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# AGRICULTURAL EDUCATION IN THE ERA OF ECONOMIC UNCERTAINTIES IN NIGERIA: ISSUES, CHALLENGES AND WAY FORWARD

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***Abstract***

*The paper examined agricultural education in the era of economic uncertainties in Nigeria: issues, challenges and way forward. The study adopted three research objectives, three research questions and hypotheses. Descriptive research designed method was used for the study. The population of the study comprises of 900 farmers and 1,000 agricultural education students. A random sampling technique was used to select 90 farmers and 110 agricultural education students as respondents to the study. The instrument use for data collection was structured questionnaire. The instrument was validated by two experts. The study adopted a 4-point modified Likert rating scale of agreement, Strongly agreed, (SA) Agreed (A), Disagreed (D), Strongly disagreed (SD), with numerical values of 4, 3, 2, and 1 respectively. The instrument also passed the test of reliability, through test-retest method and its result computed using Pearson's Product Moment Correlation Technique which yielded a coefficient of 0.88. Data collected was analyzed with mean and standard deviation using SPSS version 19, while t-test was used to test the null hypotheses at 0.05 level of significant. The finding of the study shows that there are issues affecting agricultural education in era of economic uncertainties in Nigeria, the result of the findings shows that decrease in the prices of agricultural outputs is one of the economic uncertainties. The finding concluded that lack of information about production methods and market opportunities occur as a result of economic uncertainties. The paper recommended that issues of economic uncertainties that affect agricultural exports should be reduce in order to improve the adversely of global economic.*

***Key Words:*** Agricultural, Education, Economic, Uncertainties, Issues, Challenges, Way forward

## Introduction

Agricultural education has been the most important single activity in the Nigerian economy, with about 70% of the total working population engaged in it. It is the largest single sector of the economy, providing employment for a significant segment of the workforce and constituting the mainstay of the Nigeria large rural community which accounts for nearly two-third of the population. In contemporary times, credit for developing the agricultural sector in the economy has become increasingly demanding. This is because finance plays an essential role and acts as the life wire for economic growth, as well as stagnation in any given economic system especially in developing countries (Nigeria inclusive). In their opinion, Beck and Demirguc-Kunt (2016) advocate that special financing mechanism can better provide greater access to agricultural finance.

Agricultural activities are prone to various risks and uncertainties, which could be biophysical, abiotic, biotic, climatic, environmental or economic (Fitton et al. 2019). The uncertainties inherent in weather, yields, prices, government policies, global markets and other factors that affect farming could cause wide swings in farm income (USDA 2020). According to Aroriode and Ogunbadejo (2020), farmers are closely monitoring changing weather patterns, farm programmes, prices, sales, etc. to reduce their exposure to uncertainty. However, many

farmers are less familiar with the fact that government policy also can significantly affect their business operations. Although policymakers try to design policies to improve the national economy, these policies often have unintended and harmful effects on the agricultural economy (Aroriode & Ogunbadejo 2014).

Changing economic policies affect national income, prices, interest rates and exchange rates, all of which influence the agricultural economy. The capacity to implement policies is often weak, and this results in policy uncertainty (Adebayo et al. 2009). Udah et al. (2015) analysed the contribution of some agricultural subsectors to growth in Nigerian agriculture. Among the facts in the results of the trend analysis are that some agricultural subsectors contributed to the dismal performance of the agricultural sector GDP in Nigeria. The result of the percentage analysis showed that the crop subsector contributed almost 86% to total agricultural GDP growth, reflecting a lopsided pattern of growth in the Nigerian economy, which advocated for a policy of fair distribution of resources toward the growth of the individual subsectors. Despite great progress in agricultural productivity in the past half century, with crop and livestock productivity strongly driven by the increased use of fertilisers, irrigation water, agricultural machinery, pesticides and land, it would be over-optimistic to assume that these relationships will remain positive in the future. Agriculture contributes to the growth and development of an economy in four main ways – products, factors, markets and foreign exchange. West African agriculture is at a turning point after long periods of limited attention being paid to the sector. West African countries and their development partners recognised the sector's vital importance for broad-based growth, food security, nutrition and poverty reduction (Odior 2023).

