



## Youth involvement in rice production: A panacea for youth restiveness in Anambra State, Nigeria

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DOI: <https://doi.org/10.47963/jobed.v12i.1521>

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To cite this Paper: Attamah, C. O., & Nwosu, F. E. Youth involvement in rice production: A panacea for youth restiveness in Anambra State, Nigeria. *Journal of Business and Enterprise Development (JOBED)*, 12(1). <https://doi.org/10.47963/jobed.v12i.1521>

### Article Information

#### Keywords:

Youth involvement  
Youth restiveness  
Crime  
Rice production  
Youth in rice production  
Nigeria

Received: 16<sup>th</sup> June, 2024

Revised: 18 September, 2024

Accepted: 30 September 2024

Editor: Anthony Adu-Asare Idu

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### Abstract

There is a great concern about youth restiveness due to growing unemployment in Nigeria, whereas agriculture is a huge business space with the potential for youth involvement and employment. The study sought to ascertain the level of youths' involvement in rice production in Anambra State, Nigeria. Eighty youths were purposively selected because of the preponderance of rice production in the area. Data were collected using a structured interview schedule and were analysed using mean, standard deviation, and multiple linear regression. The study revealed that youths were into the planting of rice seedlings, buying and selling of seedlings, harvesting, and fertilizer application. Sex and level of education significantly influenced youths' involvement in rice production. The youths were constrained majorly by the high cost of inputs, and lack of funds to expand production. Adequate and comprehensive training on rice production and enforcement of practical agriculture curricula in schools were identified as possible strategies for improving youths' involvement in rice production. The study concluded that youth were into rice production though influenced by their level of education and sex. The government should make rice production attractive to the youth by eliminating the constraining factors associated with it.

### Introduction

Youth restiveness is a growing global phenomenon (Adegoke et al., 2023). It refers to the agitations that are primarily led by young people and are motivated by issues of injustice, marginalization, deprivation, and grievances in a nation. Youth restiveness may also be a real youth-led movement to make known legitimate demands on issues being resisted or denied by the establishment, the political class, or people in positions of authority (Adegoke et al., 2023; Ikalewumi & Itodo, 2023). It is a situation where youths are involved in crimes of different forms on the grounds of lack of gainful employment.

Youth restiveness has been recorded as the factor behind the increasing rate of crimes in Nigeria, where about 53.4% of the youth population is unemployed (Federal Ministry of Budget and Economic Planning, 2023; Aderounmu, 2021; Obiotika, 2023). Currently, Nigeria's global crime index stands at 7.28, the second highest in Africa and the

sixth in the world (Michael, 2023, 10, 05; Okafor, 2023, 09, 28). This figure is far above 3.68 and 4.98 obtainable in countries like Rwanda and Bangladesh, respectively, with a robust agriculture outlook (Wisevoter, 2023).

Agriculture, with proper and adequate government support, has been established as a platform with the capacity for meaningful youth engagement and gainful employment (Akron and Kotu, 2022; Attamah et al., 2023). According to Husain (2023), nearly half of the population of Bangladesh with a lower global crime index than Nigeria is employed by the nation's agricultural sector. In Rwanda, the agricultural sector contributes about one-third of the nation's GDP and employs nearly 58% of the working population, and 62.3% of the total employment (International Trade Administration, 2022; Minagri, 2023). Ethiopia with a 4.79 global crime index has 85% of its employment in agriculture (Food and Agriculture Organization, 2023; Wisevoter, 2023). These go to say that, a working agricultural sector can arrest the Nigerian unemployment-induced youth restiveness.

There is restiveness among youth in Anambra State, evidenced by increased crime activities (Ofoma, 2022; Obianeri, 2022). Gainful employment, of which agriculture provides the highest number has been established as a major cure for youth restiveness (Akron and Kotu, 2022; Ofoma, 2022; Attamah et al., 2023; Ndububa, 2021). Rice production is a key agricultural activity in Anambra (Ejikeme et al., 2017; Nwalieji, 2021) that can take youth off the street (Sadiq et al., 2019) but the extent to which the youth are involved in rice production, the factors that influenced their involvement and the constraints faced by youth in rice production in the state are unknown. The study by Iwuchukwu and Udegbonam (2017) assessed the productivity and intra-household roles in rice production in Awka North Local Government Area (LGA) of Anambra State. Nwalieji (2021) captured the characteristics of rice production for all farmers in a single LGA (Ayamelum) in Anambra State. Hence, the study sought the following specific objectives; to ascertain the rice production activities that youths were involved in Anambra State, Nigeria; to determine the factors that influenced their involvement; to ascertain the constraints faced by the youths and to identify possible strategies to improve their involvement.

