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# Evaluation of Capacity-building of Staff for Effective Management in Old Oyo and Okomu National Parks, Nigeria

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## Abstract

Among the numerous issues relating to conservation in protected areas, the proficiency and effectiveness of staff in charge of the natural resourcesdemand greater emphasis, especially in the developing countries where conservation activity is respected by few. This study evaluated the capacity-building programmes in Old OvoNational Park (OONP) and Okomu National Park (OOP) in Nigeria and the training needs of the staff using 210 respondents to semi-structured questionnaire and focus group discussions. The data were analyzed using descriptive statistics of frequency counts and percentages, means and standard deviations and hypothesis testing with Pearson's correlations and T-test. The results show that capacity-building programmes: seminars and workshops, further study in higher institutions of learning and other professional pursuits exist in the parks;68.8 and 68.1% of staff in OONP and ONP had participated in different trainings respectively. The training needsidentified for OONP include ecotourism development, human resource management and patrolling with mean values at 1.71, 1.71 and 1.70; and patrol techniques, environmental education and international and national conservation strategies with mean values at 1.86, 1.83, and 1.81 for ONP respectively. OONP and ONP had common interest in intensive training (long term) at 74.6 and 59.7% for durations that should last for months at 44.9 and 66.7% respectively. The trainings provided to staff between the two parkswere not significantly (T-test p>0.05) different butthere wassignificant relationshipbetween the job disposition of staff and training provided (p<0.05) in OONP and ONP. Therefore, the training needs of all categories of staff should begiven adequate consideration in planning the development of protected areas to ensure the effectiveness of conservation strategies.

Keywords: Protected areas, staff, biodiversity conservation, effectiveness

# Introduction

Protected areas are essential components in all levels of conservation strategies. The Convention on Biological Diversity (CBD) referred to protected area as areas with vital contribution to the conservation of the world's natural and cultural resources whose values range from the protection of natural habitats and associated biodiversity to the provision of ecosystem services and contribution to poverty alleviation and sustainable development (CBD, 2004). Protected areas can provide opportunities for rural development and rational use of marginal lands, generate income and create jobs, for research and monitoring, for conservation education, and for recreation and tourism.

Hockings *et al.*(2005) noted that the expertise of protected area professionals is lacking in several key areas including natural resource management principles, research and monitoring techniques, general leadership and communication skills, and the ability to understand and provide adequate opportunities for the involvement of local stakeholders in management decisions. Chape *et al.*(2008)observed that the effective management of the world's growing system of protected areas is a

key challenge for global biodiversity conservation in the 21st century. This is because of the expanding array of external threats that continually test the abilities of protected area professionals to maintain the integrity of the protected area units and systems for which they are responsible (IUCN, 2004). Thus, for decades, global forums such as the International Union for Conservation of Nature (IUCN) World Parks and World Conservation Congresses, the Convention on Biological Diversity Conference of Parties, and others have focused considerable attention on the need to improve management effectiveness for protected area systems to enhance their sustainability as a mechanism for conservation (IUCN, 2004)

CBD (2004) documented on the programme of work with goals and targets on sustaining biological diversity. The third goal was building capacity for the planning, establishment and management of protected areas with a target that comprehensive capacity-building programmes and initiatives will be implemented to develop knowledge and skills at individual, community and institutional levels, and raise professional standards. The activities suggested to the parties are to:

- complete national protected area capacity needs assessment, and to establish capacity building programmes on the basis of these assessments including the creation of curricula, resources and programs for the sustained delivery of protected areas management training;
- establish effective mechanisms to document existing knowledge and experiences on protected area management, including traditional knowledge in accordance with Article 8(j) and Related Provisions, and identify knowledge and skills gaps;
- exchange lessons learnt, information and capacity-building experiences among countries and relevant organizations, through the Clearing-house Mechanisms and other means;
- strengthen the capacities of institutions to establish cross-sectoral collaboration for protected area management at the regional, national and local levels; and
- improve the capacity of protected areas institutions to develop sustainable financing through fiscal incentives, environmental services, and other instruments

Capacity-building, education and training constitute one of the most significant measures to ensure that planning and management frameworks are established to promote the long-term sustainability in protected areas. Hence, as much as there is a need to build capacity amongst protected area agencies, these programmes being designed to assist them need the support to effectively plan and improve the effectiveness of the capacity-building programmes (Brent and Thomas, 2003). IUCN-WCPA(2010) documented that promoting collaborative partnerships and the sharing of institutional knowledge to build capacity for effective protected area management remain a salient point of discussion.