This renewed attention being paid to agricultural education has crystallised around the Comprehensive African Agriculture Development Programme (CAADP), which in West Africa is implemented by the Economic Community of West African States (ECOWAS) and its member states as part of the ECOWAS Regional Agricultural Policy (ECOWAP) (Hollinger & Staatz 2015). According to Montes (2010), uncertainty is a feature of the real world that influences the decision making process of economic agents and undermines the effectiveness of policy. Insufficient knowledge of the economic system could prevent policy actions from having the desired effects, while a poor understanding of the consequences of monetary policy would lead to misjudgement and increase the costs of achieving policy goals extremely (Ononugbo 2021).

The inconsistencies in economic policy formulation and implementation, as well as the persistence of the influence of its uncertainties over time, are measured in the extent of the regression this economy has suffered in recent times. Economic policy uncertainty is responsible for the slow recovery from recession. This economic policy uncertainty may be seen in the ways government has unsuccessfully tried to fix the decline in economic growth and the follow-up consequences of government actions and, sometimes, inactions (Anueyiagu 2018).

Economic policy uncertainty and its role in economic performance have been widely covered in recent years, following on the work of Bloom et al. (2017), observed slow recovery of the economy can be attributed to heightened economic policy uncertainty. There are many reasons why uncertainty could influence growth. One of the earliest papers in the economics literature pointed out that increases in uncertainty lead firms to defer investment, thereby creating short, sharp recessions (Bloom et al. 2017). Recently, Bloom (2019) has shown large uncertainty shocks that lead to sharp recessions as firms and consumers put spending on agricultural farm inputs on hold. This occurs because uncertainty makes firms more cautious about investing and hiring, and it makes it harder to raise finance (Scotti 2016).

Banks are less willing to lend to firms in uncertain periods, squeezing the ability of companies to invest. Similar findings from empirical research include Bachman et al. (2023), with a review in Bloom (2019). In other, related, work, Brogaard and Detzel (2015) found that

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policy uncertainty reduces returns to assets. Over the years, there have been uncertainties that the impediment in the process of accessing finance by farmers is not particular because of non availability of credit but the refusal of credit facilitators to give loans due to uncertainty of payback. On the other hand, credit facilitators such as banks are in business to maximize profit for their owners; hence they are not to be blamed as they are not a non-profit (charity) organization. This however did not favour the rural farmers as the situation makes them to be an abandoned group in the economy (a group that does not receive attention of credit providers due to lack of collateral). This refusal by banks over the years has been a major setback in agricultural production. Therefore, this paper investigate Agricultural education in the era of economic of uncertainties in Nigeria: issues, challenges and way forward.

## Literature Review

### Conceptual Framework

Agricultural Education is a process of imparting knowledge, skills and attitudes in agriculture to a learner at any level. It gives the learner a sound academic knowledge, skills and ample opportunity to apply this knowledge. According to Tibi (1999, cited by Oke, 2023), Agricultural Education is an education employed in training learner in the basic art of farming combined with the science of teaching agriculture. Olaitan (2022), opined that agricultural education is a vital developmental process which is directly related to the effectiveness of trained man power.

### Concept of Economic Uncertainties

Anueyiagu (2018) define economic uncertainty refers to the lack of predictability and stability in the economic conditions, such as employment status and labor market situations, which can impact fertility outcomes and the timing of family transitions. Economic uncertainty is the lack of stability and predictability in the economy, which can impact many aspects of life.

