Perception of Forestry as a Career among Senior Secondary School Students in Oyo-State, Nigeria

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Abstract

Forestry education in many universities and colleges in Nigeria is currently suffering from serious drawbacks as there is a decline in enrolment into forestry related courses across the tertiary institutions. The importance of forestry education at the tertiary level as a medium for producing professional foresters cannot be over emphasized, hence the need for this study. This study assessed the level of awareness of forestry as a career among senior secondary students in Oyo state, Nigeria. A total of two hundred and forty questionnaire were randomly administered to respondents in the study area. The study reveals that 89.9% and 95.5% of the students in government and private schools respectively were aware of forestry as a course of study while 61.3% and 59.9% of both government and private schools' students got aware through their teachers. Career preference by the students show that medicine was ranked first while forestry was ranked nineteenth with 24.6% and 0.8% respectively. The level of awareness of forestry among the respondents is high with 69.7% and 57.9% in government and private schools respectively. Analysis of variance (ANOVA) result reveals a significant interaction between perception of forestry and type of school in the study area. A set of concrete recommendation for stakeholders involved in the development of forestry education is presented.

Keywords: Perception, Forestry, Career, Secondary school, Students, Oyo state

INTRODUCTION

Forest is one of the natural resources found by a man in his natural environment unlike other material like oil, metal, etc, trees occupy a unique position in that they are renewable resources if wisely used, the resources are inexhaustible (Chomini *et al*., 2011). The expansion of agricultural land for increased food production has put the existing forest in danger. Urban and infrastructural development has also put pressure on the continued existence of the forests. The forests today are facing a bleak future as a result of depletion and mismanagement (Akande and Larinde, 2004). Forestry is not only about trees; it is about the whole forestry environment and individuals trained to manage the forest resource (Alao, 2005). Forestry is the science and craft of creating, managing, using, conserving, and repairing forests and associated resources to meet desired goals, needs, and values for human and environment benefits (Arokoyo 1995). The concept of Forestry education in Nigeria began in Ibadan in the year 1963, at the University of Ibadan (Wyatt-smith and Redhead, 1988), while technical/vocational forestry education commenced formally on the 1st of May, 1941 (Soladoye, 1999) from the Federal College of Forestry, Ibadan, but forestry is now offered by many Universities, Colleges and Vocational training institutes in Nigeria.

Forestry education was and is still pivotal to national development. In view of continuous technological changes, forestry education must not be static. It must be versatile in order to be able to meet evolving contemporary challenges. Forestry education has been undergoing a steady

decline as evidenced by the 30 % global reduction in enrolment into forestry education and training programmes (Daramola, 2009). In Nigeria today, enrolment figures into forestry courses in tertiary institutions are decreasing year by year despite the fact that presently there are more than twenty-five tertiary institutions in Nigeria offering forestry and allied courses.

The World Environmental Day celebrations themes for the past five years of greening the planet through massive Tree Planting and preservation of our forests have not helped the situation due to shortage of manpower in the forestry sector to bring this idea to reality (Agarwal, *et al*., 2013).

Several critical reasons have continuously cited for the problems faced by forestry education. High on the list of reasons is the reducing interest in forestry academic programs. Interest for career and occupation values, abilities and many more differ according to individuals which can be attributed to life career choice (Nathaniel *et al*., 2014). School leavers have a tendency to choose careers with high salary, such as medicine, finance, engineering and computer and information technology (ICT), which offers a grand life style that may not be realized by choosing a career in the forestry sector (Leslie *et al*., 2006; Nyland 2005) and United States (Green 2006; Nyland, 2008). Alao, (2010) however affirmed that, Nigerian youths are not exposed to the best practices of how to enhance career development, and in many schools, teachers do not even have access to current text books on forestry to guide the student properly (Chima and Sobere, 2011) which underscores the low interest of students in forestry as a career. (Nathaniel *et al*., 2014).