The paper encloses a literature review which covers the concept of youth and youth restiveness, rice production and youth involvement, and theoretical underpinning; the methods which embody the study area, study population, sampling procedure, data collection method, measurement of variables, and data analysis; the results and discussions and; the conclusion and recommendations.

## Literature Review

### *Concept of youth and youth restiveness*

There is no set definition for the term "youth"; rather, it refers to a time in human growth and development. People who are between the ages of 19 and 40 are considered to be youths (Girei et al., 2016). A broader meaning of youth could be a stage of existence between infancy and adulthood. According to Schäfer (2015), it is characterized as a dispensation of role and identity experimenting, during which children gradually become ready for their lives as complete members of society while remaining free from the weight of social norms and obligations. The African Youth Charter defines youth as those between 15 and 35. According to the United Nations Population Fund (UNFPA), youth is defined as a period of transition from childhood dependence to adult independence. The World Health Organization (WHO), UNFPA, and UNICEF define youth as someone between the ages of 15 and 24. People between the ages of 15 and 24 are also considered "youth" by the United Nations according to a UNESCO report. The 2009 National Youth Policy of Nigeria considered people who are between the ages of 18 and 35 as youth.

Youth restiveness refers to a condition where young people, often driven by unemployment, social inequality, or political marginalization, engage in rebellious or disruptive activities as a means of expressing frustration and seeking attention (Akpokighe & Ejovi, 2020). According to Williams et al. (2024), youth restiveness is characterized by behaviours such as protests, violence, and other forms of social unrest, which can pose significant challenges to social stability and economic development. Youth restiveness is particularly prevalent in regions where there is a lack of economic opportunities and limited access to education or skills development programmes (Williams et al., 2024; Ofoma, 2022). These conditions often lead to disillusionment, causing young people to turn to deviant behaviour as a form of protest against the system that they perceive as oppressive or neglectful. Ajiboye et al. (2016) suggest that when youths are excluded from meaningful employment or social participation, their frustrations build up, which can manifest in aggressive or antisocial actions. In Nigeria, youth restiveness has been a persistent issue. Several factors contribute to this phenomenon, including poverty, political instability, and the lack of sustainable livelihoods (Ajiboye et al., 2016; Oboreh, 2010). In most states in Nigeria, young people often see few legitimate avenues to improve their

economic standing, leading to feelings of marginalization and hopelessness (Oboreh, 2010; Ofoma, 2022). As a result, youth restiveness has become a significant barrier to peace and development. Addressing youth restiveness requires a multi-faceted approach, including creating economic opportunities, promoting skill development, and fostering youth participation in community and governance processes (Ajiboye et al., 2016). Engaging youth in agricultural production, such as rice farming, provides not only a source of livelihood but also a productive outlet for their energy, reducing the likelihood of restiveness (Ofoma, 2022; Obianeri, 2022).

#### *Rice production and youth involvement*

Rice production is an important aspect of agriculture. Rice currently stands as one of the main staple crops in the world with a 2023/24 global production projection of 520.9 million metric tons (milled rice) (Childs & LeBeau, 2023). Nigeria's contribution is merely 1% (5.4 million metric tons) despite the favourable soil, climate, market and large youthful population that can easily enlist the nation among the leading producers of rice in the world (Akinbile, 2023; Sasu, 2023; Olasehinde et al., 2022). The deliberate involvement of youth who are generally known to be innovative and energetic can turn around the rice economy and address the restiveness associated with youth in Nigeria (Sadiq et al., 2019). Sadiq et al. (2019) and Attamah et al. (2023) reported that youth were involved in rice production activities like clearing of land, weeding, ridge making, pest control, harvesting, drying and parboiling. These involvements vary across regions and countries due to differences in socio-economic factors, cultural contexts, and agricultural policies. According to Tiraieyari and Krauss (2018), youth involvement in agriculture is influenced by agricultural optimism, career motives, and family and friends' support. Etim and Udoh (2018) identified household income, membership of a social group, age and farm experience as determinants of youth willingness to participate in farming activities. A study by Fasakin et al. (2022) established that the intensive participation of youth in rice production is influenced by credit access, farming experience, income, access to land, and social group membership. On the other hand, lack of access to credit, capital inadequacy, lack of access to agricultural land, high cost of irrigation and mechanization, climatic factors and poor government support have been identified as constraints to youth involvement in rice production (Naamwintome & Bagson, 2013; Fasakin et al., 2022; Attamah et al., 2023).

