

# ASSESSMENT OF THE PLACE OF AGRICULTURAL EDUCATION IN NATIONAL SECURITY

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## **Abstract**

*This study examines the assessment of the place of Agricultural education in national security. The study adopted the descriptive survey research design and four (4) research questions were formulated to guide the study. Population of the study comprises of academic and non-academic staff of the Department of Vocational Education (Agricultural Education unit), Delta State University, Abraka, College of Education, Warri and College of Education, Agbor. A sample size of one hundred (100) respondents was randomly selected from the population. A well-structured questionnaire with four (4) point rating scale was used for data collection and the data were analyzed using means ( $\bar{X}$ ) and standard deviation (SD) methods, while the chi-square ( $\chi^2$ ) contingency analysis was used to test the hypotheses at 0.05 level of significant having subjected the instrument to face & content validity and reliability test with reliable indices obtained. Results revealed that the seven (7) carefully selected roles of Agricultural education are vital in attaining National Security. Agricultural education is faced with various challenges as indicated in the seven (7) items accepted. The types of security problems present in Delta State include: food insecurity, job insecurity, environmental pollution, poverty and low income earning, kidnapping, among others. It can also be seen from the result that six (6) items were accepted as ways of combating problems of national security in Delta State. There was a significant relationship between the challenges facing agricultural education and criteria for national security; and there was also a significant relationship between the types of security problems and ways of combating national security problems. Recommendations include: Government to develop an attitude of continuing agricultural policies; and adequate funding of agricultural programmes especially when there is change in authority, among others.*

**Keywords:** Assessment, Agriculture, Agricultural Education, National Security.

### Academic Scholarship

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National security has recently become something of a cottage industry. Most efforts are concerned with redefining the policy agenda of nation-state than the concept of national security. Often, this takes the form of proposals for giving high priority to such issues as human rights, economics, the environment, drug trafficking, crime, social injustice epidemics, and the traditional concern with national security from external military threats (Dembo and Mustapha, 2012).

National security is the requirement to maintain survival of the state through the use of economic power, diplomacy, power projection and political power. The concept developed mostly in the United States after World War II. Initially focusing on military might, it now encompasses a broad range of facets, all of which impinge on the nation and the values espoused by the society (Dembo and Mustapha, 2012).

Consequently, there is no universally accepted definition of national security. Variety of definitions provides overview of the many usage of this concept. The concept still remains ambiguous, having originated from simpler definitions which initially emphasized the freedom from military threats and political coercion to later increase in sophistication and include other forms of non-military security as suited in the circumstances of time (Romm, 1993).

Walter (1943) defined it in terms of war saying that a nation has security when it does not have to sacrifice its legitimate interests to avoid war, and is able, if challenged, to maintain them by war. The 1996 definition propagated by the National Defense College of India accretes the elements of power. This academy sees National security as an appropriate and aggressive blend of political resilience and maturity, human resources, economic structure and capacity, technological competence, environment; While to others, it should develop skills and potentials including other forms of behaviour that is positive which could bring about national development. In a broad sense, there is need to understand the underlining role of vocational education in national security for clarity of purpose and structuring of programme.

### **The Role of Agricultural Education in Attaining National Security**

The role which education should play in developing countries has been variously viewed from different perspectives (Fafunwa, 1984; Olaitan, 1996; and Toby, 1997). To some, education should play the key role of assisting individuals to have a comfortable environment for them; while to others, it should develop abilities and potentials in the citizens of the country, their skills and other forms of behaviours of

positive and sometimes negative value to the society in which he or she lives. Akaniwor (1998) observes that the bedrock of any technical breakthrough is the existence of appropriate skills, abilities, competence (both mental and physical) as equipment for the individual to live in the society as a dynamic instrument of change. According to Bulus (1991), Vocational Education is to function in industries and commercial occupation. In the views of Thompson (2002), Vocational Education aims at the development of human abilities in terms of knowledge, skills and understanding so efficiently in carrying on the activities in the vocational pursuits of his choice. Winer (2000) in his contribution opined that Vocational Education is designed to develop skills, abilities, understanding, right attitudes, work habits and appreciation encompassing knowledge and information needed by workers to enter and make progress in employment on a useful and productive basis.

