Training Needs of Vocational Forestry Staff in Ogun State Nigeria.

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Abstract

Forests contribute in different forms to national and economic growths. Nigeria suffers the second largest net loss in forest reserve with 4.0 million hectares cleared annually. There is also inadequate training based on need assessment, and forestry personnel lack opportunities to update their knowledge. These concerns gave rise to this study with specific objectives to level of knowledge and level of skills of vocational staff in forestry activities. Data were collected using a simple random sampling technique in the selection of 50% of vocational staff totaling 143 respondents. Descriptive statistics and inferential statistics were used to analyze data. Majority of forestry vocational staff were between ages 41-50 years. Majority of vocational staff were school certificate holders and all staff considered themselves to be forest stakeholders. Thirty two percent of vocational staff attended Hammer procedure course. Vocational staff perceived their knowledge level and skill level as medium and that they needed little or no training in most of the area of needs. In conclusion, the study has shown that vocational staff in the study area needs to improve their knowledge, skills in forestry activities to meet up with the contemporary challenges.

Keywords:- Vocational staff, Training needs, Forestry Activities, Knowledge level, Skill level

Introduction

Forests contribute in different forms to national and economic growth, thereby, providing employment for the rural populace and serving as good conservers of soil-water. In addition, forests serve as habitation for wildlife biodiversity and provide food, recreational and aesthetic values to the environment. Unlike in the past, when forests were taken for granted, people are becoming increasingly aware of the direct and far-reaching influences of forests on the environment. Trees also help in breaking the forces of wind, thus preventing wind erosion. They therefore, serve as good conservers of soil water by encouraging percolation and discouraging run-off. Forest sub-sector accounts for about 8% of the agricultural gross domestic products (Gbadebo, et al, 2002) and several millions of households, therefore, depend on non-timber forest products (NTFPs) for subsistence purposes and income, (Etukudor, 2003).

Many state forest reserves in the country were originally set up in recognition of the importance of many tree species and the associated flora and fauna. Forestry is a

source of revenue to government and the private sector. This is through the harvesting, processing and sale of forest produce- ranging from wood to non-wood forest produce. For example, between 1990 and 1994, Edo State government generated more than N62 million from Okomu Forest Reserve (Faleyimi and Arowosoge 2011). Furthermore, forestry revenue in Akwa Ibom State accounted for about 30 percent of the state's total internally generated revenue between 1988 and 1996 (Udo, 2002). However in some cases the public does not control entry into government forest reserves to harvest minor forest products such as tree leaves, barks and roots. Within these forests are many endemic plant species and some that are commercially valuable, like mahogany and other hardwoods. The destruction of forests for timber, cropland, wood, fuel, pasture and urbanization has had an impact on many poor rural families who depend on forest resources for fuel, fodder, food, medicine and housing. Therefore, the deterioration of forests has accelerated soil erosion, sedimentation of rivers, and increased flooding (Kio, et. al. 1992). Lack of knowledge, skilled and well-trained vocational staff in the study area is a major problem, hence developing programmes, teaching farmers on problem solving strategies, facilitating rural community development efforts and forest sustainability may be impossible.

According to Borich, a need is described as a discrepancy or gap between "what is", or the present state of affairs in relation to a group and situation of interest, and "what should be", or desired state of affairs (Witkin and Altschuld, 1995; 2000). Borich (1980) pioneered his methodological model in an effort to design such a survey instrument that would allow one to collect data that can be weighed and ranked in order of priority. By doing so, responses can be linked to a practical decision framework to improve a training program. Borich defined a training need as "a discrepancy between an educational goal and trainee performance in relation to this goal." He further suggested that training programmes could utilize his model by employing the two extreme positions: what is (the measured behaviors, skills, and competencies of trainees) and what should be (the goals of the training program).

The general objective of the study was to assess the perceived training needs of forestry workers in forestry activities in South west of Nigeria. The specific objectives were to;(1)examine the level of knowledge of vocational staff in forestry activities;(2) determine the level of skills of vocational staff in forestry activities; (3) determine the attitudes of vocational staff towards forestry activities; and (4)determine constraints to performance of vocational staff involved in forestry activities in the study area.