 The level of awareness in forestry is low to the extent that a considerable amount of people knows nothing or little about forestry. In view of this, awareness programmes must be planned as some trained and well-experienced forestry extension workers will be required to carry out the job. The level of awareness of forestry could only be raised when the entire Department of Forestry and Forestry Research Institute of Nigeria helps vigorously in extending forestry education and thus changing the orientation of students about forestry and foresters. The extension services units of FRIN and forestry department of Universities therefore, have to disseminate a lot of useful information to the public on erosion control, forest fire prevention, tree planting, recreation and what forest and foresters are all about, with all these put together, and the level of awareness will be encouraging. It is hypothesized that there is no there is no interaction between the type of school (private and government schools) attended by the respondents and perception of forestry as a career. Alternative hypothesis to reject that.

METHODOLOGY

The target population for this study were senior secondary students in twelve (12) Government and (12) private schools in the three (3) senatorial district of Oyo-state**.** Multistage sampling technique was used to select the sample size for this study. The study area was stratified into three senatorial districts of Oyo state. Two local governments were purposely selected from each senatorial district based on the number of both government and private schools available in the local government. Twelve Government and twelve private secondary school in each of the local government were selected for assessment. Ten (10) students in senior secondary classes were randomly selected for interview as presented in Table 1. The questionnaire was administered to the respondents in their classrooms under strict supervision of the researcher, this enabled total retrieval of the questionnaire. Data collected were analyzed using descriptive statistics to produce frequency table, bar charts and percentage while Analysis of Variance (ANOVA) was used to test the hypothesis.

Table 1: Distribution of respondents in the study area

S/N	Sampled schools	Type of school	Local governments	No of respondents
1	Yinbol college, Orogun	Private	Akinyele	10
2	Bishop Philips Academy	Government	Egbeda	10
3	Leire comprehensive college	Private	Egbeda	10
4	Distinct Jubilee international college	Private	Akinyele	10
5	De-lord's model college	Private	Egbeda	10
6	Aponmode moniya high school	Government	Akinyele	10
7	Ajibode grammar school	Government	Akinyele	10
8	Monatan high school	Government	Egbeda/ Lagelu	10
9	Lead city international school	Private	Ibadan north west	10
10	Urban day secondary school Jericho	Government	Ibadan north west	11
11	All saints' college	Private	Ibadan north west/ ido	10
12	Jericho high school	Government	Ibadan north west	10
13	Apata grammar school	Government	Ibadan south west	10
14	Queen's school Apata	Government	Ibadan south west	10
15	Saint Catherine's college	Private	Ibadan south west	10
16	Nesam international school	Private	Ibadan south west	10
17	Morenike memorial comprehensive	Private	Ogbomoso north	10
18	Best legacy international high school	Private	Ogbomoso north	10
19	Oyo state school of science ogbomoso	Government	Ogbomoso north	10
20	Ori Oke community high school	Government	Ogbomoso north	10
21	Ogbomoso Baptist high school	Government	Ogbomoso south	9
22	Smith international Baptist academy	Private	Ogbomoso south	10
23	Caretaker community high school	Government	Ogbomoso south	10
24	Olafunmi comprehensive college	Private	Ogbomoso south	10
	Total	24	6	240

Study Area

This study was carried out in Oyo State, South - West Nigeria. Oyo State is one of the thirty-six states of the Federal Republic of Nigeria. It was created in February 3, 1976 out of the old Western State by the then regime of General Murtala Mohammed. It is located in the rainforest vegetation belt of Nigeria within longitude 7°23'47"N and 3°55'0"E and covers approximately an area of 28,454 square kilometers. The landscape consists of old hard rocks and dome shaped hills, which

rise gently from about 500 meters in the southern part and reaching a height of about 1,219 metre above sea level in the northern part. Average daily temperature ranges between 25 ^{0}C (77.0^{0}F) and 35^{0}C (95.^{0}F) almost throughout the year.

Oyo State is bounded in the south by Ogun State, in the north by Kwara State, in the west by the Republic of Benin, and in the east by Osun State. The state covers an area ranging from swamp forests to western uplands. In between are rain forests, and deciduous forest/savannah mosaic. The rainfall pattern is bimodal with the peaks in June, early July and September, while November to February is characterized by harmattan brought about by the effect of the north-easterly trade winds from Sahara region. Agricultural sector forms the base of the overall development thrusts of the state, with farming as the main occupation of the people in the area. Crops usually grown include cocoa, oil-palm, maize, yam, cassava, cocoyam, melon, cowpea, and vegetables under mixed cropping practices. Agricultural activities utilize more than 65% of the total land area of the state. Lowland Rainforest account for about 6%, while trees/woodlands/shrubs covers about 22% of the total land area of the state. Most people in the state depend on fuel wood as energy source for cooking while, poles are used for supporting electricity cables, and sawn wood are utilized for production of furniture, pulp, paper and building houses. Oyo state is divided into three senatorial districts namely: Oyo south, Oyo central and Oyo north.