Personnel (staff) management is one of the significant principles incorporated in traditional organizations whereby training and development programmes, welfare programmes, salary incentive programmes and upgraded working conditions are implemented (Analoui, 1999; Pindur *et al.*, 1995). Hockings *et al.* (2006), however, stated that the ultimate aim of capacity-building programmes is to improve the effectiveness of protected area management.

National Parks are assets of the federal government of Nigeria and the agency responsible for their management is the National Parks Service, an agency of the Federal Ministry of Environment (Marguba, 2002). This study was conducted with the aim of identifying the existing capacity building programmes for staff in Old Oyo National Park and Okomu National Park and to identify their training needs.

# Materials and Methods

The study was conducted in two national parks (Fig. 1): Old Oyo National Park (OONP) and Okomu National Park (ONP) in the south-west and southsouth geo-political zones of Nigeria respectively. The OONP was established by Act No. 36 of 1991 which was later repealed and replaced with Act No. 46 of 1999. It is located between latitudes  $8^0$  15° to  $9^0$ 05 N and longitudes  $3^0$  35 to  $4^0$  42 E, and centered on North latitude  $8^0$  36  $\acute{}$  00  $\acute{}$   $\acute{}$  and East longitude 3 57' 05'' (Akinyemi and Kayode, 2010). Thepark takes its name from Ovo-Ile (Old Ovo), the ancient political capital of Ovo Empire of the Yoruba people, and contains the ruins of this city.Okomu National Park was established under Decree 46 of 1999 (now Cap N65 LFN 2004), (Agbaje-Williams, 1990).It is located in Ovia

Southwest Local Government Area of Edo State, west of the River Niger and lies between latitudes  $6^{\circ}15'-6^{\circ}25'N$  and longitudes  $5^{\circ}9'-5^{\circ}23'E.It$  is bounded in the west by the Okomu River.In 2004, the southern extension of 26 compartments was added to the park by the Edo State Government to attain the current size of 202 km<sup>2</sup>.

The target population of the study was the staff of the parks which was at the time of this study was 303 and 156 in OONPand ONP respectively totalling 459. The sample size determined using the method of Krejcie and Morgan (1970) was210. The combination of Focus Group Discussion (FGD) and questionnaire administered by proportion at 138 and 72 in OONP and ONP respectivelyas adapted from Kopylova and Danilina (2011) was the source for primary data. The existing trainings were identified and the training needs assessment checked on gaps between current and desired knowledge, and skills required by staff for effective management of Protected Areas. The results were compared to IUCN World Parks Congress Delegate Survey 2003 conducted in Durban (South Africa) (Hockings *et al.*, 2005)The data obtained wereanalyzed using descriptive statistics such as means, standard deviations, frequency, percentages, tables and charts. Hypotheses were tested with Pearson's correlations and T-test.



Fig. 1: Map showing the study sites in Oyo and Edo States, Nigeria

# Results and Discussion

#### Trainings identified in OONP and ONP

Table 1 shows the participation of staff in capacitybuilding programmes. The capacity-building programmes exist in OONP and ONPin which 68.8 and 68.1% of the respondents had participated respectively. The identified trainings include paramilitary and patrolling, biodiversity monitoring, communication skills, human relation management, conflict management and resolution, general wildlife management, hospitality management, leadership skills, GPS techniques and data processing (Fig. 2). The findings from the focus group discussion buttressed the fact that workshops, seminars and inservice tertiary education are available in the parks. The reviewed annual training records also affirmed the existence of capacity-building programmes were in place for staff in the park. Kemraj (2007) had identified the existence of capacity-building programmes in Saint Lucia. These results are agreement with Hockings *et al.* (2006) that training and re-training of staff in protected areas cannot be over emphasised.

