INTERNATIONAL JOURNAL OF LATEST TECHNOLOGY IN ENGINEERING, MANAGEMENT & APPLIED SCIENCE (IJLTEMAS)

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

Ex-Situ Actors and Their Contribution to Conservation-Development Agenda in Old Oyo National Park

Pius Ogujo Egwumah[1], Rashidat Omolola Sotolu[1], Tyonzughul Joe Orsar[1], Benjamin Tertsea Tyowua[1], Paul Ukper Ancha[2]

[1]Department of Wildlife and Range Management, Joseph Sarwuan Tarka University, Makurdi, Nigeria.

[2]Social and Environmental Forestry, Joseph Sarwuan Tarka University, Makurdi, Nigeria.

DOI: https://doi.org/10.51583/IJLTEMAS.2025.1410000099

Received: 12 October 2025; Accepted: 19 October 2025; Published: 13 November 2025

Abstract: Effects of a green globe is felt even far away from the point of greening. Biodiversity protection or otherwise has far reaching effects even beyond the source zone. This has fueled the need for this research, gauging contribution of external actors on park protection in Old Oyo National Park (OONP). Two sets of questionnaire were administered to park officers and Support Zone Communities (SZCs) assisted with organized Focused Group Discussions (FGDs) in each of the six ranges of the park. Secondary data augments survey from records obtained from the park head office at Isokun. A total of 70 PMs were surveyed purposively at the Park headquarters and at the six ranges. From a sampling frame of 30%, a total of 40 villages were randomly and unevenly pooled from all six range stations depending on number of villages per range. Five households were randomly selected each and the household heads were purposively sampled. This was aided with FGD sessions. Most (74%) of the SZCs engage in farming, some (22.5%) practice both hunting and herding with overlap in each case. Average annual PCI for the SZCs was lesser than that of the PMs. External actors engage with the SZCs in economic empowerment, park-community synergy and more. These activities were agreed by PMs (42.86%) to be in concord with sustainable conservation, while SZCs agreed that park-community collaboration benefit them (66.5%). Community empowerment and partnership among others are inevitable to attain social acceptability, economic viability and ecological sustainability of park resources.

Keywords: Sustainable Conservation, Park Partnership, Collaboration, Economic Empowerment, Projects.

I. Introduction

Landscape approach to the restoration of the world's ecosystems is a huge challenge requiring the coordinated decision making of many stakeholders, right holders and landowners including communities, governments and the private sector. Working across so many sectors, and with so many stakeholders, requires novel ways of working together to ensure that participation is real, that groups are represented and that conflicts can be resolved. Typically, this involves a bottom-up approach. There has to be inclusion of people who need to be empowered to participate in stakeholder processes and decision making. Additionally, new methods would be required to ensure collaboration across sectors and governance levels. Important institutions concerned with ensuring that restoration decisions are made and implemented in an equitable fashion may be established in-situ or on a regional scale. According to Walters (2017), ability to adapt to local needs and good governance are pivotal to a successful restoration which needs to be context-specific. This signifies that attempt at community-based development projects should be directed at solving specific pressing problem(s) of such communities under pro-people management authorities. Additionally, people-centered dimension to conservation, which ensures locals have security of access to protected areas; reap from protected areas; and are actively involved in nature land management, is likely to earn their support for conservation efforts (Thondhlana *et. al*., 2016). This is expected to also aid social equity thus reducing conflict eruption in nature parks (Holmes-Watts and Watts, 2008). And of course, this is as opposed to the 'fortress conservation' initiative which gained most part of the twentieth century (Adams and Hutton, 2007). Nigeria is endowed with a plethora of biodiversity resources and their ecosystems. These are threatened with degradation and extinction due to an imbalance between economic development and biodiversity conservation (Anwadike, 2020). Role of National Parks in Nigeria is majorly to conserve and protect species, habitats, ecological and geographical zones. Scientific and empirical dimensions to conservation in these parks have been a failure decrying a human dimension to conservation (Muhumuza and Balkwill, 2013). However, involvement of National Parks, especially in Nigeria, in community projects is limited mainly by meagre budgets. Hence, necessitating the need for this research – exploring the roles of non-park bodies in contributing to community projects in order to aid conservation efforts in Old Oyo National Park. The park earns its uniqueness among all Nigerian National Parks due to its fascinating pockets of archaeological, cultural and historic features dotted within and around the park. As Okomu National Park stands as the only remaining virgin National Park in Nigeria, so are there abundance of solid mineral deposits in the Old Oyo National Park such as Tantalite, Columbite, Granite, Marble stone and many more both at Sepeteri and Oyo-Ile axes of the park. Additionally, as Obajanna in Kogi State is notable for cement deposit, Igbeti town in Oyo State is notable for Marble stone deposit. Recently, despite regular tourism tours and protective laws, Old Oyo National Park has been under threat from poaching, hunting, logging, mining as well as illegal herder encroachment. Participation and partnership have been identified to be essential for implementation of the dual task of park conservation and rural development (Andrew-Essien, 2018). This has triggered the modelling of this research – prying into the coupling of park and people and the significance of non-park actors in the initiative in OONP.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

