



Capacity Building for Forestry Development: Implication for Sustainable Forestry Management in South-West Nigeria

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Authors' contributions

This work was carried out in collaboration between the both authors. Author AOO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author OIF managed the analyses of the study and the literature searches. The both authors read and approved the final manuscript.

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ABSTRACT

The study was carried out to assess the impact of capacity building and its implication on sustainable forestry management in south-west Nigeria. Primary data were obtained from 152 forestry officials across the forestry administrative zones in the southwest Nigeria. Structured questionnaire were used with oral interview. Questions were asked on staffing, funding, institutional structures, staff training and development, qualification of staff, salary, legal and policy issues and the issue of rights and tenure. Data were analysed using descriptive statistics. Results revealed that across all the states in the South-west Nigeria, most of the officials (32.9%) were uniformed or vocational staff, followed by the professionals (25%), 16.5% were boundary guards, 14.5% technicians and 11.2% forest attendants. Only 36.2% of the forestry staff indicated that regular staff

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training was organized by the state forest services. 77 percent of the respondents indicated that forestry staffs were inadequate while 77.6% were not satisfied with their present salary. Sustainable forest management in Nigeria has suffered serious setbacks due to inadequate staff and the training and development of the available ones. The government should spontaneously respond with appropriate political will and proper funding which should be both adequate and timely.

Keywords: Capacity building; sustainable forest; staff development; forestry officials.

1. INTRODUCTION

Forestry is a unique sector in the Nigerian economy owing to its peculiar responsibilities in the conservation, management and sale of forest produce, and because of the concomitant necessity for its long-range planning. The forest is an economic resource and the purpose of its development is enhancement of living standards and welfare of the people [1,2]. Human resource management regards training and development as a function concerned with organizational activity aimed at bettering the job performance of individuals and groups in organizational settings [3]. According to [4], effective forest administration with necessary capacity in terms of manpower, finance, logistics and technology put in place can bring about an increase in the forest estate. Alao [5] opined that stronger forestry administration, better staffed with technically required and administratively trained personnel and well motivated is required to exercise effective control and safeguard over the state's natural resources and their exploitation.

It should be emphasised that training is crucial for organizational development as well as its success and indeed is very fruitful to both employers and employees of that organization most especially that of Forestry establishment. Human resource management regards training and development as a function which is concerned with organizational activity that is aimed at bettering the job performance of individuals and groups in organizational settings. However, training and development can be described as "an educational process that involves the sharpening of skills, concepts, changing of attitude and gaining more knowledge to enhance the performance of employees within a given set-up. Furthermore, training helps employees learn specific knowledge or skills to improve performance in their current roles. It is unequivocally clear that development is more expansive and focuses on employee growth and future performance, rather than an immediate job role. Employee training and development is a broad term covering multiple kinds of employee learning [6]. With good training and development

programs, organization is able to keep the right people and grow profit. Moreover, as the battle for top talent becomes more competitive, employee training and development programs are more important than ever. It should be noted that hiring top talent takes time and money, and how the organization engage and develop that talent impacts retention and business growth. Hence, training and development is a vital part of the human resource development and it is assuming ever important role in wake of the advancement of technology which has resulted in ever increasing competition, rise in customer's expectation of quality and service and a subsequent need to lower costs. Needless to say therefore that it become more important globally in order to prepare workers for new jobs. This is true for the developing nations particularly the Forestry sector.

Capacity development is therefore the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time. Capacity is about growth: growth of the individual in knowledge, skills and experience [7]. It was opined that there is a clear link between the internal and external components of capacity building [8]. It has been shown from experiences from mainstreaming of other issues within development cooperation that an increased awareness, understanding, and pro-active work of the donor representatives (including relevant tools and policies) may substantially trigger and stimulate the interest of potential partners [9].

The objective of this paper therefore is to examine the capacity building and its impact on sustainable forestry development in the South-west Nigeria.

2. METHODOLOGY

The study site is Southwestern Nigeria, which consists of Lagos, Ogun, Oyo, Osun, Ondo and Ekiti States (Fig. 1). The region lies between longitude 2°31' and 6°00' East and Latitude 6°21' and 8°37'N with a total land area of 77,818 km²

and a projected population of 34,406,231 in 2009 [10]. The study area is bounded in the East by Edo and Delta States, in the North by Kwara and Kogi States, in the West by the Republic of Benin and in the south by the Gulf of Guinea. The study area has 85 constituted Forest reserves with a forest area cover of 842,499 hectare (Table 1).