#### *Theoretical underpin*

Youth Development Theory (YDT) stresses the importance of providing the youth with platforms for personal growth, skill development, and active participation in their communities. According to Lerner et al. (2019), positive youth development focuses on enhancing youths' strengths and capabilities, promoting their well-being, and fostering their engagement in productive ventures. YDT posits that when young people are involved in meaningful jobs, they develop a sense of purpose, identity, and responsibility, which can reduce the prospect of engaging in risky or unruly behaviours (Pittman et al., 2001).

In Anambra State, the high levels of youth restiveness can be attributed to unemployment and lack of engagement in constructive activities (Ofoma, 2022; Obianeri, 2022). By involving young people in rice production, they can gain essential agricultural skills, learn about entrepreneurship, and develop a sense of belonging within their communities. As emphasized by Roth & Brooks-Gunn (2003), programmes that promote youth participation contribute to their social competence and help them build supportive networks. Moreover, youth involvement in agricultural activities such as rice production can serve as a platform for mentorship and peer support, which are critical components of positive youth development (Ross, 2016). These interactions can enhance their self-esteem and instil values of teamwork and cooperation, further reducing tendencies towards restiveness. By focusing on the developmental needs of youth and providing them with the tools and opportunities to thrive, initiatives that promote agricultural engagement can significantly contribute to mitigating youth restiveness in Anambra State (Sadiq et al., 2019). In addition to giving the youth economic empowerment, these strategies support their social and emotional development and build a more cohesive and effective community.

## **Methods**

The study employed a quantitative design using a cross-sectional survey. This was executed in Anambra State, Nigeria. The state is located at Latitude 6.2209° N and Longitude 6.9370° E of the equator with a land mass of 4,844 Km<sup>2</sup>, 70% of which is arable land (Ebido et al, 2020). Anambra has an estimated population of 5,068,646 and a youth population of 2,041,217 (National Bureau of Statistics & Federal Ministry of Youth Development, 2013). The major crops grown by farmers in the state are rice, yam, oil palm, cassava, cocoyam, and vegetables.

The population of the study consisted of all youths engaged in rice production in Anambra State. Youth categorization of age 18-40 years was adopted for the study. Multi-stage and purposive sampling techniques were used to select the respondents for the study. In the first stage; two senatorial zones that were key in rice production in

the state were purposively selected. In stage two, one local government area that is known for rice production was purposively selected from each of the zones, giving two LGAs. In stage three, four communities that were preponderant in rice production were selected from each LGA, giving a total of eight communities. In the fourth stage, 10 respondents between the ages of 18-40 years, who were into rice production were selected from each of the communities, giving a total of 80 respondents for the study.

Data were collected using a structured interview schedule administered by an enumerator within a space of a month, with each interview lasting about 30 minutes. The instrument contained relevant information based on the specific objectives of the study. The rice production activities that youths are into were ascertained by providing respondents with a list of different activities in rice production, from which they were asked to indicate what they do by ticking “never involved = 0”, “rarely involved = 1” and “always involved = 2”. These values were added up to obtain a value of three which was divided by three to get a mean score of 1. Thus, variables with mean scores of greater than or equal to 1 were considered as the activities in which youths were involved, while otherwise were considered as not. The youth involvement scores were generated by adding up all the response options across all the activities provided. The overall level of involvement was calculated by taking an average of the mean scores of all the rice production activities.

Factors that influenced involvement were determined using multiple linear regression with youth involvement as the dependent variable and age, sex, marital status, number of extension visits, level of education and access to education as independent variables. To identify the constraints to involvement, likely constraining variables were presented to the respondents on a four-point Likert-type scale of “to a great extent = 3”, “to some extent = 2”, “to a little extent = 1”, and “no extent = 0”. These values were added up to obtain a value of six which was divided by four to get a mean score of 1.5. Thus, variables with a mean score of 1.5 or more were considered as constraints faced by youth in rice production and less than 1.5 as otherwise. To identify possible strategies to enhance involvement, four-point Likert-type response questions were provided with options of strongly agree = 3, agree = 2, disagree = 1, and strongly disagree = 0. These values were added up to obtain a value of six which when divided gives a mean score of 1.5. Thus, variables with a mean score of 1.5 or more were perceived as solutions to the constraints faced by youths in rice production, while less than 1.5 was otherwise.

