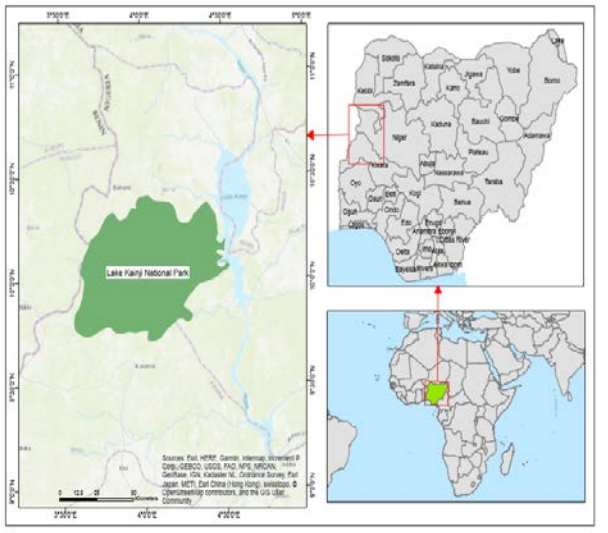

Figure 1. Location of Kainji Lake National Park in Nigeria (West Africa)

The Park houses a lot of wildlife like: elephants, lions, buffaloes, antelope, hunting dogs, hippos, patas monkey, lion, python, Nile crocodile, leopard, hyena, buffalo, kob, cobra, green snake, bush buck, tilapia, mountain reedbuck, red flanked duiker, oribi, grimms duiker, warthog, mongoose, stone partridge, snake head, hadada ibis, bee eaters, electric cat fish clawless otters, hartebeest, turtles, manatees, roan goanna, baboons, antelopes, kobs, ape, ducker, crocodile and so many others (source: https://zodml.org/discover-nigeria/heritage-and-culture/kainji-lake-national-park#.XOK1Cf7 LfIU). Plate 1 shows hippos and a lion in KLNP.

3.2. Mole National Park (Profile)

Mole National Park is located in Northwestern Ghana on grassland savanna and riparian ecosystems at an elevation of 150 m, with sharp escarpment forming the southern boundary of the park. It is situated between Wa and Tamale (both towns being regional capitals in northern Ghana) and lies between 9°11' and 10°10' N, and between 1°22' and

2°13' W, [22]. In 1971, the facility was gazetted as a National Park under the Wildlife Reserve Regulations, for its outstanding wildlife and also to protect its habitat. Its area was enlarged to 4,554km² by extending the boundaries north to the Kulpawn River area and eastward over the Konkori escarpment. In 1992, the park area was further enlarged to its present size of about 4577 km² with the addition of the Gbantala triangle (see Figure 2) onto the locational map of MNP in the northern region of Ghana.

Plate 1. Hippos and Lions in KLNP (*Source: http://www.nigeria-direct.com/activity/find-the-big-5-at-lake-kainji-national-park-one-of-the-largest-game-reserves-in-west-africa*)

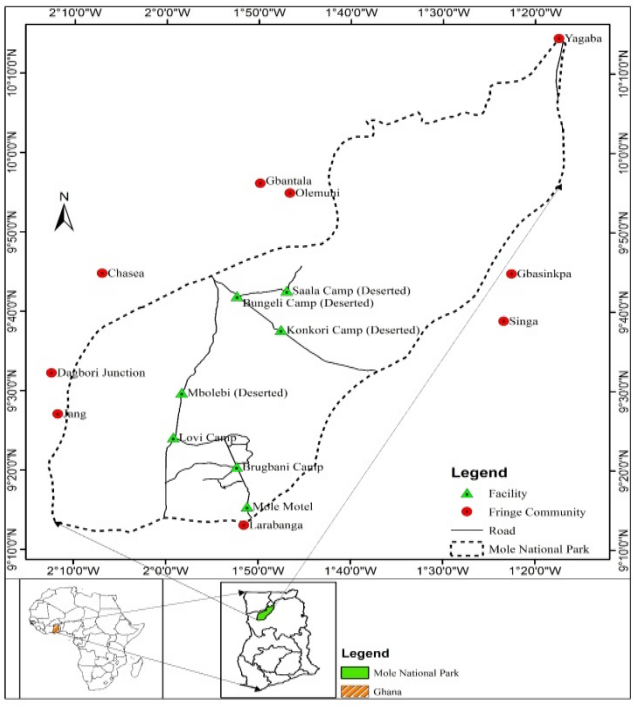

Figure 2. Map of Mole National Park indicating its location in Ghana (West Africa)