2.1 Sampling of Forest Officers

One Officer in charge of each administrative zone was selected and 20 percent of forestry

officials from each of the State headquarters as shown in Table 2.

2.2 Questionnaire Design

The questionnaires were designed to obtain information from the forest officials in charge of the forest estate. Questions were asked on staffing, funding, institutional structures, staff traing and development, qualification of staff, salary and legal and policy issues and the issue of rights and tenure.

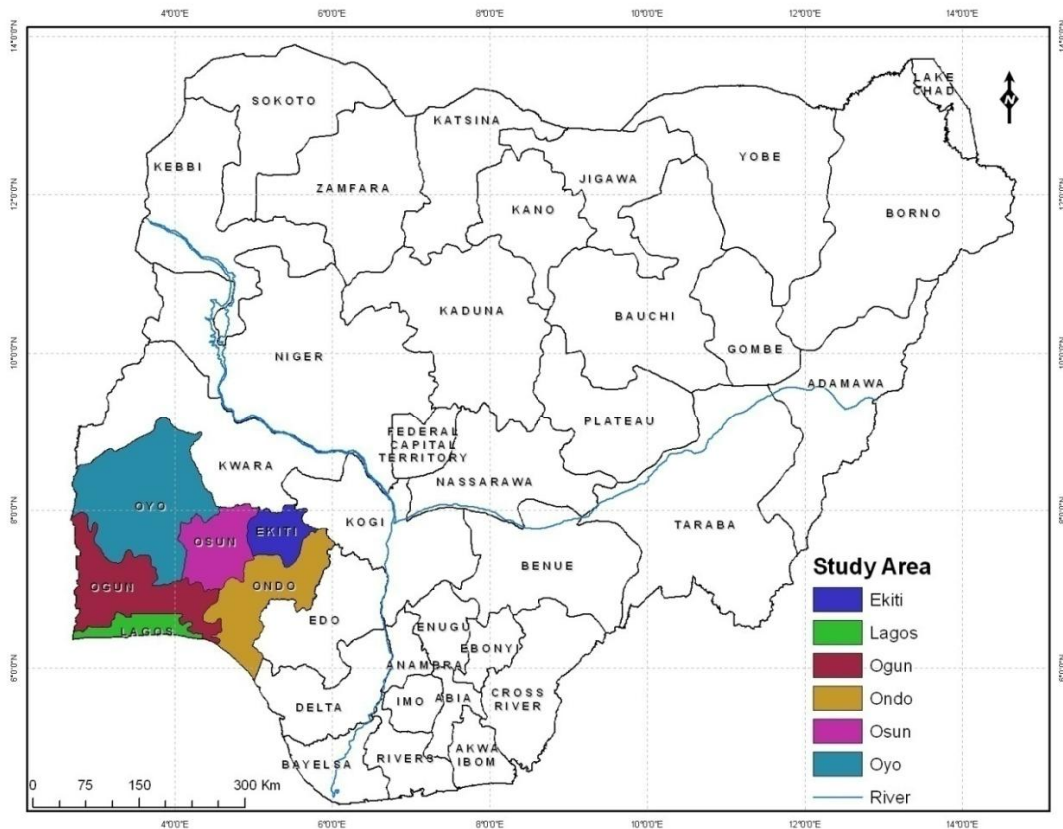


Fig. 1. Map of Nigeria showing the study area

Source: [11]

Tabl 1. Zonal Offices in the selected Southwestern of Nigeria

States	Zones
Ekiti	4 Zones (Ado, Ikere, Ikoledo and Ekiti)
Lagos	5 Zones (Badagry, Epe, Ikeja, Lagos andIkorodu)
Ogun	3 Zones (Egba, Yewa, and Ijebu)
Ondo	8 Zones (Akure South, Akure North, Idanre, Ore, Owo, Ikare, Ifon, and Ondo)
Osun	6 Zones (Ife, Ilesa, Ikirun, Osogbo, Iwo and Ede)

