Perception and Preference of Secondary School Students in the Choice of Forestry as a Career in Ibadan Metropolis

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***Abstract*: - Forestry education at tertiary level is structured to produce professional foresters, in view of managing biodiversity of natural environment, sustainable forest management creating and managing wood resource and potential to interact and work with the forest-based communities. The study was conducted to ascertain the perception of secondary school students in Ibadan metropolis, Oyo State about Forestry as a career in the university. A total of 100 pre-tested questionnaires were randomly administered to respondents to collect data in selected secondary schools in the state. The data collected was subjected to descriptive statistics of frequency and percentages and was further tested using chi–square statistics. Only 13 out of the 100 students expressed willingness to study forestry in the university. The males accounted for 48% of the population willing to study the course with or without scholarship. Despite Students' awareness level of 65%, the students' preference for medicine, law, engineering; under-representation of Forestry in secondary school curricula; and inadequate knowledge of its career prospects, were the major reasons for the low preference in studying the course. The study posit the need for the revision of secondary school Curricula in favour of forestry as a course of study along with massive public enlightenment on the prospects of the profession and globalization of the course were amongst others suggested as ways to enhancing students' perception and preference for forestry as a field of study.**

Keywords: **Perception, Preference, Forestry, Career, Secondary school, Students, Oyo State**

I. INTRODUCTION

Forestry as a profession came to being almost 200 years ago (Daramola, 2010) having realized the importance of forests as resources for the existence of man. This posited forestry education system to incorporate learning, researching and training of professionals in the forestry sector. Generally, forestry education at tertiary level is structured to produce professional foresters. APFNET (2018) stated that school leavers who selected forestry academic programs at universities were driven by the opportunity to work outdoors, their interest in managing biodiversity of natural environment, creating and managing wood resource and potential to interact and work with the forest-based communities. Against this background, the traditional forestry programs prepared the students with a strong foundation in a number of core academic disciplines, and subsequently trained them in the professional context for the forestry sector (APFNET 2018). In many forest-rich nations, forestry education has remained with this traditional model, usually introduced by the colonizing nations or having been emulated from other nations in the region. With the global change in forest cover and its role, the traditional forestry education model appears to be ill equipped to produce the necessary human capital to cope with the emanating challenges (Laurillard and Kennedy, 2017). Inevitably, forestry education is in transition all over the world, and under growing pressure to remain relevant as a professional career education. According to Lewark(2016) several reasons have are responsible for the problems faced by forestry education. Key reason is the reducing interest in forestry academic programs where school leavers prefers careers with high salary with promising achievement that are not attainable in forestry profession such as medicine, law engineering and information technology (Chima and Sobere, 2011).

Arevalo *et al*., (2012) observed that, despite the growing discontent, forestry programs in many parts of the world have not been restructured to meet market demands because forestry academic, teachers and trainers have not fully adopted to keep up with these changes. Lewark, (2016) reported that forestry graduate students from tropical countries have been unable and ill-equipped to fit with local stakeholders in technical and economic aspects, participatory approaches to forest resource use and respond effectively to global forestry paradigms. In Nigeria today, enrolment figures into forestry courses in Universities are dwindling yearly despite the large numbers of universities offering forestry and allied courses. Despite global advocacy for sustainable forests management, Nigeria still lacks adequate hands to tackle the contemporary conservation problems, and this could be linked to societal demand and lack of interest among youth to study forestry (Alao, 2010). The World Environmental Day celebrations themes 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 (Agrawal, *et al*., 2013). Besides, public perception which is a factor of preference about the profession is worrisome and disturbing (Lewark, 2016). 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). The attitude of a student towards a course of study influences the amount of content

materials internalized and the acquisition of the appropriate skills for the subject (Ibitoye, 2011). 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). Down home, Oyo State is endowed with abundant natural resources which include tropical rainforests, freshwater and mangrove swamps. These ecosystems are being threatened by anthropogenic activities ranging from urbanization, logging, exploitation, and their associated negative consequences. When ecosystems are pushed beyond the threshold, both the ecosystem and the human communities get converted. The current effort by the Oyo State Government to engender sustainable development cannot be achieved without a sustainable environment. Hence, the current challenge is to produce adequate manpower to sustainably manage her environment including the forest and wildlife resources in order to ensure sustainable livelihood for the people in general(Bullard, 2015).