Fig 1: Map of Oyo state showing the study area

RESULTS AND DISCUSSION

RESULTS

Awareness of Forestry as a Course of Study

Results presented in this section reveals information on the awareness of forestry as a course of study among the respondents in the study area. The results in Table 2 shows that 89.9% and 95.0% of students in government and private schools respectively were aware of forestry as a course of study while 10.1% and 5.0% of the students in government and public schools respectively were not aware of forestry as a course. The result also reveals in figure 2 that 61.3% of the students in government schools were aware of forestry as a profession through their teachers while 59.5% were aware through their teachers in private schools. This was followed by awareness through the internet with 17.7% and 15.7% in government and private schools respectively. Awareness through parent had the least value of 2.5% and 11.6% in government and private schools respectively. Results in figure 3 indicated that 47.9% and 40.5% of the students in government and private schools respectively had at least 1-2years awareness of forestry as a course. Awareness period of 3-4years among the students in government schools accounted for 31.1% while that of private schools was 25.6%. Only 5.9% of the respondent in government schools respectively had the awareness period of >5years about forestry.

Table 2: Distribution of respondents by awareness of forestry as a course of study

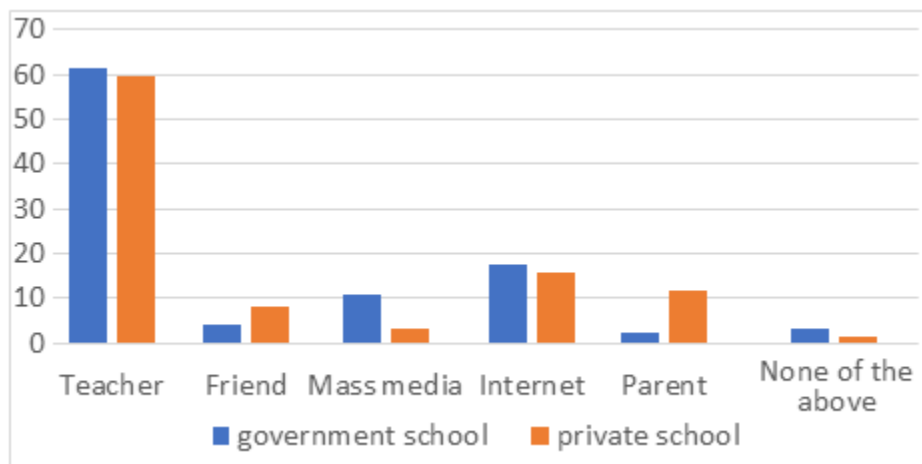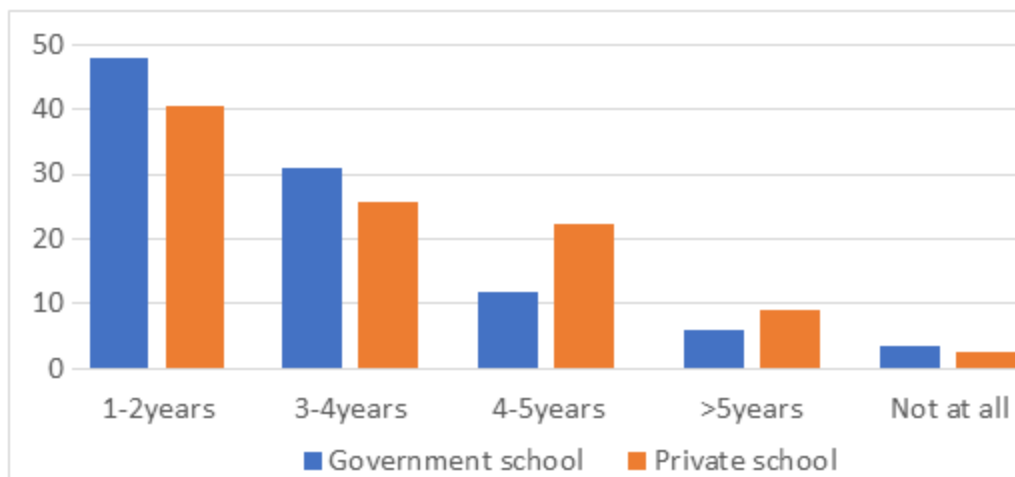| Awareness	Government School	%	Private school	%	Total	Proportion %
Yes	107	89.9	115	95.0	222	92.5
No	12	10.1	6	5.00	18	7.5
Total	119	100	121	100.0	240	100