Methodology

Vocational staff involved in forestry activities in Ogun state, South West Nigeria constituted the target population. Simple random selections of 50% of vocational staff were selected from the state, totaling 143 respondents out of 286. Descriptive statistics were used in analyzing the data. Knowledge Level: This variable was measured by assigning one to each activity mentioned, the maximum mean is 5 and the minimum is 1. The mean were categorised into high knowledge (5-4), moderately knowledge (3.99 – 2.1) and low knowledge (2-1). (Koponiyi, 2003).

Borich formula was used in calculating training needs. Randol and Larry (1988) in a study on identifying staff development needs of cooperative extension Faculty using a modified Borich Needs Assessment Model indicated that scores per training needs could theoretically range from +20 to -4. Interpretation of the calculated scores is suggested as follows:

1. A topic which has a negative score would be considered inappropriate for use in developing in-service programmes since it resulted from a combination of a very low importance score, a very high knowledge score, or a very low opportunity score.
2. A topic with a score which is relatively close to zero also would not be considered appropriate since it would seem that existing knowledge of the topic, or the opportunity to use new knowledge, is equal to the respondents' perceived importance of the topic i.e., the respondents' existing knowledge is equal to the current opportunity to use information related to the topic.
3. Those topics having positive scores should be rank-ordered and programming would be planned around those having the highest values. Therefore, the higher the number, the greater the need for training.

Results and Discussion

Respondents' Socioeconomic characteristics

Table 1 shows that majority of the respondents (87.41%) were male and 12.59% were female while majority (41.26%) were within the age range of 41-50 years in Ogun State. Majority (74.13%) of the respondents were married. Forty-one percent of the respondents had 2 to 3 children, majority (62.94%) of the vocational staff had SSCE/GCE certificate; 32.17% had been on the job for 1-5years. This gives an indication that most of the respondents were employed recently and may be facing challenges on the field if compared to older individuals. Majority (71.33%) of the respondents had no area of specialization because they were not trained in forestry. Majority (32.87%) of the respondents were exposed to short term training on tree identification and 32.17% for hammer procedure.

Table 1:
Distribution of respondents Socio Economic Characteristics

Socio Economic Characteristics	Frequency	Percentage
Sex		
Male	125	87.41
Female	18	12.59
Total	143	100
Age		
20 – 30	39	27.27
31 – 40	29	20.28
41 – 50	59	41.26
51 – 60	16	11.19
Total	143	100
Marital Status		
Single	34	23.78
Married	106	74.13
Divorced	3	2.10
Total	143	100
Number of children		
0 – 1	42	29.37
2 – 3	60	41.96
4 – 5	32	22.38
6 – 7	8	5.59
8 – 9	1	0.70
Total	143	100
Year in Service		
1 – 5 years	46	32.17
6 – 10 years	30	20.98
11 – 15 years	27	18.88
16 – 20 years	19	13.28
21 – 25 years	15	10.49
26 – 30 years	6	4.2
31 - 35years	0	0
Total	143	100
Educational Qualification		
GCE/ SSCE	90	62.94
Certificate	9	6.29
OND	34	23.78
NCE	1	0.70
HND	9	6.29
Total	143	100.00
In service Training		
Beat procedure	4	2.80
Budding and grafting	1	0.70
Forest law and policy	3	2.10
Hammer procedure	46	32.17
Log checking	1	0.70
Monitoring patrol	3	2.10
Nursery establishment	8	5.59
Plantation establishment	2	1.40
Plot demarcation	5	3.50
Seed and Seedling tech	2	1.40
Silvicultural Operation	5	3.50
Survey	3	2.10
Taxonomy	13	9.09
Refresher course	0	0
Tree identification	47	32.87
Total	143	100.00
Area of Specialization		
General Agriculture	0	0
Fisheries	0	0
Horticulture	1	0.70
Crop Science	0	0
Soil Science	2	1.40
Forestry	36	25.17
Agric Extension	2	1.40
Agric Economic	0	0
Others	102	71.33
Total	143	100

