

INDIGENOUS LAND TENURE SYSTEM AS A HINDRANCE TO THE DEVELOPMENT OF PANDAM WILDLIFE PARK

Abstract

Pandam Wildlife Park (PWP) is home to diverse wildlife resources. Indiscriminate encroachment by surrounding communities has become major problems to sustainability of biodiversity management. For this study, semi- structured household survey questionnaire was used in four surrounding communities of the park; Pandam village, Kyarda, Aningo and Nasukuuk. A total of one thousand, three hundred and twenty four questionnaires were administered in the surrounding communities out of four thousand, two hundred estimated households, representing about 31.5%. Data collected was analyzed using simple descriptive statistics, tables and chi- square analysis. Result revealed that about 89.5% of the land belongs to individuals in the community (customary land tenure system) as against 10.5% statutory. The study also revealed that 53% of the people claimed Pandam Wildlife Park impacted positively on the land tenure system while 47% believed otherwise. The data analyzed using chi-square statistical analysis confirmed that there is significant difference between the surrounding communities in relation to the effect of PWP on land tenure system at (0.05). Wildlife co-existing with rural dwellers is difficult to maintain and sustain. Therefore, active participations of local dwellers are fundamental to establishment, development and sustenance for any protective Area/park.

Keywords: Bio-resources; Conservation; Indigenous; land tenure; park; wildlife.

1. NTRODUCTION

Efforts at conservation of Wildlife diversity or biological resources began as colonial authorities desire to preserve and conserve game population, misunderstanding of traditional African pattern of resources use and concerns about deforestation with other environmental problems. However, in recent times, there is a realization that conservation efforts may advocate dual goals of conserving wildlife and maintaining them for the use of the people [1]

Land tenure system is a very much complex institution since the system is derived from customary rules that do not have any fixed set of ‘instructions for use’ regarding land and other protected area resources [2]. The Indigenous Land Tenure (ILT) systems are based on informal local practices that vary from community to community and are usually flexible and negotiable through verbal agreements [3]. It is a system that most rural African communities operate to express and order ownership, possession, access, and to regulate use and/or transfer [4]. Unlike introduced landholding regimes, the norms of indigenous tenure derive from and are sustained by the community itself rather than the state or state law (statutory land tenure). Although the rules which a particular local community follows are known as customary law and they are rarely binding beyond that community.

Indigenous land tenure is as much a social system as a legal code and from the former obtains its enormous resilience, continuity, and flexibility. Indigenous land tenure is a major tenure system on a worldwide scale. It is not confined to Africa alone. Thus, it even governs lands in industrial economies, such as rural commons in Spain, Portugal, Italy, and Switzerland and territories belonging to indigenous minorities in Europe, North America, and Oceania [4]. The system operates most expansively in agrarian economies, that is, those societies where most of the population is dependent on gross domestic product and is derived from land-based production and use. They are not often from off-farm industry and urban employment.

Protected areas, (PA) are sites for conservation of biodiversity aimed at checkmating the damaging impact of human activities on natural habitat and the resources therein, particularly wildlife [5, 6]. They cover the full range of existing categories from areas under strict protection to that under multiple land use management. These include areas that are defined locally with or without national recognition. Historically, Protected Areas in Nigeria, just like Pandam Wildlife Park, allow restricted access to its resources by the local communities who formerly were dependent on them for their livelihood [7]. This has become a problem in continuously managing any protected area through the usual land tenure system or pattern [8]. This is because African knowledge and value systems have been consistently marginalized with little or no input from the indigenous knowledge based,

[9]. Hence, for local residents, establishment of national parks can lead to the exclusion of rural people from resources use in the interest of protecting Wildlife land/natural habitat. Thus the research seeks to examine the impact of land tenure system on the development of PWP. Specifically, it is to determine the dominant land tenure system in the area and the effect of PWP on the land tenure system of the support zone communities.

2. MATERIALS AND METHODS

2.1 The Study Area

The park is located North of Benue River and South of Plateau State, along Lafia-Shendam Road in Quanpan Local Government Area of Plateau State [10]. It lies between latitudes $8^{\circ} 35^1$ N and $8^{\circ} 55^1$ N, and longitudes $8^{\circ} 00^1$ E and $10^{\circ} 00^1$ E [11]. It is bounded on the East by Namu and Kayarda towns, on the West and North, by the Dep River and on the South by Aningo, pandam and Nasukuuk towns [12]. It covers a total area of $22,400\text{km}^2$ [13]. The entire park lies within the Northern guinea savanna (Fig. 1 and 2). The Pandam Wildlife Park consists of a Y- shaped lake, which has a length of about three kilometers (3km) long and the width is between 67-100m wide. Major vegetation types of the park include wooded Guinea Savannah comprising *Azelia africana*, *Vitellaria paradosum* and *Parkia biglobossa*. A riparian vegetation mostly observed along the many smaller rivers that form tributaries to the lake and all along the banks of the Pandam lake with the presence of *Elais guinensis*, *Berlina grandiflora* and *Bosqueia angolense*. Marshlands form an open continuous wetland separating the lake and the Savannah vegetation. The two major features of the climate of the park are divided into wet and dry seasons and the variability from year to year due to climate change. The wet season extend from April to October, while the dry season extends from November to March and annual rainfall in the park is between 1,000 – 1,500 mm per annum [13].