Species of special interest in MNP include elephant, buffalo, kob, western hartebeest, roan antelope, defassa waterbuck, oribi, bohor reedbuck and red-flanked duiker. The riverine forests are home to rare and endangered species such as yellow-backed duiker and black and white Colombus monkey. The Lion, Leopard and Hyena are important large carnivores also found in the reserve. The baffalo population is of great scientific interest since both black and red colour varieties exist herein. In addition, three species endemic to Ghana are recorded, namely Gongronema obscurum, Raphionacme vignei and Phinopterys angustifolia. Eleven (11) species of mole are confined to the savannah woodland while Mimusops kammel, a tree that is confined to riverine forests is also found here (source: https://visitghana.com/attractions/mole-national-park-2/). Plate 2 shows heads of elephants and buffaloes in MNP.

Plate 2. Elephants and Buffolos in MNP (Source: https://visitghana.com/attractions/mole-national-park-2/)

3.3. Sampling and Data Collection

There are in all twenty-one (21) fringe communities to KLNP whilst on the Ghana side, thirty-three (33) communities flank MNP. Ten (10) communities were purposively selected for the purpose of the study from each of the national park area. The criterion used was to select the communities that were of close proximity to each of the park than those that were far flank off. In each community, the chief's palace was the first call point, introductions made after which the research mission and objectives were explained. Information for the study was sourced through interview schedules including employing questionnaire administration. For data collection in the selected

communities, three (3) research assistants based in either of the park areas in both countries and who were trained earlier, doubled as interpreters and read the questions from the questionnaire to the respondents in their native language, their responses elicited and written in the spaces provided [19]. This was done due to the high level of illiteracy among the residents.

A total of five hundred and eighty-two (582) respondents comprising (305) at communities of Kainji Lake National Park (see Table 1) and two hundred and seventy-seven (277) at communities of Mole National Park were involved in the survey (see Table 2) employing the use of questionnaire. Before the research begun in the selected communities, a survey of the number of households in each community was done. Two communities at the KLNP area namely Ibbi and Wawa had an estimated 500 household size each while the least size was noted at Patiko with 25 households. At the MNP area, the ancient town of Larabanga also had an estimated household size of 500 with the community with the least population size being Kananto which had 30 households (see Table 2). With the use of the questionnaire, the perceived benefits were put into three themes namely: direct, service and indirect benefits. In accordance to these themes, responses were sought for the purpose of analysis.

Taking into consideration the qualitative analysis component of the study, twenty (20) village heads (key informants), ten (10) from each national park area were contacted through in-depth interview schedules (IDIs). Key informants were reached through the use of IDIs to gather relevant information from Village Heads or the appointed informant (by the village head) of the selected communities. Express permission was sought for their voices to be recorded and transcribed and used for the analysis. Information sourced covered on the various park intervention programmes and projects in the communities. FGDs were also organized with key stakeholders namely tour guides and tourism committees in the communities.

Each group comprised of 6 to 8 participants to allow for effective discussion of questions pertaining to the benefits of the national parks to their respective communities as well as the expected benefits based on each community's needs.