Source: Field survey, 2010

Table 2. Number of Zonal forest officers in the selected Southwestern of Nigeria

States	Population of respondents	Number of zonal officers	Sampled forestry officials	Total
Ekiti	180	4	36	40
Lagos	20	5	4	09
Ogun	80	3	16	19
Ondo	100	8	20	28
Osun	120	6	24	30
Oyo	110	4	22	26
Total	610	30	122	152

Source: Field Survey, 2010

2.3 Population and Sample

Primary data needed for the study were collected from Forest officers. Each State was divided into forestry administrative zones. The zones in each of the states are as in Table 1. A total of one hundred and fifty-two forestry officers were administered questionnaire.

officials were uniformed or vocational staff and that is followed by 25 percent of the staff being professionals, 16.5 percent were boundary guards, 14.5 percent technicians and 11.2 percent forest attendants. However, it was observed that there were no boundary guards or forest attendant among Lagos State forestry officials (Table 3).

3. RESULTS AND DISCUSSION

3.1 Staff Strength of Forestry Department from the Six South-Western States in Nigeria

Table 3 showed the staff strength of the Forestry Departments according to the six south-west states of Nigeria. More than half of the officials from Lagos State (55.6 percent) were professionals while 40 percent of officials from Ekiti were uniformed or vocational staff. About 30 percent each of officials from each of Ogun (31.6 percent) and Osun (30.0 percent) were professionals while only little more than 20 percent of the officials from Oyo (23.1 percent) and Ondo (21.4 percent) were professionals. Across all the states, most (32.9 percent) of the

3.2 Comparison of the Professional Staff (Degree Holders) in the Forest Service of South-West, Nigeria

Lagos state had the highest number of professional staff (55.6 percent) compared to the other states. This is followed by Ogun State (31.6 percent), Osun State (30.0 percent), Ondo State (21.4 percent) and Oyo State (23.1 percent) Ekiti State had the lowest number, with 15 percent of professional staff among the forestry officials (see Fig. 2).

3.3 Comparison of the Technical Staff (OND and HND) in the Forest Service of South-West, Nigeria

Oyo State had the highest number of technicians among the forestry officials with 23.1 percent of

Table 3. Table showing staff strength of forestry officials in southwest, Nigeria

Cadre of staff	State												Total	
	Ekiti		Lagos		Ogun		Ondo		Osun		Oyo		N	%
	N	%	N	%	N	%	N	%	N	%	N	%		
Professional	6	15.0	5	55.6	6	31.6	6	21.4	9	30.0	6	23.1	38	25.0
Technician	4	10.0	2	22.2	4	21.0	4	14.3	2	6.7	6	23.1	22	14.5
Uniformed or vocational staff	16	40.0	2	22.2	5	26.3	10	35.7	9	30.0	8	30.8	50	32.9
Boundary guard	12	30.0	0	0.0	2	10.5	3	10.7	4	13.3	4	15.4	25	16.5
Forest attendant	2	5.0	0	0.0	2	10.5	5	17.9	6	20.0	2	7.7	17	11.2
Total	40	100.0	9	100.0	19	100.0	28	100.0	30	100.0	26	100.0	152	100.0

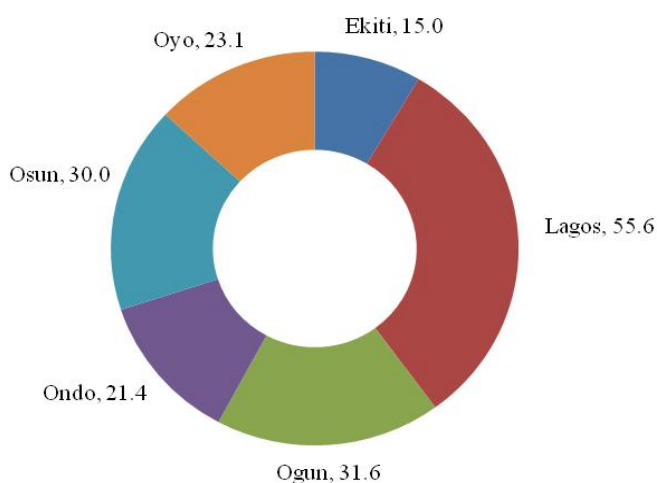


Fig. 2. Percentage distribution of professional forest officials in South-west, Nigeria