Olajide (2020) define economic uncertainty refers to a situation in which the future economic environment is difficult to predict, and there is a high degree of risk or unknowns involved. This can be caused by a variety of factors, including political instability, changes in government policies, natural disasters, and market fluctuations. Examples, Olajide (2020) said that in the era of agricultural education, economic uncertainty include:

**Volatility in financial markets to agricultural productivities:** When stock prices or exchange rates fluctuate significantly, it can create uncertainty for investors and businesses. This was shown during the Global Financial Crisis and also financial uncertainty during and after the covid-19 pandemic. Much countries agricultural productivity have volatile exchange rates which increases the risks for businesses and overseas investors.

**Changes in macroeconomic policies:** For example, if a government announces plans to change direct and indirect tax rates or regulations, it can create uncertainty for businesses and consumers. Likewise, uncertainty can be created when a central bank changes the direction of monetary policy and starts changing interest rates.

**Natural disasters:** Events like earthquakes, hurricanes, and other natural disasters can disrupt supply chains and disrupt economic activity, creating uncertainty. Many countries including numerous lower-income nations have an economy highly susceptible to the consequences of climate change.

**Political instability:** Unrest or instability in a country can create uncertainty for businesses and investors. For example, it can cause businesses to hold off on making investments or hiring new employees, as they are unsure about the future economic environment. Consumers may also become more cautious about spending money, as they are uncertain about their own financial situation. This can lead to an increase in precautionary saving and a rise in the marginal propensity to consume. When uncertainty is high, there is increased risk of an economic recession as agents hold back on consumption and investment

decisions (Montes 2020). Overall, economic uncertainty can lead to a decrease in economic activity, as people and businesses become more risk-averse.

**Agricultural Education in the era of Economic Uncertainties**

Nigeria is blessed with huge physical, human and natural resource endowments yet the majority of its population live below both the absolute and relative poverty lines. The national survey conducted between 2003 and 2004 shows that slightly above half of the population (51.6 percent) live below US$1 dollar per day and the relative national poverty incidence was found to be 54.4 percent (National Bureau of Statistics (NBS), 2008). However, the most current Human Development Report by the United Nations Development Programme (UNDP, 2019) shows that about 64.4 and 83.7 percent of the population lives below $1.25 and $2 a day, respectively. This poverty situation is worse in the rural areas where over 70 percent of the people reside and earn their living through agriculture than in the urban areas. More than 86.5 percent of the rural population is engaged in agriculture (NBS, 2005). This invariably leaves agriculture as a key sector capable of affecting majority of Nigerians in diverse ways. Therefore, the persistence of hunger and poverty in Nigeria must be, to a large extent, the failure of the agricultural sector to fully impact positively on the people.

The poor and small-scale farmers are particularly vulnerable to these risks. A country which relies on agricultural exports can be adversely affected by global economic shocks (Easterly and Kraay, 2020). A sudden decrease in the prices of agricultural outputs can quickly push small net sellers into losses and poverty. Moreover, poor smallholders face a number of constraints that limit their productivity. Lack of information about production methods and market opportunities, particularly for new crops and varieties prohibit households from intensifying agriculture and producing high-value commodities whose market demand is growing rapidly. Poor access to credit and/or insurance can also limit uptake of new technologies. Smallholder producers are now also facing the growing challenges of recent technological changes and the stringent quality standards for many food products, both of which are associated with the globalization of commodity chains. In addition, high initial inequality in the distribution of assets and especially of land can also be a plausible candidate explanation of why some agricultural productivity change might be less effective in up lifting poor families from poverty (Janvry and Sadoulet, 2020).

**Issues of Economic Uncertainties in Agricultural Education**

Households in many rural areas are subject to substantial economic uncertainty. Recurrent droughts and fluctuations in output prices lead to volatile agricultural earnings

(Shanahan et al., 2019), and rural producers often lack access to credit or insurance markets. The paper builds on the simple idea that risk-averse farmers facing ex ante uncertainty over future revenue may sacrifice additional earnings in order to reduce exposure to income volatility. If climate shocks and output price shocks affect all crops similarly, there would be no scope for crop portfolio adjustments to lower income uncertainty in the era of agricultural education farm productivities. However, to the extent that output price shocks and climatic conditions are crop specific, farmers may divert land to crops that generate lower expected returns but help smooth against annual income fluctuations.