Table 1. Sample size determination for communities adjacent to KLNP

Sampled communities	Estimated household	Sampled household	Respondents per household	Questionnaires Administered
Patiko	25	6	4	24
Malale	30	6	4	24
Felegi	30	6	4	24
Gada Oli	35	6	4	24
Worumakoto	40	6	4	24
Leshigbe	40	6	4	24
Kemanji	55	6	4	24
New kali	180	9	3	27
Ibbi	500	18	3	55
Wawa	500	18	3	55
Total				305

Source: Field data, 2016

Table 2. Sample size determination for communities adjacent to MNP

Sampled Communities	Estimated Household	Sampled Household	Respondents per household	Questionnaires Administered
Kananto	30	6	4	24
Kaden	33	6	4	24
Yazouri	40	6	4	24
Kabampe	45	6	4	24
Grupe	45	6	4	24
Kpulumbo	50	6	4	24
Mognore	50	6	4	24
Murugu	135	9	3	27
Bawena	150	9	3	27
Larabanga	500	18	3	55
Total				277

Source: Field data, 2016

3.4. Research Design

The research design adopted for this study is that of the comparative design. One of the more obvious forms of such research is in cross-cultural or cross-national research (7). In a useful definition, Hantrais (1996) cited by (7), has suggested that "such research occurs when individuals or teams set out to examine particular issues or phenomena in two or more countries with the express intention of comparing their manifestations in different socio-cultural settings (institutions, customs, traditions, value systems, lifestyles language and thought-patterns), using same research instruments either to carry out secondary analysis of national data or to conduct new empirical work. The aim may be seek explanations for similarities and differences or to gain a greater awareness and a deeper understanding of social reality in different national contexts" (7, p.65).

The results that were then collated were analyzed quantitatively based on local people's perceptions about ecotourism related benefits in the national park areas where they lived by.

4. Results and Discussions

Socio-demographic characteristics of Respondents of the fringe Communities

Results obtained as shown in Table 3 revealed more male respondents than females in the study communities at the two National Parks. At KLNP communities, findings shows 61.6% of the respondents were male while at MNP communities, 64.3% of the respondents were male. Results from the survey again revealed that the highest age incidence at both park communities "converged" at the age range 30-39years, with 39% for KLNP fringe communities and 34.7% for MNP communities.

With regard to educational status of respondents, it came to the fore that majority of the respondents had no formal education. The revelations were that 65.5% of respondents at KLNP fringe communities had no formal education, while 74.4% was the case at MNP communities. The largest household size at communities in KLNP was 6-10 with 42.6%, while the largest household size at communities of Mole is 11-15 with 40.5%. The main source of livelihood (occupation) as revealed in the findings of this study at both national park communities is farming. At the Kainji communities 56.1% respondents were involved in farming activities while 64.6% were noted as farmers at the Mole communities.

The socio-demographic characteristics of respondents were markedly varied across the study communities. A conspicuous trend unearthed in the study was that male respondents were predominant and the results again showed, an economically active population, largely illiterate and agrarian making it in tandem with a similar observation in the literature by [18] in their study of the status of human-wildlife conflicts in Mpanga/Kipengere Game Reserve in Tanzania. The youthful population observed in this study suggests the likelihood of an increased demand for infrastructure related development such as clinics and schools including creating employment opportunities and access roads necessary to meet the needs of these teaming youth and their families in the not too distant future as advanced by [13].

There was high level of illiteracy observed especially at the Mole communities which could be attributed to the fact that some of the communities had only one primary school to meet the needs of the local people and in some extreme cases these communities were far apart from the nearest schools. A case in point is a community known as Kaden, where children trekked a total of 21km daily to access formal education/schooling. The implication of such a finding on policy in formulation in Ghana is that a lot more still needs to be done by the education ministry on Free Compulsory Universal Basic Education (FCUBE) policy in rural areas especially in the Ghanaian basic educational system to encourage a lot more parents to put their children of school going age into the formal system.

Another inference with regard to the high illiteracy rates was that, as agrarian communities, children were needed as farm helps on the fields providing labour at virtually no cost for the sustenance of their families. The large household sizes observed in this study also implied that community members were part of an extended family system, a common practice in many African communities. It is an undeniable fact that large household sizes also proved to be useful in places where farming was the predominant source of sustenance. This seems to agree with thoughts expressed by Kandoh to the effect that large household sizes were a "plus" for a family whose main source of livelihood is farming, ensuring that labour was provided cheaply [13].