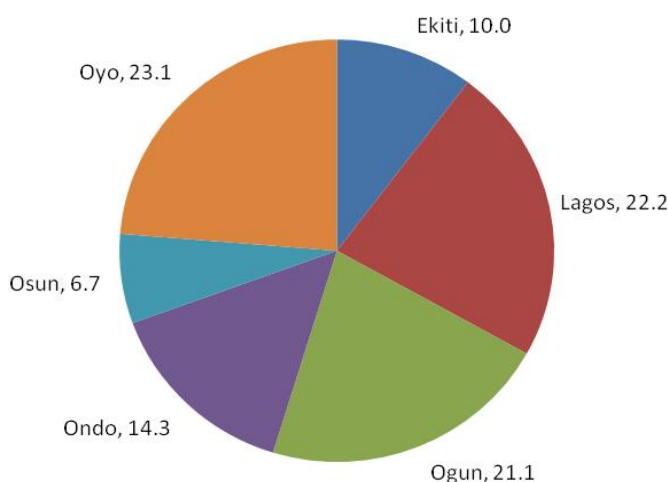


Fig. 3. Percentage distribution of technicians among forestry officials of South-west, Nigeria

its forestry officials being technicians. This is followed by Lagos and Ogun States with 22.2 percent and 21.2 percent respectively. Osun State had the least with 6.7 percent technicians among forestry officials while Ondo and Ekiti states had 14.3 percent and 10.0 percent technicians respectively (Fig. 3).

3.4 Comparison of the Vocational Staff (Forest Guards Cadre) in the Forest Service of South-West Nigeria

Forty percent of the forestry officials in Ekiti State were vocational staff and this is the highest among states in southwest Nigeria. Ekiti State was followed by 35.7 percent in Ondo State and about 30 percent each in Osun and Oyo states.

Ogun State 26.3 percent of vocational staff among the forestry officials and Lagos had the least percent of vocational staff (22.2 percent) (Fig. 4).

3.5 Comparison of the Vocational Staff (Silvicultural Overseer) in the Forest Service of South-West Nigeria

Lagos State does not have Forest attendants (Silviculture overseer) therefore not represented on Fig 5. However, Osun State had the highest proportion of forest attendants of 20 percent and this was followed by Ondo State with 17.9 percent; Ogun had 10.5 percent, Oyo State had 7.7 percent and Ekiti State had the least with 5.0 percent (Fig. 5).

3.6 Comparison of the Boundary Guards Cadre in the Forest Service of South-West Nigeria

Lagos State did not have boundary guards. Ekiti State had the highest percent of boundary

guards (30 percent) which was followed by Oyo State with 15.4 percent and Osun State 13.3 percent. Ogun and Ondo States both had 10.7 percent and 10.5 percent boundary guards respectively (Fig. 6).

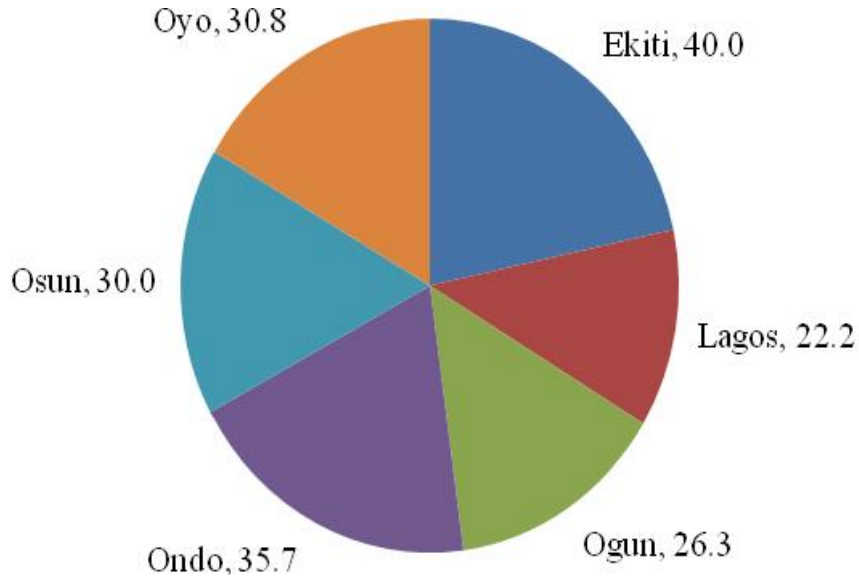


Fig. 4. Percentage distribution of vocational forestry officials in southwest Nigeria

