PERCEPTION OF JUNIOR SECONDARY SCHOOLS TEACHERS' OF PRE-VOCATIONAL AGRICULTURE ON THE MANAGEMENT OF SCHOOL FARMS IN SOUTH-EAST, NIGERIA

DR. FRANCIS NWANGBO AZUNKU
Department Of Agricultural Education
Ebonyi State College Of Education, Ikwo
Ebonyi State, Nigeria

Abstract
The study was carried out to identify the perception of Junior Secondary Schools teachers of pre-vocational agriculture on the management of school farms in South-East Nigeria. The study which was carried out in South-East, Nigeria, adopted descriptive survey design. The population of the study consisted of all teacher of pre-vocational agriculture in all public Junior Secondary Schools in South-East Nigeria numbering four thousand, six hundred and thirty two (4,632). Multi-staged sampling technique was employed in choosing 400 respondents for the study. The instrument for data collection was a structured questionnaire titled Teachers Perception Questionnaire (TPQ). The instrument was validated by seven experts. To determine the reliability of the instrument, the questionnaire was subjected to trail testing. This was done by administering the questionnaire to forty (40) Junior Secondary School teachers of pre-vocational agriculture in Cross River State. Chronbach Alpha method was used to determine the internal consistency of the instrument and reliability coefficients and the reliability coefficients was 0.81 which was satisfactory to attest to the reliability of the instrument. The researcher with seven research assistants visited the selected schools to collect data directly from the respondents within four weeks. Mean ($\bar{x}$) scores and standard deviation was used to answer the four research questions that guided the study. T-test statistics was used to test the four null hypotheses at 0.05 level of significant at 398 degree of freedom. The results revealed that the respondents accepted the items presented as the perception of Junior Secondary Schools teachers of pre-vocational agriculture on the management of school farms in South-East Nigeria. It was recommended that the findings of the study should be implemented by relevant bodies

Keywords: *Pre-Vocation, Agriculture and Farm*

Introduction

Teachers are the hallmark of any educational system. The strength of any nation lies on the quality of its teachers while education remains the centre of manpower training and development. Federal Republic of Nigeria (2002) noted that a teacher is a person who had undergone approved professional training in education at appropriate levels capable of imparting knowledge, attitudes and skills to the learner. Teachers in this study refers to all those who have done all the relevant professional training and are employed in the teaching service. Federal Republic of Nigeria (2004) noted that no education system can rise above the quality of its teachers. Adaralegbe (2003) asserted that, "the teacher is the key person in the nation's education enterprise whose quality of training could mar or make the education results at all levels.

In Junior Secondary School, teachers teach different subjects one of which is pre-vocational agriculture. For pre-vocational agriculture to be taught effectively in the Junior Secondary School level there must be school farms. A school farm according to Wikipedia (2019) is a farming initiatives set up by school authorities in order to enable agricultural

students to acquire practical farming skills to compliment knowledge gained in the classroom. The author also stated that school farms are created for the purpose of providing fundamental agricultural skills to inexperienced students. A school farm according to Ndem (2016) is an area of land specifically mapped out in the school premises or outside the school where practical agriculture is carried out by the students under the supervision of agricultural science teacher for acquisition of skills. The objectives of school farms according to the author includes to promote: socially desirable attitudes, habits and understanding concerning agricultural production; opportunities for the demonstration of agricultural innovations and opportunities for coordinating theory taught in the classroom and practical experience; creative activities of students; generating income for the students; generating income for the school; and imparting skills to farm management skills to agricultural science students. To ensure the achievement of these objectives, teachers are employed by government to teach in different schools with land and other facilities for farming located in the urban and rural areas.

The location of the school determines the characteristics and number of teachers teaching there. According to Anikpo, Mohammed, Ezegbe, Salau and Okunamiri (2008) schools in the urban areas usually have more; teachers, supervision, facilities, funds among others while in rural schools most of the items mentioned above are usually in short supply. Because of this, the complaints of teachers in the rural areas in the management of school farms differ significantly from those in the urban areas. However both of them work to achieve one objective which is universal access to basic education. The way teachers perceive their treatment by supervisory agencies determines their level of effectiveness and efficiency.