Some Global Conservation Bodies and Their Contributions to Conservation

African Wildlife Foundation (AWF) protects wildlife and wild lands to thrive in modern Africa (AWF, 2024); Centre for Biological Diversity (CBD) protects endangered species through legal action, petitions, media and activism; Conservation International (CI) protects nature as a source of food, fresh water, livelihoods and a stable climate; Eco-Health Alliance protects health of people, animals and the environment from emerging infectious diseases; International Union for Conservation of Nature (IUCN) is a partnership of 1400 organizations working towards sustainable use of natural resources through improving human condition, balancing people with the environment they depend on and conserving the exactness of nature (Schwass, 2024); Wildlife Conservation Society (WCS) saves wildlife and wild species worldwide with programs in 60 countries and manages five New York City wildlife parks including the Bronx Zoo; World Wide Fund for Nature (WWF) also called World Wildlife Fund, promotes a future where people live in harmony with nature through ensuring sustainable use of renewable natural resources (Strauss and Petrick, 2024);.

Conservation-Development Projects in Africa

These are Integrated Conservation and Development Projects which link the conservation of biodiversity in protected areas with social and economic development in the surrounding areas. Aim here is to protect natural habitats and uncultivated areas, and to provide incentives for establishment of new ones. Protected areas and community conserved areas, making up a quarter of the earth's surface in land and sea, holds high potential for human development through securing ecosystem services, maintaining livelihoods and shading the impacts of climate change (Glemarec *et. al*., 2010). Hence, efforts of conservation bodies in coupling social development is a self-supporting system paradigm that is expected. Some of these include: Wildlife Conservation in Greater Kruger Park, South Africa focus on students' research on endangered animals to assist wildlife trusts and reserve management teams; Chimpanzee Conservation is the project of The African Conservation Foundation to conserve chimpanzees, including the endangered Nigeria-Cameroon chimpanzee; Namibia National Biodiversity Program (NNBP) coordinate and supports biodiversity conservation and its sustainable use (Mulonga *et. al*., 2014).

II. Materials and Methods

The Study Site: Northern Ogun Forest Reserve (est. 1936) and the southern Oyo-Ile Forest Reserve (est. 1941) were both converted to game reserves in 1952. Due to density and diversity of wildlife species population, the two were merged by the then Western State Government in the late 1960s to form the Upper Ogun Game Reserve. This was later upgraded to the present status of a National Park by the Federal Department of Forestry. Old Oyo National Park was established to preserve the cultural, historical and archaeological features in the abandoned sites of the then capital city of the ancient Old Oyo empire at Oyo-Ile, Bara and Koso, to protect, preserve, conserve and manage representative samples of indigenous flora and fauna of the south-west geographical region of Nigeria. Old Oyo National Park takes its name from Oyo-Ile (Old Oyo), the ancient political capital of Old Oyo Empire of the Yoruba people, and contains the ruins of the city (Thornton, 1999). The park has six range offices (fig.1). the park is sited in the northern Oyo and southern Kwara States of Nigeria with the administrative head office of the park in Oyo town, in Isokun area, along Oyo-Iseyin road. It covers an approximate land area of 2,512km^2 and lies on latitudes $8^0$15'-$9^0$00'N of the equator and on longitudes 3^0 35'-$4^0$42'E of the Greenwich Meridian. Rainy season is between April and September with the highest rainfall recorded around July to August. Range of annual rainfall in the park is between 900mm and 1,500mm. Mean annual temperature is between 12^0C and 37^0C. Temperature is highest in the dry season with the mean daily maximal greatest around February and March (33.6^0C) and the lowest values (20^0C) during the height of harmattan in December and January. The southern part of the park is drained by the Owu, Owe and Ogun Rivers, while the northern sector is drained by the Tessi River. The park is endowed with unique and spectacular features of abundant water resources that drain most part of the park throughout the year like the Ibuya pool and the Ikere Gorge dam. There is a great diversity of fish species in the major water bodies.

Park's Biodiversity: The park is rich in flora and fauna resources. Notable flora species include: *Parkia biglobossa*, *Afzelia africana*, *Vitelaria paradoxum*, *Vitex doniana*, *Daniella oliveri*, *Ceiba pentadra*, *Andropogon spp*, *Eliomarus spp*, and *Hyparrhenia* dissolute. Notable fauna species that could be found in the park include: Buffon's kob (*Kobus kob*), Roan antelope (*Hippotragus equinus*), Western hartebeest (*Alcelaphus buselaphus*), Bush buck (*Tragelaphus scriptus*), baboon (*Papio anubis*), Patas monkey (*Erythocebus patas*), Oribi (*Ourebia ourebi*), Grimm's duiker (*Sylvicapra grimmia*), Lion (*Panthera leo*), Warthog (*Phacochoerus aethiopicus*), Water buck (*Kobus defasa*), Red-flanked duiker (*Cephalophus rufilatus*), Black and white colobus monkey (*Colobus vellerosus*), Green monkey (*Cercopithecus aethiops*) and many more.