II. METHODOLOGY

Description of the study area

The study covers Ibadan metropolitan city, which is the largest indigenous city in Africa, is the capital of Oyo state. Ibadan lies at latitude 7 ˚23' N and Longitude 3˚ 56'E. Temperature ranges between 210C and 320C throughout the year with mean relative humidity of about 75%. The mean annual rainfall ranges between 1,500mm and 2,000mm (Alao, 2010).There are two major ecological zones in the State: tropical rainforest exist in the southern path while derived savanna predominates in the northern peripheries. The vegetation is evergreen composed of many varieties of hardwood tree species such as *Terminalia superba*, *Pycnathusangolense*, *Meliciaexcelsa*, *Antiarisafricana and Pterocarpusosun.* It is located at the transition zone between the forest and grassland areas of the country. The population of central Ibadan which is made of by the five Local Government Areas as indicated in figure 1is 1,338,659 according to census result of 2006 covering an area of 128 square kilometer.

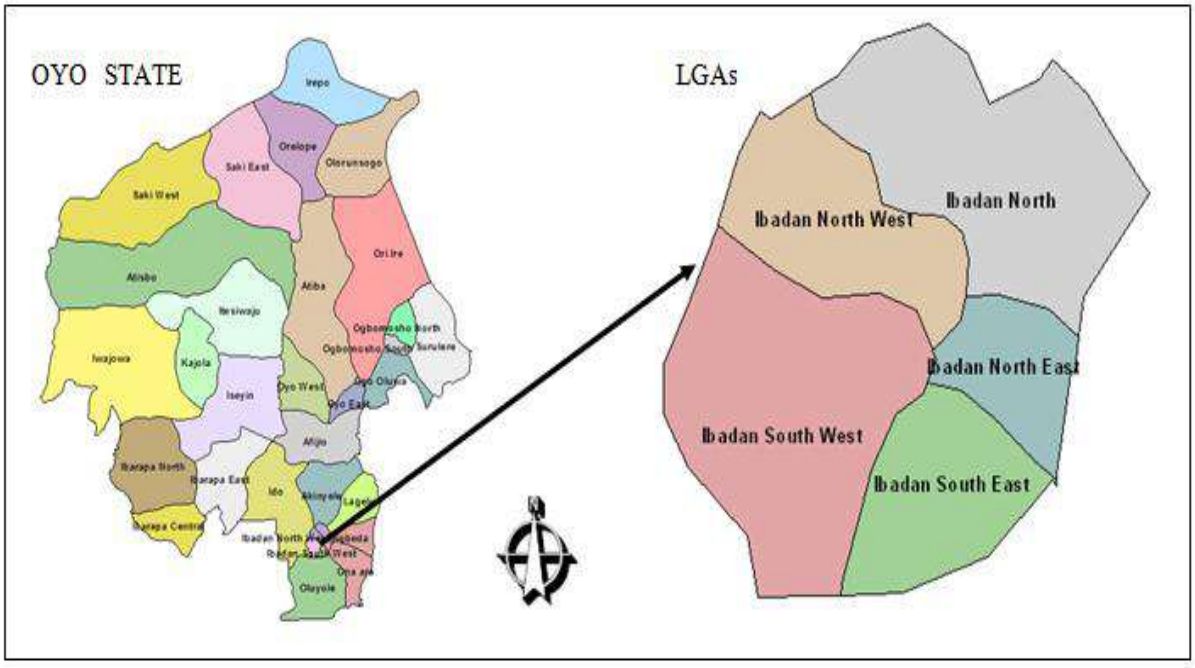

Figure 1: Map showing the Location of the study area

Source: Alao, 2010

Sampling Procedure

Five secondary schools were randomly selected from the local government. Twenty students each was randomly selected for questionnaire administration. A total of one hundred students were selected. Two-section open ended Questionnaire and oral interviews were used to collect data. The first section was designed to collect data on personal characteristics. The second section has items solely on the indicators of the variables on the attitude of secondary school students and forestry as a profession under investigation. The data collected was subjected to descriptive statistics of frequency and percentages and was further tested using chi–square statistics.

