(KEJAANS)

KEBBI JOURNAL OF AGRICULTURE AND NATURAL SCIENCES

September, 2025, Vol. 1, issue 2

CONTACT:
The Editor-in-Chief,
Kebbi Journal of Agriculture and Natural Sciences,
Faculty of Agriculture,
Abdullahi Fodio University of Science and Technology
Aliero,
PMB 1144, Birnin kebbi, Nigeria.
Email: kejaanseditor@ksusta.edu.ng,

ISSN: 1595-5776

KEBBI JOURNAL OF AGRICULTURE AND NATURAL SCIENCES (KEJAANS)

September, 2025; Volume 1, Issue 2

OFFICIAL JOURNAL OF THE

FACULTY OF AGRICULTURE

ABDULLAHI FODIO UNIVERSITY OF SCIENCE AND TECHNOLOGY, ALIERO

ISSN: 1595-5776

About the Journal

This official scientific publication of the Faculty of Agriculture, Abdullahi Fodio University of Science and Technology Aliero, is a non-profit, open access, double-blind peer-reviewed Journal publishing four issues (January, April, July and October) per annum. The Journal is a platform open to collaborations with researchers, authors, institutions, research agencies and private companies related to Agriculture. The Mission of the Journal is to disseminate scientific knowledge through the publication of original research articles, research notes, book reviews, letters to the editor and reviews of Literature, representing a contribution to scientific and technological knowledge in respective areas covered by the Journal. The Kebbi Journal of Agriculture and Natural Sciences seeks to validate and disseminate new knowledge, making it public in order to strengthen the human capacity, constitute a link in the scientific community to the society and encouraging the expansion of University and academic researches.

Scope of Kebbi Journal of Agriculture and Natural Sciences (KEJAANS)

The Kebbi Journal of Agriculture and Natural Sciences has the sole aim of providing an intellectual platform and ideas for scholars, by promoting interdisciplinary studies related to agriculture and natural science through publishing the latest scientific research findings that are of direct policy implications and beneficial to the research community. Consequently, the journal covers all aspects of Crop Science, Animal Science, Agricultural Economics, Agricultural Extension and Rural Development, Food Science, Fisheries and Aquaculture, Biotechnology, Soil Science and Agricultural Engineering, Forestry and Environment, Wildlife, Agricultural Education, Agro-allied Industries as well as all Natural Science researches related to Agriculture.

KEBBI JOURNAL OF AGRICULTURE AND NATURAL SCIENCES (KEJAANS)
September, 2025: Volume 1, Issue 2 : 374-383
p-ISSN: 1595-5776

ASSESSMENT OF CONSTRAINTS FACED BY YOUTHS IN RICE VALUE ADDITION ACTIVITIES IN KEBBI STATE, NIGERIA

***[1]Ibrahim, S. *[1]Tijani, H. O., [2]Farinde, A. J., [1]U. S. Hassan, [1]S. Umar, and [1]Nasiru, S**

[1]Department of Agricultural Economics and Extension, Faculty of Agriculture, Abdullahi Fodio University of Science and Technology, Aliero, Nigeria
[2]Department of Agricultural Extension and Rural Development, Faculty of Agriculture, Obafemi Awolowo University, Ile-Ife, Nigeria

Corresponding author: +2348033646611; sanisenchi2014@gmail.com.

