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Trend and Perception of Forest Revenue Generation in Akwa Ibom State, Nigeria

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Abstract

The study examined revenue generation trend and perception of challenges facing it by forestry personnel in Akwa Ibom State, Nigeria. Data for the study was generated through primary and secondary sources. Primary sources involved the use of questionnaire which was administered to all Forest Officers and Uniformed Field Staff in all the 31 Forest Division and Headquarter in the state. Secondary sources involved collation of generated revenue from all the divisions for the study period. Data obtained were analyzed using descriptive and inferential statistics including Least square regression. The results indicated an increasing trend in forest revenue for the state statistically defined by the function $y=45631x-900000000+e$ ($p>0.05$) with a coefficient of determination of 0.7492 or 74.92%. There was also a positive correlation ($r=0.866$) between generated revenue and year for the 20 years under review. The mean revenue was ₦4776247.00 with the highest generated revenue (₦9823550.00) in 2014. However, majority (55.13%) of the respondents perceived revenue generation in the state to be decreasing and attributed the decline majorly to lack of mobility (16.84%) and insufficient man power (15.79%). Attitude and level of offence in the study area was perceived to be fairly cooperative (62.81%) and high (43.80%), while recruitment of more personnel (11.05%) and provision of mobility (10.03%) was considered an effective means of improving revenue generation in the state. Also, educating the people and regular patrol by forest personnel was considered as the best ways of curtailing forest offences in the area. The study recommended increased allocation of funds to the sector in addition to tackling the challenges faced by the personnel.

Key Words: forest, revenue generation, deforestation, workforce, offences

Introduction

Forest Revenue System (FRS) as described by Gray (1997) is a mechanism put in place by government to set and collect charges on forest resources such as timber for the sustainable development of forestry in particular and the economy in general. According to Omoluabi et al. (1993), FRS is a policy instrument that can be used effectively to ensure that a nation obtains maximum benefits from the management of its forest resources. It is a strong instrument for stimulating appropriate forest industrial de-

velopment and efficient wood utilization. The primary objective in designing a FRS is to maximize forest revenues collected (Gray 1983). It can serve to complement forest management activities and thus as an instrument to forest and economic development policy, encourage utilization of currently under-utilized species, restrict over-logging, and achieve economic efficiency in the use of the forest resources management (Gray 1997; Olaseni et al. 2004).

The sale of forest resources is one of the major ways in which government interacts with the local people in terms of generation of economic, social and cultural activities

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(Federal Department of Forestry, Nigeria 2001; Nelson and Jacob 2017). These activities become a source of employment to timber contractors, saw millers and gatherers of non-wood forest products. It is from this plethora of activities that government formulates policy for attaining specific forestry goals and implementation of economic development activities.

An efficient forest revenue system is meant to check over-exploitation and encourage sustainable forest management, but in many states in Nigeria, the forestry services are forced to aim at targets that are not in tune with the tenet of good forest management practice (Olaseni et al. 2004). The nation's forest revenue system is weak and therefore cannot maximize the range of benefits that could have been produced from its forests (Nelson and Jacob 2017). The forest resources are characterized by low forest fees and collection rates (Gray 1997). Apart from the negative implication on government revenue, the low forest charges encourage inefficiencies, distortion of forest management decisions which causes difficulties in forest management.

In Akwa Ibom State, sources of forest revenue include timber production fees, non-wood and minor forest product fees, Industry and enterprise fees and penalty fees (Nelson 2018). The timber production fees are collected for the removal of timber products such as poles, pulpwood, and fuelwood, while the non-wood and minor forest product fees included fees for the collection of leaves, tapping palm and making rafia wine, chewing sticks, ropes and fruits. Industry and enterprise fees include registration fees for timber contractors, holders of property hammers, industry license renewal fees and registration fees for forest machinery. Hunting and recreational forest land-use fees comprised of hunting permit and farming fees. Also, revenue is generated from penalties for breaking the law such as fines and sale of confiscated forest products (Forestry Department 2013). According to Udo (1997), in Akwa Ibom State, on the average, 90 forest offences were committed annually between 1988 and 1998, and on the average ₦17,994 was realized annually as compoundment fees. This study therefore examines the trend of forest revenue collections in Akwa Ibom State from 1996 to 2015 to ascertain if it was increasing or decreasing and also identify the challenges facing forest revenue collection in the State as perceived by forestry personnel.