Sampling Techniques

Sources of Data: Two sources of data were employed to elucidate information from respondents for this survey. These are primary and secondary data sources. For the primary data source, two sets of structured questionnaire were designed for two categories of respondents: Park Officials and members of the Support Zone Communities (SZCs). This was aided with organized Focused Group Discussions and In-depth Interview in each selected village. In-depth interview targeted leaders of community association and groups including heads of departments as well as range officers at each of the selected range offices. For the secondary data however, relevant pieces of information were retrieved from the park annual report files. Records on local groups, community-based conservation and empowerment programs as well as external aid groups were obtained from the park head office at Isokun.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

Questionnaire Design and Data Collection: A sampling size of 18 percent from a staff strength of about four hundred was adopted on park officers targeting department heads and park officers involved in projects at the six ranges of the park and at the park headquarters (HQ) at Oyo town. Hence, ten park staff were picked from each of the range offices and the HQ, focusing on project heads, department heads and management officers. This makes a total of 70 park staff purposively selected for the survey of this research. For the park communities however, a multistage sampling procedure was adopted (Akosim *et al*., 2010). From all the six range stations, 30% of the number of villages in each range were randomly pooled (table 1) with a total of 40 selected villages. Five households were then randomly picked from each of the selected villages to give a total of 200 selected households in the entire park for questionnaire administration. Taking household heads' involvement in empowerment initiatives into account, they were selected in each household. A total of 200 copies of questionnaire sets were then distributed to support zone villages of Old Oyo National Park to elucidate information from the park inhabitants. The empirical phase of this study was conducted between August 2023 and September, 2024 covering periods of rainy and dry seasons. The assistance of an interview guide, who understands the cultural and traditional disposition of the locals, was employed in order to syphon as much authentic information as possible from the SZC members. An approximate time of five and three minutes were spent respectively completing a questionnaire set by the local communities before and after the FGD sessions with them.

Statistical Analysis: Data emanating from this survey is processed using Statistical Package for Social Sciences (SPSS version 20.0) and subjected to both descriptive and inferential statistics. Results from descriptive analysis in frequencies of occurrences and percentages are presented in the form of tables and charts. Inferential package employed includes: Mann-Whitney U Test.

Table 1: Range Offices and Their Respective Selected Villages

Range Office	Number of SZCs	30% of SZCs Selected	Households/ Community
Oyo-Ile	12	4	20
Tessi	9	3	15
Sepeteri	17	8	40
Marguba	20	8	40
Tede	38	11	55
Yemoso	19	6	30
Total	**115**	**40**	**200**

Source: Field Survey (2024)

III. Results

Socioeconomic Indices as a Function of SZC Members Livelihood Pattern OONP

Age range of respondents is between 31 to 40 years. Most of the respondents are married (80.37%) and males (82.22%). Highest percentage (54.3%) of the park managers have a family size of 1-5 individuals per household, while for the park communities, highest household size (43.5%) was recorded for the >10 household size category. As expected, all the park officers are civil servants with a minute percentage of them (5.7%) engaging in alternative livelihood sources. This is in contrast to the SZC members whose main occupation includes farming (74%), herding (12.57%), while their alternative sources of income include hunting (12%), trading (37.5%) and others. These are Garri and palm oil processing, sales of wood, planks and charcoal. There is no significant difference ($P>0.05$) in alternative sources of livelihood among the selected villages in each range station and across villages in the selected range stations. A little above 25% of the SZCs are primary school leavers. There exist marked significant differences ($P<0.05$) between the two groups of respondents in their educational attainment, annual income and per capita income (PCI) as depicted on table 2.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