Agricultural education plays a key role in attaining national security. This is supported by the statement made by Egbule (2004) stating that “a nation that cannot meet the basic food needs (in terms of quantity and quality) of her populace is politically and economically unstable and could easily be maneuvered and threatened by more stable nations”. He called it a fear that can mostly be overcome through the application of knowledge, skills and attitudes acquired from science and technology into agricultural production.

On this note, agricultural education provides the necessary instruction and practical experience that could bring about the development of the agricultural sector and also produce technically and professionally qualified human resources that could stimulate agricultural research and provide food security (Kroma, 2003).

Therefore, in attaining national security, the role of agricultural education in its contribution is achieving the various forms of national security which includes the following:

- Agricultural education contributes to human resource development for national security.
- Agricultural education supports military security.
- Agricultural education contributes to the facilitation of food security.
- Agricultural education is a source of information for national development and national security.
- Agricultural education is a means of promoting self-employment.
- Agricultural education is a means of combating job insecurity.

- Agricultural education supports health security and environmental protection (kroma, 2013).

### **Challenges of Agricultural Education in Ensuring National Security**

Maguire (1991) analyzed that the past two (2) decades has witnessed lack of funding and support for agricultural education and this has resulted in the vast and rapid diminishing capacity of the previously robust agricultural institutions. Modern agricultural education investment remains the critical factor to develop the agricultural sector. He also added that, the issue of lack of funding and well-structured operational policy has brought about isolation of agricultural education from the market and from the rest of the educational system.

A clear policy framework for national security, development and improvement is needed in Nigeria to provide coherence between government bodies (including the military security service and educational ministries), donors, NGOs, training institutions, community, organizations and international communities for the attainment of security in the nation (Cohen and Levinthal, 2000).

Responding to the problems of agricultural education, the system seems to be faced with the challenges such as fragmentation and lack of co-ordination, poor and inconsistent quality control, ineffective and non-responsive agricultural education programme, poor access to agricultural education of emerging farmers and populace for national security, agriculture's negative image and lack of critical skills.

### **Types of Security Problems Facing Nigeria**

It is on record that Nigeria has witnessed a drastic insecurity challenges in the past few years and this crisis is in various forms, such as food insecurity, environmental problems, political insecurity, economic insecurity and job insecurity with varying degree of its effect on the overall structure of the country and the well-being of its citizens (Dembo & Mustapha, 2012).

Akinyele (2009) noted that large numbers of people in Nigeria (mainly women, children and the elderly) suffers from malnutrition. A high level of malnutrition is particularly reported among rural children with figure varying from 56% in rural communities in South West to 84.3% of those in Northern Nigeria. According to the National Bureau of Statistics (2007), food utilization and nutritional well-being of many households in Nigeria are of relatively low quality while about 60.8% Nigerians are malnourished. On the other hand, Tonukari and Omotor (2010) stated that majority of the urban labour force in Nigeria works in sectors like petty trades and services where

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wages are low and job tenure uncertain. Unemployment according to Olaitan (1996) leads to frustration and disillusionment which may result in crime or drug abuse in a futile attempt to escape from and forget the pains and humiliation of poverty and lack. These problems are generally linked by three major factors with their respective effects on national security in Nigeria, i.e. illiteracy, corruption and poor human security are the chief causes of the following problems:

- Food Insecurity
- Environmental Problem
- Job Insecurity
- Political Insecurity
- Economic Insecurity

### **Ways of Combating Problems of National Security**

In addressing the problems of national security, a people-centered view of security is necessary for national and global stability owing to the fact that the environment is a resultant effect of human actions. Consequently, human security should be addressed in a clear sense in an attempt to combat national security with the view of tackling the problem of fear and the problem of want as far as human security is concerned (Egbule, 2004).

Freedom from fear and freedom from want can be attained through the following ways according to Human Security Center (2008).

- Well-structured policy framework for human security can proffer solution to problems of National Security.
- Development of Agriculture for the provision of food and raw materials can contribute to solving problems of national security.
- Rural enlightenment through the provision of quality education can proffer solution to problem of National security.
- Research and scientific programmes is a means of resolving problems of National security.
- Provision of basic amenities and infrastructural facilities is a means of resolving National security problems.
- Application of science and technology through ICT, improving the modern trends in agriculture can contribute to solving the problem of National security (Human Security Center, 2008).