Perception according to Hornby (2010) is the way you notice things especially with senses. By this definition, perception tries to ascertain the views, opinions, ideas and knowledge which the people have about a particular phenomenon. In this study, perception refers to the view of school teachers on the effectiveness of implementing of school farm activities. In teaching profession, a lot of things help to determine teachers reasoning about the schools, the management and the community. Ivowi (2000) stated that it could be attributed to number and quality of interactions between adults and students, environmental factors like physical buildings, materials and academic performance, feeling of safeness and school size especially at universal basic education levels. .

South - East, Nigeria is particularly significant in the management of school farms because it is found in the rainforest zone which favours different agricultural operations in both urban and rural Junior Secondary Schools. Nwite (2012) reveal that the free education policy seem to concentrate on increasing students enrolment in South-East, Nigeria without corresponding increase in the number of teachers, their welfare, teaching facilities and their capacity building and many of the teachers are abandoning teaching profession. This situation could hamper the attainment of universal basic education goal number five which is to ensure the acquisition of appropriate level of literacy, numeracy, manipulative, communicative and life skills needed for laying solid foundation for lifelong learning. The researcher therefore wants to find out the perception of Junior Secondary School Teachers of pre-vocational agriculture on the management of school farms in South-East Nigeria.

Statement of the Problem

The realization of any programme objectives depends largely on the management of the programme. In Junior Secondary Schools, these objectives include the acquisition of appropriate level of literacy, numeracy, manipulative, communicative and life skills by learners. This is expected to be achieved through a well articulated programme of instruction in the Junior Secondary Schools by teachers. Observation by the researcher shows that there is general aparty to the participation of teachers in South-East Nigeria in school farm practicals as most of the teachers do not take the students to

the farm. Another worrisome fact is that most agricultural science teachers who have their ways have all changed their services to State Universal Basic Education Board offices at the headquarters and zones, Ministries of Education at the headquarters and zones as well as Local Government Education Authorities. Also many teachers in the rural schools have transferred to urban areas. These changes and transfers have led to difficulties in teaching practical agriculture in schools. Example, observations by the researcher shows basic facilities that would have made teaching and learning of practical agriculture easier is grossly inadequate in most schools. Because of that, it is pertinent to investigate the perception of agricultural science teachers on the management of school farms in South-East Nigeria. This could help government and relevant agencies to tackle the problem of agricultural science teachers at Junior Secondary Schools.

Purpose of the study

The general purpose of the study is to find out the perception of Junior Secondary Schools teachers of pre-vocational agriculture on the management of school farms in South-East Nigeria Specifically, the study sought to:

1. Ascertain the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the level of funding of school farms.
2. Determine the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the availability of facilities in school farms.
3. Ascertain the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the motivational strategies adopted by government for effective management of school farms.
4. Ascertain the extent to which Junior Secondary Schools teachers of pre-vocational agriculture perceive the level of supervision carried out in school farms.

Research Questions

The following research questions guided the study:

1. What are the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the level of funding of school farms?
2. What are the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the availability of facilities in school farms?
3. What are the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the motivational strategies adopted by government for effective management of school farms?
4. What are the perceptions of Junior Secondary Schools teachers of pre-vocational agriculture on the extent of supervision of school farms?

Hypotheses

The following null hypotheses were tested for the study at 0.05 level of significance. 1. There was no significant difference in the mean ratings of the responses of Junior Secondary Schools teachers of pre-vocational agriculture in rural and urban areas on the level of funding of school farms.