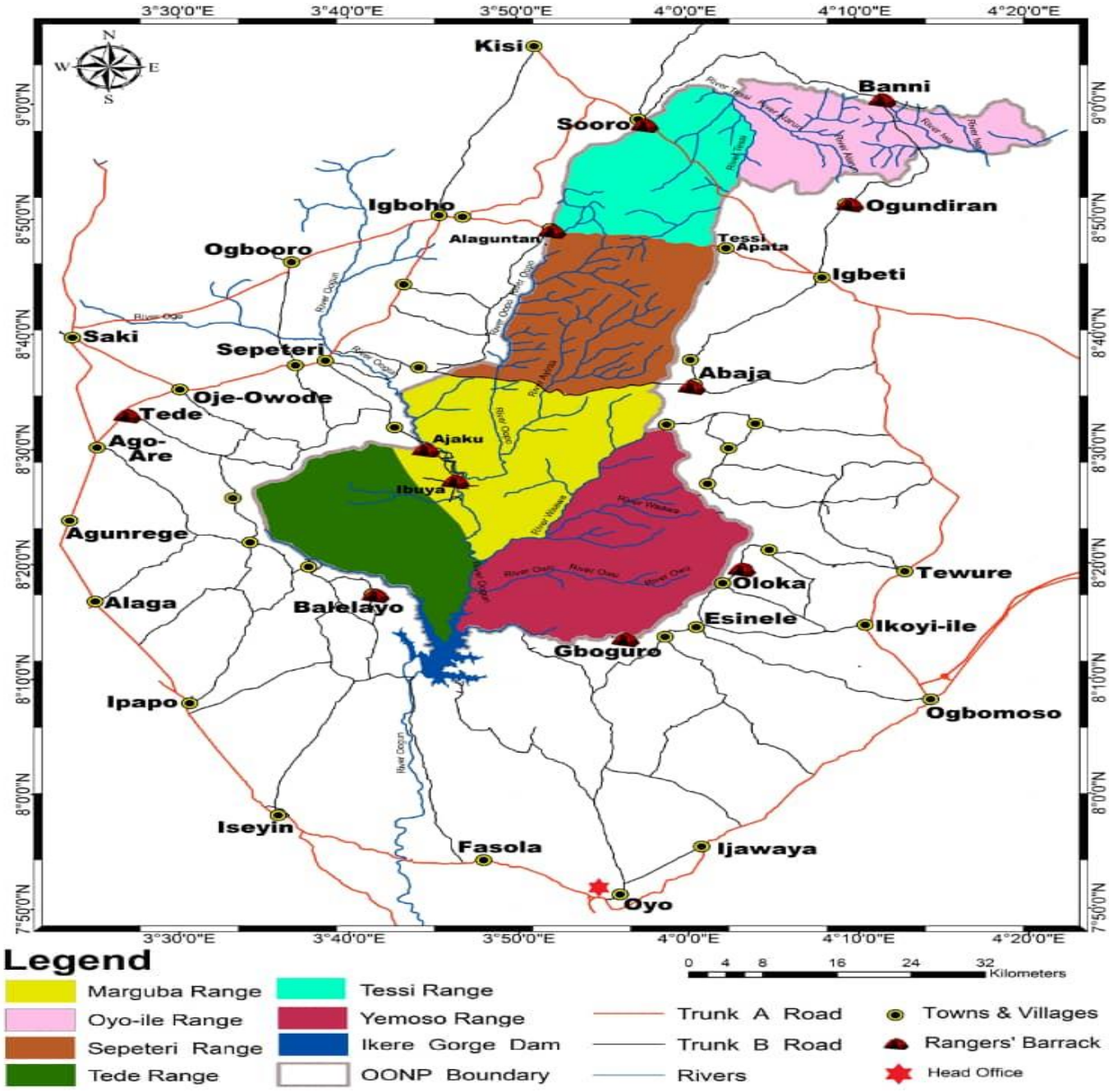

Fig. 1: Map of Old Oyo National Park Showing the Support Zone Villages

Source: OONP, 2023

Table 2: Demographic and Socioeconomic Parameters of Responds

Variables	Park Managers (n=70)	Support Zone Communities (SZCs) (n=200)	Total (N=270)
AGE:	**%**	**%**	**%**
<21	0	6.0	**4.4**
21-30	21.4	13.0	**15.2**
31-40	32.9	34.0	**33.7**
41-50	44.3	29.0	**33.0**

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

50-70	1.4	18.0	**13.7**
Total	**100.0**	**100.0**	**100.0**
SEX:			
Female	11.4	20.0	**17.8**
Male	88.6	80.0	**82.2**
Total	**100.0**	**100.0**	**100.0**
Family Size:			
1-5	54.3	23.0	**31.1**
6-10	31.4	33.5	**33.0**
>10	14.3	43.5	**35.9**
Total	**100.0**	**100.0**	**100.0**
Main Occupation:			
Civil Service	100	0.0	**25.9**
Farming	4.3	74.0	**55.9**
Herding	0	22.5	**16.7**
Hunting	0	25.5	**18.9**
Trading	1.4	37.5	**28.1**
Others	0	41.5	**30.7**
No Altntive	94.3	0.0	**24.4**
Total	**100.0**	**100.0**	**-**
Educational Attainment:			
Non-Formal	0	39.0	**28.9**
Primary	0	25.5	**18.9**
Secondary	11.4	23.0	**20.0**
Tertiary	88.6	12.5	**32.2**
Total	**100.0**	**100.0**	**100.0**
Annual Income ('000₦):			
500-1,000	44.3	73.5	**65.9**
1,001-1,500	18.6	14.0	**15.2**
1,501-2,000	28.6	10.0	**14.8**
>2,000	8.6	2.5	**4.1**
Total	**100.0**	**100.0**	**100.0**
PCI (₦)	**221,795**	**123,219**	**172,507**

Source: Field Survey, 2024.

