

## Evaluation of Staff Strength of Forestry Personnel, Edo State, Nigeria, from 1986-2008

<sup>1</sup>C. Kalu, <sup>2</sup>S. Ikpoba and <sup>3</sup>B. Okonta

<sup>1</sup>Department of Forestry and Wildlife, Faculty of Agriculture, University of Benin, Benin, Nigeria

<sup>2</sup>Department of Forestry, Ministry of Environment, Edo State, Nigeria

<sup>3</sup>Department of Forestry and Wildlife, Delta State University, Nigeria

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**Abstract:** Edo State forest estates are managed by professional, technical uniformed staff and task force members. This study was conducted to determine the staff strength, employment trend and wage policies of the forest workers. Secondary data were collected from the records and annual reports on forestry activities in the departments of conservation and utilization in the Ministry of environment, Edo State. The results showed that there were significant difference ( $p < 0.05$ ) among the categories of personnel and employment trend among them during the period under review. Uniformed staff dominated other categories in the above cases. Investigation revealed that Ovia South East and Benin city had dominant staff strength of 10 personnel based on empirical norm applied in the study. While, 1 personnel each was recorded in Egor and Eguben locations. It was also revealed that the distribution of monthly salary among the workers increased from unskilled to professional staff, while task force members wage did not follow the same trend. Forest workers are bed rock of forest conservation. It is recommended that they should be in full strength of labour, right categories and adequately remunerated so as to dissuade them from corruption and sharp practices, while executing their jobs.

**Key words:** Staff strength, forest resources, remuneration, forest conservation, stakeholders, Nigeria

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### INTRODUCTION

At the passage of forest law in Nigeria in 1908 and the subsequent passages of other Regional forest laws, certain forest areas were designated as forest reserves spanning through, mangrove, high rainforest to savannah. These areas (forests) remain the economic treasure house of the people who depend on the resources for their basic needs, commercial value and associated security as well as of immense economic importance (Falconer and Anold, 1991; Bada and Popoola, 2005).

The management of the forest estates (reserves) lies in the hand of forestry department staff comprising professional, technical, uniform and non-uniform staff. The personnel are mandated to formulate and implement forest policies, enforce forest laws and develop forest resources. According to Papka (2005), the responsibility of forest personnel are to:

- Ensure efficient use of forest production and services, through guaranteeing economic viability and long term social and environmental benefit
- Protection of forest biodiversity and associated values in forest management

- Ensure legal and customary rights of rural communities
- Under take forest assessment and monitoring
- Recognize timber certification requirement

The staff strength of Edo State forestry personnel have been somewhat low in recent years. This is due to the fact that some retired forest staff were not replaced and the taskforce on forestry was introduce whose members usurped some of the functions of professional foresters in same aspects of log control and forest protection. This is because taskforce members who are not professional foresters are having a challenging time understanding the impacts of their activities of forest conservation (Baan, 2004). Rationalization of forestry personnel as well as other civil servants has appreciable impact on the workings of forestry and visualizes the extent to which the future of the forestry staff could be guaranteed. The situation changes the way in which people protect the forest estates. In some cases, attitudinal change among the personnel have been introduced, replacing sustainable management with destructive harvest through connivance of illegal forest exploiters, in other instance, the increase commercial value of forest products leads to their over exploitation

(Falconer and Anold, 1991). Thus, the shifts towards a cash economy and quick way of making money have important implications for the ways in which forest estates are managed. On the account of this, taskforce is used as one of the ways for mobilization of forest revenue. The study focuses on the staff strength of various categories of labour in forestry, number of the employed staff during the period under review. It also examines, the optimal labour force for the conservation of forest estates as well as the wages distribution among various categories of forest personnel, since the number of uniformed protection staff diminished from 127-99 between 1995 and 2000 (Azeke, 2002).

### MATERIALS AND METHODS

**Site description:** Edo State was the study site where the research was conducted. The state has a total land area of 19,707 km<sup>2</sup> and a population of approximately 3,218,332 based on 2006 National census figure (ANE EJ, 2004; Okafor, 2005; Wikipedia, 2009). It is one of the South geopolitical zones, aptly described as south central state of Nigeria which located between (5°-6°5"E) and (5°-6°30"N). There are 37 forest reserves in the state, which covers a total of 597,557 ha (FORMECU, 1999). These areas spread through 18 local government areas, which constituted management units for the forest personnel, based on individual area of jurisdiction. This figure is far lower than the present status due to incessant dereservation of the forest estates. The management of the forest areas (National forests and plantations) is the exclusive responsibility of the forestry department (FORMECU, 1999; Hill, 1999). The state owns all the forest reserves, formulates policy, manages the estates and figures out ways to measure progress in forestry activities. Various communities in 18 local Government areas in the state have no responsibilities in forest management as identified by Simula *et al.* (2006) and Silva *et al.* (2006) since, local community is largely absent in the involvement of forestry management. The communities within the local Government area are entitled to royalty from the accrued revenues from their area based on 1987 recommended sharing formula of 55, 25 and 20% for state government, local councils and forest regeneration fund (ANE EJ, 2004).