Figure 2: Medium of Awareness

Figure 3: Period of Awareness

Respondents Awareness of Tree Planting, Climate Change and their interest in Forestry as a Profession

Results in this section present information on respondent's awareness of tree planting, climate change and their interest in forestry as a profession. The result in Table 3 shows that 63.9% and 50.4% of the respondents in government and private schools respectively have knowledge of tree planting campaigns while 36.1% and 49.6% in both government and private schools respectively did not know about tree planting campaign. The result also reveals that 89.1% of students in government schools had the knowledge of climate change while 82.6% of students in private schools had full knowledge of climate change. It was indicated in the result that only 16.8% and 9.1% of the respondents in government and private schools respectively were interested in studying forestry as a course in higher institution.

Table 3: Distribution of respondents based on their knowledge of tree planting, climate change and preference for forestry

Item	Government schools	%	Private schools	%	Total	Proportion %
Knowledge of tree planting						
Yes	76	63.9	61	50.4	137	57.1
No	43	36.1	60	49.6	103	42.9
Knowledge of climate change						
Yes	106	89.1	100	82.6	206	85.8
No	113	10.9	21	17.4	34	14.2
Preference for forestry						
Yes	20	16.8	11	9.1	31	12.9
No	99	83.2	110	90.9	209	87.1

Respondents Preference for Forestry Compare to other Profession

Table 4 shows that medicine was ranked first with 24.6%, followed by engineering (9.6%). Pharmacy and nursing were ranked third and fourth with 8.8% and 8.3% respectively while forestry was ranked nineteenth with 0.8% and agricultural science 18th with 1.3%.

Table 4: Distribution of respondents by course ranking

Course	Government school	%	Private school	%	Total	Percentage	Ranking
Medicine	29	24.4	30	24.8	59	24.6	1ST
Engineering	10	8.4	13	10.7	23	9.6	2ND
Pharmacy	10	8.4	11	9.9	21	8.8	3RD
Nursing	8	6.7	12	9.9	20	8.3	4TH
Law	6	5.0	8	6.6	14	5.8	5TH
Biochemistry	7	5.9	6	5.0	13	5.4	6TH
Bioinformatics	7	5.9	5	4.1	12	5.0	7TH
Accounting	6	5.0	5	4.1	11	4.6	8TH
Human nutrition	6	5.0	4	3.3	10	4.2	9TH
Quantity Survey	4	3.4	5	4.1	9	3.8	10TH
Geology	3	2.5	5	4.1	8	3.3	11TH
Vet. Medicine	4	3.4	3	1.7	7	2.9	12TH
Economics	4	3.4	3	2.5	7	2.9	12TH
Microbiology	2	1.7	4	3.3	6	2.5	14TH
Computer science	2	1.7	3	2.5	5	2.1	15TH
Mass com	4	2.5	2	1.7	5	2.1	15TH
Theatre Art	3	3.4	0	0.0	4	1.7	17TH
Agriculture	2	1.7	1	0.8	3	1.3	18TH
Forestry	1	1.7	1	0.8	2	0.8	19TH
Botany	1	0.8	0	0.0	1	0.4	20TH
Total	119	100.0	121	100	240	100.0	

Respondents Level of Awareness of Forestry

The result reveals in table 5 that the level of awareness of forestry among the respondents is high with 69.7% and 57.9% in government and private schools respectively. This implies that the students were fully aware of forestry as a career in the study area.

