

# Staff Availability in Universities for Human Resource Development in Agricultural Extension in South-Eastern Nigeria

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**Abstract:** This study was carried out in the universities in South-Eastern Nigeria, to ascertain the staff availability for human resource development. A survey design was adopted to collect primary data, using questionnaire and key informant records as instruments. The instruments were validated through peer review of research experts in the Department of Rural Sociology and Extension. The reliability was 0.89 of Cronbach's alpha which confirmed that the instrument was statistically reliable. Multi-stage probability sampling technique was used to derive a sample size of 164 respondents from 8 universities. Data were analyzed with descriptive statistics such as frequency, percentage, means and inferential statistics such as t-test. The result revealed that staff sampled were in their active age range of 31-50 years. It was indicated that 63.4% were males and 29.27% had PhD degree. The result shows 34.26% were shortfall of academic staff of Agricultural Extension. The analysis revealed that staff availability for academic staff had the pooled mean of 2.04 and that of non-academic  $X = 2.09$ . The null hypothesis of no significant mean difference was not rejected because  $t_{cal} -0.009$  was less than  $t_{tab} 1.960$  at 0.05 level of significance. This means that there is no significance difference between the mean scores of staff availability for academic and non-academic staff. The study recommended that government should grant waiver of employment to both Federal and State universities through the National Universities Commission and Ministry of Education and fund them adequately to attract and retain the required staff to achieve the mandate of Agricultural Extension in Nigeria.

**Key words:** universities, staff availability, human resource development agricultural extension

## 1. Introduction

Effective extension delivery depends on the number and quality of staff in extension organization. Human-beings or manpower serve as the active factors that manipulate other factors of production such as capital and other natural resources in the production process. Igwe (2004) and Obanya (2006) identified inadequate number of qualified staff, poor conditions of service, and mass exodus of qualified teachers as major obstacles confronting Nigerian university

system, including those that produce extension staff [1, 2].

Staff availability in any establishment or programme is the responsibility of the personnel management. It is the personnel management that is concerned with manpower planning, recruitment, selection, placement, termination, education and training, career development, terms of employment, method of remuneration, working conditions and employment services. O'Neil (1994) pointed out that quality staff (human resources) available depend on the recruitment, retention, development of professional teachers and dedicated staff that would promote an optimum level of performance towards the provision of quality education

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[3]. Persons who make up the staff have the responsibility to shape the tone, direction and effectiveness of a programme. Hence, the quality of service of any school or organization to achieve its goal or mandate is dependent largely on the adequate number of the professional competence and quality of staff available. The objective of Agricultural Extension in developing of human resources in the universities, is achieved through the effort of the staff. Arikewuyo and Adegbesan (2009) observed that asset and greater management challenges within the organization (Agricultural Extension Programme) in universities has been meeting the human resources needs adequately [4].

Ugboaja (2014) contended that agricultural extension in the universities system has been very crucial in the development of agricultural knowledge, technological skills, habits and attitudes for the transformation and revolutionization of agricultural sector to ensure food security [5]. This can only be achieved on sustainable basis if there are adequate quality staff. There has always been a slogan that “No educational system can grow beyond the available quality and quantity of its staff. The National Universities Commission (NUC) (2007) recommendation of academic structure for the development of human resources in Agricultural Extension is as follows; Professorial cadre (20%), Senior Lecturer (35%) Lecturer I to Graduate Assistant (45%) and a staff-student ratio of 1:30 for all programmes [6]. In this regard, if the available staff falls short of this standard, the human resource development in agricultural extension will not be effective in the universities. The human resources that are required to be developed are the students, while the available staff include both the academic and non-academic staff. These two categories of people must complement each other in the work place so that the mandate of developing human resources (students) will be productive and result-oriented. Iheonunekwu (2012) defined human resource development as various

effort to develop the necessary human capacity, both intellectual and physical, to ensure that requisite results and successes are recorded on a continuous basis [7]. Human resource development in agricultural extension is the process of increasing and improving the knowledge and skill base of the current and future betterment of the various areas of agricultural practices.