ABSTRACT

Youths play essential roles in producing and distributing rice as farmers and labourers face numerous constraints in rice value-addition activities. The study assessed the constraints to youth involvement in rice production, processing, and consumption. The study also identified the respondents' socio-economic characteristics, examined the constraints faced by respondents, and identified the coping strategies used to remove the constraints. A multistage sampling technique was used to select respondents for the study. Data was analysed using descriptive. Inferential statistics such as regression was used to test the hypothesis. The mean age of the respondents was 27.49±4.53, and the majority were males. The majority (67.3%) were married, with 14.67±2.53 mean years of experience in value addition, and almost all (90.9%) were literate in both Western and Quranic education. The mean household size was 6±2.20, the number of wives was 1±0.35, the mean farm size was 1.79±0.92, and the mean annual income was ₦ 206,066.50-1,336,333.00. The constraints faced by the youth `were barriers to entry into rice value addition activities, inadequate irrigation facilities (M=3.418), inadequate modern and affordable processing facilities (M=3.226), addition to the extra cost of production (M= 3.202), insufficient institutional support (i.e., credit) was identified as one of the constraints faced by the respondents; the majority (88.2) faced severe constraints. The result of the regression coefficient (β) shows that total perceived factors (β=0.203; p≤0.01), total constraints (β=0.388; p≤0.01), annual income (β=0.47; p≤0.01), and household (β=0.171; p≤0.01) were significant with constraints faced by the youth in rice value addition activities with a value of R^2 =0.31. Conclusively, youth were severely constrained in rice value addition activities; it was recommended that government and non-governmental organisations remove all barriers to entry into rice value addition activities, and so, that it will accommodate more youth in rice value addition activities in Nigeria.

Keywords**:** Constraints, Youth, Rice value, addition, Kebbi State

Introduction

Youths are critical players in rice value-addition activities spanning production, processing, marketing, and utilisation. Their activities are noticeable, ranging from tilling the soil (land preparation), planting, fertiliser application, weeding, harvesting, threshing, winnowing, processing of paddy, and

marketing of rice to the final consumer. Nigeria's youth play their role in the rice value chain as labourers working on their parents' farms or as rice field owners. Some youths serve as middlemen, brokers, retailers, and rice food vendors. Kebbi State youth are not excluded from this, as all rice value chain activities can be seen. Kebbi state is one of the states in Nigeria that are the primary producers of rice. The people of the state consume rice in different forms.

Consequent to the above, youths faced a lot of constraints generally in agriculture, ranging from poor access to credit, inadequate extension service, lack of improved seeds, and high cost of inputs such as fertiliser and herbicides, among others Martinson *et al.* (2019; ElDidi *et al.* (2020); and Saugat, Pankaj, and Stephen (2021). If these constraints are adequately removed, rice value chain activities have the potential to provide decent employment to the youths. A lot has been done concerning youth participation in agriculture. Most studies were done in countries with smaller sample sizes, limiting the findings' generalisations to other parts or regions. The only research close to this is Simbiat *et al.* (2021) and Jessie (2020), but the two studies did not look at youth issues and, subsequently, the constraints they faced in rice value addition activities. Assessing the restrictions on youths' participation in rice value-addition activities has become holy to guiding government policy regarding youth employment and empowerment. The youths are the future farmers, and their interest in farming must be sustained. Nigeria's dream of self-sufficiency in rice can only be actualised when the critical segment of the society is given reasonable consideration. To this end, this study is designed to address issues from factors critical to youth involvement in rice value addition. Specifically, the objectives were to describe the socio-economic characteristics of the youths in the study area; examine constraints faced by the youths in the study area and identify the coping strategies the youths employ to combat the constraints in the study area.

Methodology

The study was conducted in Kebbi State, Nigeria. The target population was comprised of youth involved in rice value-addition activities. The state is one of the rice-producing states in Nigeria. A multistage sampling technique was employed to select respondents for the study. The state is divided into four agricultural Zones: Argungu Zone I, Bunza Zone II, Zuru Zone III, and Yauri Zone IV, respectively. In the first stage, two zones, Argungu and Bunza Zones, were randomly selected, respectively. In the second stage, two Local Government Areas were randomly selected from these Zones: Argungu and Birnin Kebbi in Zone I and Suru and Bunza in Zone II. In the third stage, four rural communities were randomly selected from each LGA, making up eight LGAs. The communities selected are Natsini, Kamfani, Matan Fada, and Gotomo in Argungu LGA. In Birnin Kebbi, the LGA, Zauro, Makera, Gulumbe, and Harasawa were selected. While in Bunza LGA, Raha, Tungar Dan-Nufe, and Maidahini were selected. While in Suru LGA, Zagga, Aljannare, Kwasara, and Kende communities were selected. In the final stage, Slovin's formula was used to calculate the sample size of 156 respondents. Slovin's formula is $n \div (1+Ne^2)$, where n= number of samples, N= population size, and e= error tolerance (significance level). Therefore, $256 \div (1+256 \times 0.05^2) = 156$ respondents. Data were analysed using descriptive statistics such as mean scores, percentages, tables, charts, and frequency distribution. Inferential statistics such as multiple regression analysis was used to determine the relationship between

respondents' socio-economic characteristics and the constraints faced in rice value-addition activities.