Collaboration and Partnership: Ex-Situ Conservation Actors and Their Projects In Old Oyo National Park

Old Oyo National Park enjoy collaboration and support from local aid agencies with interest in conservation (Table 3). These supports range from providing services for environmental protection of the park and the support zone communities; conservation education and awareness to communities and even to students in schools; strengthening park-community cooperation; as well as economic empowerment of community members.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

Table 3: Aid Groups and Their Respective Community-Based Programs Contributing to Conservation of OONP

Aid Agency	Program Type	Agenda
Premier FM 93.5 Ibadan	Broadcast Conservation Education Programs; Conservation Club in Public Secondary Schools	Conservation Education and Awareness
National Orientation Agency, Oyo West LG	Interschool Football Clubs; Community Awareness Train	Park-Community Cooperation
Caring Climate Film Production Osogbo	Conservation Education and Awareness Train	Conservation Education and Awareness
Green Bond Afforestation Program (Federal Government)	Cash Crops and Fruit Crops Plantation (Mango, Orange, Cashew, Palm, Shea Butter, Rose Wood)	Environmental protection (Flood Control) and Economic Empowerment Program for Park Communities

Source: Field Survey (2024)

Community-Based Projects and Its Significance on Ecosystem-Based Approach to Sustainable Conservation in Old Oyo National Park

Community Development Projects (CBP) agreed to be of benefit to local communities around the park, actually yield less than ₦500,000 per year (95.83%) for each household as seen in figure 2. Hence, local peoples' support for conservation (fig. 3) is expressed to be low (54.17%). Their support for conservation is lowly dependent on their cravings for empowerment from result of correlation between the peoples' urge for empowerment and development, versus their for support for park conservation.

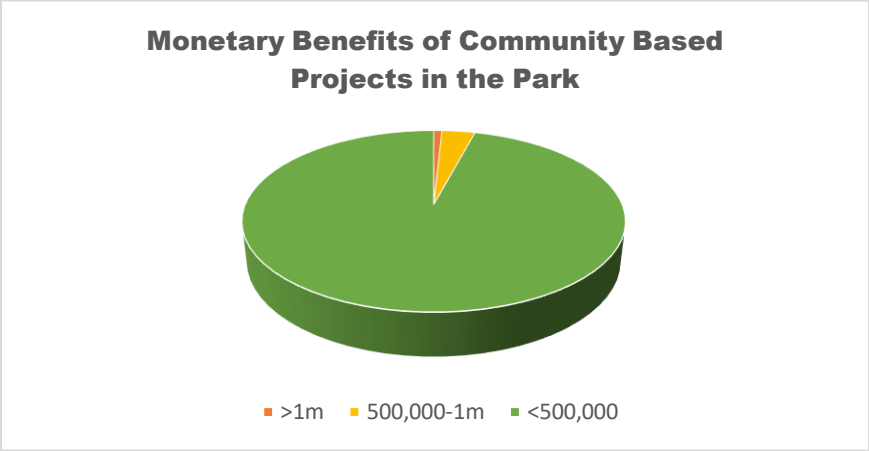

Fig. 2: Amount (in ₦) Benefited by SZCs from Community-Based Projects per Annum

Source: Field Survey (2024)

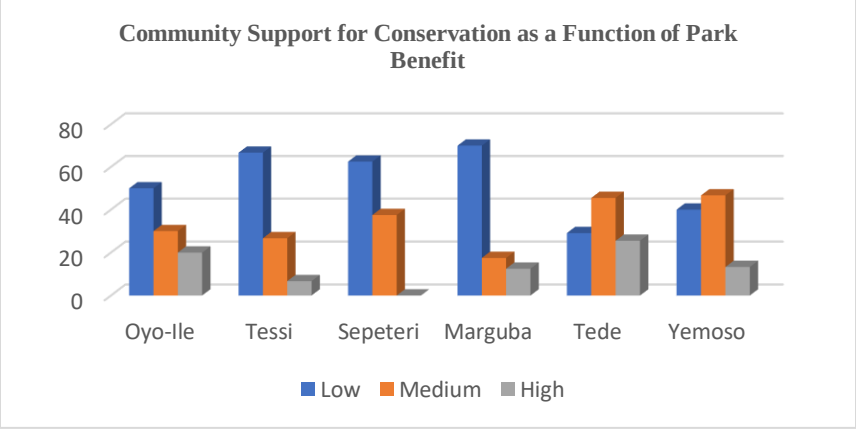

Fig. 3: Relationship Between Park Benefits and Community Support for Conservation in OONP

Source: Field Survey (2024)

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

Hypothesis: Testing Correlation between Support for Conservation Against Urge for Empowerment and Development Among SZCs of OONP

Test Statistics: Pearson Product Moment Correlation Coefficient (r)

x = independent variable (communities' urge for empowerment and development)

y = dependent variable (community support for conservation)

$$r = \frac{n\sum XY - \sum X \sum Y}{(n\sum X^2 - (\sum X)^2) - (n\sum Y^2 - (\sum Y)^2)}$$

n = number of data point, x,y pairs

$\sum XY$ = sum of product of x-value and y-value for each point

$\sum X$ = sum of x- values in the data set = 51.6

$\sum Y$ = sum of y-values in the data set = 55.1

$\sum X^2$ = sum of squares of x-values in the data set

$\sum Y^2$ = sum of squares of y-values in the data set

$(\sum X)^2$ = square of sum of x-values in the data set

$(\sum Y)^2$ = square of sum of y-values in the data set

$-1 \leq r \leq +1$

-1 denotes a strong negative correlation while +1 denotes a strong positive correlation