Human resource development is also seen by Iheonunekwu (2012) as a combination of multi-variate and multi-dimensional approach and efforts geared towards the improvement and sustaining of the current economic levels and performance of social welfare of the clientele [7]. Okorie (2000) [8] associated the human resource development with the Chinese proverb that says “if one is planning for one year, he should plant rice, if one is planning for ten years he should plant fruit-trees, but if one is planning for hundred years he should plant men. Planting of men is a life-long process which starts with birth and ends in death. When the required staff is made available, it will enhance the production of human resources in agricultural extension. The skills, knowledge, technology so developed will enable them to assist the resource-poor farmers to achieve food security and reduce poverty.

Okunamiri (2009) Adeyemi and Uko-Aviomoh (2004) pointed out that the development of human resources (in Agricultural Extension) lend itself to the Cobb-Douglas Production Function Model [9, 10]. This model states that to obtain equilibrium state in any production system, the growth in output can be increased by increasing the number of the available work/force. In the contrary, to establish equilibrium growth in the development of human resources, the student enrolment must be accompanied by a proportionate growth in staff strength. Otherwise disequilibrium in students-staff ratio will weaken the efficacy and quality of the production which are students or human resource being developed.

This study, therefore, ascertained staff availability for human development for Agricultural Extension in the public universities in South-Eastern Nigeria. Specifically, it describes the socio-economic characteristics of respondents and determined the number of academic and non-academic staff available in the study area.

## 2. Methodology

The study adopted a survey design to carry out this research on public universities in the South-Eastern, Nigeria. There are 17 public universities, comprising of Federal and State Universities. The Federal Universities were 7 and the state universities were 10. Population of the study is made up of all academic and non-academic staff in the study area.

Multi-stage simple disproportionate probability sampling technique was employed to select 11 universities out of 17. Secondly, 20 academic staff which gave 220 and finally 10 non-academic staff were selected from each of the sampled universities. A total of 330 questionnaire were administered out of these, the questionnaire completed and returned was 164. Out of this number, 108 questionnaire were returned out of 220 administered to academic staff, while 56 questionnaires were returned out of 110 non-academic staff. Analysis was made, on the basis of the returned questionnaire. The analysis was based on descriptive statistics such as frequency, percentage and mean and the inferential statistics was the t-test at 0.05 level of significance.

## 3. Result and Discussion

The result revealed majority of the respondents (63.15%) were between the active age range of 31-50 years. Age is very important in determining the level of productivity in the world of work. Nwaru (2004) Iheke (2010) and Nnodim (2011) in their studies indicated that as individuals grow older [11, 12], their mental abilities and capacities to cope with job demands and challenges decreases. Majority (63.41%) of the

respondents were males, while (36.59%) females. This is in tandem with the Needs Assessment Report of Nigeria Public Universities (2012) [13] which indicated that there was male dominance among the university staff citing specifically Abia State University, (83% males), while in University of Uyo, (80%) males. It found out that majority of the respondents (85.98%) were married and (87.48%) had tertiary education. Needs Assessment of Nigeria Public Universities (NANPU) (2012) observed that Nigerian Universities need 80% of academic staff to be Ph.D. holders. However, the non-academic staff job requirement do not need highly specialized qualifications comparatively [13].

It was shown that 29.88% had working experience between 1-10 years. While 26.22% had working experience between 11-20 years and 31-40 years. The findings revealed that majority of the respondents were not very experienced. The low level of working experience can be attributed to the policy of government on staff engagement, retirement, retrenchment and brain-drain syndrome in the university system that is characterized by embargo on employment and non-replacement of retired staff. It is *a priori* expected, that the more years an individual spent on the job, the more experienced, effective and productive he becomes. Iheke (2010) [14] contended that the more experienced one is on the job, the more proficient he becomes.

The result revealed that (34.26%) were not core-experts in Agricultural Extension but Agricultural Economics experts who were engaged teaching agricultural extension courses and more so exercising dominance over Agricultural Extension, specifically in the state universities.