Variables like constraints were measured on a Likert scale of 0 -3, such as Very much (3), Much (2), Less (1), and not at all (0). The total mean score for each constraint was calculated as a preference. With Scores of 3, 2, 1, and 0, respectively. The coping strategy was also measured on a scale of 1- 4. Where very effective (4), moderately effective (3), effective (2), fairly effective (1), and not effective (0). Coping strategies with mean scores equal to or greater than 1.972) were considered effective. (Ibrahim, 2023).

Results and Discussion

Socio-economic characteristics of youth in rice Value addition activities

Many (38.6%) of the youth were between the ages of 28 and 31, with an average of 27.49±4.53 years. It implies that the population is youthful, agile, willing to learn, and can take risks. Sixty-one per cent of the respondents were males. It indicates that male folk have dominated rice value-addition activities in the study area. The findings agree with (Ibrahim, 2018), who found that males have dominated cattle-rearing activities, indicating that males have more dominance in agriculture. It may be because farming is still considered an occupation for men in rural areas as a livelihood. The study also gives credence to Agboola *et al.* (2015) on vegetable farming, who submitted that more males are involved in vegetable farming than their female counterparts because it requires time and high energy. Rice value-addition activities also share similar characteristics. The study is also in harmony with Abidogun, *et al.*, (2019), who noted that gender inequality is noticed in Nigeria's agricultural sector, constituting a significant bottleneck to agricultural development and sustainable livelihood in rural areas. The majority (67.3%) of the respondents were married, which implies that married youths were more involved in rice value-addition activities. The findings also agree with Kimaro and Towo (2015), who posited that married farmers are likely to be pressured to produce more farm produce for family consumption and commercialisation. It is also in tandem with Ibrahim's (2018) findings that farm succession planning and retirement are easier among married farmers. Many (68.6%) of the respondents have equal to or greater than 14 years of farming experience, with a mean of 14.67±2.53 years of farming experience. The implication is that the youth have more experience in rice value addition activities, which could drive their involvement in rice value addition activities in the study area. The findings gave credence to Ibrahim (2018), who contended that farming experience influences farm succession planning.

Also, many (38.6%) of the respondents have attained up to the post-secondary level of education. It showed why the respondents were determined despite the constraints they faced. These findings agree with the conclusions from Ibrahim (2018), who argued that possession of education is why cattle farmers in Kebbi state had identified a successor for their farms. A proportion (73.2%) of the respondents have 2 -7 household members. The result agrees with Ibrahim (2018), who maintained that larger households are due to the value attached to children, and the larger the household size the person has, the higher their status in the community. It contradicts the reports of the National Bureau of Statistics (2016), which state that the average household size is 5.9 in rural areas. And it also agrees with Glover (2013), who posited that the magnitude of agricultural production has been found to have a direct relationship. Thus, the larger the household size, the more agricultural

production. Nearly all (99.3%) respondents have only one wife, with a mean of 1± and a standard deviation of 0.35. It implies that the respondents are embracing a modern way of life. Forty-five respondents have less than or equal to one hectare of land, with a mean of 1.79± and a standard deviation of 0.92. It implies that respondents are smallholder farmers in the study area.