2.2 Sample Procedure

A multi- stage sampling technique was designed for the purpose of selecting respondents within the surrounding communities of Pandam, Kyarda, Aningo and Nasukuuk. Firstly, stratification of enumeration wards was carried out. Then, household listing was carried out in each ward. Households that were used were further selected by random

sampling and respondent was the head. Where he or she was not available, the next most available adult was interviewed.

2.3 Data Collection and Analysis

Total numbers of one thousand and four hundred questionnaires were administered but only one thousand, three hundred and twenty four questionnaires (1,324) were retrieved in the four selected surrounding communities of four thousand, two hundred estimated households. This represented 31.5%. Data collected were pooled together and analyzed using simple descriptive statistics (tables) and chi- square analysis.



Fig. 1: A map of Nigeria showing position of Plateau State with Qu'apam LGA

Sources: Google/map of Nigeria/structure

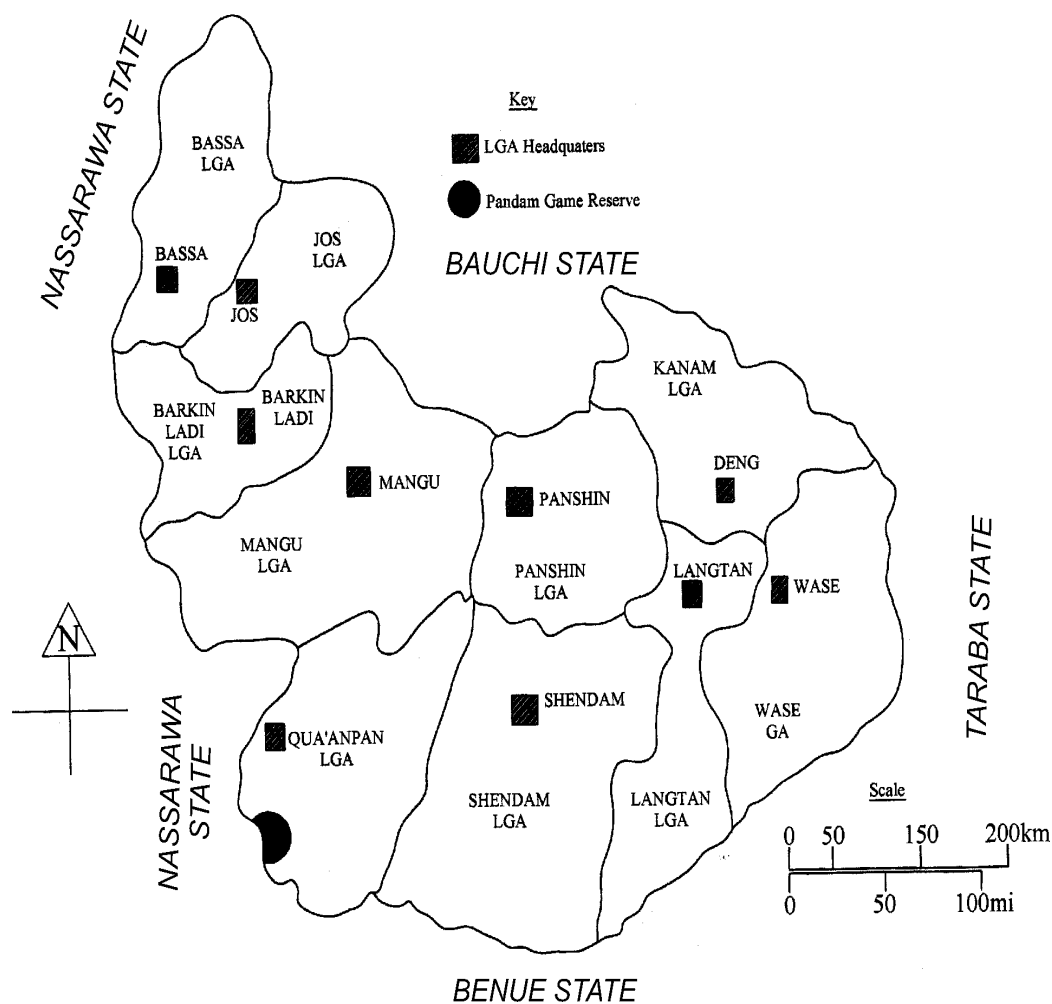


Fig. 2: A map of Qu'apam L.G.A showing location of Pandam Wildlife Park.