$r = +0.3983$, $R^2 = 0.1586$, $p = 0.1777$ ($p>0.05$)

Decision: there exists a weak positive correlation between support for conservation and peoples' urge for empowerment and development by SZC members and the correlation is not significant. 15% support for empowerment and development by the SZCs influence their support for conservation.

IV. Discussion

Socioeconomic Pointer to Low Income Level of SCZs in Old Oyo National Park

National Parks, nature reserves and other protected areas across the developing world are known to harbor human influx whose population derive their means of livelihood from biodiversity resources use (Toyobo *et al.*, 2014). The scenario is not different from the case of Support Zone Communities (SZCs) of Old Oyo National Park (OONP) where buffer zone inhabitants are comprised of able-bodied males of large family sizes. Formal education gives exposure, broadens horizon and opens up more opportunities for survival. This the managers of the resource have but the locals haven't. Locals who have very low educational background; with large family sizes and some of whom have been in the park since birth, who have spent nothing less than a decade in the park, with subsistence means of livelihood, often see themselves as the original custodians of the park and its resources. With low level of education, the rurals could mostly earn through artisanal work, farming, trading, and subordinate government jobs making them low-level income earners. As park managers earn their living through resource protection, community members rely on resource use for their sustenance. Per capita income, which describes the average annual income per person per year, has a significant difference between the managers of biodiversity and the rural communities harboring OONP, with the managers earning more. Expectedly, where park managers are keen on resource protection, community members are winding their ways around exploitation and encroachment through hunting, mining, fishing, logging, charcoal production. If there are provisions for financial assistance to the locals to fund their businesses, perhaps, it could have been a lot better to convince them over their cooperation with wildlife protection. Locals in places like Sepeteri and Ago Awaye towns engage in artisanal works like mechanic, vulcanizing, fashion designing, with the reality of proximity of that zone to the border town- Saki, this gives those towns an outlook of communities detached and far away from a protected area.

Conservation Success as a Function of Economic Empowerment of Park Communities in OONP

The economic valuation of protected areas is currently receiving considerable attention from policymakers and park managers, as such information can assist with the identification and design of funding mechanisms and the provision of alternative sustainable livelihood opportunities to park communities as corroborated in the work of Pisani *et al.* (2021). Need for this is not farfetched from OONP as locals need funding for livestock production, handicraft making, fish production, scholarship for indigenous students of the communities, as its been enjoyed by the locals of Lake Mburo National Park, Uganda (Twinamatsiko *et.al.*, 2022). Encroachment in the park as well as close proximity of communities to the park exposes fauna species to poaching. Hydrogen cyanide is contained in cassava. Communities throw cassava peelings into rivers Ajaku and Ogun, poisoning and killing aquatic lives. After this, the locals demand more compensation from the park authorities as they claim that the benefits that they are

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

getting from the park is too minute. This corroborates the assertion of King (2010) that involvement of communities in park management has ethical and economic impacts. There are also complaints that government-promised development projects are not getting to them. This could push locals to harbor poachers at a price; connive with or harbor illegal entrants to log, poach, mine; or engage extensively in all forms of illegal exploitation of park resources. Another root of complaints by locals over insufficiency of park developmental projects is premised on need to address their livelihood needs amidst conservation costs (Archabald and Naughton-Treves, 2001). As a result of the perceived inequitable distribution of benefits, unauthorized resource use takes place as was the case in the research findings of Twinamatsiko *et al.* (2014) and Harrison *et al.* (2015) indicating that those who engage in poaching are poorer people than those who perceive less involvement within the adjacent communities of protected areas. And it therefore necessitates tackling illegal biodiversity exploitation through empowerment and system change.