2. There was no significant difference in the mean ratings of the responses of Junior Secondary Schools teachers of pre-vocational agriculture in rural and urban areas on the availability of school facilities in school farms.
3. There was no significant difference in the mean ratings of the responses of Junior Secondary Schools teachers of pre-vocational agriculture in rural and urban areas on the motivational strategies adopted by government for effective management of school farms.
4. There was no significant difference in the mean rating of the responses of Junior Secondary Schools teachers of pre-vocational agriculture in Junior

Secondary Schools in rural and urban areas on the extent to which they perceive the supervision of instructions in school farms.

Research Method

Descriptive survey design was used for the study. Ali (2006) noted that descriptive survey design uses sample data in an appraisal to document, describe and explain what is in existence or non-existent, or present the status of existence of the phenomenon under investigation. The research design was used specifically for the study because it aims at collecting data and describing it in a systematic manner. The study was carried out in South-East Nigeria. The zone comprises of five states namely: Abia, Anambra, Ebonyi, Enugu and Imo. South-East Nigeria was chosen for the study because there was no known existing independent research in the area on the perception of teachers of Junior Secondary School Teachers of pre-vocational agriculture on the management of school farms. Similarly, contains urban and rural schools with pupils and teachers. Therefore, there is need to do an assessment of the perception of teachers of pre-vocational agriculture on the management of school farms in South-East Nigeria.

The population of the study consisted of all Teachers of pre-vocational agriculture in Junior Secondary School in South-East Nigeria numbering four thousand, six hundred and thirty two (4,632) (Planning, Research and Statistics Department of UBEC 2015). Multi-staged sampling technique was employed in choosing 400 respondents for the study. First, sample random sampling technique by balloting was used to draw a sample of two (2) states out of the five in South-East. Secondly, simple random sampling by balloting was used to select eighty (80) public Junior Secondary Schools from each state. Thirdly, out of this eighty (80) purposive sampling was used to select forty (40) public Junior Secondary Schools each from urban and rural areas for the sample. Fourthly, simple random sampling technique was used to select ten (10) teachers in each school. The choice of the schools used was based on whether they are in rural or urban area. This produced a total sample of 400.

The instrument for data collection was a structured questionnaire titled Teachers Perception Questionnaire (TPQ). The instrument was divided into two parts, namely part one and part two. Part one sought information on personal data of the respondents. Part two consisted of items in four clusters: A, B, C and D which provided answers to the four research questions. Each of the clusters has items that were responded to. The response options are: Very High Extent (VHE), High Extent (HE), Low Extent (LE) Very Low Extent (VLE). The questionnaire is arranged in clusters. Cluster 'A' contained items 1-7 to answer research question one which is: to what extent are funds are available for school farms? Cluster 'B' had items 8-17 which elicited responses to research question two: on the perception of Junior Secondary Schools teachers' of pre-vocational agriculture on availability of facilities. Cluster C had items 18 – 30 which sought to know the perception of Junior Secondary Schools teachers of pre-vocational agriculture on motivation while Cluster D had items 31 – 40 which sought to know the perception of Junior Secondary Schools teachers of pre-vocational agriculture on supervision of instruction.

To ascertain the validity of the instrument, the researcher gave the instrument to seven experts, four from the Department of Agricultural Education and three from the Department of Science Education (Measurement and Evaluation Unit), all from, University of Nigeria, Nsukka. They were specifically requested to examine the instrument to ensure that the items relate to the purpose of the study, the research questions and the formulated hypotheses. The validates were also requested to make comments based on the clarity, appropriateness and language of all the items and make such other comments they may wish to, regarding the adequacy of the instrument and ways of improving it. Based on such comments, inputs and corrections, the items were restructured from initial 51 items to 40 items.

To determine the reliability of the instrument, the questionnaire was subjected to trail testing. This was done by administering the questionnaire to forty (40) Junior Secondary School teachers of pre-vocational agriculture from Cross River State. The choice of the teachers from Cross River State is that they share the same climatic condition and the teach pre-vocational agriculture in their secondary schools. Chronbach Alpha method of reliability was used to determine the internal consistency of the instrument and reliability coefficients for clusters A – D respectively. The reliability coefficient was 0.81 which was satisfactory to attest to the reliability of the instrument. The researcher with seven research assistants undertook personal visits to the selected schools to collect data directly from the respondents within four weeks..