### **Statement of the Problem**

Nigeria as a nation has been beclouded with problems of insecurity mostly in this recent times. Many have argued that this problem of insecurity in the nation is that of bad governance which have given rise to insecurity. While others have attributed it to poor quality education and illiteracy, despite the fact that these problems still exist with various numbers of educational institution in the country.

However, vocational education offers great opportunities for the actualization of National security. Many authors have recognized it as an important source of development, information and key resources for the building of reliable human resources that can bring about a secured nation. On the other hand, in Nigeria, this function is yet to be seen. Thus, it is quite imperative to assess the place of vocational education in national security in Nigeria, particularly in Delta state. This is the plat form on which the study is anchored.

### **Research Questions**

- What are the roles of agricultural education in attaining national security in Delta State?
- What are the challenges facing agricultural education in ensuring national security in Delta State?
- What are the types of security problems present in Delta State?
- What are the ways of combating the problems of national security in Delta State?

### **Research Hypotheses**

HO<sub>1</sub>: There is no significant relationship between the challenges facing agricultural education and criteria for National Security.

HO<sub>2</sub>: There is no significant relationship between the types of security problems and the ways of combating national security problems.

### **Methodology**

The study adopted the descriptive survey research design. The population of the study comprises of academic and non-academic staffs of the Department of Vocational Education (Agricultural Education, Home Economics Education, Technical and Business Education, and Computer Science Education units), Delta State University, Abraka, Colleges of Education, Warri and Agbor respectively. A sample size of hundred (100) was randomly selected from population of one hundred and ten (110) using purposive sampling technique. A well-structured questionnaire with four (4) point rating scale of SA=Strongly Agreed, A=Agreed, SD=Strongly Disagreed and D=Disagreed

was used for data collection after validation by three (3) lecturers from the Department of Vocational Education (Agricultural Science unit), Delta State University, Abraka. The test re-test method of reliability was used for the instrument with a coefficient of 0.91 obtained. Data was analyzed using means ( $\bar{x}$ ) and standard deviations (SD) method with a criterion mean ( $\bar{x}$ ) of 2.5 for acceptance and rejection; while the chi-square contingency analysis was used to test the hypotheses at 0.05 level of significance.

**Results and Discussion**

**Research Question One:** What are the roles of agricultural education in attaining national security in Delta state?

**Table 1:** Roles of Agricultural Education in Attaining National Security in Delta State

S/N	Items	N	Mean ( $\bar{x}$ )	SD	Remark
1.	Agricultural education contributes to human resource development for National security	100	3.06	0.8387	Accepted
2.	Agricultural education supports military security	100	2.80	0.8762	Accepted
3.	Agricultural education contribute to the facilitation of food security	100	3.63	0.6460	Accepted
4.	Agricultural education is a source of information for national development and national security	100	3.00	0.8409	Accepted
5.	Agricultural education is a means of promoting self-employment	100	3.35	0.9679	Accepted
6.	Agricultural education is a means of combating job insecurity	100	3.62	0.6750	Accepted
7.	Agricultural education supports health security and environmental protection	100	2.85	0.9143	Accepted

**S.D= Standard Deviation**

The data presented in table 1 above indicates a positive response and accepted mean ( $\bar{x}$ ) score for items 1, 2, 3, 4, 5, 6 and 7. Implying that Agricultural education play the roles stated in item 1 to 7 in attaining National security and that Agricultural education is important in achieving National security in Delta state.

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**Research Question Two:** What are the challenges facing agricultural education in ensuring national security in Delta State?

**Table 2:** Challenges facing Agricultural Education in Ensuring National Security in Delta State.

S/N	Items	N	Mean ( $\bar{x}$ )	SD	Remark
1.	Lack of adequate funding, poor learning environment and infrastructural facilities	100	3.44	0.8327	Accepted
2.	Inadequate in-service programmes and training for staffs for professional development	100	3.14	0.8879	Accepted
3.	Inadequate professional human resources	100	2.90	0.8933	Accepted
4.	Poor management and administrative support	100	2.86	0.7250	Accepted
5.	Inadequate practical courses and experiential learning programmes	100	3.22	0.8358	Accepted
6.	Inadequate vocational and demonstration centers	100	2.95	0.7399	Accepted
7.	Inadequate co-ordination and coherence of Agricultural programmes	100	2.95	0.7399	Accepted
8.	Inadequate critical skills on human personnel	100	1.60	0.8646	Rejected

**S.D= Standard Deviation**

The data presented in table 2 above indicated an accepted mean ( $\bar{x}$ ) score and positive response from items 1, 2, 3, 4, 5, 6, and 7, while a negative mean ( $\bar{x}$ ) score and rejected response from item 8. Implying that items 1-7 are among the challenges facing Agricultural education in ensuring national security. However, inadequate critical skills on human personnel is not a challenge facing Agricultural education in ensuring national security in Delta State.