III. RESULTS AND DISCUSSION

Table 1

1. Gender distribution of respondents

Gender	Frequency	%
Male	48	48
Female	52	52
Total	**100**	**100**

2. Parental educational level

Educational level	Frequency	%
HND/B.Sc/M.Sc/Ph.D	30	30
ND/NCE	18	18
Secondary School Certificate	20	20
Primary School Certificate	5	5
No Formal Education	27	27
Total	**100**	**100**

3. Parental occupational level

Occupational level	Frequency	%
Civil servant	38	38
Trader	30	30
Farmer	20	20
Private Establishment	12	12
Total	**100**	**100**

4. Information on Forestry as a profession

Have you heard of forestry before?	Frequency	%
Yes	65	65
No	35	35
Total	100	100

5. Channel of Information about Forestry

Channel	Frequency	%
Radio	5	4.1
Television	10	8.2
Newspaper	1	1.0
Family members	13	10.6
Teachers	75	61.4
Neighbours/friends	18	14.7
Total	122*	100

6. Preferred Courses by respondents without award of scholarship

Courses preferred	Frequency	%
Forestry	13	13
Medicine	40	40
Engineering	15	15
Education	1	1
Law	31	31
Total	**100**	**100**

7. Willingness to study forestry with Scholarship

Study forestry with scholarship	Frequency	%
Yes	48	48
No	52	52
Total	**100**	**100**

8. Students' perception of the future of forestry as profession

How do you considered forestry as profession?	Frequency	%
The future is bright	23	23
The future is not bright	45	45
I can't say	32	32
Total	**100**	**100**

9. Reason for non-competitiveness of forestry as a profession

Reasons	Frequency	%
The course is not popular	45	45
Students who have no money	0	0
It is only for dull students	0	0
Students with no alternative	15	15
No job after study	40	40
Total	100	100

10. Government action to promote forestry as a profession

Government action	Frequency	%
Forestry subjects in school curriculum.	20	20
Awareness on television and radio	10	10
Job availability for forestry graduates	70	70
Total	100	100

The study as presented in table 1 revealed that there is almost equal number (gender) of students selected for the survey. Youths are strongly believed to be mothers, fathers and leaders of tomorrow. They are expected to naturally take over the affairs of the society they find themselves. At the initial stage of development, youths learn to imitate the elders, followed by the phase of taken initiatives and risks towards the end of life journey, they impact knowledge and communicate life experiences to those behind them. Hence, any programmes that take cognizance of the youths will surely exhibit continuity, wide coverage and general acceptability (Lewark, 2016). According to the study, more than one quarter of the respondents' parents have Higher National Diploma and above, this is followed by no formal education, secondary certificates and the least is primary school certificates. Parental educational level may have influence on students' career choice. The occupational level of the students' parents revealed that the parents are civil servants in one government ministries or another, this is followed by traders, farmers and working with private establishments. The parents' occupational level could influence their wards career choice. The study also revealed that almost all the respondents were aware of forestry as a profession and majority of them became aware of forestry through their teachers, followed by those who got their awareness through their neighbours. The least corresponds to those who got theirs awareness through the newspaper.

The study revealed that without any reinforcement such as the award of scholarship, the respondents were not willing to study Forestry but medicine and Law. Besides, almost a half of the students would like to study forestry in the higher institution if they were given scholarship while some of the students strongly detest forestry, that even if they were offered scholarship, they would not study it but see a bright future for the profession of Forestry in Nigeria. The study however revealed that more than half of the respondents believed that the profession is not popular in Nigeria partly due to little or no publicity as to what opportunities are there for a graduate of forestry, while some of the respondents see the profession as that of students who have no alternative and indicated that those who study the course in the higher institution will not get job in the labour market. Besides, the study further showed that majority of the respondents agreed that government can promote forestry as a profession by making job available for those who study it. This is followed by student's who agreed that pure forestry subjects be included in the school curriculum. The least number agreed that government can create more awareness on radio and television.

Table 2: Chi-square Analysis

Chi-square test of gender studying forestry with scholarship			
Value	**Df A**	**Symp**	**Sig**
Pearson chi-square	3.558	1	0.059**
Continuity correction	2.464	1	0.117**
Likelihood ratio	3.610	1	0.057**
Linear-by-linear association	3.469	1	0.063**
N of valid class	100		
** *Not significant at 0.05*			
Chi-square test of parents' educational level and course liked to study			
Pearson chi-square	12.299	12	0.422 **
Likelihood ratio	12.644	12	0.395**
Linear-by-linear association	2. 225	1	0.136**
N of valid class	100		
** *Not significant at 0.05*			
Chi-square of gender and the future of forestry profession			
Pearson chi-square	10.332	2	0.006*
Likelihood ratio	10.958	2	0.004*
Linear-by-linear association	7.021	1	0.008*
N of valid class 100			
**significant at 0.05*			