Mean (x) scores and standard deviation was used to answer the four research questions that guided the study. T-test statistics was used to test the four null hypotheses at 0.05 level of significant at 398 degree of freedom. The arithmetic mean was determined through the summation of the values of the options and divided by the number of columns. Which is

$$\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$$

Based on this result, any item with a mean of 2.5 and above was accepted while items with less than 2.5 were rejected. To test the hypothesis, the researcher made use of t-test of independence at 0.05 level of significance.

Results

Table I: Mean responses of Junior Secondary School Teachers of pre-vocational agriculture from Rural and Urban areas on the funding of school farms

N=400

S/N	Item statement	SA	A	D	SD	Total	X	SD	D
1	Government provides running cost to Head Teachers for the management of school farms	1344	132	24	8	1508	3.77	1.00	Agree
2	Government is fair in its distribution of funds to all schools for the management of school farms practicals	320	516	272	12	1120	2.80	1.25	Agree
3	Government gives teachers free hand for the management of funds generated from school farms.	1184	252	32	4	1472	3.68	1.07	Agree
4	Nobody cares about funding school farms.	752	552	24	16	1344	3.36	1.09	Agree
5	Income generated from school farms are utilized in schools	448	600	120	28	1196	2.99	0.44	Agree
6	Funds from school farms are ploughed back into the farms	640	144	112	136	1032	2.58	0.51	Agree
7	Government do not care about funding of school farms	400	660	123	12	1204	3.01	0.62	Agree

The data presented in table 1 revealed that the 7 items in the table had their mean values ranged from 2.58 to 3.77. This means that each of the mean value is above the cutoff point of 2.50, indicating that they are the perceptions of Junior Secondary School Teachers of pre-vocational agriculture on the funding of school farms in South-East Nigeria. The standard deviations of the items ranged from 0.44 to 1.25. This means that each of the standard deviations is below 1.96. It therefore shows that the respondents were not too far from the mean and they were close to one another in their responses.

Research Question Two

Table 2: Mean responses of Junior Secondary School Teachers of pre-vocational agriculture from Rural and Urban areas on the availability of facilities in school farms

N=400

S/N	Item statement	SA	A	D	SD	Total	X	SD	D
8	Government provides adequate class and staff rooms	1344	132	24	8	1508	3.77	1.00	Agree
9	Government provides farm inputs	352	516	216	32	1116	2.79	1.11	Agree
10	Communities provides adequate farm lands for school farms	1184	252	32	4	1472	3.68	1.07	Agree
11	Government provides water supply systems for irrigation	752	552	24	16	1344	3.36	1.09	Agree
12	Provision of improved varieties of crops and animals	448	600	120	28	1196	2.99	0.44	Agree
13	Government provides ICT facilities for marketing of agricultural products	400	660	123	12	1204	3.01	0.62	Agree
14	Government provides current text books of agriculture	608	528	128	8	1272	3.18	0.99	Agree
15	Government provides charts for teaching and learning of agriculture	1312	144	32	8	1496	3.74	1.04	Agree
16	Government provides stores for storage of farm products	340	472	148	92	1052	2.63	0.92	Agree
17	Government provides security for school farms	960	348	64	12	1384	3.46	1.20	Agree

The data presented in table 2 revealed that the 10 items in the table had their mean values ranged from 2.58 to 3.77. This means that each of the mean value is above the cutoff point of 2.50, indicating that they are perceptions of the Junior Secondary School Teachers of pre-vocational agriculture on the availability of facilities in school farms in Junior Secondary Schools. The standard deviations of the items ranged from 0.44 to 1.25. This means that each of the standard deviations is below 1.96. It therefore shows that the respondents were not too far from the mean and they were close to one another in their responses.