Table 5: Distribution of respondents by level of Awareness of forestry

Level of awareness	Government school	%	Private school	%
High	83	69.7	70	57.9
Low	36	30.3	51	42.1
Total	119	100.0	121	100.0

Testing the hypothesis

Analysis of variance (ANOVA) was used to test the hypothesis, since it is measured at a nominal level.

H0: there is no interaction between the type of school (private and government schools) attended by the respondents and the perception of forestry as a career.

Variable	Mean square	F	P-value	Remarks
Private	0.658	4.763	0.001	Significant
Government	0.783	3.019	0.014	Significant

The result reveals that there is a statistically significant interaction between perception of forestry as a career and the type of school (private and government schools) in the study area with a p-value (0.001, 0.014) which is less than (p<0.05). This implies that the type of schools attended by the students had a great influence on their perception of forestry as a career.

DISCUSSION

As shown from the results above, it was observed that majority (89.9%, 95.0%) of the students in both government and private schools respectively were aware of forestry as a course of study. It was also revealed that the students got aware of forestry as a course of study through their teachers. Moreover, the larger percentage of the students in both government and private schools had at least 1-2 years awareness of forestry as a course of study in tertiary institution. The findings from the results in table 3, also shows that 63.9% and 50.4% of students in both government and private schools respectively have knowledge about tree planting campaign. This observation could be attributed to the tree planting awareness campaign program organized by the extension unit of forest economics and extension department of (FRIN) to some adopted government and private schools in Oyo state. The exercise is conducted monthly where students had the opportunity of participating in tree planting by planting seedlings in designated areas of the school premises. This assertion is in agreement with the submission of Chima and Sobere (2011)

The observed high level of awareness about forestry among the government and private schools' students shows that this set of students were better informed about forestry which is evident from the result in table 5 with 69.7% and 57.9% in government and private schools respectively. This assertion further confirms the result in table 5 which revealed that students in both government and private schools had high level of awareness of forestry.

Generally, the observed low level of interest of the students in forestry education compared to other courses as evident from the result in table 4 where forestry was ranked nineteenth with 0.8% while medicine was ranked first, might be due to the low esteem of the forestry profession in the society and the fact that the prospects of the profession being rarely discussed whenever it is mentioned unlike medicine, engineering, pharmacy and law. This is line with findings of Daramola (2009) who reported that these professions enjoy high esteem in the society. This assertion is also in agreement with the submission of Chima and Sobere (2011) on students' reasons for not wanting to study Forestry and Wildlife management in University.

Daramola (2009) also reported that forestry education has been undergoing a steady decline as evidenced by the 30% global reduction in enrolment into forestry education and training programmes. In addition, the low level of interest in forestry could be tackled when issues

affecting forestry departments in Nigerian tertiary institutions like marginalization by the Faculties of Agriculture, low level of enrolment at undergraduate and postgraduate levels are critically addressed. It should also be noted that the themes for the International day of forests celebration since the past five years have centered on the role of forests in storing carbon which helps in mitigating the impact of climate change through planting of trees and preservation of the forests. For example: Forests and biodiversity; Too precious to lose-2020, Forests and education-2019, Forests and sustainable cities-2018, Forests and energy-2017, Forests and water-2016. Many states in Nigeria including Oyo state have done so much to raise awareness on how to manage the forests in a sustainable way but there is still much to be done.

CONCLUSION

Based on the findings from the study, the students were aware of forestry as a course of study but the students' preference for Forestry as a course compared to other courses like Medicine, Engineering, Pharmacy and Nursing is extremely low with Forestry course ranked nineteenth position. It was also revealed from the result that there is a statistically significant interaction between perception of forestry as a career and the type of school (private and government schools) in the study area.

The Extension departments of FRIN and other relevant stakeholders in the forestry field needs to create more awareness and enlighten the students in secondary schools on the importance of studying forestry as a course in tertiary Institution as some students are ignorance of career prospects. Also, in order to keep track of forestry education in Nigeria, forestry education at secondary school level should be introduced in order to generate interest from the student as earlier as possible. More so, there should be improvement of teaching aids and entrepreneurial skills should be strongly encouraged in forestry training which would prepare forestry graduate for self-employment rather than job seekers. Massive public enlightenment on forestry education and its foresight is needed.

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