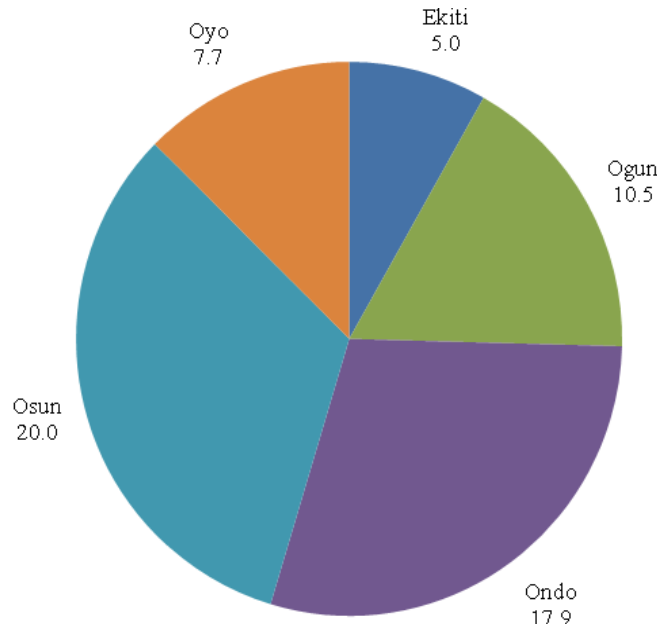


Fig. 5. Percentage distribution of forest attendants (silviculture attendants) in south-west Nigeria

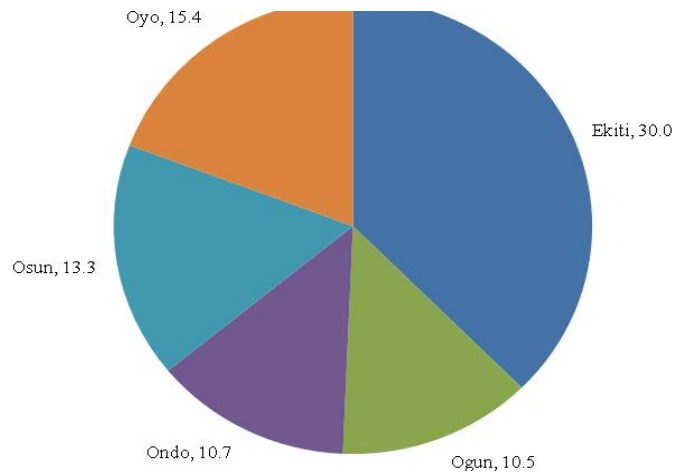


Fig. 6. Percentage distribution of forest boundary guards in south-west Nigeria

4. PERCEPTION OF FORESTRY STAFF ABOUT CONDITION OF WORK

4.1 Regular Staff Training

Only 36.2 percent of the forestry staff indicated that regular staff training was organized by the forestry agencies while 63.8 percent of the respondents indicated that no regular staff trainings were being organized by the agency. More than 40 percent of officials in Ondo (42.9 percent) and Oyo (42.3 percent) States indicated that the agencies organized regular training for the staff while more than 30 percent of respondents in each of Ekiti (32.5 percent), Ogun

(36.8 percent), and Osun (36.7 percent) indicated that the staffs were being trained regularly; also, about 10 percent of officials from Lagos State (11.1 percent) indicated that regular training was organized by the forestry agencies (Fig. 7).