Materials and Methods

Study area

The study was carried out in Akwa Ibom State, located in the southern part of Nigeria. It lies between latitudes $4^{\circ}32'$ and $5^{\circ}53'$ North and longitudes $7^{\circ}25'$ and $8^{\circ}25'$ East (Fig. 1). It is located within the tropical rainforest zone with a landmass of $8,412 \text{ km}^2$ (Nelson 2015). Akwa Ibom State has a projected population of $5,671,223$ persons for 2017 at a growth rate of 3.46% per year (NPC 2007). The state has 31 Local Government Areas with three gazetted forest reserves namely; Stubbs Creek, Ogu Itu and Obot Ndom Forest Reserves and other protected forests in each local Government Area.

Akwa Ibom State has common borders with Cross River State to the East, Abia State to the North, Rivers State to the West, and the Atlantic Ocean to the South (Akwa Ibom Agricultural Development Programme (AKADEP 2006)). The climate of the state is characterized by two seasons – rainy or wet season, which lasts for about 8 months (mid-March–November) and the dry season (December–early-March). The total annual average rainfall is about 2500 mm (Ekanem 2010). Temperatures are uniformly high throughout the year with slight variation between

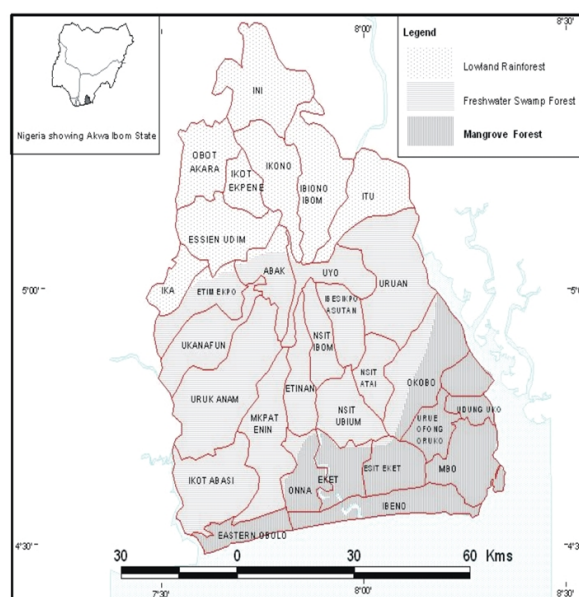


Fig. 1. Administrative and vegetative map of Akwa Ibom State, Nigeria. Source: Nelson (2018).

26°C and 28°C. High range of relative humidity (75%-95.6%) is common across the length and breadth of the State (Nelson 2015).

Sampling and data collection

The target population for the study was the Forest Officers (FOs) and Uniformed Field Staff (UFS) in the entire 31 Forestry Divisions and Forestry Directorate Headquarters in the study area. The nominal roll in the state forestry directorate was used to identify the number of forest officers and uniformed staff available in all the forest divisions in the state. A total of seventy-nine (79) forest officers were recorded for the entire state, implying at least two forest officers per forest division. For the uniformed staff, a total of fifty-three (53) was recorded in the state.

The design that was adopted for selection of respondents (forest officers and uniformed field staff) for the study was complete enumeration (100% sampling) of the population in the study area as recommended by Gregersen et al. (1999) and used by Nelson (2015) due to its small sampling population. The instruments used for data collection in the study included questionnaire, personal interviews, personal observation and documentary reviews.

The questionnaire was the main data collection instrument used in this study. Two sets of questionnaires with both opened and closed questions were developed and administered. The first set of questionnaire was administered to Forest Officers (FOs) that are responsible for management and collection of forest revenue in each division. This set of questionnaire focused on issue related to sources of forest revenue, collections of forest revenue and suggested way on how revenue collection could be improved. The second set was administered to Uniformed Field Staff (UFS). This set of questionnaire focused on the challenges faced by the UFS on revenue collection by the users of the forest and its products. Also, it was used to assess how often the UFS patrolled their charge for protection of the forest in order to reduce the rate of illegal activities. A total of 132 copies of the questionnaire were administered to the respondents between July and September 2017 but only 121 (91.67%) copies of the questionnaire were retrieved and used data for analysis.

