

## Hindrances to effective Vegetable production in Secondary Schools in Ikwerre Local Government Area of Rivers State

Offor, U.S, Johnson Oporum and Tambari, N. Allison

Department of Agricultural Science Ignatius Ajuru University of Education, Port Harcourt

E-mail: [sos2212003@yahoo.com](mailto:sos2212003@yahoo.com)

**Abstract:** This study investigated factors that militate against vegetable production in secondary schools in Ikwerre local Government Area of River state. Four research questions were used to guide the study. The design of the study is descriptive survey design. A sample of 120 SSS III Students was drawn from the population using simple random sampling technique. An instrument titled “factors militating against vegetable production scale (FMAVPS) was used for collection of data, which was analyzed using mean and standard deviation. The result revealed that there is low engagement of students in vegetable gardening, lack of facilities and equipment, schools give lesser support in few areas to vegetable gardening and there is need for adequate provision of human and non-human resource for vegetable gardening in schools. Based on the above findings, recommendations were made.

[Offor, U.S, Johnson Oporum and Tambari, N. Allison. **Hindrances to effective Vegetable production in Secondary Schools in Ikwerre Local Government Area of Rivers State.** *World Rural Observ* 2015;7(3):42-45]. ISSN: 1944-6543 (Print); ISSN: 1944-6551 (Online). <http://www.sciencepub.net/rural>. 8

**Keywords:** School participation, vegetable gardening, factors, and students engagement

### Introduction

The importance of human nutrition cannot be over emphasized, as it involves the selection, ingestion, digestion, absorption and utilization of food including the removal of waste food products for the well being of man. Best diets give rise to optimum development, growth, maturity, resistance to diseases and enhance longevity. Fruits and vegetables are good examples of healthy food and their consumption however, has proved beneficial in many ways.

Vegetable according to Nwankwo (1997) are soft succulent herbaceous plants eaten whole or in parts, raw or cooked, as part of a meal or in salad. Vegetable are herbaceous plants species which its various morphological parts are utilized and are usually characterized by high moisture content (Alabi and Agbato, 2000).

Mean while, vegetable consumption rate varies because different area grow different vegetable in Nigeria due to diverse climatic conditions, for example, fluted pumpkin is common in the east, locus bean is popular in the west and Roselle (*Hibiscus Sabdarifa*) is consumed in the North. Though there are common vegetable that are grown and consumed by all regions, like tomato and pepper. Apart from locally cultivated vegetable that are eaten in tropical countries, there are 1000 types of vegetable in use in the world (world book Encyclopedia, 1992). Vegetable can be grouped according to the parts of the plant and can also be classified based on botany, edible organ, usage and temperature adaptation (Nwankwo, 1997). Vegetable are important part of a healthy diet because they supply essential vitamins,

minerals and help to neutralize acid produced during digestion. They are succulent source of niacin, riboflavin, thiamine etc. vegetable also supply proteins in addition to carbohydrate. Vegetable are accorded the secondary priority rating in crop production and some of them are Okoro, pepper, tomato, cabbage, lettuce, fluted pumpkin, potato, water melon, garden egg, pulses and bitter leaf etc. they provide dietary fibre which among others promotes bowel regularity, softens the stools and enhances frequent sterols and (Musherd, 1970).

The daily needs of vegetables are about 150g to 250g per person with a short cooking time and its consumption brings about low heart disease (fader *et al* 1955). Vegetable is of high economic value since it gives canning industries raw materials and it is possible to grow vegetable at anytime of the year if there is a steady source of water (Aiyebayo, and Adeyanju, 1980).

Emphasizing on growing of vegetable in school, Ozigi in Ride, Rice and Tindak (1990) and Aiyegbayo *et al* (1980), noted that one way of stimulating Students’ interest is by involving in the practical Agriculture such as how to handle various farms jobs. These have been urged by government and school authorities to employ well trained agricultural teachers that will help in training of personnel’s in Agriculture.

### Statement of the Problem

Practical agriculture science has faced a lot of problems since its introduction in the school curriculum. Such problem ranges from lack of laboratory equipment, poor funding and inadequate manpower etc. These problems have resulted to

student's poor performance on the subject in most of our secondary schools (Nwankwo, 1997). It is also affecting student's knowledge and participation in the growing of vegetable especially in most areas like Ikwerre Local Government Area. It seems that the government through ministry of agriculture, private agencies and extension Officers are not assisting schools to motivate students in the growing of vegetable. The problem of this study therefore, is to examine critically the factors that militate against vegetable production in secondary schools in Ikwerre Local Government Area of Rivers State.