4.2 Adequacy of Staff

About 77 percent of the respondents indicated that forestry staff were inadequate. However, more than 40 percent in Osun State (43.3 percent) indicated that the forestry staffs were adequate while more than one in five from Ondo (25 percent) and Oyo (23.1 percent) states

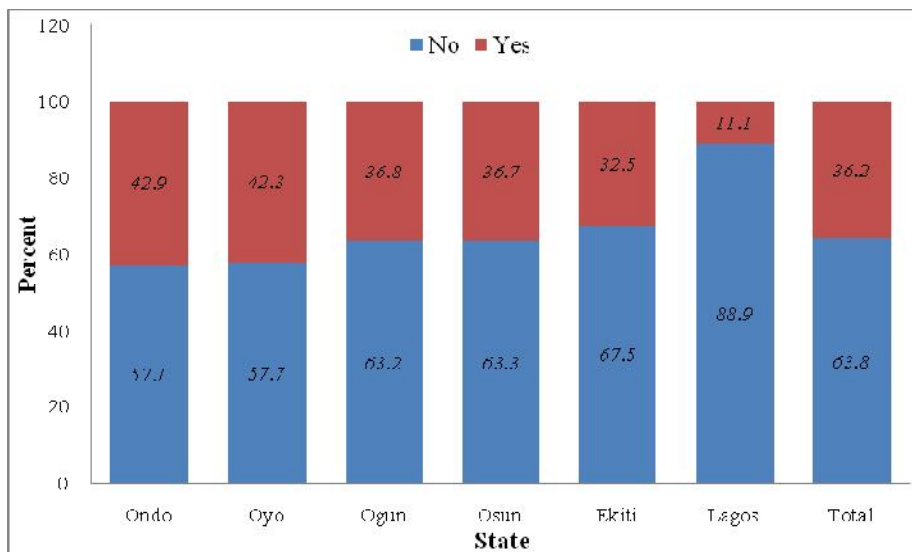


Fig. 7. Regular staff training

indicated that the forestry staffs were adequate. While 17.5 percent and 10.5 percent of staff in Ekiti and Ogun States respectively indicated that forestry staffs were adequate, all the staff (100 percent) in Lagos State indicated that the forestry staff were not adequate Fig. 8).

4.3 Contentment with Salary Structure

Inadequate monthly salary can predispose forestry officials to aid or condone forest offences in order to meet their pressing needs. Little more than one in five (22.4 percent) of the forestry official across all the south-western states of Nigeria indicated that they were contented with their current salary structure. Officials in Lagos were the least contented; as only 11.1 percent of them indicated that they were contented with their monthly salary. The highest were observed in Oyo and Osun States, where 26.9 percent and 26.7 percent respectively, of the forestry officials indicated that they were contented with their monthly salary followed by Ondo (21.4 percent), Ogun (21.2 percent) and Ekiti (20.0 percent) States (see Fig. 9).

4.4 Provision of Needed Logistics for Operation

Provision of needed logistics including equipments, machinery and vehicles helps to

augment cost of running operations as well as providing a comfortable working condition. 30 percent of the forestry officials across all the six south-western states in Nigeria indicated that the needed logistics were provided for. 46.2 percent of forestry officials in Oyo State, which was the highest among all the states, indicated that logistics were provided; and this was followed by 40 percent of officials from Osun State. About one in four of the officials from Ekiti (25 percent), Ogun (26.3 percent), and Ogun (28.6 percent) states indicated that logistics were provided while the least was in Lagos State (22.2 percent) as shown on (Fig. 10).

4.5 Job Satisfaction

Job satisfaction is a measure of how much security as well as necessary incentives an official gets from his job, as lack of job satisfaction may prompt an official to aid and/or condone forest offences. Only about 31 percent of the forestry officials from across the six states from southwest Nigeria indicated that they were satisfied with their jobs. Highest percent of job satisfaction was observed in Oyo State (38.5 percent) followed by Ondo (32.1 percent), Ogun (31.6 percent), Osun (30.0 percent), and Ekiti (27.5 percent) States. Job satisfaction was least in Lagos State, with only 22.2 percent (Fig. 11).