Data analysis

Data obtained were analyzed using descriptive statistics, least square regression and correlation as used by Jacob et al. (2018a, b). Descriptive statistics involved the use of frequency tables, percentages and means in displaying results, while Least Squares regression was used to determine the best fit line to the data using simple calculus and linear algebra. This was done to find the best fit straight line $y=ax + b + e$, where y is the revenue, a =coefficient of x , x =year, b =constant and e is the unexplained error. All these analyses were carried out using Microsoft Excel.

Correlation analysis was also performed to identify the strength of relationships between revenue and year. The correlation coefficient (r) usually varies between -1 and +1 where a perfect correlation is ± 1 and 0 is the absence of correlations. Values of r between 0 and 1 reflect a partial correlation, which can be significant or not.

Results and Discussion

Trend in forest revenue collection for Akwa Ibom State

The result in figures 2 shows the trend line and least square composite graphs of the annual forest revenue for Akwa Ibom State. Trend analysis helps in estimating if the revenue is growing or declining. The result indicates that the state forest revenue followed an increasing pattern with each year’s revenue exceeding the previous year except for year 2001, 2004, 2007 and 2010. However, the result also indicates that the state was generating below its mean revenue of ₦4776247.00 between 1996-2005 and 2007, while in 2006 and between 2008 to 2015, its revenue exceeded the

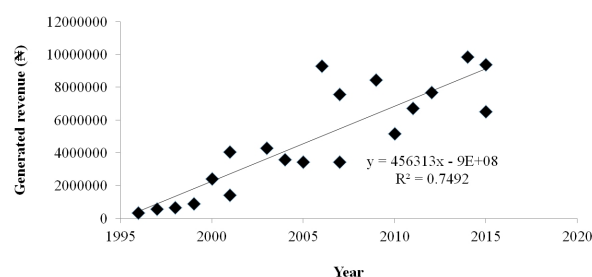


Fig. 2. Trend in forest revenue generation in Akwa Ibom State, Nigeria.

mean annual revenue. The highest generated revenue of expenditure was in 2014 (₦9823550.00) followed by 2013 and 2016 with ₦9378300.00 and ₦9262370.00 respectively. The least revenue was in 1996 amounting to ₦345952.00. This increasing trend in forest revenue for the state is statistically defined by the function $y = 45631x - 900000000 + e$ ($p > 0.05$) with a coefficient of determination of 0.7492 or 74.92%. Also, there existed a strong correlation between the generated revenue and year ($r = 0.866$). This is an indication that revenue in the state is directly influenced by the previous year revenue. This is in agreement with the observations by Nelson (2018), Nelson and Jacob (2017) and Udo (1999), who reported that the preceding year's revenue performance was usually used as determinant in setting subsequent year's revenue target. Also, despite the low forest resource base in the study area, there was still an average increase in yearly revenue generation which adversely affected the available forest resources.

Forest officers perceived trend of forest revenue generation

The perceived trend and reasons for the trend in forest revenue by the respondents are presented in Tables 1 and 2. As indicated in Table 1, majority (55.13%) of the respondents perceived that the revenue they generated was decreasing from the ones generated the previous year, while 44.87% indicated that there was an increased in the revenue they generated from the previous year. Most (38.71%) of the respondents who perceived that the revenue they generated was increasing from the previous year attributed the increase to hard work (Table 2). This agreed with Solkhe and Chaudhary (2011) observation that hard work and team work are used in an organization to motivate employees to bring out the best skills in them in order to outshine his/her other colleagues.

Table 1. Trend in revenue generation by forest officers

Trend	Frequency	Percentage (%)
Increase	35	44.87
Decrease	43	55.13
Total	78	100.00

Source: Field data (2017).