	OON	IP	ONP			
Participation	Frequency Percent		Frequency	Percent		
Yes	95	68.8	49	68.1		
No	43	31.2	23	31.9		
Total	138	100.0	72	100.0		





Fig. 2: Trainings held in capacity-building programmes for staff of OONP and ONP

Table 2: Inferential Differences in training provided to the staff between the two pa	oarks
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Variable	Mean		Mean	Т	Sig(2 tailed)
	Old Oyo	Okomu	Difference		
General Wildlife management	1.19	1.16	0.03	0.39	0.70
Paramilitary and patrolling	1.22	1.24	-0.02	-0.32	0.75
GPS techniques	1.03	1.02	0.01	0.38	0.70
Conflict management and resolution	1.05	1.02	0.03	0.91	0.36
Communication skills	1.13	1.16	-0.04	-0.60	0.55
Data processing	1.04	1.06	-0.02	-0.50	0.62
Biodiversity monitoring	1.17	1.20	-0.04	-0.52	0.60
Human relation techniques	1.08	1.04	0.04	0.97	0.34
Financial management	1.03	1.08	-0.05	-1.31	0.19
Leadership skills	1.06	1.02	0.04	1.12	0.26
Hospitality management	1.01	1.02	-0.01	-0.48	0.63

Source: Field survey, 2017

The trainings that the staff had undergone in OONP and ONP are very similar although the frequency and the number of participants differ maybe as a result of the size of the park and staff strength. The inferential tests represented in table 2 show the following: general wildlife management (T=0.39, p>0.05), paramilitary and patrolling (T=-0.32,

p>0.75), GPS techniques (T=0.38, p>0.70), conflict management and resolution (T=0.91, p>0.05), communication skills (T=-0.60, p>0.05), Data processing (T=-0.50, p>0.05), biodiversity monitoring (T=0.52, P>0.05), human relation techniques (T= 0.97, p>0.05), financial management (T=-1.31 p>0.05), leadership skills (T=1.12, p>0.05)

and hospitality management (T=-0.48, p>0.05). Therefore, there is no significant difference between the training put in place for staff in OONP and ONP probably because the two operate under the same umbrella body-National Parks Service, an agency of the Federal Ministry of Environment (Marguba, 2002).

### Training needs

Building the capacity among protected area managers has been consistently identified as a promising means by which to address the challenge. Periodically assessing the capacity needs of protected area managers is critical to informing the development of targeted interventions that maximize efficiency and impact (Carlos et al., 2013). The training need topics identified by the staff in OONP and ONP are shown in Table 3. The training need topics in OONP are ecotourism development, human resources management and patrolling with high mean values at 1.71, 1.71 and 1.70 respectively staff in ONP preferred while patrolling, environmental education, International and national conversation strategies, and human resources management high mean valuesat 1.86, 1.83, 1.81 and 1.78 respectively. However, thetopics identified by the group membersduring the focus group discussion on training needs for achieving the conservation goals of the parks include plant identification, wildlife photography and ecotourism. This agrees with the findings of survey conducted in 2003 by World Park Delegateson Protected Area training needs that variations can exist depending on the management and location of the protected area (Hockings et al., 2005). Also, the country report on protected area training needs assessment in St. Lucia showed that most of the topics identified were similar to those enumerated in OONP and ONP and emphasized that protected area professionals and

managers must acquire new skills and knowledge in order to effectively manage protected areas and protected area systems (Kemraj, 2007. The staff in OONP and ONP had common interest in intensive training (long term) with 74.6% and 59.7% respectively, and the duration of training with highest percentage was for those which would last for months at 44.9 and 66.7% respectively while only 5.1 and 4.2% of respondents indicated preference for 1-5 days respectively (Table 4). Kemraj (2007) stated that 50% of respondents indicated they preferred a training duration of 1-5 days whilst the remaining respondents indicated a preference of 1-2 weeks and short courses such as seminars, workshops and field trips. The difference in preference for duration of courses might be as a result of geographical locations and level of education and exposure.