Benefits Expected by Residents from Ecotourism Related Development

Residents' expectation was to see development projects rolled out whilst other formal employment and livelihood opportunities open up within and around their communities as a result of the decision of the respective governments usurping the forest facilities (which was their main source of livelihood) for ecotourism development and from which they are aware revenue accrues. In Table 4, majority of the respondents (48.3%) at KLNP perceived that the direct benefit from ecotourism was in the areas of training and empowerment while the main service benefit expected was permanent employment as indicated by (22.3%) of respondents and major indirect benefit of ecotourism being provision of transportation services by locals for tourists (8.9%).

At the communities of MNP, the direct benefit from ecotourism development as perceived by respondents was mainly in the area of health services provision as indicated by (58.8%) respondents. The main reason for this perception is that the District Health Post (hospital) is at Damongo which was about 22 kms or more away from

most of the fringe communities. The siting of a health clinic within the park premises to cater for health needs of staff of MNP was seen as a very important intervention because the same facility also attended to the health needs of the fringe communities. Health services was considered a major benefit as reported by residents at MNP communities and this may not be unconnected with a well-resourced clinic at the park headquarters at Samole which indeed was open to all local residents in the communities adjacent to the park. At Kainji, findings revealed that health services were available through government effort and not directly through the park although provision of drugs and renovation of some clinics had been carried out in some of the communities through the collaborative efforts of the park management and some NGOs.

The service benefit noted in employment creation was also reported by respondents (37.4%) while the perceived indirect benefit from the findings of the study was reported as an opportunity for cultural display by locales to tourists at a fee (11.9%). This study thus discloses that local communities of both national parks have benefited directly and indirectly from the ecotourism related development at the parks. Direct benefits attested to by local residents include the improvement in the educational needs of the children and this finding is consistent with that of [15] who revealed that many residents in South Africa's Mashushe Shangwe Reserve believe that the reserve provided benefits to the community including education, recreation, development projects and conservation of environmental resources.

Table 3. Socio- demographic Characteristics of Communities from both Parks

Demographic Variables (Gender)	Kainji Lake Park		Mole National Park		Both National Parks	
	Frequency (*f*)	Percentage (%)	Frequency (*f*)	Percentage (%)	Frequency (*f*)	Percentage (%)
Male	188	61.6	178	64.3	366	62.9
Female	117	38.4	99	35.7	216	37.1
Age						
18-29 years	84	27.5	47	17	131	22.5
30-39 years	119	39	96	34.7	215	36.9
40-49 years	66	21.6	80	28.8	146	25.1
50-59 years	27	8.9	40	14.4	67	11.5
Above 60 years	9	3	14	5.1	23	4
Education						
No formal education	200	65.6	206	74.4	406	69.8
Primary education	46	15.1	25	9	71	12.2
Middle JSS	9	3	13	4.7	22	3.8
Secondary SSS	34	11.1	26	9.4	60	10.3
Tertiary	6	2	3	1.1	9	1.5
Others	10	3.3	4	1.4	14	2.4
Household size						
1-5	6	2	5	1.8	11	1.9
6-10	130	42.6	74	26.7	204	35.1
11-15	117	38.4	113	40.8	230	39.5
16-20	52	17	82	29.6	134	23
above 20	0	0	3	1.1	3	0.5
Livelihood activities						
Farming	171	56.1	179	64.6	350	60.1
Fishing	6	2	3	1.1	9	1.5
Trading	73	23.9	44	15.8	117	20.1
Formal employment	14	4.6	8	2.9	22	3.8
Artisans	36	11.8	29	10.5	65	11.2
Others	5	1.6	14	5.1	19	3.3

Source: Field data, 2016

The provision of potable water through borehole drilling was another direct benefit enjoyed by some communities of the park which according to [30] is essential for the economic and physical well-being of local residents. However only a few respondents (13.6%) of fringe communities to MNP indicated that (borehole water) was a benefit. This was probably due to the fact that only a few communities at MNP area had boreholes in their settlements as many depended on hand dug wells, streams and rivers for water and also further revealing that some sections in the Ghanaian rural populace are yet struggling to access clean and potable water thus making the situation at variance with the tenets set by the National Water Policy which is also underpinned by the principles enunciated in the Ghana Poverty Reduction Strategy (GPRS), the Millennium Development Goals (MDGs) and the "Africa Water Vision" of the New Partnership for Africa's Development (NEPAD) which all note improving water services and uses as being essential for increasing hygiene and sanitation service levels that affect productive lives of people, enhance enrolment and retention of girls in school, enhance women's dignity and ability to lead, reduce morbidity and mortality, reduce pre and post-natal risks and prevent vector and water borne diseases. Health, nutrition and food production, were noted to be dependent on availability of water in adequate quantities and good quality.