Pro-Conservation Efforts of Ex-Situ Stakeholders in the Park

The delivery of positive outcomes relating to biodiversity; recognition and respect for rights-holders and stakeholders living in or near the area or dependent on its natural resources; and meeting human needs through ecosystem services (Dudley *et. al*., 2022) is a way of achieving CBD goal 30x30. Involvement of external actors with these groups is rooting conservation through the people as was the case where a methodology was designed to support the social actors involved in the management of protected areas of National Natural Parks of Colombia (UNEP-WCMC, 2018). Just as stakeholders from different levels including farmers, government agencies, civil society groups, private sectors cooperate to plant 2.4 million trees to stabilize river banks of Harda district in India; government recognized a community-led organization, Community Resource Management Areas (CREMA), to restore farmlands across Ghana; around 270 groups jointly focus on landscape restoration of the Atlantic Forest Restoration Pact in Brazil (Walters, 2017), OONP enjoys a variety of interventions from different actor groups who are outside the territories of the park, making frantic efforts to sustain resource protection and conservation through empowering the local support zone communities. In 2013, Old Oyo National Park partnered with Caring Climate Film Production in the production of a movie titled 'Igbo Oba', employing locals as ad hoc actors and extras. Also the same year, Kob Football Club was established by HYZIK concept to bring communities in the park together for entertainment rapport. Since 2014, National Orientation Agency of the Oyo West Local Government has been organizing periodic sensitization programme titled 'Doing the Right Thing at All Time'. Same year, the park also started an awareness creation programme through 92.5 FM Amuludun Radio in joint collaboration with Cote de Voire and the Republic of Benin. On a regular basis, the park organizes Jingles on National Television Authority (NTA) Ibadan, Broadcasting Corporation of Oyo State (BCOS) Osun, BCOS Oyo, Federal Radio Corporation of Nigeria (FRCN) Ibadan and Premier FM 93.5 Ibadan. The park also organizes Conservation Clubs in public secondary schools in the park support zone communities. In all, partnership, participation and collaboration are expressed towards park conservation while involving and benefiting the locals in one way or the other. If these are routine, continuous and sustainable, locals' stewardship for conservation would be achieved as was established by Chadzon *et al.* (2020). And enforcement officers would have lesser encounter with complicated scenarios and threats to deal with. Likewise, the 'withdraw and return' strategy of the people – withdrawing from resource exploitation at the instance of benefit and returning to it as soon as benefit seizes, would come to a alt. this would assist to better secure the park and its resources for a more sustainable park-people engagement.

V. Conclusion

International standards on sustainable development and environmental protection emphasize the need for public participation. This is with the assumption that greater public participation can improve quality of decisions, improve public respect of those decisions, and improve public perception of government. However, public perception among non-government officials vary depending on the level of consultation. Governance and equity assessment approach demonstrate ecosystem-level management to promote sustainable conservation of biodiversity. Integration, however, requires the meaningful involvement of stakeholders. Procedural, distributive and recognitive equity are instrumental to improving the landscape of decision making for better and equitable conservation. It is evident that the functioning of the protected area is dependent on a better working relationship with the community. Greater governance and equity strengthen community support for conservation and development. The more people felt involved and that they benefited from protected areas, the more they increased their conservation support and stewardship.

References

1. Adams W.M. & Hutton J. (2007): People, Parks and Poverty: Political Ecology and Biodiversity Conservation. Cons Soc. 5(2):147–183. https://www.jstor.org/stable/263928.
2. Akosim C., Bode A.S., Kwaga B.T. & Dishan E.E. (2010): Perceptions and Involvement of Neighbouring Communities of Kainji Lake National Park Towards The Parks Conservation Programmes. Journ. Res. in For., Wild. and Env., 2(1): 44-53.
3. Andrew-Essien E.E., (2018): Strengthening Park Management Effectiveness for Natural Resource Sustainability in the Cross River National Park (CRNP), Nigeria. Proceedings of 6th NSCB Biodiversity Conference; UNIUYO 2018. Pp: 233-237. https://nscbconf2018.wordpress.com.
4. Anwadike B.C. (2020): Biodiversity Conservation in Nigeria: Perception, Challenges and Possible Remedies. Current Investigations In Agriculture and Current Research. LUPINE Publishers. ISSN: 2637-4676. Pp: 1109-1115.