**Data collection and models:** Secondary data were employed in the study to elicit the necessary information on the trend of employment of forest service and the staff strength of the personnel. Wage data were also obtained on the monthly salaries of the various categories of workers. Opportunities were created to assess the various

categories of personnel involved in all aspects of forest operations in the 18 local Government areas of the state. The information was obtained from the state forestry head quarter as well as some forest area offices where data needed to be augmented to the ones from the former. Records and various documents on the managers of forest estates were kept in these offices were appropriately consulted during the data collection exercise.

**Optimum labour demand models:** These models were employed in the study to determine the optimum labour required for an activity like forest conservation. Empirical norms of technical staff per management unit of forest reserve were developed by FAO (1970) as a common practice of estimating manpower requirement in forestry programme. The estimates of staff like professional, technical and uniform and unskilled requirements were derived from the numbers of technical staff using supervision ratios. A forest reserve with an area of 300 km<sup>2</sup> was used as a baseline and the supervision ratios were 3 professional, 12 technical, 48 uniformed and 120 unskilled staff.

The analysis was full labour per local Government area/management units (forest allocation, exploitation inventory and/or monitory) was based on Empirical worm.

### Model specification:

$$LD = \Sigma (\lambda_{ik} L_i) \quad (1)$$

$$\lambda = \frac{x_i}{\Sigma x_i} \quad (2)$$

$$L_i = \frac{x_i}{y_i} \quad (3)$$

where:

- LD = Labour demand based on empirical norms
- ik = Full strength of labour based on empirical norm
- $\lambda$  = Structure of employment
- $L_i$  = Labour activity level
- $x_i$  = Number of each category of labour on ground
- $y_i$  = Number of each category of labour based on empirical norms/recommended number of each category of labour
- $\Sigma$  = Summation sign

### RESULTS AND DISCUSSION

Personnel of forest service consists all the staff whose primary duty is to ensure that forest estates are sustainably managed. They included the professionals, technical, uniformed and unskilled labour or members of

taskforce (Table 1). The results revealed that there were significant different among various categories of forest personnel ( $p < 0.05$ ). Further analysis with use of fisher's lest significant difference showed that the number of uniformed staff dominated other categories of staff considered in the study. The presence of taskforce, though not very common in democratic setting, is vestige of military regimes. It is still very prominent in the forest management of the state especially in forest protection, log control and revenue generation. It is a prevailing, approach adopted by successive government in Edo State about 2 decades ago. The skills of the members of the task force are not systematically linked to the functional responsibilities or job description (Hill, 1999).

**Labour force policy in Edo State forestry:** The aim of labour policy force is to ensure full and to secure entitlement for skilled and unskilled labour under desired conditions established by law. The trend in strength of labour shows the decline of forestry personnel over the years spanning from 1986-2008 (Table 2). The results showed significant differences ( $p < 0.05$ ) among various categories of staff employed over the projected period. Further analysis with fisher's Least Significant Difference (LSD) revealed that the uniformed staff employed dominated other categories of the forestry staff employed in the period under review. The reason cannot be unconnected with the fact most staff members in this category are used for various forest operations or assist both the professional and technical staff in charge of various activities, for instance forest technicians, rangers are involved physically in tree identification, land demarcation and other routine operations. They are the local workforce who tends to occupy low and medium qualified position (Caetano and Rodrigues, 2005).

**Human capital in forest management:** The ability to manage forest estates hinges on the nature of human capital in terms of strength, full employment as well as relevant skill. It entails, the acquisition and increasing the number of persons who have the skills, education and experience, which for sustainable forest management to appropriately advance economic and political development. Table 3 shows that the strength of labour was low in most of the local Government areas/or and management units. Ovia South East and Benin city accounted for 10 forest personnel on strength of labour based on empirical norms used in the study. The value was closely followed by Ovia North East, which had 9 forest workers on the strength of labours, while Uhummode and Egueben LGAs accounted for one individual on the strength of labour.

**Table 1: Staff strength of Edo State forest service**

LGAs	Professional/ Technical	Uniformed staff	Taskforce member
Uhumwode	2	7	1
Egor	1	2	1
Owan West	6	3	1
Owan East and Akoko-Edo	1	5	2
Ovia South East	3	13	1
Ovia North East	6	12	1
Egueben	1	2	1
Orhionwon	2	5	1
Oredoand Ikpoba-Okhua	2	7	1
Etsako West, East and Contral	1	8	3
Esan South and North East	1	3	2
Esan West and central	1	3	2
Benin city	6	12	1
Total	33	82	18
Mean	2.53 <sup>a</sup>	6.31 <sup>b</sup>	1.38 <sup>a</sup>