With regard to road construction and rehabilitation which is another direct benefit, MNP communities did not see such as a benefit inuring from the creation of the park. This study however revealed that in Ghana, the construction of roads was a purely national government affair and as such the park management was not in a position to provide roads for communities. On the contrary respondents from fringe communities of KLNP area indicated that the park had assisted in upgrading some of their roads not necessarily because it was a need in the community but primarily for administrative purpose and this had also served and eased the transportation problems in some of the communities.

Training and empowerment was a benefit reported by respondents from communities surrounding both national parks and this consisted mainly of training and extension services in agriculture related activities with majority beneficiaries being women. Such training sessions might just be relevant with the recent Ghana government's policy on planting for food and jobs which is just being rolled out in the country. The major service benefit enjoyed by the communities was in the area of employment especially in the case of MNP as a few were taken into formal employment as range guards while some were informally trained as tour guides. This finding however seems to differ from the findings of [30] who stated that there were no visible impacts made by the Kruger National park in South Africa in the area of employment creation for local residents. Though a few were employed, many residents complained that their kinsmen were not being employed by the park, and the handful of locals employed was not up to the expectation of residents. This reportage differs from the findings of [25] whose findings in Kenya reported 72% favourable responses towards job creation for the local residents.

The indirect benefits of ecotourism development were more noticeable at MNP communities because the residents there were more involved in ecotourism activities than at KLNP area. Such benefits include earnings from cultural display to tourists, sale of drinks and foods to guests, operation of some local homestays related facilities and provision of transportation services to tourists. In both parks, school children (pupils and students) do not enjoy free access but instead a small token (reduced fee) was collected to enable them access the facility (see Table 4).

Table 4. Perceived Benefits of Ecotourism at Communities of both Parks

Perceived Benefits	Kainji Lake	Mole
Direct Benefits		
Education related	42(15.6)	98 (40.3)
Borehole (potable water)	123(45.7)	33 (13.6)
Health services (clinics)	37(13.8)	143(58.8)
Road construction and rehabilitation	49(18.2)	1(0.4)
Training and empowerment	130(48.3)	64(26.3)
Service Benefits		
Permanent employment	60(22.3)	91(37.4)
Temporary employment	25(9.3)	21(8.6)
Casual labour	27(10.0)	5(2.1)
Indirect benefit		
Cultural display to tourists	0(0)	29(11.9)
Sales of drinks and foods	7(2.6)	11(4.5)
Homestay facilities	0(0)	24(9.9)
Providing transport services to tourist	24(8.9)	17(7.0)
Free access by students	0(0)	0(0)

Source: Field data, 2016

Findings from the key informants and the focus group discussions at Kainji communities revealed that collaboration between the national park and Global Environmental Facility (GEF) has been beneficial to their communities as members from the communities were trained in various skills such as livestock production, agro processing, sheabutter processing and bee keeping. Many women and the youth at Kainji Lake National Park area, claimed to have been empowered through facilities granted them from the GEF Youth and Women Association in the form of loans given for businesses probably in conformity to refocusing the sector as proposed by the Federal Ministry of Agriculture and Rural Development's (FMARD) policy on implementing a new strategy, the Agricultural Transformation Agenda (ATA) which in 2011-2016, had its focus being the rebuilding of a sector whose relevance had shrunk dramatically and to which extension and credit services were seen as key to its success. Another key finding and noted as a benefit inuring to the Kainji Lake National Park area was the provision of potable water for majority of the communities. Although some of the boreholes were no longer functioning, it was discovered that about 60% of functioning boreholes in Kainji Lake communities, based on participants' information, were the ones provided through the GEF/Park intervention.