**Challenges of Economic Uncertainties in Agricultural Education**

There are many challenges militating against growth in agricultural sector especially in the less developed economies. According to Uguru (2021), the factors ascribed to the problems of agriculture in a growing economy are:

**Poor Local customs**- For a change in the present system, it is important to know that the traditions of the local people, if they will have strong views and attitudes on land ownership,

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system of cropping and rearing of livestock.

**Poor Communication, transport and marketing**- most of the existing lands suitable for agricultural activities are located in the rural areas. Such areas lack access roads that necessitate transportation of the produce. Therefore farmers depend only on the local markets which mean that whatever products they were unable to sell at the local market or export through local middlemen are usually left to waste due to lack of storage facilities, incentive to boost production; and poor prices for their goods and services.

**Poor Farmers Education:** the level of education among most farmers is low, there is great need of knowledge for the farmers in the rural areas to know the periods they will farm and the right species of crops and breed of animal to rear to make higher yield. Therefore, agricultural extension workers should help the people to understand the best way to raise crops and animal productivities.

**Poor Health and medical services:** people are weak due to lack of efficient medical services, diseases like malaria, typhoid fever, etc., these weakens people thus affecting their agricultural productivities. Malnutrition also contributes to low output (Carter, 2019)

**Inadequate Capital/Credit:** the production of food for an ever increasing population means that uncultivated land must be improved and increase in production involves the use of improved varieties of plants and animals, fertilizers, pesticides and farm mechanization. For a farmer to embark on large scale agricultural project he needs adequate finance and credit facilities, which may be available for large scale commercial and estate farming.

**Risks:** due to the risk involved in agriculture, the commercial banks find it difficult to engage in the provision of agricultural credits. Example, unfavorable climate or soil condition, inadequate technological experience, lack of improved varieties, insects and disease may ruin the farmers‘ enterprises which may limit the farmers‘ abilities to meet debt obligations. Jaja (2015) in his contribution to the problems of agriculture attribute low use of technology as the cause of low output and farm income which culminate in poor savings and investment. There is also the problem of crop failure which is as a result of weather, lack of storage facility and modern method of preserving the surplus farm produce during harvesting period. Many beneficiaries of agricultural loan have the impression that money lent to them constitutes part of their own share of the national cake, therefore there is no need for repayment.

**Way forward to issues and challenges of Agricultural Education in Nigeria in the Era of Nigeria economic Uncertainties**

For the economy of Nigeria to be listed as one of the leading economies, increase in food production is important, income diversification is important, job creation is also important when there is effective conservation of available resources. Agricultural education offers all these possibilities. One of the cultural values, Nigeria Agricultural Education is expected to transmit is the learning, training and practice of agriculture crops during in the era of uncertainties (Egun, 2020). It is transformation of the understanding and practice of farming to meet the changing world of the time. This

i) Increased Food Production: Agricultural Education in era of uncertainties is now targeted towards the rural farmers who form the real food and raw material producers in the country comprising of 95 percent of the domestically marketed and consumer food and 2.4 percent export (Ezehia, 2023). A well structured system of Agricultural Education interpretes both vigorous expansion and adaptation to the actual farmer’s needs especially in the following areas:
    a. Farmers being motivated by been given incentives.
    b. Gradual move of subsistence farmers to mechanized farmers, train them and give them subsidy.
    c. The move from rain fed agriculture to irrigation farming for a sustainable massive

production.

d. Mass Agricultural Education of the farmers on the techniques of c uncertainties as well as agro- ecological agriculture.
e. The training and re-training of extension farmers on improved agricultural practices.
f. Serious utilization of research findings.
g. Meeting the needs mentioned above ensures continual increase in food production thereby coping with the national food needs.