**Table 2: Employment trends in Edo State forestry service**

Years	Professional	Technical	Uniform
1986-1990	1	2	-
1991-1995	2	9	32
1996-2000	-	-	-
2001-2005	-	-	72
2006-2008	6	4	-
Total	9	11	104
Mean	3 <sup>a</sup>	3.67 <sup>a</sup>	52 <sup>b</sup>

**Table 3: Forest labour per management units/strength of LGAs**

LGAs	Labour demand based on empirical norms
Uhummode	5
Egor	1
Owan West	2
Owan East and Akoko Edo	4
Ovia South East	10
Ovia North East	9
Egueben	1
Orhionmin	3
Oredo and Ikpoba-Okhua	5
Efsako West East and central	6
Esan South and North	4
Esan West and central	2
Benin city	10

The findings reveal a dearth of forest personnel to effectively carry out sustainable forest management and conservation. This cannot be unconnected with the down sizing of the state public servants about two decades ago since the great Purge on the staff strength no complementary replacement has been made. This does not agree with the role of forestry and agriculture as the mainstay of Nigerian economy with 70% of the country's labour force employed in the sector (Tomori, 1987). It does not also agree with the view's of Hill (1999) that lack of a personnel information system limits the ability to improve the human resource situation. The result is economy plagued with unique combination of rural urban migration, stagnating agricultural productivity and growing unemployment and underemployment. The trend is particularly severe among the younger element of the

population because they do not have skills, opportunities or other complementary resources for participating actively in the economy.

**Wage policy of forest personnel:** The salary is fixed by the wage policy for the forestry personnel who have been based on minimum wage stipulated by the Federal Government of Nigeria. Most times, the state and the trade union agree on the salary scale for the civil servants based on various grade levels due to collective bargaining. The wage for the taskforce is based on commission and is not fixed by the trade union. This makes the tasks force salary more attractive. The observation agrees with view of Sheiffer *et al.* (2004) that in neoclassical growth model, labour freely move from low wage to the high one. The results showed that inspite of the monthly salary of a taskforce members, the monthly salary of other categories of the forestry personnel increases from the uniformed to professional staff (Fig. 1). The values considered were the averages between the lowest and the highest scales in each category of the forestry personnel.

It is difficult to say for several reasons, whether the wage policies of forestry personnel have really helped to raise their standard of living and job satisfaction so as to dissuade them from compromising their duties and responsibilities when faced with illegal loggers. In fact, it seems that the low salary of forestry personnel compared to industrial workers (Banks and Oil Company) has made them venerable to be influenced by illegal loggers or forest offences as well as offenders. The indication is that the involvement of forest workers in the sharp practices is some what difficult to be resisted. It is apparent that most workers do not consider the full implication of illegalities on the forest estates due to the fact that non-forestry graduates and biological sciences are greatly considered in the forestry positions rather than areas that mostly accurately represent their expertise. Conversely, in

developed countries the most talented foresters are happily employed to secure long-term position (Durst and Norris, 1990).

## CONCLUSION

Four categories of forest personnel consist the managers of forest of forest estates in Edo, namely: professional, technical, uniformed staff and taskforce members. This helps to coordinate the various units in the Department. The basic aim is to apply sustainable forest management to all the forest reserves in order to continuously meet the needs and aspirations of all the stakeholders of the forest resources. The adapted approaches and techniques are geared towards improving the resource, which hinges on the state forest law. Over the years the forest reserves in the state have been on continuous decline, from 613,900-439,900 ha from 1978-1995 (FORMECU, 1999). This indicates the forest workers are not doing enough in conserving the estates.

The study has confirmed the existence of only 3 necessary categories of forest personnel, which indicates absence of forest labour that is replaced by taskforce members. The taskforce members are politicians who do not contribute much to forest conservation. The findings contrast the view expressed by Kishor and Damania (2007) that monitoring organization and committee detect and suppress illegal logging by reporting on monitoring, apprehension and prosecution of illegal logging operation as well creating networks in support f forest protection activities. It is also observed that there is a gap in the trend of employment despite the massive retirement of the workers during the projected period. This accounts for lower staff strength based on the optimum labour demand model used in the study. It is most disheartening that monthly wage of the forest workers is low compared to the ones in the industries, which negatively affect the latter's commitment to duties and resistance to illegalities and undue advances from forest offenders. This adversely affects forest policy implementation and responsibilities of area forest officers whose functions are encroached upon by task force members.

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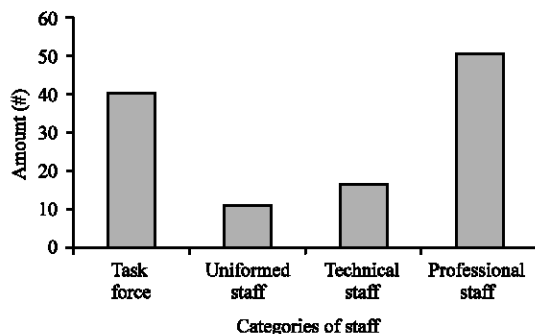


Fig. 1: Average monthly salary for forest managers

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