The chi-square in table 2 revealed that the award of scholarship by government to reinforce students has no significant influence ($p>0.05$) on the study of forestry. This showed the level of hatred that some students manifest towards choosing forestry as a course of study, despite the fact that with scholarship, they would not just study forestry. The table revealed that parents' educational level has no significant relationship ($p>0.05$) with the choice of courses to study in the higher institution. This showed that parents' educational level does not determine the career choice of their wards. The chi-square further revealed that there is significant relationship ($p<0.05$) with forestry and prospect for the profession. The study revealed that there were almost equal number of boys and girls that were randomly selected for the survey. The parents' educational levels do not have significant relationship ($p>0.05$) with the choice of career on the respondents. This showed that parents educational status does not affect the career choice of the respondents. The findings also showed that the parents' occupational level does not have significant relationship ($p>0.05$) with students' career choice. There have been cases where a typical farmer's ward became Medical doctor and Automobile Engineer while the wards of executive director preferred to engage in the business of contraband materials.

Although most of the respondents were fully aware of forestry as a profession, only very few of them are willing to study forestry without reinforcement of scholarship. While majority of the respondents preferred to study medicine and Law, surprisingly the number of respondents that preferred to study Education was insignificant. This will have serious implication on teaching and learning processes in the nearest future as the respondents who should replace the older generation have no interest in Education as a profession, hence the need for government to take action on our education. Most of the respondents were aware of forestry as a profession through their teachers in the school. This showed that the secondary school curriculum contain forestry in both the junior and senior secondary school level. The findings also revealed that negligible number of the respondents indicated that they received their awareness through the newspaper. This may be probably due to the fact that the respondents have very poor reading habits or that they don't have access to newspapers. Interestingly, the findings revealed that if the respondents were reinforced with the award of scholarship to study forestry in the higher institution, higher percentage would like to study it, compared with those who were willing to study it without scholarship. Most of the respondents see the future of forestry profession to be bright while most of the respondents agreed that the profession is not popular. Most of the respondents would like government to make job available for those who studied forestry. Also, the respondents have

passion for forestry as most of the respondents would like to marry those who study forestry in the future.

IV. RECOMMENDATIONS

The study revealed that students are aware of the existence of Forestry as a course of study with low preference to be pursued as a course of study compared to other courses. On the ground of this fact, the study concludes that, the lack of interest in forestry as a course of study is not a factor of the peculiarity of the course being practiced in the rural areas nor ignorant of its existence but that of ignorant of the prospects imbedded in the profession as a result of little or no counseling. The study further posit the inclusion of forestry as a subject in the secondary school curriculum to further broaden the students' knowledge of the course from the scratch and as well boast their interest of the course as a profession right from a subject taken in class. Besides, considering the recent globalization and democratization of education along with the importance forestry, the study posit the need to shift towards social and urban forestry, community forestry, and environmental forestry with strict emphasis on the socio-econ and environmental focus of forest (Nathaniel, *et al*., 2014). This underscores the need for a review of the curriculum of forestry for a sustainable forestry program both in succession and in quality to serve all sector of the economy. The way out is a synergy with natural resources development, economy, environment, scientific research, through training and innovation agenda (Bernasconi and Schroff 2011). The resolution should be towards holism and away from industrial-based forestry education models with adequate and frequent re-trained in new approaches to forest management and review the objectives of forestry education in the light of future developments (Laurillard, and Kennedy, (2017). On-line forestry program as practiced in cornell university is another innovative and efficient option for wider audiences across the globe and deliver such programs in an innovative and efficient manner (Lewar, 2016).

V. CONCLUSION

The study focused on the perception and preference of secondary school students in Forestry as a career in Oyo State. The secondary school students full of in-built abilities yet to be fully utilized are needed particularly in forestry activities where nature conservation has to be balanced with the production of timber and self-reliance, hence, the need to examine the attitude of secondary school students towards forestry as a profession. Therefore, the study recommends that, Governments, Individuals, public and private organizations, NGOs and many others should encourage the students by awarding scholarships to those who intend to study forestry as a profession. Also, graduates of forestry should be empowered to be self-reliant while imposition of career by parent should be put to stop

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