**Research Question Three:** What are the types of security problems present in Delta State?

**Table 3:** Types of Security Problems Present in Delta State

S/N	Items	N	Mean ( $\bar{x}$ )	SD	Remark
1.	Food security is a major problem in Delta State	100	3.00	0.8409	Accepted
2.	Job insecurity is a problem facing Deltans	100	3.32	0.9732	Accepted
3.	Pollution is an environmental problem in Delta State	100	2.95	0.8087	Accepted
4.	Poverty and low income earning is a common economic problem in Delta State	100	3.02	0.7383	Accepted
5.	Crisis and political instability is a problem of insecurity in Delta State	100	2.89	0.8978	Accepted
6.	Bunkery and vandalization is a major problem facing Deltans	100	2.90	0.8933	Accepted
7.	Breaking of law and order is a security challenge facing Delta State	100	1.70	1.3890	Rejected
8.	Health insecurity is a problem in Delta State	100	2.80	0.8762	Accepted
9.	Kidnapping, insurgency, life and property insecurity is a problem of security facing Delta State	100	2.70	0.6162	Accepted

**S.D= Standard Deviation**

The data presented in table 3 above indicates a positive response and accepted mean ( $\bar{x}$ ) score for items 1, 2, 3, 4, 5, 6, 8 and 9, while a negative response and rejected mean ( $\bar{x}$ ) score from item 7; implying that items 1, 2, 3, 4, 5, 6, 8 and 9 are types of security problems present in Delta state, while item 7 is not a security problem or threat present in Delta state.

**Research Question Four:** What are the ways of combating problems of national security in Delta State?

**Table 4:** Ways of Combating Problems of National Security in Delta State.

S/N	Items	N	Mean ( $\bar{x}$ )	SD	Remark
1.	Well-structured policy framework for human security can proffer solution to problems of National security	100	3.00	0.8409	Accepted
2.	Development of Agriculture for the production of food and raw materials can contribute to solving problems of National Security	100	3.22	0.8358	Accepted
3.	Rural enlightenment through the provision of quality education can proffer solution to problem of national security	100	3.18	0.7437	Accepted
4.	Research and scientific programmes is a means of resolving problems of national security	100	3.38	0.8502	Accepted
5.	Provision of basic amenities and infrastructural facilities is a means of resolving National Security problems	100	3.00	0.8409	Accepted
6.	Application of science and technology through ICT, improving the current trends in Agriculture can contribute to solving problems of national security	100	2.95	0.9783	Accepted

**S.D= Standard Deviation**

The data presented in table 4 above indicates a positive response and accepted mean ( $\bar{x}$ ) score for items 1, 2, 3, 4, 5 and 6. Implying that, the above solutions in the items are relevant in combating security problems in Delta State.

### Testing of Hypotheses

**Hypothesis One (Ho<sub>1</sub>):** There is no significant relationship between the challenges facing Agricultural education and the role of agricultural Education in attaining national security.

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**Table 5:** Chi-square ( $\chi^2$ ) test of the challenges facing agricultural education and the role of agricultural education in attaining national security

S/N	SA	A	SD	D	DF	$\chi^2$ Cal. Value	$\chi^2$ Cri. Value	Level of Significance	Remarks
1.	60	30	4	6	21	347	32.671	0.05	Reject Ho
2.	37	50	3	10					
3.	25	50	15	10					
4.	12	70	10	8					
5.	40	50	2	8					
6.	20	60	15	5					
7.	20	60	15	5					
8.	5	10	25	60					
E	27.4	47.5	11.1	14.0					

E = Expected Frequency

The table above shows that the null hypothesis was rejected because the chi-square ( $\chi^2$ ) calculated (347) is greater than the chi-square ( $\chi^2$ ) critical value (32.671). This implies that, the challenges facing agricultural education are similar to the roles of agricultural education in attaining national security in Delta state.