There was significant relationship and moderate correlation between most the trainings provided and the unit of services of the respondents' trainings in OONP and ONP as follows: general wildlife management (r=0.23, 0.39 p<0.05), paramilitary and patrolling (r=0.21, 0.41 p<0.05), human relation techniques (r=0.23, p<0.05), biodiversity monitoring (r=0.23, 0.40 p<0.05), communication skills (r=0.36, 0.39 p<0.05) respectively. This implies that the training provided is relevant to the job disposition. Ogunjinmi et al. (2014) indicated a significant but weak relationship in training opportunities with organizational commitment which implies that training of staff if properly structured will go a long way to actualizing the organization goal. It is, therefore, evident that a more structured capacitybuilding programme for staff with a strategic framework is very instrumental to achieving the conservation goals of the protected area.

		Old Oyo	National	Okomu National	
S/N	Training topic	Park <b>N = 138</b>		Park	
				N = 72	
		Mean	SD	Mean	SD
1	International and national conversation strategies and protected	1.62	0.49	1.78	0.41
	area policies				
2	Environmental education and interaction	1.64	0.48	1.83	0.38
3	Biodiversity monitoring and management	1.63	0.48	1.67	0.47
4	Communication skills	1.63	0.48	1.67	0.47
5	Physical and landscape planning	1.38	0.48	1.58	0.50
6	Planning and design of interpretive structures and media	1.48	0.51	1.67	0.47
7	Ecotourism development and planning	1.71	0.46	1.56	0.50
8	Visitor safety planning	1.67	0.47	1.62	0.48
9	Human resources management	1.70	0.46	1.81	0.40
10	Financial management and planning	1.63	0.48	1.47	0.50
11	Social policies, community involvement and conflict resolution	1.44	0.50	1.49	0.50
12	Law enforcement	1.45	0.50	1.44	0.50
13	Sustainable tourism and marketing in protected area	1.51	0.51	1.57	0.50
14	Patrolling	1.71	0.46	1.86	0.35
15	Traditional knowledge and cultural resource management	1.35	0.48	1.50	0.50
16	Scientific knowledge and research	1.46	0.50	1.51	0.50
17	Leadership and decision-making skills	1.64	0.48	1.59	0.49
18	Others / Wildlife behavioural pattern	1.07	0.26	1.05	0.23

Table 3: Training needs of the protected area staff in Old Oyo National Park and Okomu National Park

Source: Field Survey, 2017

#### Table 4: Modality and length of Training

	Old Oyo National Park		Okomı	ı National Park
Mode of training	Frequency	Percent%	Frequency	Percent%
Intensive (full time)	103	74.6	43	59.7
Extensive (Few hours per day)	19	13.8	21	29.2
On-the-job training tour to foreign	12	8.7	8	11.1
land				
Others (often)	4	2.9	-	-
Length of training				
1-5days	7	5.1	3	4.2
7days	14	10.1	7	9.7
1-2 weeks	55	39.9	14	19.4
Month(s)	62	44.9	48	66.7
Total	138	100.0	72	100.0

## Source: Field Survey, 2017

## Conclusion

The studyhas shown that capacity-building programmes exist in Old Oyo National Park and Okomu National Park but their effects on the challenges facing conservation are not conspicuous. A substantial number of the staff suggested topics and areas of focus expected to be emphasized in subsequent capacity-building programme. Someof the respondents aspire to have personal training in higher institutions of learning which would enhance relevance, sense of fulfilment and, in turn, affect their job disposition but constant denial of such opportunitiestend to dampen enthusiasm for work and development. The focus group discussion helped to affirm the staff need for training and role of the Nigeria Park Service (NPS) in selecting personnel for the capacity-building programmes should be without bias.

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