Research Question Three

Table 3: Mean responses of Junior Secondary School Teachers of pre-vocational agriculture from Rural and Urban areas on the motivational strategies adopted by government for effective management of school farms

N=400

S/N	Item statement	SA	A	D	SD	Total	X	SD	D
18	Agriculture teachers participate in at least one capacity building course every two years	1344	132	24	8	1508	3.77	1.00	Agree
19	Teacher are involved in marketing of proceeds from school farms	320	516	272	12	1120	2.80	1.25	Agree
20	Teachers' participate in cluster schools	352	516	216	32	1116	2.79	1.11	Agree
	professional meetings								
21	New agriculture teachers undergo compulsory mentorship	608	600	48	24	1280	3.20	1.16	Agree
22	Teachers are periodically given proceeds from school farms	1184	252	32	4	1472	3.68	1.07	Agree
23	Teachers are given a portion of school farms to cultivate	752	552	24	16	1344	3.36	1.09	Agree
24	Agriculture teachers are given awards from the national/state/LGEA	448	600	120	28	1196	2.99	0.44	Agree
25	Teachers are sponsored to attend at least one agricultural based professional conference every year	640	144	112	136	1032	2.58	0.51	Agree
26	Teachers are given extra allowance for risks and uncertainties encountered in the school farms	400	660	123	12	1204	3.01	0.62	Agree
27	Salaries of agricultural teachers are paid as at when due	608	528	128	8	1272	3.18	0.99	Agree
28	Leave allowances and other incentives of agriculture teachers are paid as at when due	1312	144	32	8	1496	3.74	1.04	Agree
29	Agriculture teachers are promoted as at when due	340	472	148	92	1052	2.63	0.92	Agree
30	Adequate exposure of teachers of agriculture on the application of ICT in teaching and learning of agriculture	624	528	64	36	1252	3.13	1.02	Agree

The data presented in table 3 revealed that the 13 items in the table had their mean values ranged from 2.58 to 3.77. This means that each of the mean value is above the cutoff point of 2.50, indicating that they are the perceptions of Junior Secondary Schools teachers on the motivational strategies adopted by Universal Basic Education Board for effective management of school farms. The Standard Deviations of the items ranged from 0.44 to 1.25. This means that each of the standard deviations is below 1.96. It therefore shows that the respondents were not too far from the mean and they were close to one another in their responses.

Research Question Four

Table 4: Mean responses of Junior Secondary School Teachers of agriculture from Rural and Urban areas on the extent to which they perceive the level of supervision carried out in school farms

N= 400

S/N	Item statement	SA	A	D	SD	Total	$\bar{X}$	SD	D
31	Supervision of school farms are regular	512	696	80	0	1288	3.22	0.95	Agree
32	There is regular supervision of other activities in my school	1104	228	64	16	1412	3.53	1.19	Agree
33	Reports of supervision are sent regularly to my Head Teacher.	512	528	96	48	1184	2.96	1.27	Agree
34	The supervisory unit in our school supervises our farm	496	588	128	16	1226	3.07	0.86	Agree
35	Supervisors are friendly to us in crosschecking records.	640	54	136	4	1284	3.21	0.85	Agree
36	Supervisors hold discussion with teachers on improved farming competencies at the end of every supervision exercise.	1264	168	32	12	1476	3.69	1.02	Agree
37	Supervision of farm offices and practical results is effective	1152	288	0	16	1456	3.64	0.89	Agree
38	Supervisors are experts in agriculture	352	348	360	16	1076	2.69	0.75	Agree
39	Supervisors visit farms in our school	1344	168	8	4	1524	3.81	0.84	Agree
40	Supervisors make suggestions on how to improve school farms	1088	228	64	20	1390	3.48	0.86	Agree

The data presented in table 4 revealed that the 10 items in the table had their mean values ranged from 2.69 to 3.81. This means that each of the mean value is above the cutoff point of 2.50, indicating that they are the extent to which they perceive the level of supervision carried out in school farms. The standard deviations of the items ranged from 0.37 to 1.27. This means that each of the standard deviations is below 1.96. It therefore shows that the respondents were not too far from the mean and they were close to one another in their responses