ii) Income Diversification: Areas of agriculture can be broadly subdivided into its various subsectors which include livestock production, fishery, crop production and forestry (Darma, 2017).Current curricula of bee keeping, snail farming, grass cutter farming, the areas of agro- diversity, environmental aspects and the various type of agricultural entrepreneurship will pave way for income generation as well as diversification.

iii) Increased Job creation: Nigeria with a population of 140 million (2006 Census), about 70 percent of Nigerians are employed in the agricultural sector (Darma, 2017).With the fast growing population in Nigeria and with new areas like beekeeping, snail farming, grass cutter farming, agro-diversity conservation and environmental aspects incorporated into agricultural education curricula, a vast job opportunities exists for graduates of agriculture. Other areas for job opportunities also include the area of processing, storage and marketing of agricultural produce, land resource development as well as land administration thereby reducing the rate of unemployment in the country. Agriculture, when rightly practiced and accorded its rightful place, can be a major driver of growth and development for Nigeria.

**Statement of problem**

Reducing soil fertility (occasioned by wind and water erosion, deforestation, and over-cropping), over-reliance on rain-fed agriculture and non-fine tuning of macroeconomic and agricultural policies to meet famers' and investors' needs are also some of the emerging problems, economic uncertainties to agricultural education in Nigeria. Furthermore, the low level of agricultural research and declining influence of Extension owing to poor funding have impacted negatively on the development of agriculture. Conflict in the use of arable land and water between and among farmers, herdsmen, hunters, and other user-groups is increasingly recognized as a great obstacle to agriculture (Adisa, 2019). Other problems is a great low level of animal production, poverty among farmers/rural people, low access to credit soil infertility/land degradation due to small holdings - wind erosion Yield gap - water erosion Inadequate famer access to input.

**Objective of the Study**

The main objective of the study is to examine agricultural education in era of economic uncertainties in Nigeria: Issues, Challenges and way forward. The specific purpose is to:

i. Examine issues affecting agricultural education in era of economic uncertainties in Nigeria.
ii. Determine challenges facing agricultural education in era of economic uncertainties in Nigeria.
iii. Investigate way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria.

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**Research Questions**

The following questions are used to guide the study

i. What is the issues affecting agricultural education in era of economic uncertainties in Nigeria?
ii. What is challenges facing agricultural education in era of economic uncertainties in Nigeria?
iii. What is way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria?

**Research Hypotheses**

The following hypotheses are tested at 0.05 level of significant

$H_{01}$: There is no significant difference between the mean responses of students and farmers on issues affecting agricultural education in era of economic uncertainties in Nigeria.
$H_{02}$: There is no significant difference between challenges facing agricultural education in era of economic uncertainties in Nigeria.
$H_{03}$: There is no significant difference between way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria.

**Methodology**

The study employed a descriptive research designed method. The area of the study is Delta State. The population of the study comprises of 900 farmers and 1,000 agricultural education students. A random sampling technique was used to select 90 farmers and 110 agricultural education students as respondents to the study and this gave a total number of 200 respondents that was drawn from the entire population. The instrument use for data collection was a structured questionnaire titled "Agricultural Education in Era of Conservation in Nigeria: Issues, Challenges and Way Forward Questionnaire (AEECNICWFQ). The study adopted a 4- point modified Likert rating scale of agreement, Strongly agreed, (SA) Agreed (A), Disagreed (D), Strongly disagreed (SD), with numerical values of 4, 3, 2, and 1 respectively. The instrument was validated by two experts in the Department of Vocational and Technical Education, Educational Option in the University of Delta Agbor, Delta State. The instrument also passed the test of reliability, through test-retest method and its result computed using Pearson's Product Moment Correlation Technique which yielded a coefficient of 0.88. All the instruments administered were returned with the help of two recruited research assistance. The research question was analyzed with mean and standard deviation using SPSS version 19, while t-test was used to test the null hypotheses at 0.05 level of significant. The benchmark of the hypotheses tested indicate that any mean score of 2.50 and above was accepted, while any mean score below 2.50 and above was considered not accepted based.