ISSN 2278-2540 | DOI: 10.51583/IJLTEMAS | Volume XIV, Issue X, October 2025

5. Archabald, K. & Naughton-Treves, L. (2001): Tourism Revenue Sharing Around National Parks In Western Uganda: Early Efforts to Identify and Reward Local Communities. Env. Cons. 28(2):135–149. DOI: 10.1017/S0376892901000145.
6. AWF (2024): African Wildlife Foundation Statement on United Nations Framework Convention on Climate Change COP29 Outcomes. PRESS RELEASE. Retrieved 24th December, 2024.
7. Bob Strauss & Betsy Petrick (2024): The Top 10 Wildlife Conservation Organizations. Treehugger; Sustainability for All. http://www.treehugger.com.
8. Dudley N., Robinson J., Andelman S., Bingham H., Conzo L.A., Geldmann J., Groruld-Colvert K., Gurney G., Hickey V., Hockings M., Jonas H., Kettunen M., Marnewick D., Masozera M., Mitchell B., Parrish J., Redford K., Espinoza A.R., Russi D., Salafsky N., Springer J., Sullivan-Stack J., Tugendhat H., Watson J.E.M., Wilkie D. & Woodley S. (2022): Developing An Outcomes-Based Approach To Achieving Target 3 Of The Global Biodiversity Framework. Parks Vol. (28)2. Pp: 33-44. DOI: 10.2305/IUCN.CH.2022.PARKS-28-2ND.en.
9. Glemarec Y., Dloghlaf A. & Da Fonseca G.A.B. (2010): Forward In Ervin J., Sekhran N., Dinu V., Gidda S, Vergeichik M. & Mee J. (2010). Protected Areas for the 21st Century: Lessons from UNDP/GEF's Portfolio. New York United Nations Development Programme and Montreal Convention on Biological Diversity. 132pp. ISBN: 92-9225-274-7.
10. Harrison, M., Baker, J., Twinamatsiko, M. & Milner-Gulland, E.J. (2015): Profiling Unauthorized Natural Resource Users for Better Targeting of Conservation Interventions Understanding The Profiles and Motivations of Resource Users and Local Perceptions of Governance at Bwindi Impenetrable National Park, Uganda, Cons. Biol 29(6):1636–1646. https://doi.org/10.1111/cobi.12575.
11. Holmes-Watts T & Watts S. (2008): Legal Frameworks for and the Practice of Participatory Natural Resources Management in South Africa. For. Policy. Econ. 10:435–443.
12. https://www.iucn.org/news/forests/201701/people-centered-governance-and-restoration.
13. King B. (2010): Conservation Geographies in Sub-Saharan Africa: The Politics of National Parks, Community Conservation and Peace Parks. Geography Compass 4(1): 14-27. ResearchGate. DOI: 10.1111/j.1749-8198.2009.00288.x
14. Muhumuza M. & Balkwill K. (2013): Factors Affecting The Success of Conserving Biodiversity in National Parks: a Review of Case Studies from Africa. Terlizzi A. (ed.). vol. 2013(1). Pp: 20. https://doi.org/10.1155/2013/798101.
15. Mulonga S., Mfune J., Willemse N., Humavindu M., Canniffe B. & Nghishidi J. (2014): Namibia's Second National Biodiversity Strategy Action Plan 2013-2022. Republic of Namibia, Ministry of Environment and Tourism. De Voss N. (ed.). xi+59pp.
16. Pisani, D., Pazienza, P., Perrino, E.V., Caporale, D. & De Lucia, C. (2021). The Economic Valuation of Ecosystem Services of Biodiversity Components in Protected Areas: A Review For a Framework of Analysis For The Gargano National Park. Sustainability 13(21):11726 doi.org/10.3390/su132111726.
17. Schwass R.D. (2024): Introduction to Sustainable Development. World Conservation Strategy of The International Union For The Conservation of Nature and Natural Resources (IUCN). 26pp. York University, Toronto, Canada. Encyclopedia of Life Support Systems (EOLSS). http://www.eolss.net/Eolss-sampleAllChapter.aspx
18. Thondhlana G, Cundill G & Kepe T. (2016): Co-Management, Land Rights, and Conflicts Around South Africa's Silaka Nature Reserve. Soc. Nat. Res. 29:(4)403–417. Routledge. https://doi.org/10.1080/08941920.2015.1089609
19. Toyobo A.E., Raheem W.M. & Oyoleye O.I. (2014): Conservation Strategies of Wildlife Resources in The Old Oyo National Park, Nigeria. Int. Journ. Adv. Sci. & Techn Res. Issue 4 (4). Pp: 526-537. ISSN: 2249-6654.
20. Twinamatsiko M., Franks P., Booker F., Muchunguzi C. & Murembe C.N. (2022): Alternative Approaches to Integrated Conservation and Development: Equitable Governance at Lake Mburo National Park, Uganda. Parks. Vol. 28(2). Pp: 23-32. Doi.org/10.2305/IUCN.CH.2022.PARKS-28-2MT.en
21. Twinamatsiko, M., Baker, J., Harrison, M., Shirkhorshidi, M., Bitariho, R., Weiland, M., Asuma, S., Milner-Gulland, E.J., Franks, P. & Roe, D. (2014): Linking Conservation, Equity and Poverty Alleviation. Understanding the Profiles and Motivations of Resource Users and Local Perceptions of Governance at Bwindi Impenetrable National Park, Uganda. London: IIED. Doi.org/10.13140/2.1.4853.4409. https://pubs.iied.org/14630IIED. ISBN: 978-1-78431-073-8
22. UNEP-WCMC (2018): 2018 United Nations List of Protected Areas. Supplement on Protected Area Management Effectiveness. UNEP-WCMC, Cambridge, UK. iv+63. ISBN: 987-92-807-3717-2.
23. UNESCO (2023): World Heritage: A Unique Contribution to Biodiversity Conservation. United Nations Educational, Scientific and Cultural Organization. UNESCO Digital Library. 15pp. www.unesco.org. https://doi.org/10.58337/LSRE8424
24. Walters G. (2017): People-Centered Governance and Restoration. International Union for Conservation of Nature (IUCN) Document. Viewed June 2, 2018.
25. Chadzon R.L., Wilson S.J., Brondizio E., Guariguata M.R. & Herbohn J. (2020): Key Challenges for Governing Forest and landscape Restoration Across Different Contexts. Vol 104. https://doi.org/10.1016/j.landusepol.2020.104854