Table 1: Distribution of respondents according to their socio-economic characteristics

Variables	Frequency	Percentage	Mean	Std. Deviation
Age			**27.49**	**4.53**
≤18.0	3	2.0		
19.00- 22.50	16	10.5		
22.51- 27.00	59	38.6		
28.00- 31.50	42	27.5		
≥31.51	33	21.4		
Sex				
Male	94	61.4		
Female	59	38.6		
Marital status				
Married	103	67.3		
Single	8	5.2		
Widow/widower	30	19.6		
Divorced	12	7.9		
Years of experience			**14.67**	**2.53**
≤5.0	1	0.7		
6.00- 13.00	47	30.7		
≥14.00	105	68.6		
Level of education				
Non	19	12.6		
Primary	17	11.2		
Secondary	43	28.2		
Post-secondary	53	34.6		
Quranic	21	13.4		
Household size			**6.33**	**2.20**
≤1.00	1	0.7		
2.00- 7.50	112	73.2		
≥7.51- 14.00	40	26.1		
Number of wives			**1.11**	**0.34**
≤00	1	0.7		
≥0.68	152	99.3		
Farm size			**1.79**	**0.92**
≤1.00	70	45.8		
2.00- 2.67	54	35.3		
2.68- 4.33	27	17.6		
≥4.34	2	1.3		

Source**:** Field survey, 2021

KEBBI JOURNAL OF AGRICULTURE AND NATURAL SCIENCES (KEJAANS)
September, 2025: Volume 1, Issue 2 : 374-383
p-ISSN: 1595-5776

The annual income of respondents

From Fig. 1, it can be inferred that 78.4% of the respondents fall between incomes of ₦206,666.50 and 1, 336, 333.00. The finding is in tandem with the finding of Filusi *et al.* (2022), who reported a similar finding. The implication is that most of the youths are low-income earners. This is an indication that the youth are highly constrained. This finding gave credence to (Tau, 2024 Etale & Bailey, 2021; Kibirige *et al.*, 2017), who posit youth face a lot of constraints in agriculture, ranging from lack of access to capital and land.

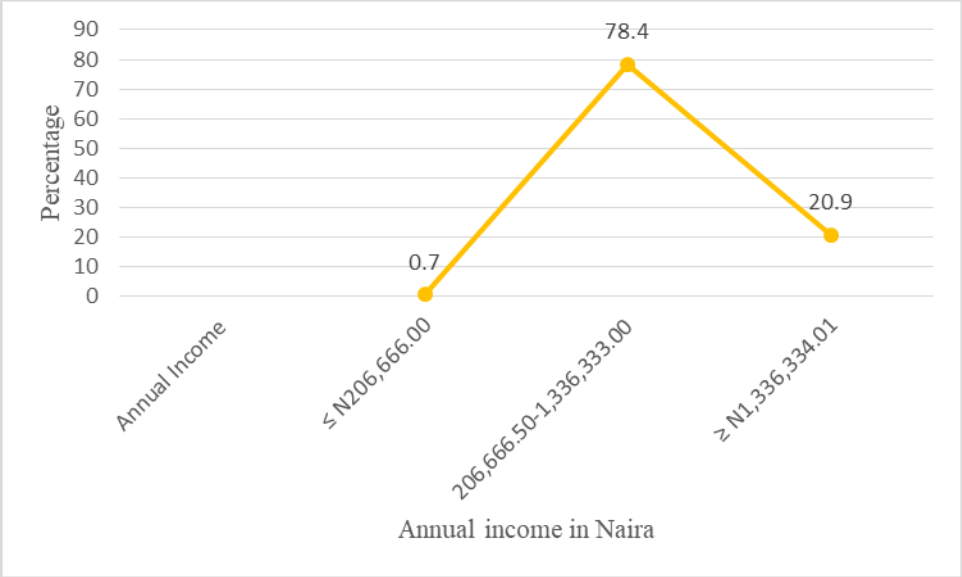

Figure 1: Distribution of respondents according to annual income from rice value-addition activities

Constraints faced by the respondents in rice value-addition activities

It can be inferred from Table 2 that the respondents perceived all the constraints as major constraints in the study area. Some of these major constraints as indicated by the respondents were ranked in order of severity such as: barriers to entry into rice processing industry (M=3.503), inadequate irrigation facilities (M=3.418); inadequate modern and affordable processing facilities (M=3.226), addition to extra cost of production (M= 3.202), inadequate institutional support (i.e. credit) (M=3.192); poor implementation of government policy (M=3.139); lack of timely access to improved seeds and other inputs (M=3.091); inadequate innovative rice processing techniques (M=3.091); inadequate storage facilities (M=3.071); problem of poor milling equipment (M=3.071); inadequate knowledge of post-harvest handling techniques (M=3.052);inadequate farmland for rice cultivation (M=3.039); high overhead cost due unstable power supply (M=3.032); problem of appropriate harvesting techniques (M=2.925); poor access to market (M=2.732); farmers/herders conflict (M=2.692); poor access to loans/financial capacity of rice traders (M=2.686); high cost of transportation (M=2.575); millers and processor lack high milling capacity milling machines (M=2.529); and poor access to information on prices (M=2.104). It can, therefore, be deduced that barriers to entry into the rice processing