**Data Analysis**

## Research Question 1

What is the issues affecting agricultural education in era of economic uncertainties in Nigeria?

**Table 1 showing mean score of respondents on issues affecting agricultural education in era of economic uncertainties in Nigeria**

| | | Farmers (90) | | | | | | Students (110) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S/N** | **Statements** | **SA** | **A** | **D** | **SD** | $\bar{X}$ | **S.D** | **SA** | **A** | **S** | **SD** | $\bar{X}$ | **S.D** |
| 1 | Poor and small-scale farmers | 70 | 10 | 4 | 6 | 3.6 | 0.72 | 75 | 20 | 5 | 10 | 3.45 | 0.69 |
| 2 | Agricultural exports can be adversely affected by global economic | 60 | 20 | - | 10 | 3.44 | 0.69 | 77 | 19 | 4 | 10 | 3.48 | 0.79 |
| 3 | Decrease in the prices of agricultural outputs | 65 | 22 | 3 | - | 3.69 | 0.74 | 73 | 27 | 6 | 4 | 3.48 | 0.71 |
| 4 | Lack of information about production methods and market opportunities | 61 | 26 | - | 3 | 3.61 | 0.72 | 71 | 20 | 11 | 8 | 3.4 | 0.68 |
| 5 | Uncertainties of recent technological changes affect many food products. | 71 | 10 | 3 | 6 | 3.62 | 0.72 | 70 | 26 | 7 | 7 | 3.44 | 0.69 |
| 6 | Grand mean/Standard deviation | | | | | 3.59 | 0.72 | | | | | 3.45 | 0.71 |

The data presented in table 1 shows that respondents agreed to all the item listed under research question 1 on issues affecting agricultural education in era of economic uncertainties in Nigeria with the total grand mean of 3.59 and 3.64 and standard deviation of 0.72 and 0.71 of the instrument used respectively.

## Research Question 2

What is challenges facing agricultural education in era of economic uncertainties in Nigeria?

**Table 2 showing mean score of respondents on challenges facing agricultural education in era of economic uncertainties in Nigeria**

| | | Farmers (90) | | | | | | Students (110) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S/N** | **Statements** | **SA** | **A** | **D** | **SD** | $\bar{X}$ | **SD** | **A** | **A** | **S** | **SD** | $\bar{X}$ | **SD** |
| 6 | Poor local customs- | 66 | 20 | 6 | 4 | 3.84 | 0.77 | 73 | 17 | 16 | 4 | 3.45 | 0.69 |
| 7 | Poor Communication, transport and marketing | 60 | 21 | - | 9 | 3.47 | 0.69 | 76 | 20 | 14 | - | 3.56 | 0.71 |
| 8 | Poor Farmers Education | 64 | 17 | 9 | - | 3.61 | 0.72 | 75 | 25 | - | 10 | 3.5 | 0.7 |
| 9 | Poor Health and medical services | 60 | 19 | 10 | 11 | 3.64 | 0.733 | 70 | 27 | 6 | 7 | 3.45 | 0.69 |
| 10 | Inadequate Capital/Credit | 70 | 14 | 6 | - | 3.71 | 0.74 | 77 | 20 | 10 | 3 | 3.55 | 0.71 |
| | Grand mean/ Standard deviation | | | | | 3.65 | 0.73 | | | | | 3.50 | 0.7 |

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The data presented in table 2 shows that respondents agreed with all the item listed under research question 2 on the challenges facing agricultural education in era of economic uncertainties in Nigeria with the grand mean score for both respondents as 3.65 and 3.50 and standard deviation of 0.73 and 0.7 which is above the decision rule of 2.50 stated as decision rule respectively.

## Research Question 3

What is way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria?