According to Federal Department of Forestry, Nigeria (2001), team work strengthens the bond among the employees and ensures that targets are met at a faster pace as the workload is shared among the officers and as individuals feel motivated to perform better than his team members.

Increased public enlightenment programmes (23.39%) and the setting up of new revenue check points (7.26%) were also perceived as a factor for increased revenue trend. According to Dykstra et al. (1996), proper sensitization and involvement of local communities helps in forest revenue collection, while new revenue check points was necessary to check logs illegally conveyed to avert revenue payment at designated check points. However, Federal Department of Forestry, Nigeria (2001) recommends that these new revenue collection posts be sited at specific routes mutually agreed upon by the Forestry Department and the resources exploiters.

Table 2. Reasons for fluctuations in revenue collection Akwa Ibom State

Revenue collection reasons	Frequency	Percentage
Increase in revenue generation		
Hard work	48	38.71
Team work	37	29.84
Public enlightenment	29	23.39
New revenue points	9	7.26
Prayer	1	0.80
Total	124*	100.00
Decrease in revenue generation		
Lack of equipment (e.g. pass hammer)	24	8.42
No mobility	48	16.84
Lack of safety kits	6	2.11
Insufficient manpower	45	15.79
Low revenue base	36	12.63
Low interest and allowance	31	10.88
Lack of official receipt	29	10.18
Lack of Incentives or motivation	18	6.32
Economic recession	13	4.56
Non-compliance of people	11	3.86
Lack of accommodation	5	1.75
Lack of afforestation	8	2.81
Payment of revenue in another location	11	3.86
Total	285*	100.00

*Multiple response to the questions.

Source: Field data (2017).

As indicated in Table 2, about 16.84% of the respondents attributed the decrease in forest revenue generation to lack of mobility (vehicles and motorcycles). This was followed by insufficient manpower (15.79%) in the field, low revenue base (12.63%), low office imprest and allowances (10.88%), lack of official receipts to be issued at the point of collection (10.18%), lack of equipment (pass hammer) (8.42%) and lack of staff motivation (6.32%). The above factors agreed with Udo (1997), Federal Department of Forestry, Nigeria (2001), Ezebilo (2004), Agbogisi and Ofuoku (2009), Jacob et al. (2012), Akinsoji (2013) and Sule (2013) but contradicts the observation of Dykstra et al. (1996) who stated that inability of the forestry sector to value the forests and forest products in real financial and economic terms, poor policy of classifying forests into protected (reserved) and unprotected (non-reserved) areas led to the loss of significant revenue through destruction or illegal exploitation of timber on farmlands which continued to supply large quantities of raw materials. Also, the inadequacy of forestry departments to monitor forest resource exploitation also accounted for the low revenue.

Attitude and level of forestry offence

The result in Table 3 shows the attitude or level of cooperation of the people in payment of their tariffs to the forest revenue collectors. Majority (71.07%) of the respondents reported having good cooperation with the people (fairly cooperative (62.81%) and very cooperative (8.26%)), while 28.93% reported the people as being non-cooperative in the payment of their revenue. Good cooperation of the people

in payment of their tariffs indicated the presence of a collaborative management agreement between the people and the government. This approach usually addresses potential conflict between parties concerned in forest revenue collection through the sharing of benefits accrued from revenue among stakeholders (Wells and Brandon 1993; Borrini-Feyerabend 1997). This result is also in accordance with Udo et al. (2009) reported that over 90% of the respondents in an earlier study indicated that they knew and understood the forest law and regulations operating in Akwa Ibom State with 93% claiming that they were aware of the penalties stipulated by law for forest offences, hence they were willing to pay their dues. However, the non-cooperative attitude of the people reported by few of the forest personnel could be attributed to their perceived deprivation in resource rights and marginalization of their values and opinion in decision making processes which affects their livelihoods (Neumann 1998; Swanson and Johnston 1999; Brockington 2002; Darkoh 2003; Adams and Hutton 2007). These therefore poses far reaching implications including land use conflicts, unsustainable environmental practices, environmental deterioration, increasing social and spatial inequalities and the associated conditions of powerlessness and disillusionment (Murphree 1997; Murphree 1999; Sen 1999; Sadan 2004; Cousins et al. 2005; Chakravorty 2006; Mosetlhi 2012).