industry are inadequate irrigation facilities, inadequate modern and affordable processing facilities, addition to the extra cost of production, inadequate institutional support, poor implementation of government policies, lack of timely access to improved seeds and other inputs and so on will always keep rice value addition activities unattractive to the youth and hence affecting rice supply in the country.

Table 2: Distribution and ranking of major constraints faced by respondents in rice value addition activities

Constraints	**Mean score**	**Rank**
Barriers to entry into the rice processing industry	3.503	1st
Inadequate irrigation facilities	3.418	2nd
Inadequate modern and affordable processing facilities	3.226	3rd
In addition to the extra cost of production	3.202	4th
Inadequate institutional support (i.e., credit)	3.192	5th
Poor implementation of government policy	3.139	6th
Lack of timely access to improved seeds and other inputs	3.091	7th
Inadequate innovative rice processing techniques	3.091	7th
Inadequate storage facilities	3.071	8th
The problem of poor milling equipment	3.071	8th
Inadequate knowledge of post-harvest handling techniques	3.052	10th
Inadequate farmland for rice cultivation	3.039	11th
High overhead cost due to unstable power supply	3.032	12th
The problem of appropriate harvesting techniques	2.925	13th
Poor access to the market	2.732	14th
Farmers/herders conflict	2.692	15th
Poor access to loans/ financial capacity of rice traders	2.686	16th
High cost of transportation	2.575	17th
Millers and processors lack high-capacity milling machines	2.529	18th
Poor access to information on prices	2.104	19th

Source**:** Field survey, 2021, Grand mean: 3.2397

The overall level of constraints faced by the respondents in their involvement in rice value-addition activities

Fig 4 showed that most (88.2%) respondents indicated they were severely constrained. In contrast, 11.1 per cent indicated that they are much more severely constrained, and only a few 0.7 per cent indicated that they are less severely constrained. The implication is that the youth are severely constrained as there is a need for assistance.

KEBBI JOURNAL OF AGRICULTURE AND NATURAL SCIENCES (KEJAANS)
September, 2025: Volume 1, Issue 2 : 374-383
p-ISSN: 1595-5776