**Table3 Showing Mean Score of Respondents on Way Forward to Issues and Challenges Facing Agricultural Education in Era of Economic Uncertainties in Nigeria.**

| | | Farmers (90) | | | | | | Students (110) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **S/N** | **STATEMENTS** | **SA** | **A** | **S** | **SD** | **X** | **SD** | **SA** | **A** | **S** | **SD** | ***X*** | **SD** |
| 1 | Increased in Food Production | 69 | 19 | 4 | 6 | 3.86 | 0.77 | 75 | 11 | 5 | 9 | 3.21 | 0.64 |
| 2 | Income Diversification | 61 | 16 | 5 | 8 | 3.44 | 0.69 | 77 | 20 | 3 | 10 | 3.49 | 0.79 |
| 3 | Mass Agricultural Education of the farmers on the techniques of c uncertainties as well as agro-ecological agriculture | 65 | 15 | 6 | 4 | 3.57 | 0.71 | 75 | 25 | 4 | 6 | 3.54 | 0.71 |
| 4 | Increased Job creation | 60 | 20 | 10 | - | 3.56 | 0.71 | 70 | 23 | 9 | 8 | 3.41 | 0.68 |
| 5 | Training and re- training of extension farmers on improved agricultural practices | 60 | 14 | 3 | | 3.27 | 0.66 | 71 | 20 | 10 | 9 | 3.39 | 0.68 |
| 6 | Grand mean/Standard deviation | | | | | 3.54 | 0.71 | | | | | 3.41 | 0.7 |

The data presented and analyzed above in table 3 indicate that respondents strongly agreed with all the item listed under research questions 3 on the way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria with the grand mean for both respondents 3.54 and 3.41 and standard deviation as 0.71 and 0.7 which reveals that the instrument used for this study is reliable since the average mean is above the decision rule of 2.50 that was state.

### Testing Of Hypotheses

**$H_{01}$:** There is no significant difference between the mean responses of students and farmers on issues affecting agricultural education in era of economic uncertainties in Nigeria.

**Table 4 showing t-score on issues affecting agricultural education in era of economic uncertainties in Nigeria**

| GROUP | NO | X | SD | DF | t/cal Value | t/crit value | Level of Significance | Decision |
|---|---|---|---|---|---|---|---|---|
| Male | 90 | 3.6 | 0.74 | 200-2 (198) | 1.3 | 1.96 | 0.05 | Accepted |
| Female | 110 | 3.45 | 0.86 | | | | | |

From the above table the t-calculated value of 1.38 is lower than the t-critical value of 1.96 at 0.05 level of significant. Therefore the null hypotheses which state that there is no significant difference is between financial stress accepted.

**$H_{02}$:** There is no significant difference between challenges facing agricultural education in era of economic uncertainties in Nigeria.

**Table 5 showing t-score on the Challenges Facing Agricultural Education in Era of Economic Uncertainties in Nigeria**

| GROUP | NO | X | SD | DF | t/cal Value | t/crit value | Level of Significance | Decision |
|---|---|---|---|---|---|---|---|---|
| Male | 90 | 3.71 | 0.58 | 198 | 1.47 | 1.96 | 0.05 | Accepted |
| Female | 110 | 3.50 | 0.82 | | | | | |

From the above table the observed t-calculated value of 1.47 is lower than the critical value of 1.96 at 0.05 level of significance. Therefore; the null hypothesis stated in the table is accepted because the t-calculated value is lower than t-critical value obtained from the table

**$H_{03}$:** There is no significant difference between way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria.

**Table 6 showing t-score on the Way Forward to Issues and Challenges Facing Agricultural Education in era of Economic Uncertainties in Nigeria**.

| GROUP | NO | X | SD | DF | t/cal Value | t/crit value | Level of Significance | Decision |
|---|---|---|---|---|---|---|---|---|
| Male | 90 | 3.53 | 1.84 | 198 | 1.38 | 1.96 | 0.05 | Accepted |
| Female | 110 | 3.480 | 0.84 | | | | | |

From the above table the t-calculated value of 1.3 is lower than the t-critical value of 1.96 therefore the null hypothesis stated in the table above is accepted as it is indicated that in the decision rule that any above 2.50 should be accepted and any below rejected.