The results in Table 3 also shows that 43.80% of the respondents perceived the level of offence in the study area to be high, while 36.36% and 19.83% perceived it to be moderate and low respectively. This implies that almost all the forest areas in the state were severely threatened by illegal activities due inadequate penalties on offenders. This finding corroborated that of Adeyoju (1986), Udo (1997), Ozo-Eson (2001), Adeyoju (2001), Udo et al. (2009) and Oduntan et al. (2013) reports, who in their separate studies reported that some of the offenders did not commit such offences because of ignorance, but because of other reasons such as the urge to profiteer through corrupt practices in view of the low ethical standards of the society. Consequently, large forest areas have been opened up by this indiscriminate exploitation of logs, especially areas where these trees grow very well (Ahmed et al. 2016).

According to Asia Indigenous Peoples Pact (2016), indigenous people viewed forest as a common wealth of all,

Table 3. Attitude and level of forestry offence in Akwa Ibom State

Attitude	Frequency	Percentage (%)
Very cooperative	10	8.26
Fairly cooperative	76	62.81
Not cooperative	35	28.93
Total	121	100.00
Level of offence		
High	53	43.80
Moderate	44	36.37
Low	24	19.83
Total	121	100.00

Source: Field data (2017).

which they might use and manage for their needs. This implied that the non-inclusion of the people in forest management decision making by the government coupled with the uncontrolled commercial values placed on forests by the government were among the reason for hostilities or non-cooperation of the people in revenue payment. Also, unfair access and benefits sharing system had in most cases triggered communal conflicts (Jacob 2008; Andrew-Essien and Bisong 2009; Jacob and Ogogo 2011; Jacob et al. 2013) and debates (Mosesthi 2012).

Studies have also shown that areas within region or people deprived of effective resource governance, development and rural livelihoods but with a constantly increasing population growth would exert a significant strain or pressure on the resources such that crisis conditions set in (Andrew-Essien and Bisong 2009; Jacob et al. 2013). These crises were prompted by the increasing social and environmental conflicts that persistently plague the world today, and which seldom were rampant in resource rich environments (Darkoh and Rwomire 2003; World Commission on Environment and Development (Kommissionen 1987).

Perceived ways of improving forest revenue collection in Akwa Ibom State

The results in Table 4 indicate the various ways in which the respondents perceived forest revenue collection in the study area could be improved. Among the seventeen (17) ways mentioned, recruitment of more uniformed field staff had the highest frequency (11.05%). This implies that recruitment of more UFS will make for efficient patrol of the division as the area to be covered during routine monthly patrol will be less, thus resulting in high monthly revenue and low incidence of forest offences. This was followed in a decreasing order by provision of mobility (vehicles and motorcycles) for the various divisions (10.03%). Availability of vehicles and motorcycles would help in regular patrol and evacuation of seized forest produces which were illegally exploited. Prompt arrest, seizure and evacuation of illegally exploited forest products to the divisional offices of the forestry department will ensure that no revenue is lost by illegal exploitation of forest resources.

Provision of official receipts which accounted for 9.30%

Table 4. Suggested ways of improving forest revenue collection in Akwa Ibom State

Ways of revenue improvement	Frequency	Percentage
Recruitment of more uniform field staff	76	11.05
Empowering staff	47	6.83
Provision of mobility (vehicles and motorcycles)	69	10.03
Provision of adequate imperest for the office	61	8.87
Improvement in the nation economy	24	3.49
Enacting adequate forest laws	19	2.76
Provision of adequate equipment (Pass hammer, amoury, binoculars, GPS, etc.)	53	7.70
Establishment of timber markets	31	4.51
Nursery establishment (ornamental nurseries)	28	4.07
Adequate enlightenment campaigns	24	3.49
Adequate and effective patrols	52	7.56
Establishment of more check points	49	7.12
Intensive tree planting across the state	34	4.91
Provision of good roads for evacuation of seized items	18	2.62
Reduction in corruption	4	0.58
Provision of official receipts to be issued for payment received	64	9.30
Provision of accommodation for office and staff	9	1.31
Adequate and timely staff training	26	3.78
Total	688*	100.00

*Multiple responses to the questions.