Descriptive and inferential statistics in IBM-SPSS, version 25.0 were used for data analysis. The rice production activities, constraints faced by youth and possible strategies for youth involvement were analysed using mean and standard deviation, while multiple linear regression was used to determine the factors influencing youth involvement.

## Results and Discussions

### *Youth involvement in rice production activities*

Judging from the overall mean score ( $\bar{x}=1.30$ ) as captured in Table 1, youth were involved in rice production in Anambra State. Item-wise scores show they were involved in the planting of seedlings ( $\bar{x}=1.99$ ), buying and selling of seedlings ( $\bar{x}=1.95$ ), manual harvesting ( $\bar{x}=1.91$ ), fertilizer application ( $\bar{x}=1.90$ ), weed control ( $\bar{x}=1.89$ ), soil tiling ( $\bar{x}=1.81$ ), pest control ( $\bar{x}=1.77$ ), land clearing ( $\bar{x}=1.70$ ), nursery operations ( $\bar{x}=1.49$ ), bagging ( $\bar{x}=1.49$ ), and drying of grains ( $\bar{x}=1.20$ ). The result implies that youth were involved in rice production but more attached to activities that are less technical and less capital-involving. This claim is supported by the fact that activities such as de-stoning, irrigation, milling, parboiling, and threshing, all fell below the mean, and substantiated by the findings of Attamah et al. (2023), that youth avoided the above-mentioned activities. The decision to settle for the less capital-intensive activities could be associated with the financial limitation which has been established in the literature as the bane of youth entrepreneurship (Ahmed & Ahmed, 2021; Babu & Zhou, 2023). Hence, it will be very proper for the government to set aside funds which will be adequately manned and monitored for the sole aim of youth empowerment in genuine agricultural endeavours. Looking at it from another angle, youth involvement is a welcome development that could have a strong impact on the economy as it will help reduce the level of youth restiveness, crimes and unemployment. This submission is corroborated by Kimaro et al. (2015) who claimed that rural youth's active involvement in agricultural pursuits helped to alleviate the problem of unemployment, particularly in rural areas. To

accomplish sustainable development goals, particularly those related to poverty reduction and food security, governments, non-governmental organizations, and the private sector should make more of an effort to increase youth participation in agricultural operations.

**Table 1: Activities of youth in rice production**

<b>Activities</b>	<b>Mean (<math>\bar{x}</math>)</b>	<b>Standard deviation</b>
Clearing of land	1.70*	0.58
Tilling of soil	1.81*	0.45
Nursery operations	1.49*	0.50
Buying and selling of seedlings	1.95*	0.22
Planting of seedlings	1.99*	0.11
Fertilizer application	1.90*	0.41
Irrigation	0.25	0.49
Pest control	1.77*	0.45
Weed control	1.89*	0.32
Manual harvesting	1.91*	0.40
Automated harvesting	0.16	0.43
Drying of grains	1.20*	0.77
Threshing	0.88	0.80
Drenching of paddy when parboiling	0.85	0.89
Steam heating of paddy when parboiling	0.87	0.91
Milling	0.51	0.66
De stoning	0.93	0.78
Bagging	1.49*	0.76
<b>Total score</b>	<b>23.55</b>	
<b>Overall mean</b>	<b>1.30</b>	
Authors' construct, 2023	*Significant ( $\bar{x} \geq 1.00$ )	

#### *Factors influencing youth involvement in rice production*

Table 2 shows that there was no significant relationship ( $F=1.69$ ;  $p \leq 0.05$ ) between some selected socio-economic variables of the youth and their involvement in rice production. This disagreed with Attamah et al. (2023) who reported a significant relationship ( $F=2.50$ ;  $p \leq 0.05$ ) between youth involvement in rice production and some socio-economic factors.

Item-wise, Sex ( $t = -2.28$ ) and level of education ( $t = -2.18$ ) significantly influenced youths' involvement in rice production, while marital status ( $t = -1.05$ ), access to credit ( $t = -0.42$ ), age ( $t = 1.27$ ), and the number of extensions visit ( $t = -0.56$ ) were not significant. This negates the findings of Attamah et al. (2023), that access to credit and the number of extension visits were significant. Based on the adjusted R Square, the factors in the regression model only explained 6% of the variance in youth involvement in rice production.