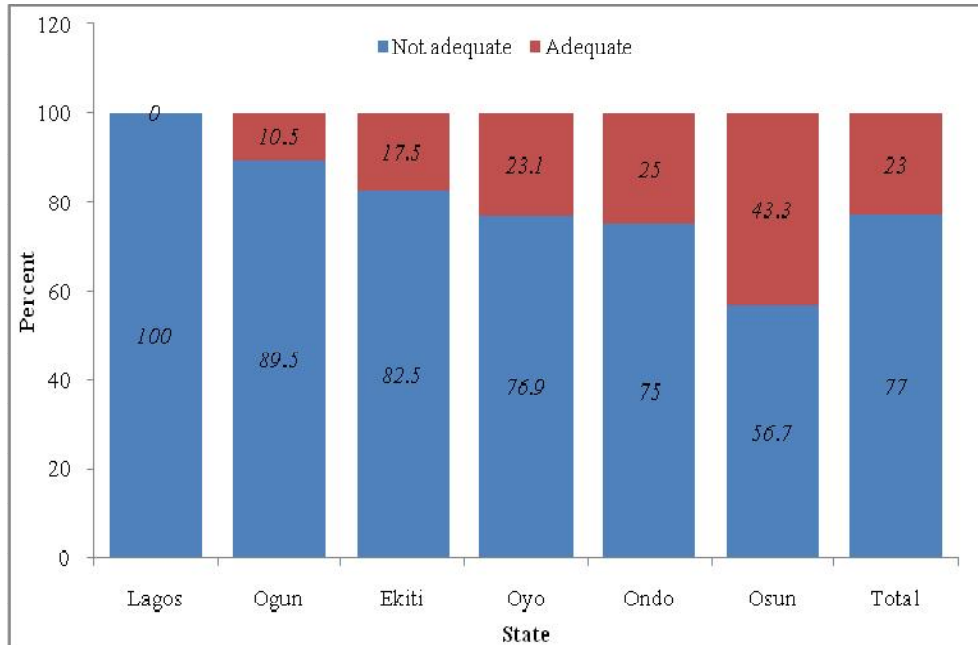


Fig. 8. Adequacy of staff in forestry service

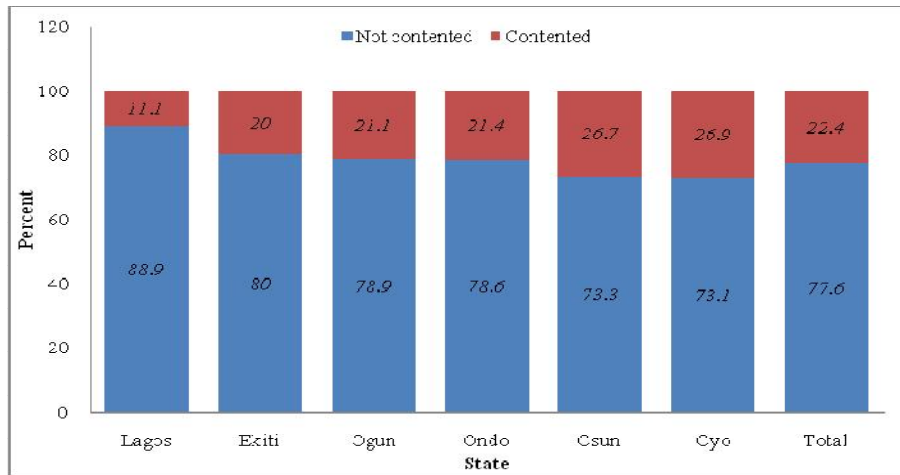


Fig. 9. Contentment with present salary structure

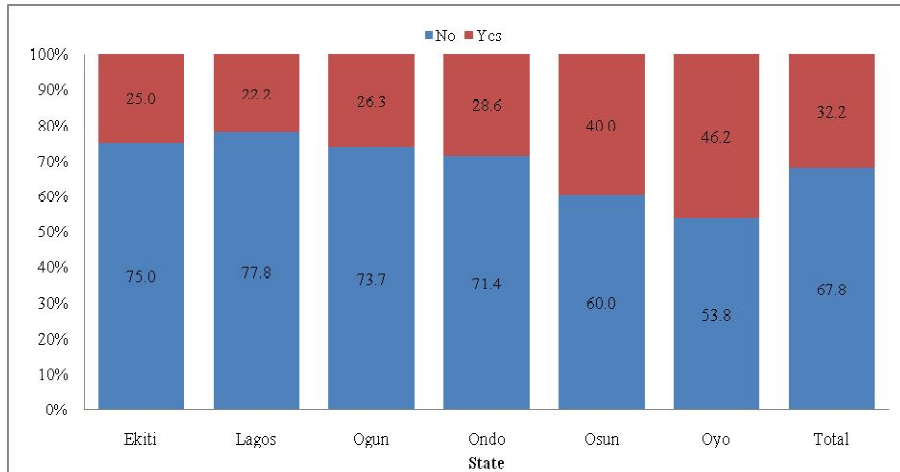


Fig. 10. Percent distribution of responses forest officials about provision of logistics for carrying out duties in southwest Nigeria