Source: Field data (2017).

also affected revenue collection in the study area. The recent introduction of e-receipt in the state to ensure that all internally generated revenue in the state is harmonized is a serious setback to the forestry directorate in its bid to generate revenue. With only one revenue payment point in the entire Local Government Area making up a Forestry Division, payment of revenue into the state coffers becomes tedious and cumbersome as the payer has to queue up in the line waiting for his/her turn before payment can be made.

Also, considering that most of the forestry check points were usually in remote areas implied that payment had to be effected in the Local Government Area Secretariat where the Treasury Offices was housed and the receipts collected and authenticated by the Forestry revenue collector before the forest produce would be conveyed out of the area. More worrisome was the fact that the transporter or owner of the forest produce exploited may be willing to pay the stipulated fees but there was no electricity to effect payment, hence the person had to revisit the office another day to conduct payment. These scenarios had made it difficult for forest revenues to be paid into the government coffers as the people seldom device means of averting payment in order not to be delayed, especially the transporters whose vehicles were involved in the process. Availability of payment receipts being issued by the forest guard would ensure that all bureaucracies were removed and revenue was easily paid thereby encouraging the people to pay their levies without delays.

Other perceived ways of improving forest revenue in the state included; provision of adequate funds to run the offices in each division, provision of adequate equipment (stamp hammer, etc), adequate and effective patrols and establishment of more check points for the collection of revenue with, 8.87%, 7.70%, 7.56% and 7.12% respectively. Others were empowerment of the staff (6.83%) through various motivation approaches, intensive tree planting (4.91%) to restore the degraded landscape, establishment of more timber markets in locations where there are few or no timber markets (4.51%), establishment of ornamental nurseries (4.07%) to cater for the increasing demand of ornamental plants and other horticultural plants in the study area, adequate and timely training of staff (3.78%) to provide them with the needed capabilities for revenue collection, adequate enlightenment of the populace (3.49%) on

the need to pay revenue of forest resources exploited and improvement in the nation's economy (3.49%) as most of the business was slow due to low patronage. Review of the existing obsolete forest law and enactment of new laws had a low (2.76%) frequency followed by provision of office accommodation for divisions without befitting ones (1.31%), while the need for reduction in corrupt practices by the forest officers and uniformed field staff (0.58%) was the least considered avenue for improving forest revenue collection in the study area.

The above-mentioned measures, as perceived by the respondents were in line with the observations of Dykstra and Heinrich (1996), Food and Agriculture Organization of the United Nations (1997), FAO (2003), Ezebilo (2004), Agbogisi and Ofuoku (2009), Jacob et al. (2012) and Akinsoji (2013) that human and financial capitals were needed to improve revenue generation in the study area. According to Emeghara (2012), human resources are more important than physical and financial resources. Without the required human capital (skilled and unskilled), physical capital in the form of machines and other technologies would not give rise to desired outcome. However, economists have tended in their analysis of Nigeria's forest revenue woes to concentrate mainly on the difficulties arising from dearth of financial resources for forestry development. Implicit in this line of argument is the assumption that if financial resources were available in sufficient quantities for forestry development, they would yield more revenue to the government. However, research, according to Emeghara (2006) had revealed that problems arising from shortage of manpower especially in the scientific, engineering, technical and managerial areas were indeed more critical and serious than those associated and connected with mere scarcity of capital.

Corruption, another symptom of weak forest sector governance was evident in the form of bribes, extortion, kick-backs, protection money and, most sinister of all, the erosion of institutions beyond the sector and across the economy with a debilitating and crippling effect on Nigeria's overall forestry development (Emeghara 2012). More often than not, it facilitated the occurrence of illegal acts, especially large-scale illegal logging as about \$5 billion per year was estimated to be lost globally due to uncollected taxes and royalties on legally sanctioned timber harvests due to corruption (World Bank 2006). According to Emeghara

(2012) the degree of corruption in the country was alarming as it was almost institutionalized. As Njoku (2001) stated, corruption was a pervasive cankerworm which had burrowed into the very foundation of the Nigerian society virulently, sapping its strength and vitality and leading to diversion of resources (especially funds) meant for forestry development into private use.