Table 2 shows that the mean score on the availability of academic staff in Agricultural Extension was low with the pooled mean of 2.04, against the cut-off point (2.50). the result revealed that the rated number of academic staff with PhD was  $\bar{X} = 2.13$ , the number of staff at professorial rank was  $\bar{X} = 1.95$ , Senior

lecturers  $\bar{X} = 2.14$ , Lecturer 1  $\bar{X} = 2.21$ , Lecturers II  $\bar{X} = 2.09$ , Assistant lecturers  $\bar{X} = 1.89$  and Graduate Assistants  $\bar{X} = 1.94$ . The findings of this study therefore agrees with Obanya (2006) [2] who revealed that Nigerian universities are in dearth of academic staff. Confirming the report of the Needs Assessment of the Nigerian Public Universities (2012) [13] which indicated that less than 105 of Nigerian

Universities have 60% of their academic staff with PhD degree. The shortfall amounts to 32,000 academic staff, which by implication includes Agricultural Extension. This study suggested that waiver should be granted to the universities based on needs to engage the adequate number of staff in Agricultural Extension for effective and efficient development of extension personnel in Nigerian universities.

**Table 1 Distribution of respondents based on socio-economic characteristics.**

Socioeconomic characteristics variables	Frequency	Percentage
<b>Age (years)</b>		
21-30	24	14.63
31-40	48	29.27
41-50	56	34.15
51-60	35	21.34
61-70	01	0.64
<b>Total</b>	<b>164</b>	<b>100.0</b>
<b>Sex</b>		
Male	104	63.41
Female	60	36.59
<b>Total</b>	<b>164</b>	<b>100.0</b>
<b>Marital Status</b>		
Married	141	85.98
Single	22	13.41
Widowed	01	0.61
<b>Total</b>	<b>164</b>	<b>100.0</b>
<b>Educational level</b>		
Ph.D.	48	29.27
M.Sc	64	39.02
B.Sc/BA/B.Ed/HND	21	12.80
NCE/OND	11	6.71
WASC/SSCE	14	8.54
FSLC	06	3.66
<b>Total</b>	<b>164</b>	<b>100.0</b>
<b>Years of Working Experience</b>		
1-10	49	29.88
11-20	43	26.22
21-30	29	17.68
31-40	43	26.22
<b>Total</b>	<b>164</b>	<b>100.0</b>
<b>Professional Special areas of Academic Staff</b>		
Core Agric Extension Experts	71	65.71
Non-Agric Extension Experts	37	34.26

Source: Field Survey, 2014

**Table 2 Respondents opinion based on available academic staff in agricultural extension in South-Eastern Nigeria.**

Availability of academic staff variables (N = 108)	HA	AD	SA	NA	$\sum Fx$	$\bar{X}$	Remark
Number of academic staff in your department	07	30	32	39	221	2.05	Slightly Available
Permanent academic staff with Ph.D.	06	35	34	33	230	2.13	Slightly Available
Number and spread from professors to Graduate Assistant	04	33	31	40	217	2.01	Slightly Available
Academic staff in professorial rank	04	30	31	43	211	1.95	Slightly Available
Academic staff of the rank the rank of Senior lecturer	07	35	32	34	231	2.14	Slightly Available
Academic staff Lecturer I	12	32	31	33	239	2.21	Slightly Available
Academic staff available at the rank of Lecturer II	07	30	37	34	226	2.09	Slightly Available
Academic staff available with the rank of Assistant Lecturer	07	20	30	51	199	1.89	Slightly Available
Number of academic staff at the rank of Graduate Assistant	07	24	32	45	209	1.94	Slightly Available
<b>Pooled Mean</b>						<b>2.04</b>	Slightly Available

Source: Field Survey, 2014

Table 3 shows the pooled mean score of available non-academic staff was  $\bar{X} = 2.09$  which means that they were slightly available against 2.50 reference mean. The result shows the mean ratings available number of both senior and junior  $\bar{X} = 2.21$  and  $\bar{X} = 2.29$  respectively, Assistant Registrar/Officer  $\bar{X} = 2.13$ , Assistant Executive/Clerical officer  $\bar{X} = 2.05$ , Messenger/Cleaner  $\bar{X} = 2.32$ , Senior and Junior Secretarial staff  $\bar{X} = 2.05$ , Technical staff both Senior and Junior  $\bar{X} = 1.77$ . These findings show that non-academic (support) staff in Agricultural Extension departments were in short supply. The findings of this study is in tandem with the NANPU (2012) report that

faculties and departments were disadvantaged for non-academic (support) staff in preference to the Vice Chancellor's Registrar's and Bursary units of the Universities of Nigeria. For example in the university of Nigeria Nsukka, only 17.07% were posted to the faculties to share with the departments. On the basis of low availability, some universities hired some non-academic staff on contract and part-time. For example, 10.24% were hired on contract and part-time, while 11% were hired in University of Uyo. The situation was worse in the State-owned universities where one or two support staff were engaged contrary to National Universities Commission minimum standard of at least 6 in various areas of needs in each department.