Specifically, sex influenced youths' involvement significantly, though with a negative t-value ( $t = -2.28$ ). This implies that being female increases the possibility of involvement in rice production activities. This could be linked to the willingness or drive for women to always go for any available job option not minding the pay. It could also be associated with the multitasking abilities of females; they can be ambidextrous, doing many things at a time. This supports the claim of Atere (2023) that women are actively involved in ensuring household food security via their participation in agricultural activities. A study by Maduka et al. (2023) also reported women as being strongly involved in cocoa production in Abia State.

Level of education ( $t = -2.18$ ) significantly influenced youths' involvement in rice production but with a negative t-value. This shows that the less educated a person is, the higher the tendency to subscribe to rice production. This supports the claim that youth see agriculture as a field for the uneducated, aged and elderly (Bello et al., 2021; Dawodu & Olagunju, 2022). Their view and attitude may not be unconnected with the crude and laborious nature of agriculture in sub-Saharan Africa. The practice makes agriculture unattractive to the young, especially the educated

young. Some see participation in agricultural production as unemployment or a makeshift job. This view, if not urgently arrested through a youth-friendly agricultural approach, is highly disadvantageous for any nation that wants to develop.

Age, marital status, access to credit, and extension visits had no significant ( $p>0.05$ ) influence on youth involvement in rice production. Although, this supports the findings of Attamah et al. (2023) that age and marital status had no significant influence on youth involvement, but contradicts the report of Sadiq et al., (2019) that youth involvement was significantly influenced by age.

**Table 2: Factors influencing youth involvement in rice production**

Variables	Unstandardized coefficients		Standardized coefficients	t-value	Sig
	B	Std. error	Beta		
Constant	32.01	5.50		5.82	0.000
Age	0.21	0.17	0.23	1.27 ( $\underline{x}=30.38$ )	0.207
Number of extension visits	-0.59	1.05	-0.07	-0.56 ( $\underline{x}=1.34$ )	0.574
Sex	-3.52	1.54	-0.29	-2.28	0.026*
Marital status	-1.69	1.60	-0.18	-1.05	0.296
Level of education	-10.05	4.61	-0.26	-2.18	0.033*
Access to credit	-0.45	1.08	-0.05	-0.42	0.678

Dependent variable: Involvement; Adjusted  $R^2 = 0.06$ ; F-value = 1.69; \* $p \leq 0.05$ ; n = 80

**Source: Authors' construct, 2023**

#### *Constraints faced by youths in rice production*

The constraints identified by the respondents (Table 3) include a high cost of farm inputs ( $\underline{x} = 2.97$ ), lack of funds to expand production ( $\underline{x} = 2.93$ ), high irrigation cost ( $\underline{x} = 2.93$ ), poor access to loan facilities ( $\underline{x} = 2.87$ ), inefficient fertilizer and pesticide ( $\underline{x} = 2.86$ ), climate change ( $\underline{x} = 2.85$ ), high post-harvest losses ( $\underline{x} = 2.85$ ), unavailability of farm labour ( $\underline{x} = 2.82$ ), poor government support ( $\underline{x} = 2.80$ ), inadequate access to improved seedlings ( $\underline{x} = 2.71$ ), poor access to land for agriculture ( $\underline{x} = 2.70$ ), high mechanization cost ( $\underline{x} = 2.56$ ), lack of access to information on agric. business ( $\underline{x} = 1.86$ ), challenges of pests, diseases and weeds ( $\underline{x} = 1.63$ ), and wrong perception of agriculture ( $\underline{x} = 1.56$ ). These constraints are in line with the submission of Attamah et al. (2023), except for poor access to land for agriculture and challenges of pests, diseases and weeds.