#### **Purpose of the Study**

The major purpose of the study is to identify the factors militating against vegetable production in secondary schools in Ikwerre Local Government Area of Rivers State.

#### **Research Questions**

The following research question guided the study.

1. To what extent do secondary schools engage in vegetable gardening in Ikwerre Local Government Area of River state?
2. What are the available facilities and equipment for vegetable gardening in schools?
3. What types of support do the school give to practical agriculture (vegetable gardening)
4. What are the possible solution to factors that hinders vegetable gardening?

#### **Methodology**

The design of this study is descriptive survey. The population of the study consists of all agricultural

science students in SSSIII in the twenty two (22) public secondary schools in Ikwerre Local Government Area of Rivers State. A sample of one hundred and twenty (120) students was drawn from the population through simple random sampling technique. An instrument titled "factors militating against vegetable production scale" (FMAVPS) in a 20 items structured questionnaire with five point likert rating scale was used for data collection. Three experts in Agriculture science determined the face, construct and content validity of the instrument. Using test-retest method with a sample of 30 student's and Pearson product moment correlation, the reliability coefficient obtained from the instrument (HEVPS) was 0.79. The researcher personally administered the instrument with the assistance of Agricultural science teachers in each of the secondary schools who were trained and instructed on what to do. Mean and standard deviation was used to analyze the research questions with criterion mean of 3.0. All the scores that fell within and above the criterion mean of 3.0 were accepted, while those that fell below the criterion mean of 3.0 were rejected.

#### **Results**

Analysis of data in this study was done in line with the research questions in the tables below.

**Research Question I:** To what extent do secondary schools engage in vegetable gardening in Ikwerre Local Government Area of Rivers State?

Table 1: mean ( $\bar{x}$ ) and standard deviation (SD) scores on the extent of secondary schools engagement in vegetable gardening in KELGA

S/No	Items	N	$\bar{x}$	SD	Remarks
1.	Gardening is not included in the school time table	120	3.7	1.2	Accepted
2.	Students are not given chance to carryout regular work in the garden	120	3.9	1.3	Accepted
3.	A well planned and functional garden does not exist in the school	120	3.1	1.0	Accepted
4.	Vegetable gardening is only taught theoretically in the class.	120	3.5	1.6	Accepted
5.	Agricultural science teachers does not motivate students in the schools	120	3.3	1.1	Accepted

Table 1 show that the mean scores of all the items are above the criterion mean of 3.0. This means that they are accepted as contributors to poor vegetable production in the area and there is low engagement of students.

**Research Question II:** what are the available facilities and equipment for vegetable gardening in schools?

Table II: mean ( $\bar{x}$ ) and standard deviation (SD) scores on available facilities and equipment for vegetable gardening in schools?

S/No	Items	N	$\bar{x}$	SD	Remarks
1.	Hoe, matchet, spade, watering can, measuring tap are available in low quantity for gardening in the school	120	3.4	1.0	Accepted
2.	Spraying equipment is not available in the school agronomy laboratory.	120	3.8	1.4	Accepted
3.	School does not have improved varieties/agrochemicals.	120	3.2	1.0	Accepted
4.	A tractor does not exist in the school compound	120	3.7	1.9	Accepted
5.	Soil testing equipment does not exist in the school agronomy laboratory.	120	3.6	1.3	accepted

Table II above shows that the mean scores of all the items are above the criterion mean of 3.0 this means that they are accepted meaning that there is lack of facilities and equipment for vegetable gardening in schools.

**Research Question III:** what types of support does the school give to practical agriculture (vegetable gardening)?

Table III mean ( $\bar{x}$ ) and standard deviation (SD) on types of support the school gives to practical agriculture.

S/No	Items	N	$\bar{x}$	SD	Remarks
1.	School authorities provide fund for garden practices	120	2.1	1.0	Accepted
2.	Schools hold agricultural exhibitions or shows	120	2.3	1.1	Accepted
3.	Schools provide facilities in the agricultural laboratory	120	2.1	1.1	Accepted
4.	The school provide farm for garden practices	120	3.4	1.3	Accepted
5.	School heads allocated time for agricultural practices in the time table.	120	3.3	1.2	accepted

Table III show that the mean scores of items 1, 2 and 3 are below the criterion mean of 3.0 and were rejected. While items 4 and 5 are above the criterion mean of 3.0 and were accepted. This means that the

school gives some support in few areas to agriculture practice.