**Discussion of Findings**

The findings of the study showed that all the items stated in table 1 had no significance differences as it agreed by the respondents under research question. The finding revealed that there are issues affecting agricultural education in era of economic uncertainties in Nigeria. The findings shows that there is economic uncertainties poor and small-scale farmers, respondents strongly agreed that there is economic uncertainties in agricultural exports can be adversely affected by global economic, respondents agreed that decrease in the prices of agricultural outputs is one of the economic uncertainties, while respondents strongly agreed that lack of information about production methods and market opportunities occur as a result of economic uncertainties. The findings revealed that uncertainties of recent technological changes affect many food products. The finding is in line with Easterly and Kraay, (2020) whos stated that A sudden decrease in the prices of agricultural outputs can quickly push small net sellers into losses and poverty. The findings also agreed with the finding of Janvry and Sadoulet, (2020) who recommended that smallholder producers are now also facing the growing challenges of recent technological changes and the stringent quality standards for many food products, both of which are associated with the globalization of commodity chains.

The findings of the study shows that all the items stated in table 2 are agreed to by the respondents under research questions 2. The findings shows that poor local customs is one of challenges facing agricultural education in era of economic uncertainties in Nigeria, poor

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communication to transport and marketing is one of challenges facing agricultural education in era of economic uncertainties in Nigeria, respondents strongly agreed that poor farmers education is one of the challenges facing agricultural education in era of economic uncertainties in Nigeria, while respondents agreed that poor health and medical services is one of the challenges facing agricultural education in era of economic uncertainties in Nigeria. Findings show that inadequate capital/credit is one of the challenges facing agricultural education in era of economic uncertainties in Nigeria. The findings is in agreement with Uguru (2021) who stated that change in the present system, it is important to know that the traditions of the local people, if they will have strong views and attitudes on land ownership, system of cropping and rearing of livestock.

Finally the findings of the study showed that all items stated on table 3 have no significance difference in the responses of the respondents on the way forward to issues and challenges facing agricultural education in era of economic uncertainties in Nigeria. The findings shows that respondents strongly agreed that there should be increased in food production, respondents agreed that there should be income diversification, while respondents agreed that there should be mass agricultural education of the farmers on the techniques of economic uncertainties as well as agro- ecological agriculture, respondents strongly agreed that there is increased in Job creation, while respondents agreed that there should be training and re-training of extension farmers on improved agricultural practices. The findings is in line with Darma, (2017) who recommended that areas of agriculture can be broadly subdivided into its various subsectors which include livestock production, fishery, crop production and forestry.

**Conclusion**

The issues of economic uncertainties in agricultural exports can be adversely affected by global economic, decrease in the prices of agricultural outputs is also one of the economic uncertainties affect agricultural education productivities in Nigeria. Lack of information about production methods and market opportunities occur as a result of economic uncertainties, while smallholder producers are now also facing the growing challenges of recent technological changes and the stringent quality standards for many food products, both of which are associated with the globalization of commodity chains. Although, poor local customs is one of challenges facing agricultural education in era of economic uncertainties in Nigeria, as well as poor communication to transport and marketing is one of agricultural productivities in era of economic uncertainties in Nigeria. However, poor farmers education also stands as a challenges facing agricultural education in era of economic uncertainties in Nigeria.

**Recommendations**

The paper examines the following recommendations which are:

- Issues of economic uncertainties that affect agricultural exports should be reduce in order to improve the adversely of global economic.
- There should be increase in the prices of agricultural outputs to alleviate economic uncertainties in Nigeria.
- Adequate of information about production methods and market opportunities should be available for competitive purposes in the era of economic uncertainties in Nigeria.
- There should be effective local customs in order to control those challenges facing agricultural education in era of economic uncertainties in Nigeria.

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