Hypothesis I:

Table 5: T-test analysis of the responses of Junior Secondary School Teachers of Pre-vocational Agriculture in Rural and Urban areas) on the level of funding of school farms

S/N	Item statement	Agriculture Teachers from Rural areas N=200		Agriculture Teachers from Urban areas N=200		t-cal	t-tab	Remark
		x_1	S_1^2	x_2	S_2^2	t-cal	t-tab	Remark
1	Government provides running cost to Head Teachers for management of school farms	3.02	0.49	3.51	0.44	-1.59	1.96	Not significant
2	Government is fair in its distribution of funds to all schools for management of school farms	3.12	0.66	3.45	0.50	-4.77	1.96	Not significant
3	Government gives teachers free hand in the management of funds generated from school farms.	3.26	0.99	3.43	0.87	-1.96	1.96	Not significant
4	Nobody cares about funding school farms.	3.02	0.92	2.90	0.83	0.70	1.96	Not significant
5	Income generated from school farms are utilized in schools	3.18	1.09	3.27	0.86	-0.70	1.96	Not significant
6	Funds from school farms are ploughed back into the farms	2.65	1.08	3.04	0.72	-3.52	1.96	Not significant
7	Government do not care about funding of school farms	3.58	0.50	3.41	0.49	-2.96	1.96	Not significant

df = 398

The data presented in table 5 revealed that each of the 7 items in the table had a calculated t-value less than the table value of 1.96 (two tailed test) at 0.05 level of significance and 398 degree of freedom. This indicated that there was no significant difference in the mean ratings of the responses of Junior Secondary School Teachers of pre-vocational agriculture in rural and urban areas on the level of funding of school farms in South-East Nigeria. With this result, the null hypotheses of no significant difference were upheld for the 7 items.

Hypothesis 2:

Table 6: T-test analysis of the responses of Junior Secondary School Teachers of Pre-vocational Agriculture in Rural and Urban areas on the availability of school facilities in school farms

S/N	Item statement	Agriculture Teachers from Rural areas N=200		Agriculture Teachers from Urban areas N=200		t-cal	t-tab	Remark
		x_1	S_1^2	x_2	S_2^2	t-cal	t-tab	Remark
8	Government provides adequate class and staff rooms	3.04	0.49	3.54	0.44	-1.59	1.96	Not significant
9	Government provides farm inputs	3.73	0.97	3.12	0.95	-2.97	1.96	Not significant
10	Government provides adequate farm lands for school farms	3.26	0.99	3.43	0.87	-1.96	1.96	Not significant
11	Government provides water supply systems for irrigation	3.02	0.92	2.90	0.83	0.70	1.96	Not significant
12	Provision of improved varieties of crops and animals	3.18	1.09	3.27	0.86	-0.70	1.96	Not significant
13	Government provides ICT facilities for marketing of agricultural products	3.57	0.50	3.43	0.49	-2.96	1.96	Not significant
14	Government provides current text books of agriculture	3.13	0.79	3.01	0.95	1.06	1.96	Not significant
15	Government provides charts for teaching and learning	2.95	0.84	3.18	0.38	-2.86	1.96	Not significant
16	Government provides stores for storage of farm products	3.25	0.70	3.30	0.47	-0.33	1.96	Not significant
17	Government provides security for school farms	3.40	0.69	3.35	0.46	0.13	1.96	Not significant

df = 398

The data presented in table 3 revealed that each of the 10 items in the table had a calculated t-value less than the table value of 1.96 (two tailed test) at 0.05 level of significance and 398 degree of freedom. This indicated that there was no significant difference in the mean ratings of the responses of the two groups of respondents (teachers of agriculture from Rural and Urban areas) on perceptions of Junior Secondary School teachers of pre-vocational agriculture on the availability of facilities in school farms in South East Nigeria. With this result, the null hypotheses of no significant difference were upheld for the 10 items.