**Research Question IV:** what is the possible solution to the factors that hinders vegetable gardening?

Table IV mean ( $\bar{x}$ ) and standard deviation (SD) scores on possible solution to vegetable gardening.

S/No	Items	N	$\bar{x}$	SD	Remarks
1.	Government should provide special grant for agricultural science facilities in secondary schools	120	4.1	1.8	Accepted
2.	Government extension workers should assist schools	120	4.2	1.8	Accepted
3.	School authorities should always provide enough period for agricultural	120	4.0	1.6	Accepted
4.	Government should provide adequate and professional Agricultural science teachers to school	120	3.8	1.0	Accepted
5.	Proper sensitization should always be carryout by government and non-governmental Agency on the need for vegetable gardening in schools	120	4.1	1.8	accepted

Table IV show that the mean scores of all the items are above the criterion mean of 3.0, this means that they are acceptable solution for the improvement of vegetable gardening.

### Discussion of Results

From the result on the extent of student engagement in vegetable gardening, it was observed

that student's participation was low. This result was noted early in the works of Feder *et al.* (1985) who ex-rayed and noted that poor allocation of time to practical Agricultural Science in schools leads to poor integration of student in practical aspect of the course.

The result further indicates that most schools in the area gave few supports in area of vegetable

gardening. Olaitan (1996) has earlier explained that in practical Agriculture, schools authorities should develop critical thinking on ways of its improvement. This may have accounted to the low patronage seen in schools as at the time of this research.

In areas of availability of facilities and equipments for vegetable gardening in schools, (Research Question II), the findings were of the view that there is lack of facilities and equipment for vegetable gardening Ozigi Reie and Tradan (1990) had already maintained that any institution that is lacking in essential equipment cannot achieve its objective. The downward trend in schools in Ikwerre Local Government Area in terms of equipment/facilities for vegetable garden production is then not an oversight.

The results further indicate that for improvement in vegetable gardening in the schools, proper sensitization and provision of adequate manpower are necessary. This is in agreement with Nweke and Akorha (1983) that urged government and school authorities to employ well trained Agricultural teachers that will help in training personnel in Agriculture.

### Recommendation

From the findings of this research, the following recommendations are made.

1. Students should be properly enlightened on the importance of vegetable gardening in the school, at home and the society at large and the need to sustain it.
2. Government should increase the funding of agricultural practice especially in schools by providing agricultural facilities and equipment.
3. School authorities should adequately include gardening in the school-time table just like other subjects.
4. Government should provide adequate and professional Agricultural science teachers in various schools. This will enhance the teaching and learning

of agricultural science especially in areas of vegetable gardening in school.

5. Teaching of Agricultural science should be more practical in the schools.

6. Teaching/Learning of Agricultural science should be tailored toward exposing and engaging student on the aspects of vegetable gardening.

### References

1. Aiyebayo, JT and Adeyanju. Introduction to Tropical Agriculture Science. Ibadan, Evans Brothers 1980.
2. Alabi, JA and Agabato, SO. Introduction to Horticulture .Oyo. Odumatt Press and Publishers 2000.
3. Feder, GR., Just, E and Ziberman, D. Adoption of Agricultural innovations in Developing countries. A survey: Economic development of Agricultural economics. 1985, 74 (4): 936-947.
4. Moshher, AT. Research needed for the development of Agriculture and modernization of farming. Ames: Iowa University press 1970.
5. Nwanchukwu, M. An Identification of problems of practical Agriculture in Secondary Schools Unpublished project 1994.
6. Nwankwo, C. Problems of Agricultural Development in Nigeria; in Element of Agriculture. Omuoku-Molsyfem united publisher 1997.
7. Nweke, FI and JA. Akorca. Determinants of agricultural progressiveness in small holder cropping systems in south east Nigeria and consequences for research and extension administration. *Agricultural administration*. 1983, 8 (3); 163-179.
8. Olaitan, SO. Vocational and technical education in Nigeria: Issues and analysis. Onitsha: Noble Graphic press. Publishing Division 1996.
9. Rice, RP., Rice, LW and Tindall, HD. First and vegetable production in warm climate. London Macmillan 1990.

7/27/2015