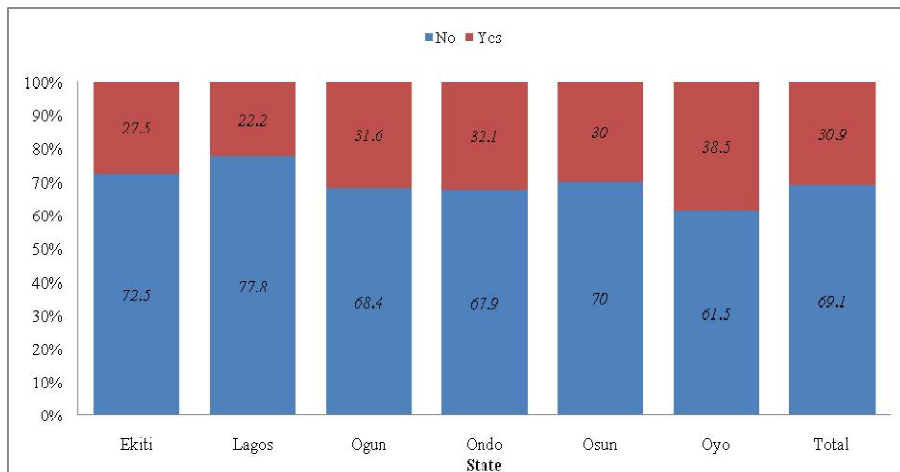


Fig. 11. Percent distribution of response of forest officials about job satisfaction in South-west, Nigeria

5. CONCLUSION AND RECOMMENDATION

Sustainable forest management in Nigeria has suffered serious setbacks due to inadequate staff and the training and development of the available ones. The government should spontaneously respond with appropriate political will and proper funding which should be both adequate and timely. Forest policy implementation is reactive, falling behind the broader social and economic changes. To be in the forefront of changes requires a more proactive approach most especially in terms of capacity building in the forestry sector. Forestry officials should be equipped and empowered to serve as capacity building and morale booster towards effectiveness and efficiency. This would necessitate substantial effort to understand the future direction of social and economic development, and identifying the appropriate role the sector could play.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Adeyoju SK. Forestry and the Nigerian economy. Ibadan University Press, Nigeria. 1975;308.
2. Agbeja BO. Development proceedings of the 1st commonwealth forestry association (CFA) conference, Nigeria chapter. In Forestry and allied natural resources disciplines in Nigerian institutions: Inputs for future solutions to dwindling forest estate in Nigeria. (eds: Agbeja BO, Adetogun AC, Adejoba OR, Osunsina IO. Held in Forestry Research Institute of Nigeria, Ibadan. 2016;16-23.
3. Wikipedia. Training and Development; 2016. Available: https://en.wikipedia.org/wiki/Training_and_development (Accessed 4th June 2017)
4. Faleyimu OI, Agbeja BO, Sulaiman RA. Labour capacity of forest service institution in southwestern states of Nigeria. Journal of Environmental Issues and Agriculture in Developing Countries. 2009;1(1-3):98-110.
5. Alao JS. Capacity building modules in the Nigerian Forest services. A Ph.D submitted to the Department of Forest Resources Management, University of Ibadan (Unpublished); 2005.
6. Employer Training and Development; 2016. Available: <http://www.allencomm.com/resource/what-is-employee-training-development/> (Accessed 8th April, 2017)
7. Training and Development; 2017. Available: <http://www.google.com.ng/training> (Accessed 8th April, 2017)
8. Conroy C, Mishra A, Rai A. Learning from self-initiated community forest management in Orissa, India. Forests, Trees and People Newsletter No 42; 2000.
9. Chotthong B, Aksornkoae S. Sustainable Community-based Mangrove Rehabilitation in Thailand (Online); 2009. Available: http://www.tei.or.th/Projects/Community_base_mangrove.pdf (Accessed November 3, 2009)
10. NPC: National Population Commission, Abuja. Bulletin. 1991;45.
11. FOMECU: Forestry Management, Evaluation and Coordination Unit. Bulletin. 1998; 109.

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