Hypothesis 3:

Table 7: T-test analysis of the responses of teachers of Pre-vocational agriculture in Junior Secondary Schools in rural and urban areas on the motivational strategies available for school farms management

S/N	Item statement	Agriculture Teachers from Rural areas N=200		Agriculture Teachers from Urban areas N=200		t-cal	t-tab	Remark
		x_1	S_1^2	x_2	S_2^2	t-cal	t-tab	Remark
18	Agriculture teachers participate in at least one capacity building course every two years	3.01	0.49	3.54	0.44	-1.59	1.96	Not significant
19	Teacher are involved in marketing of proceeds from school farms	3.11	0.66	3.45	0.50	-4.77	1.96	Not significant
20	Teachers' participate in cluster schools professional meetings	3.75	0.97	3.13	0.95	-2.97	1.96	Not significant
21	New agriculture teachers undergo compulsory mentorship	3.70	0.46	3.68	0.46	0.40	1.96	Not significant
22	Teachers are periodically given proceeds from school farms	3.26	0.99	3.43	0.87	-1.96	1.96	Not significant
23	Teachers are given a portion of school farms to cultivate	3.01	0.92	2.90	0.83	0.70	1.96	Not significant
24	Agriculture teachers are given awards from the national/state/LGEA	3.18	1.09	3.27	0.86	-0.70	1.96	Not significant
25	Teachers are sponsored to attend at least one agriculture based professional conference every year	2.66	1.08	3.05	0.72	-3.52	1.96	Not significant
26	Teachers are given extra allowance for risks and uncertainties encountered in the school farms	3.57	0.50	3.42	0.49	-2.96	1.96	Not significant
27	Salaries of agriculture teachers are paid as at when due	3.13	0.79	3.01	0.95	1.06	1.96	Not significant
28	Leave allowances and other incentives of agriculture teachers are paid as at when due	2.95	0.84	3.18	0.38	-2.86	1.96	Not significant
29	Teachers of agriculture teachers are promoted as at when due	3.24	0.70	3.30	0.47	-0.33	1.96	Not significant
30	Adequate exposure of teachers of agriculture on the application of ICT in teaching and learning	3.34	0.83	3.47	0.47	-1.6	1.96	Not significant

df = 398

The data presented in table 3 revealed that each of the 13 items in the table had a calculated t-value less than the table value of 1.96 (two tailed test) at 0.05 level of significance and 398 degree of freedom. This indicated that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the motivational strategies available for teachers in school farms management in South-East Nigeria. With this result, the null hypotheses of no significant difference were upheld for the 13 items.

Hypothesis 4:

Table 8: T-test analysis of the responses of Junior Secondary School Teachers of pre-vocational agriculture in rural and urban areas on the extent to which they perceive the supervision of instructions in school farms

S/N	Item statement	Agriculture Teachers from Rural areas N=200		Agriculture Teachers from Urban areas N=200		t-cal	t-tab	Remark
		x_1	S_1^2	x_2	S_2^2	t-cal	t-tab	Remark
31	Supervision of school farms are regular	3.32	0.78	3.47	0.65	-2.49	1.96	Not significant
32	There is regular supervision of other activities in my school	3.24	0.77	3.51	0.59	-2.46	1.96	Not significant
33	Reports of supervision are sent regularly to my Head Teacher.	3.41	0.78	3.51	0.56	-1.74	1.96	Not significant
34	The supervisory unit in our school supervises our farms	3.31	0.67	3.42	0.61	-0.88	1.96	Not significant
35	Supervisors are friendly to us in crosschecking records.	3.52	0.60	3.56	0.48	-1.59	1.96	Not significant
36	Supervisors hold discussion with teachers on improved farming competencies at the end of every supervision exercise.	3.54	0.64	3.63	0.45	-1.92	1.96	Not significant
37	Supervision of farm offices and practical results are regular	3.43	0.74	3.54	0.56	-1.92	1.96	Not significant
38	Supervisors are experts in agriculture	4.22	0.62	3.81	0.37	-2.74	1.96	Not significant
39	Supervisors visit farms in our school	3.45	0.56	3.52	0.54	-1.42	1.96	Not significant
40	Supervisors make suggestions on how to improve school farms	3.47	0.52	3.50	0.49	-1.06	1.96	Not significant