The high cost of farm inputs was also established as a constraint faced by youth in the report of Mthi et al. (2021). This constraint could lead to a situation where the more determined and agro-interested youth are pushed to subscribe to paid labour instead of setting up farms. This scenario mostly results in youth exploitation which could lead to a wrong perception of agriculture among youths. High input costs could also cause the youth to fall prey to merchants of fake and inferior agro-inputs. Lack of funds to expand production could imply that the transition from small-scale to medium or large-scale production could be difficult to achieve as a youth. This agrees with Ahmed and Ahmed (2021) and Ankrah et al. (2020) who identified limited access to finance as a major constraint faced by youth entrepreneurs. The need for a dedicated fund for youth agricultural development should be topmost in government agricultural policies; with this in place, the credit needs of farmers will easily be handled. The high cost of irrigation could confine youth to one production cycle in a year whereas there could be more, with functional irrigation facilities on the ground. The porosity of Nigeria's border and the low performance of standard organizations, leading to the influx of sub-standard agricultural products into the Nigerian market require serious government attention if fertilizer and pesticide failure must be arrested among farmers. Climate change was also identified as a constraint by Amanze and Orgi (2023). This implies that more climate change adaptive and mitigation approaches that are sustainable should be advanced to farmers by extension agents. High post-harvest losses imply that farmers lack comprehensive knowledge and skill on how to adequately manage their harvest with minimal or no losses. Therefore, the extension agents need to respond very fast to this challenge to safeguard farmers' efforts and in turn build more strength and confidence in farmers. This can be achieved by either getting more manpower or man hours into extension; the 1.34 average number of visits per year as captured in Table 2, is too poor if meaningful development must be realised. It

could also imply that farmers lacked the necessary storage facilities for their produce. This corroborates the findings of Ubana and Bako (2019), that youth are constrained by inadequate storage facilities. Pests, diseases and weeds management are critical aspects of rice production as failure to adequately attend to any of them could mar the efforts of farmers. This claim is supported by the report of the International Rice Research Institute, that rice farmers suffer an average of 37% loss annually to pests and diseases (Hu et al., 2023). The unavailability of farm labour could result in farmers paying more than necessary for the available few. This could shoot up the cost of production to a degree that may not support beginners who are most likely to be youths. The unavailability of labour could be linked to a wrong perception of agriculture among youth coupled with unfavourable experiences that some may have had in the field. This could also be associated with the laborious nature of farming, which leaves most small-scale farmers and labourers in an unkempt state. The issue of rural-urban migration in search of white-collar jobs might also be a factor. The high cost of labour was reported by Amanze and Orgi (2023) in their study as a constraint to agriculture.

Poor government support is at the base of the under-performance of agriculture. This is because the policies needed to achieve a working agricultural sector can only be engineered and birthed by the government. The extent to which a people can develop is at the mercy of the government in power. Hence, a need for strong citizen sensitization on governance participation and recruitment. The problems of inadequate access to improved seedlings, the high cost of mechanization, and poor access to land for agriculture among others can easily be addressed by a stroke of policy from a committed government. The result supports the claim of Ubana and Bako (2019) who identified unfavourable government policies as a setback to youth participation in agro-processing. Positive perception and confidence building in agriculture can easily be achieved by sincere government efforts in fixing the agricultural sector. When the issues of start-up capital, access to standard agro-inputs, credit facilities, market, and regulatory environment are fixed, the perception will change for good. Wrong perception towards agriculture was also recorded as a major challenge to youth participation in agricultural activities by Akinngbe and Ogundele (2019).

**Table 3: Constraints faced by respondents in rice production**

Constraints	Mean ( $\bar{x}$ )	Standard deviation
Lack of funds to expand production	2.93*	0.38
High irrigation cost	2.93*	0.27
Wrong perception of agriculture	1.56*	0.61
Lack of access to information on agric. Business	1.86*	0.49
Inadequate access to improved seedlings	2.71*	0.51
Poor access to land for agriculture	2.70*	0.60
High cost of farm inputs	2.97*	0.16
Unavailability farm of labour	2.82*	0.47
Challenges of pests, diseases and weed	1.63*	0.27
Limited access to market and related information	1.47	0.41
Inefficient fertilizer and pesticide	2.86*	0.38
Climate change	2.85*	0.36
High post-harvest losses	2.85*	0.39
High mechanization cost	2.56*	0.16
Poor access to loan facilities	2.87*	0.33
Poor government support	2.80*	0.40

Source: Authors' construct, 2023

\*Significant ( $\bar{x} \geq 1.50$ )