At the MNP area, key informant interviews revealed that due to tourism, some communities especially Larebanga, Mognori and Murugu had received training in bee farming from a tourist from Canada. He came on tour to the park and realizing the potential of the park facility in apiculture went back home and returned with some capital to help train the local people in beehive construction and today locales within these communities produce good honey for sale in Tamale and other major towns in the country. Again another revelation from a key informant interview was that, one of the communities (Murugu) was made to benefit from trophy hunting. In this wise, a buffer zone was declared in an area between Murugu and Kaden and certain species of wildlife (buffalo, warthog, red flank duiker, hartebeest, waterbuck) passed for trophy hunting if only the hunter's gun was licensed and the West Gonja District Assembly had given the permit for the hunt after the necessary fees had been paid. The trophy hunter was made to proceed to the community (Murugu) to meet the chief hunter therein who then took the guest hunter to the buffer zone to 'track' the designated animal and a fee was paid to the community.

In the area of employment only 30% of the Kainji communities indicated their kinsmen were taken as staff of the park and this was made known from one of the chief's account. An informant from the KLNP area stated during another interview that 60% of the junior staff of the park were from adjacent communities. However, another key informant attributed the low employment from some communities to be as a result of incidences of connivance with poachers from these same communities to carry out anti conservation activities within the park. Information obtained during the FGD and in a key informant interview reveal that the communities were not satisfied with the level of employment offered with an explanation that one way to reduce anti conservation related tendencies among the locales was to employ more of the youth who graduate from higher study schools and were without jobs.

At the MNP area, during IDI, a key informant also revealed that, some locales from within the surrounding communities have been formally employed as range guards in particular, whilst about twenty or more tour guides from these same communities have also been trained. These accordingly were basically freelance tour guides to whom some tourists visiting the park chose to associate with for the time being whilst in the area and they charged a fee. This was noted as another area of employment. He however lamented over the fact that the unemployment situation was serious whilst acknowledging that it was also a basic fact the park could not absorb all the unemployed.

At the KLNP area, some key informants again pointed out that road rehabilitation was a benefit some communities had enjoyed from the park. The roads which were opened up and upgraded for park patrols also made movement of the local people and that of farm produce from one community to the other and to market centres easier. The Ghana side did not benefit from such, although it was brought to the fore that, Government of Ghana (GOG) through an African Development Bank Facility had tarred the road from Larebanga to the entrance and within some portions of the park.

5. Conclusions

It came up in the study that most residents in these fringe communities to the two national parks were illiterate (no formal education). They also depended heavily on the resource until both facilities were designated national parks and a main source of livelihood (farming and hunting) were taken off. Such situations often called for interventions to enable locals find alternative sources of livelihood, one such ways was to let them benefit from tourism related activities in the parks and other relevant development intervention projects.

This study has been able to establish that although, some of the communities had benefited from some park and NGO intervention programmes such as the provision of boreholes, agricultural extension services, health services, and some levels of formal employments, such benefits were however found to be inadequate and not universally distributed in the fringe communities of both parks.

6. Recommendations

1. The study revealed that 45% of Kainji area communities benefited from potable water provision while only 13% in the Mole area communities also benefited. This therefore calls on stakeholders, park management and governments of the two nations to

put in more efforts at water provision and make it a priority since it is a basic need.

2. Development of road infrastructure leading to the national parks and adjacent communities especially those used within communities could be expanded, upgraded with gravel and regularly maintained to allow the communities gain easy access to market, health facilities and other services available in other communities and the parks. This will add to the stock of benefits amassed by the communities.
3. Training and extension related opportunities in agriculture since the park cannot offer every citizen formal employment. Such trainings should be annual and extended to benefit many more of the communities since it will offer locales of the fringe communities brighter agricultural prospects.
4. Homestay opportunities should be expanded in the Mole area while such opportunities should also be introduced in the Kainji area to bring more tourism benefits to the door-step of the fringe communities.
5. A needs assessment is also recommended periodically to ascertain the benefits expected by the community residents and conscious efforts made by park management to provide what these residents ask for. This will give them the needed zeal to embrace conservation efforts championed by the parks.

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