In addition to motivation, workers need a conducive working environment, skills and ability to do their job effectively (Chandrasekar 2011). According to McCowan (2001), poor work environment is associated with reduced job satisfaction, absenteeism, somatic complaints, burnout and depression phenomena as most of the workers spent fifty % of their lives within indoor environments (administrative staff), thereby influencing their mental status, actions, abilities and also their performance (Sundstrom et al. 1994). Therefore, good results and increased output in revenue generation could be assumed to be the result of better workplace environment. Better physical environment of office will motivate the employees and ultimately improve their productivity (Carnevale 1992).

Perceived ways of checking forest offences

The ranking of the various ways for checking of forest offences in the study area as perceived by the forest personnel in the study area is indicated in Table 5. The results showed that educating the people on the need to comply with the forest law in the state and pay their tariff was the most effective method as it was ranked first (1st) among other methods. This was followed by mounting of check points across the length and breadth of each division and the use of occasional and surprise team patrol across the forest estate

Table 5. Ranking of ways for checking forest offences by forest officers in Akwa Ibom State

Check measures	Score	Rank
Occasional and surprise team patrol	158	3rd
Regular patrol by uniform field staff	125	4th
Mounting of check points	197	2nd
Educating the people	248	1st

*Scores were obtained by summation of each check measures by the use of reverse scoring of respondents ranking i.e. 1st=4, 2nd=3, 3rd=2 and 4th=1.

which were ranked second and third respectively. However, regular patrol by uniformed field staff was considered the least effective method among the four methods as it was ranked the fourth (Table 5).

Educating the people was ranked first. This implied that if the public are made to understand the importance of the forest and how the forest resources could be utilized wisely, then the rate of unsustainable exploitation of forest resource would reduce. This could enhance good forest management which involves both scientific and traditional knowledge on how to manage forest resources sustainably. The effectiveness of education was in line with the observation by Kuhar et al. (2010) that people could not exhibit environmentally responsible behaviours if they had no knowledge of the environment or lacked the understanding of what they could do to help. Accordingly, Hines et al. (1987) found small correlations ($r=0.35$) between knowledge/attitude and behaviour. Although they found a verbal commitment to be the most significant predictor of pro-environmental behaviour, the two only moderately correlated ($r=0.49$). Also, studies in the field of behavioural change showed that a moderate to large intent to change behaviour was required to show a small to medium actual change in behaviour (Webb and Sheeran 2006), therefore, continued work with the community and schools was critical to encourage behavioural change in future generations.

Mounting of check points was ranked second. This implied that mounting of check points could help in reducing illegal trafficking of forest products. This is in line with the observation of Udo (1980) who reported that mounting of check-point has been a very recent innovation in Forestry Service to check illegal activities in Cross Rivers State. The consideration of regular patrol by uniformed field staff in the study area as the least measure for checking of forest offences can be attributed to shortage of uniformed field personnel in the study area. This is in line with the observation of Kalu et al. (2009), Akinsoji (2013) and Sule (2013) that there exists shortage of uniformed field personnel in the country.

Conclusion and Recommendations

From the study, it can be concluded that annual forest revenue generation in Akwa Ibom State, Nigeria followed

an increasing pattern with a strong correlation between the revenue collected and year of collection. This trend was attributed to hard work and team work among the forestry personnel. However, despite the trend, majority of the personnel still perceive it as decreasing as a result of their inability to meet up their yearly revenue target and the myriad of challenges facing the sector among them poor mobility and insufficient man power. The study also envisages that more effort should be put into educating the people on the need to pay their dues and obtaining permits before exploiting the forest resources would enhance revenue the revenue profile of the state. Also, regular patrolling of the forest estate by the forestry personnel will help in reducing the level of forest offence in the study area. The study therefore recommends improved funding for forestry projects and programmes to increase the status of forest in the state in addition to creating a conducive working environment for its work force to achieve their set targets in revenue collection.

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