Source: Ministry of land and survey Plateau State.

123 **Table. 1: Average Climatic Data for Pandam Area (2008- 2010)**

Months	Mean monthly rainfall (mm)	Mean monthly rain days	Mean monthly average temperatures (⁰ C)	Mean monthly sunshine duration (hours	Mean monthly humidity maximum 2	relational
JAN	0.00	0.00	28.42	4.52	40.44	
FEB	0.01	0.02	28.30	6.00	41.20	
MAR	0.20	0.04	31.43	7.84	40.34	
APRIL	40.60	6.46	32.64	7.24	43.64	
MAY	101.30	10.25	30.84	6.83	53.84	
JUNE	120.40	10.30	29.64	6.24	63.34	
JULY	150.30	13.46	28.20	4.02	70.46	
AUG	160.80	12.20	27.85	4.34	73.50	
SEPT	182.40	16.40	28.10	4.10	73.84	
OCT	120.30	15.64	28.00	5.34	70.22	
NOV	25.00	1.06	27.40	7.04	46.84	
DEC	0.04	0.14	28.24	3.86	42.46	

124 **Source:** Meteorological station, College of Agriculture Lafia (2012)

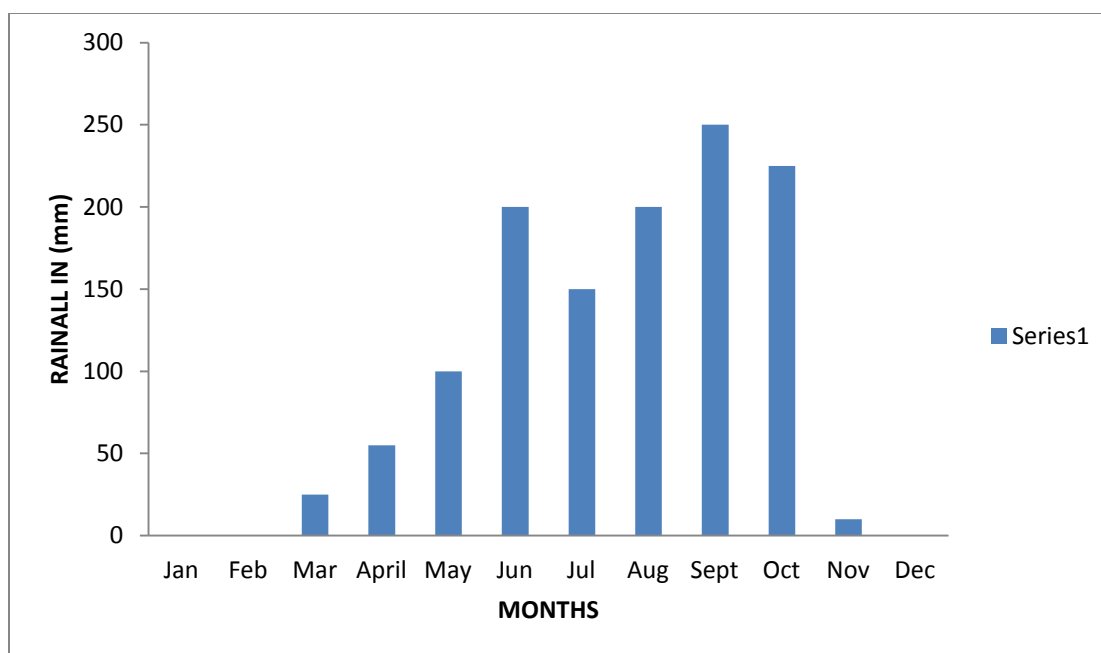


Fig 3. Total monthly rainfall (mm) in Pandam (2010).

Source: Department of Agricultural Education, College of Agriculture, Lafia (2012).

3. RESULTS

The gender characteristic of the respondents presented in Table 2 reviewed that the male respondents were dominant (83.2%), while the female were only (16.8%) of the sampled population. Table 3 indicates the type of land ownership practiced in the study area. The result shows that about 89.5% of the land belongs to individuals in the communities as against 10.5% statutory. The response on the impact of PWP on land tenure system was presented in (Table 4). Respondents (46.84%) were of the opinion that the PWP had impacted negatively on the land tenure system of the area. On the other hand, 53.16% of the respondents believed otherwise. This position was further confirmed when the data was subjected to chi-square statistical analysis (Table 5), which was significant at ($P > 0.05$) between the communities. For instance the Pandam and Nasukuuk are of the opinion that PWP affects their land tenure system while Aningo and Kyarda believe otherwise.