**Table 3 Distribution of respondents based on available non-academic staff in agricultural extension in South-Eastern Nigeria.**

Availability of non-academic staff variables (N = 56)	HA	AD	SA	NA	$\sum Fx$	$\bar{X}$	Remark
Number of available Senior non-academic staff in your department	04	19	18	15	124	2.21	Slightly Available
Available junior non-academic staff in your department	05	19	19	13	128	2.29	Slightly Available
Number of available non-academic staff at the rank of Assistant Registrar/Administrative officer	03	19	16	18	119	2.13	Slightly Available
The quantity of available non-academic staff at the rank of Assistant Executive officer/Clerical officer	06	12	17	21	115	2.05	Slightly Available
The number of available non-academic staff at the rank of Mesenger/Cleaner	09	17	13	17	130	2.32	Slightly Available
The quantity of senior and junior secretarial staff available in your department	05	13	18	20	115	2.05	Slightly Available
The number of technical staff both senior and junior available in your department	03	09	16	28	99	1.77	Slightly Available
The number of senior and junior typists and computer operators available in your department	05	11	16	24	109	1.95	Slightly Available
The number of library staff available in your department	03	12	12	29	113	2.02	Slightly Available
<b>Pooled Mean</b>						<b>2.09</b>	Slightly Available

Source: Field Survey, 2014

This observation was based on the researcher’s personal experience during his survey of 2013. The study therefore recommended that the Ministry of Education and the National Universities Commission and the universities administration should improve their employment policies and allocation to the department to ensure adequate supply of the needed non-academic (support) staff especially in Agricultural Extension department.

The result in Table 4 revealed that there was no significant mean difference between academic and non-academic staff available for human resource

development in Agricultural Extension. This justification was based on  $t_{cal} = -0.009$  and  $t_{tab} = 1.960$  at 0.05 significant level. Consequently, the null hypothesis that there is no significant difference was not rejected. Since the  $t_{cal}$  was negative, it implies that available (support) staff non-academics were less than academic staff. Efforts should be concentrated in recruiting adequate number of academic staff and non-academic staff in the need areas to ensure effective human resource development in Agricultural Extension.

**Table 4 Test of difference between academic and non-academic staff availability for human resource development in agricultural extension.**

Staff Availability	N	Mean	S <sup>2</sup>	S <sup>2</sup> p	t <sub>cal</sub>	t <sub>tab0.05</sub>	Decision
Academic Staff	108	2.04	700.30				
				1104.27	-0.009	1.960	Accepted
Non-academic Staff	56	2.09	1890.18				

Source: Field Survey, 2013

#### 4. Conclusion

The study ascertained the staff availability in universities for human resource development in Agricultural Extension in South Eastern Nigeria. The academic staff and non-academic staff in the department of Agricultural Extension in the public universities in the study area were used as respondents. The study indicated that both academic and non-academic staff available in Agricultural Extension in the study area were inadequate and as such did not meet the minimum standard of National Universities Commission’s minimum standard for accreditation especially in respect of State universities. Effort therefore, should be facilitated to close these gaps for effective human resource development in Agricultural Extension in Nigerian Universities.

#### 5. Recommendations

Based on the findings, it was recommended that the merger of Agricultural Extension and Agricultural Economics as one department should be separated to

avoid make-shift arrangement to fill shortfalls as it is the case where this exists. Secondly, the Federal Ministry of Education should partner with the National Universities Commission to grant waiver to the Universities to engage the quantity and quality of staff needed in Agricultural Extension to ensure effective and efficient human resource development to increase Agricultural Extension services delivery in Nigeria.

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