Respondents perceived knowledge level

Table 2 shows that Ogun State vocational staff have medium knowledge in forestry activities such as Techniques of plantation establishment and management($\bar{x}$ = 3.434) , basic measuration techniques($\bar{x}$ = 3.455) , reporting forest defense and other development activities($\bar{x}$ = 3.846) etc. This gives an indication that the vocational staff were familiar with field operations and were performing at medium level while the perceived knowledge level in activities such as wildlife management and monitoring etc. were perceived as low. These areas were relatively new to these Vocational staff although, they may have received instructions on how to handle matters relating to such. They have, however not undergone training to that effect. The implication is that most of the vocational staff need training in the areas as listed in table2.

Table 2
Vocational staff perceived knowledge in Ogun State

knowledge varibles	WMA	SD	level
Reporting forest offences and other development activities	3.846	0.91	M
Construct, maintain and operate a Forest nursery	3.490	1.21	M
Basic measuration techniques	3.455	0.23	M
Techniques of plantation establishment and management	3.434	1.15	M
Prevention of encroachment	3.238	1.08	M
Enforcement of environmental law	3.077	1.23	M
Prevention of accident	2.951	1.05	L
Public awareness	2.769	1.11	L
Wildlife management and monitoring	2.490	1.17	L
Biodiversity monitoring and management	2.357	1.07	L

Weighted Mean Average = WMA SD = Standard deviation
Where H- High, M-Medium, L- Low
Source: Field Survey, 2011

Respondents perceived skills level

Table 3 shows that respondents in Ogun State have a medium level of skills in checking forest offences($\bar{x}$ = 3.832) ; performing basic silvicultural techniques($\bar{x}$ = 3.497) etc. while they had low level of skills in few areas. This may be due to the fact that the respondents were not able to put these skills to use because these activities were not their major areas but only useful for their field.

Table 3

Vocational staff perceived skills in Ogun State

Skills	WMA	S D	level
Tree Identification and tagging of tree	3.867	1.152	M
Checking forest Offence	3.832	1.119	M
Patrolling and detecting Offenders	3.818	1.161	M
Perform basic silvicultural techniques	3.497	1.162	M
On-field procedures and techniques	3.441	0.924	M
Safety Practices	3.364	0.916	M
Maintain of boundary lines and marks	3.169	1.113	M
Prevention of fire outbreak	3.154	1.077	M
Perform basic survey techniques	3.126	1.119	M
Monitoring and protecting of Natural resources	3.077	0.986	M
Perform basic harvesting techniques	2.636	0.727	L
Ways and means of minimizing fuel wood consuming action	2.538	0.803	L
Apply basic Principle of first aid	2.042	1.027	L

Weighted Mean Average = WMA SD = Standard deviation
Where H- High, M-Medium, L- Low
Source: Field Survey, 2011

Respondents' attitude towards forestry activities

Table 4 shows that Ogun State respondents' attitude towards forestry activities is favourable ($\bar{x}$ = 3.587) that is financial management in forestry is part of forestry, senior officers should not be concerned with administration ($\bar{x}$ = 3.448) , and junior officers are not expected to know anything in marketing of timber($\bar{x}$ = 3.225) . This may be due to their level of understanding on administration in which their perception about financial management and administration is small. They also perceived that they were not lacking in technical ability, and site factors should be for specific people not all and because the skills involved in the job are lacking in some cadre of staff($\bar{x}$ = 1.860) . Record keeping should not be carried out every day($\bar{x}$ = 1.818) ; an indication that some were lazy to do the right thing. This current study shows that vocational staff in the study area do not have too strong attitude towards excellent forestry activities although they have a positive attitude which can be improved upon to give right and solid forestry activities in the state.