**Hypothesis Two (Ho<sub>2</sub>):** There is no significant relationship between the types of security problems and the ways of combating national security problems.

**Table 6:** Chi-square ( $\chi^2$ ) test of the types of security problems and the ways of combating national security problems.

S/N	SA	A	SD	D	DF	$\chi^2$ Cal. Value	$\chi^2$ Cri. Value	Level of Significance	Remarks
1.	25	60	5	10	24	368	36.415	0.05	Reject Ho
2.	60	20	12	8					
3.	20	65	5	10					
4.	20	70	2	8					
5.	25	50	15	10					
6.	25	55	5	15					
7.	10	10	10	70					
8.	20	50	20	10					
9.	10	60	20	10					
E	23.9	48.9	10.4	16.1					

E = Expected Frequency

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The table above shows that the null hypothesis was rejected because the chi-square ( $\chi^2$ ) calculated (368) is greater than the chi-square ( $\chi^2$ ) critical value (36.415). This implies that the types of security problems are similar to the ways of combating national security problems in Delta State.

### **Discussion of Results**

From the results in table 1, it shows that Agricultural education performs important roles in attaining National security. This finding is in line with Kroma (2003) stating that Agricultural education provides the necessary instruction and practical experience that could bring about the development of the agricultural sector and also produce technically and professionally qualified human resource that could stimulate agricultural research and provide food security. Findings also revealed that Agricultural education contribute to job security, self-employment and development. These findings is supported by Egbule's (2004) opinion that Agricultural education prepares youths for job opportunities by offering them skills, knowledge, technicalities and confidence for self-reliance and self-employment.

Findings from table 2 revealed that Agricultural education is faced with various challenges in ensuring National Security in Delta state. These findings is in line with Maguire (1991) stating that, the issue of lack/poor funding, poor learning environment and infrastructural facilities as well as well-structured operational policy has brought about an isolation of agricultural education from the market and from the rest of the educational system.

Findings from table 3 shows that the following security problems exist in Delta State: food insecurity, job insecurity, environmental insecurity, political insecurity, economic insecurity and health insecurity. This is in line with Dembo and Mustapha (2012) findings that Nigeria has witnessed a drastic insecurity challenges in the past few years and this crisis is in various forms, such as food insecurity, environmental problems, political insecurity, economic insecurity and job insecurity with varying degree of its effect on the overall structure of the country and the well-being of its citizens. However, findings also revealed that breakdown of law and order is not a security problem existing in Delta State.

Findings from table 4 revealed that the problems of national security can be combated through various ways. These findings are in line with the outlined ways that can combat national security as stated by Human Security Center (2008).

The findings from hypothesis one shows that there is a significance relationship between the challenges facing agricultural education and the role of Agricultural education in attaining national security in Delta State.

Findings from hypothesis two show that there is also a significant relationship between the types of security problems and the ways of combating national security problems in Delta State.

### **Conclusion**

Nigeria as a nation has been beclouded with problems of insecurity, mostly in this recent time. Many have argued that these problems of insecurity in the nation is that of bad governance which have given rise to insecurity, while others have attributed it to poor quality education and illiteracy, despite the fact that these problems still exist with numbers of educational institution in the country.

However, vocational education particularly agricultural education offers great opportunities for the actualization of national security. Many authors have recognized it as an important source of developmental information and key resources for the building of reliable human resource that can bring about a secured nation. Thus, it is quite imperative to develop agricultural education and its programmes in terms of financing and structures if these latent potentials are to be met.

### **Recommendations**

In order to improve Agricultural Education in Delta state to meet with the present global change and environmental need in attaining National Security, the following recommendations were suggested. They are:

- Government should develop an attitude of continuing agricultural policies and adequate funding of agricultural programmes especially when there is change in authority.
- Agricultural education should be involved in rural developmental protection by participating in appropriate activities leading to the formulation of national development policies.
- Agricultural institutions should develop education programmes and curricula responding to the needs of the community and environment by providing the knowledge and skills required to meet the needs of the people concerned and to solve their technical and socio-economic problems.

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- Research should be an integral part of higher education institution programmes and the research themes should include interest of small and poor agricultural producers and measurements of research impacts should be done.

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