= 398

The data presented in table 4 revealed that each of the 10 items in the table had a calculated t-value less than the table value of 1.96 (two tailed test) at 0.05 level of significance and 398 degree of freedom. This indicated that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the responses of Junior Secondary School teachers of pre-vocational agriculture in rural and urban areas on the extent to which they perceive the supervision of instructions in school farms in South-East Nigeria. With this result, the null hypotheses of no significant difference were upheld for the 10 items.

Findings of the Study

The findings of the study in research question two shows that the respondents accepted that in funding school farms in South-East Nigeria, Government should: provides running cost to Head Teachers for management of school farms regularly; be in its distribution of funds to all schools for management of school farms; give teachers free hand in the management of funds generated from school farms; cares about funding school farms; ensure that income generated from school farms are utilized in schools; and funds from school farms are ploughed back into the farms.

The findings of the study in research question two shows that the respondents accepted the following as the perceptions of Junior Secondary School teachers of pre-vocational agriculture on the availability of facilities in school farms in South-East Nigeria. The findings shows that they government should: provides adequate class and staff rooms; provides farm inputs; provides adequate farm lands for school farms; provides water supply systems for irrigation; Provision of improved varieties of crops and animals; provides ICT facilities for marketing of agricultural products; provides current text books of agriculture; provides charts for teaching and learning; provides stores for storage of farm products; and provides security for school farms

The findings of the study in research question three shows that the respondents accepted the following as the motivational strategies available to teachers involved in school farms management in South-East Nigeria. The findings include: agriculture teachers participate in at least one capacity building course every two years; teacher are involved in marketing of proceeds from school farms; teachers' participate in cluster schools professional meetings; new agriculture teachers undergo compulsory mentorship; teachers are periodically given proceeds from school farms; teachers are given a portion of school farms to cultivate; agriculture teachers are given awards from the national/state/LGEA; teachers are sponsored to attend at least one agriculture based professional conference every year; teachers are given extra allowance for risks and uncertainties encountered in the school farms; salaries of agriculture teachers are paid as at when due; leave allowances and other incentives of agriculture teachers are paid as at when due; teachers of agriculture teachers are promoted as at when due; and adequate exposure of teachers of agriculture on the application of ICT in teaching and learning.

The findings of the study in research question four shows that the respondents accepted the following as the extent to which they perceive the supervision of instructions in school farms in South-East Nigeria. The findings include: supervision of school farms are regular; there is regular supervision of other activities in my school; reports of supervision are sent regularly to my Head Teacher; the supervisory unit in our school supervises our farms; supervisors are friendly to us in cross checking records; supervisors hold discussion with teachers on improved farming competencies at the end of every supervision exercise; supervision of farm offices and practical results are regular; supervisors are experts in agriculture; supervisors visit farms in our school; and supervisors make suggestions on how to improve school farms

Recommendations

Based on the findings of the study, the researcher recommends as follows:

1. That relevant body like Universal Basic

Education Commission (UBEC) and its state offices should direct the implementation of the findings of the study at basic education level so as to improve the teaching of agriculture.

2. That Nigerian Educational Research and Development Council (NERDC) should integrate the findings of the study into the curriculum of pre-vocational agriculture at Junior Secondary School level
3. Those teachers of pre-vocational agriculture at Junior Secondary School level should be adequately motivated to teach the subject effectively.
4. State Universal Basic Education Boards in the South-East, Nigeria should improve its supervision of school farms in the area

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