#### *Strategies to improve youth's involvement in rice production*

All the variables captured in Table 4 were identified as major strategies to improve youth involvement in rice production. The strategies include adequate and comprehensive training on rice production ( $\bar{x}=2.99$ ), enforcement of practical agriculture curriculum in secondary and tertiary school levels ( $\bar{x}=2.99$ ), enforcement of sales of locally produced rice by the government ( $\bar{x}=2.97$ ), provision of facilities and structures that support rice production ( $\bar{x}=2.97$ ), youth sensitization in rice production ( $\bar{x}=2.96$ ), easy access to zero or low-interest rate credits ( $\bar{x}=2.95$ ), provision of accessible agricultural land ( $\bar{x}=2.95$ ), the functional linkage between farmers and buyers ( $\bar{x}=2.95$ ), subsidization of inputs like pesticides, fertilizers etc. ( $\bar{x}=2.94$ ), youth-targeted empowerment programme on rice production by

government ( $\bar{x}=2.94$ ) and longer repayment term for agricultural credits ( $\bar{x} =2.93$ ). These strategies are consistent with the report of Attamah et al. (2023) on strategies for improving youth involvement in rice production in Abia State.

Holistic implementation of the identified strategies could go a long way in giving agriculture a new face in Nigeria. Specifically, comprehensive training of the youth could bridge the knowledge and skill gap in rice production. This singular act, if properly and thoroughly done, by engaging experts of international repute, could empower the youth to compete favourably with their contemporaries in other climes. Going further, by leveraging on the high youth population which stands at about 80 million (NBS, 2020), could place Nigeria among the top rice producers in the globe. Enforcement of a robust and technology-driven practical agriculture curriculum at secondary and tertiary school levels could give agriculture a more lasting and perpetuating effect across generations; by enshrining the culture of farming into every student and graduate. Creating a favourable policy and regulatory framework that will promote the sales of only locally produced rice in the Nigerian market could also do wonders by boosting farmers' confidence in agribusiness. Putting a sustainable structure that could address the capital-intensive facilities associated with rice production could go a long way in enhancing youth participation. A properly planned sensitization, highlighting the dividends of rice production and government genuine commitments could boost youth involvement. Easy access to zero or low-interest credit and provision of accessible agricultural land could break the inertia which most youths are often confronted with in settling for agriculture. The introduction of a loan repayment plan that will not put farmers under undue pressure to pay back could be a good strategy. Addressing the problems associated with access to quality and affordable inputs of all kinds, and market-related challenges could arouse genuine interest in the youth. Twumasi et al. (2019), added among others, motivation via giving of merit awards on farmers' day celebrations, as a strategy to enhance youth involvement in agriculture.

**Table 4: Strategies to improve the involvement of youth in rice production**

Strategies	Mean ( $\bar{x}$ )	Standard deviation
Adequate and comprehensive training in rice production	2.99*	0.11
Longer repayment terms for agricultural credits	2.93*	0.27
Easy access to zero or low-interest-rate credits	2.95*	0.22
Subsidization of inputs like pesticides, fertilizers etc.	2.94*	0.24
Enforcement of sales of locally produced rice by the government	2.97*	0.16
Enforcement of practical agriculture curriculum in schools	2.99*	0.11
Implementation of a youth-targeted empowerment programme in rice production by the government	2.94*	0.24
Provision of accessible agricultural land	2.95*	0.22
Youth sensitization in rice production	2.96*	0.19
Establishment of functional linkage between farmers and buyers	2.95*	0.22
Provision of facilities that support production	2.97*	0.16

Authors' construct, 2023

\*Significant ( $\bar{x} \geq 1.50$ )

## Conclusion

The youth are involved in rice production but are more into activities that are less technical and less capital-involving. Sex and level of education were the factors that significantly influenced their involvement (though with negative t-values). Their activities in rice production were constrained mainly by issues around finance, policy, input, climate change, pest and disease, land, labour, wrong perception, and post-harvest loss. According to Oboada et al. (2015), youth restiveness is more common among male folks who are school drop-out and unemployed. Hence, if rice production must be adopted as a panacea for youth restiveness, the government, non-governmental organisations and private individuals who are interested in the youth, must put up a well-thought-out plan on how to attract this class of youths into rice production. The number of extension agent visits to farmers should be increased to at least, once a month to allow for more meaningful contacts in a year that could translate to agricultural development. Generally, the government should make rice production captivating to all by eliminating the associated constraints.



### *The study's limitations and future research directions*

The study did not collect data on youth restiveness in the area, submissions on youth restiveness were based on secondary data. Hence, future research could consider incorporating youth restiveness primary data. Also, the scope of future research can be increased to cover more areas and respondents.

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### **Declaration of Interest**

The authors declare no conflict of interest of any form.

### **Funding Information**

The authors funded the study