Table 2: Gender distribution of household heads in landlord communities of PWP.

Communities	Distance (Km)	Male	Female	Total
Pandam	0-0.5	245 (77.53)	71 (22.47)	316(100.00)
Kyarda	1	356 (76.72)	108 (23.28)	464(100.00)
Aningo	2	192 (93.20)	14 (6.80)	206(100.00)
Nasukuuk	3	308 (91.12)	30 (8.88)	338(100.00)
Total		1,101 (83.16)	223 (16.84)	1324(100.00)

Source: Field Survey (2011)

Note: Figures in bracket are in percentage

Table 3: Types of land tenure system in the study area

Type of Tenure	Number of respondents	Response (%)
Customary (i.e communal inheritance)	1,185	89.50
Statutory	139	10.50
Total	1,324	100.00

Source: Field Survey (2011)

Table 4: Response on effect of PWP on land tenure system

Community	No effect	Has effect	Total
Pandam	172(54.43)	144(45.57)	316(100.00)
Kyarda	286(61.64)	178(38.36)	464(100.00)
Aningo	92(44.66)	114(55.34)	206(100.00)
Nasukuuk	160(47.34)	178(52.66)	338(100.00)
Total	710(46.84)	614(53.16)	1324(100.00)

Source: Field Survey (2011)

Figures in bracket are in percentage

163 **Table 5: Chi Square statistical analysis on the effect of PWP on land tenure system.**

Community	No effect	Has effect	Total
Pandam	*172 ** 167	*144 ** 148	316
Kyarda	*286 ** 217.34	* 178 ** 246.66	464
Aningo	*92 ** 84.48	*114 ** 121.52	206
Nasukuuk	*160 ** 132.02	*178 **205.98	338
Total	710	614	1,324

164 * = Observed value ** Expected value

165 $X^2_{cal} = 39.83$ $X^2_{tab} (0.05) \text{ at } 1 \text{ df} = 6.07$

166 Hypothesis:

167 H_0 (Null hypothesis): There is no significant difference between the surrounding communities
168 in relation to the effect of PWP on land tenure system.

169 H_1 (Alternative): There is significant difference between the surrounding communities in
170 relation to the effect of PWP on land tenure system.

171 Decision: Since $X^2_{cal} > X^2_{tab}$ at (0.05) the H_1 is accepted

172

173 **4. DISCUSSION**

174 In this present study, issues of natural resources conservation have raised some fundamental
175 questions. The questions of who owns the resources- Government or natives and who actually
176 controls the use of the natural resources?. These are some of the pertinent questions relating to
177 the use of Pandam Wildlife Park with dominating traditional (customary) land use pattern by the
178 surrounding communities. Numerous studies [4, 15, 16]. shown that often women in rural areas
179 have less access than men to productive resources, services and opportunities, such as land
180 ownership and this is the reflection of the male being dominant in the study area. This also
181 confirmed the cultural believes and view that males are always head of families.

182 Perhaps, the reason for the difference of opinion on the direct impact of PWP on land tenure of
183 the surrounding communities may be due to the relative nearness of some of the communities to
184 the PWP boundary; the proportion of the communities land acquired by the PWP; the ever
185 changing of the social and economic activities within the communities and increased population
186 leading to more demand for social and economic purposes, particularly land for agriculture.
187 Moreover, the two views expressed between communities is significant ($P > 0.05$) to the extent

that it should not be ignored because it has implication for the conservation of biodiversity in the PWP.

According to African Biodiversity [17], challenges of protected Areas come from rapid population growth with lack of appropriate resources management structure. In addition, land suitable for farming becomes inadequate and therefore land use encroachment on reserved areas becomes an option for the support zone communities.

All the above reasons have given wildlife utilization an easy ride in Pandam Wildlife Park and a threat to its conservation. This is in line with the view of [9]. that there is always a conflict in land use pattern between Protected Areas and the surrounding communities.

5. CONCLUSION

Pandam Wildlife Park is gradually being encroached by the surrounding communities who believed Government denied them of their traditional land use pattern. However, it is worth mention that rural dwellers co-existence with wildlife is difficult to maintain due to increasing socio-economic activities of our rural populace. Therefore, the active participation of the local communities is fundamental to establishment, development and sustenance of any protective area/ park to have meaningful economic value and maintain stable range resources of the reserve.

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