Table 4
Vocational staff attitude towards forestry in Ogun State

Attitudinal statements	WMA
Lack the technical competence in forestry activities	2.392
Financial Management in forestry is not part of forestry	3.587*
Site factors should be the job of all stakeholders in forestry	1.860
Record keeping should be done everyday	1.818
Forestry workers should be involved in providing seeds and seedlings for farmers	1.713
Senior officers should not be concerned with administration	3.448*
Junior officers are not expected to know anything in marketing of timber	3.225*
Pest and diseases control is more important in forestry than in communication	2.119

Weighted Mean Average = WMA
*Favourable
Source: Field Survey, 2011

Respondents perceived constraints

Table 5shows that vocational staff in Ogun State perceived all the listed constraints as major constraints due to the fact that most of them were not new on the job, and may have earlier at one time or the other reported same to their supervisors. Some may even have dumped the job for other areas in the State because of these constraints when they were not attended to. These may have demoralized them to put their energy to work.

Table 5
Mean distribution of perceived constraints.

CONSTRAINTS	WMA	SD
Poor Condition of service	1.097	0.321
High risk involved in forestry activities	1.245	0.492
Political Instability	1.648	0.736
No in-service training	1.147	0.443
Poor transportation within the forest zone	1.042	0.201
Insufficient knowledge about management techniques	1.287	0.498
Human wildlife conflict	1.301	0.531
Poor funding from the government	1.035	0.184
Problems of fire outbreak	1.132	0.341
Diseases and Pest infestation	1.168	0.375
Lack of Equipment	1.007	0.084

Weighted Mean Average = WMA

In the study area vocational staff training needs are less need because they were having negative scores or scores close to zero as seen in table 6. This indicates that inappropriateness of the topic for training which is as a result of a combination of a very low importance score, a very high knowledge score, or a very low opportunity score or the opportunity to use new knowledge is equal to the respondents' perceived importance of the topic. The respondents' existing knowledge is equal to the current opportunity to use information related to the topic. Therefore, it is important that perceived new areas were explained to workers before embarking on training.

Table 6
Training needs of vocational staff in Ogun State.

Training Need	WMDS
Reporting Forest offences and other development activities	0.38
Techniques of plantation establishment and management	-0.32
Construct, maintain and operate a forest Nursery	0.318
Basic measuration techniques mean	0.9
Prevention of encroachment	-0.56
Prevention of accident	-2.02
Public Awareness	-0.68
Enforcement of environment Law	-0.106
Biodiversity monitoring and management.	-0.04

Conclusion

In conclusion, the level of knowledge of vocational staff was low in major forestry activities. The vocational staff were having medium level of skills. Therefore vocational staff in forestry activities must be properly trained in attitude, skill and knowledge to meet needs and ensure satisfactory standards of performance. Training on specific aspect of needs for forest workers will protect the forest reserve in the state.

References

Etukudo, I. (2003):"Botany, Conservational and Traditional Uses of Plants" The Verdict Press Uyo Pg 22 – 166.

Faleyimi, O.I. and Arowosoge O.G.E (2011): Status of forest policy implementation in Kaduna State, Nigeria *Austrian Journal of Basic and Applied Sciences* 5(8):995-1001.

Gbadebo, O.A.; Oyesola, O.B. and Samuel, A.A. (2002): Gender Analysis of Income Generating Activities of Enclave Dwellers in Onigambari Forest Reserve of Oyo State. *Proceedings of the 28th Annual Conference of the Forestry Association of Nigeria* held in Akure, Ondo State. pp 233 –238.

Kio, P.R.O., J.E. Abu and R. G. Lowe (1992): *High Forest management in Nigeria Invited Paper for the IUFRO Centennial Conference*, Eberswalde, Germany.

Kuponiyi F. A. (2003) involvement of private organisation in Agricultural Extension delivery in south western Nigeria *Unpublished Ph. D. Thesis*, University of Ibadan pp 45 – 62.

Randol G. W.,and Larry J. H. (1988) in a study on Identifying Staff Development Needs of Cooperative Extension Faculty Using a Modified Borich Needs Assessment Model *Journal of Agricultural Education* Pp26-32