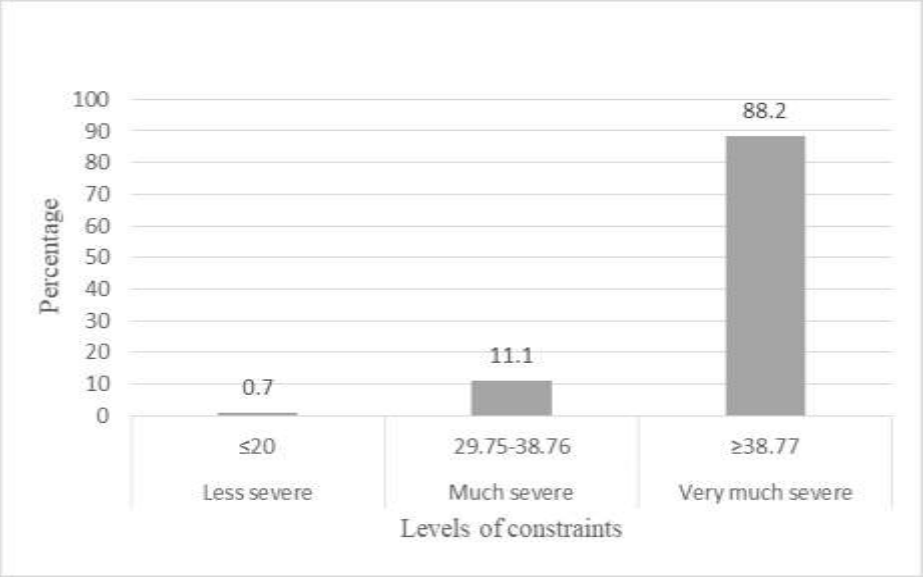

Figure 4: Distribution of respondents according to levels of constraints faced

Coping strategies employed by the respondents to combat the constraints

It can be deduced from Table 3 that all five (5) coping strategies were perceived and ranked in order of effectiveness. Some of the coping strategies, as indicated by the respondents, were stored in local rhombus (M=4.000); joining cooperative societies to source for funds, ranked second (M=3.836); borrowing from families and friends (M=3.000), ranked third; selling in bulk at cheaper prices (M=2.702); wan ranked fourth; and use of contact farmers (M=1.972) was least effective. It implied that most young farmers store their rice paddy in local rhombus at low prices. Join cooperative societies to source funds was ranked second, meaning that the youths in the study area used cooperative societies as alternative sources of funds. Borrowing from families and friends is another coping strategy employed to combat the constraints in the study area.

Table 3: Distribution and ranking of respondents based on coping strategies employed to combat the constraints

Coping strategies	Mean score	Rank
Storing in local rhombus	4.000	1st
Join cooperative societies to source for funds	3.836	2nd
Borrowing from families and friends	3.000	3rd
Selling in bulk at cheaper prices	2.702	4th
Use of contact farmers	1.9723	5th
Loans from commercial banks	1.000	6th
Hiring of machines/ equipment	1.000	6th
Selling through the Rice Farmers Association of Nigeria (RIFAN)	0.565	7th
Grants from non-government organisations (NGOs)	0.065	8th
Government incentives and subsidies	0.000	9th

Source**:** Field survey, 2021

KEBBI JOURNAL OF AGRICULTURE AND NATURAL SCIENCES (KEJAANS)
September, 2025: Volume 1, Issue 2 : 374-383
p-ISSN: 1595-5776

Multiple regression analysis showing the relationship between respondents' socio-economic characteristics and constraints faced in rice value addition activities

Results in Table 3 show the regression analysis, which revealed the magnitude of change in the level of constraints faced by the respondents in rice value addition activities due to the change in the selected variables by one unit. The result of the regression coefficient (β) shows that total perceived factors (β=0.203; p≤0.01), total constraints (β=0.388; p≤0.01), annual income (β=0.47; p≤0.01), and household (β=0.171; p≤0.01) were significant with constraints faced by the youth in rice value addition activities with a value of R^2 =0.31. It implies that perceived factors, total constraints, annual income, and household size influenced respondents' involvement in rice value-addition activities in the study area.

Table 4: Result of regression analysis showing the relationship between respondents' involvement and some selected socio-economic characteristics

Variable	Regression	(β)	T=value	p-value
Total perceived factors	0.001	0.203	2.508	0.013
Total constraints	9.652	0.388	5.328	0.001
Annual income	0.042	0.47	2.995	0.003
Household size	13129.574	0.171	2.149	0.003

*Significant at 0.01 level
**significant at 0.05 level
R=56, R^2= 0.31, F=5.894
Source**:** Field survey, 2021

Conclusion and Recommendations

The study assessed the constraints faced by youth in rice value-addition activities in Kebbi State, Nigeria. The findings indicate that the youth involved in rice value addition are predominantly male, married, and experienced in farming. Despite their educational attainments and active involvement in agricultural activities, they face significant constraints. These include barriers to entry into the rice processing industry, inadequate irrigation and processing facilities, high production costs, and insufficient institutional support. The constraints severely hinder the productivity and sustainability of their rice value-addition activities. However, the youths employ various coping strategies, such as storing rice paddy in local rhombus, joining cooperative societies for funding, and borrowing from families and friends. While somewhat effective, these strategies highlight the need for more robust support systems.

Recommendations

1. **Improvement of Irrigation Facilities**: Government and private stakeholders should invest in developing and maintaining adequate irrigation systems to ensure year-round rice farming.
2. **Provision of Modern Processing Equipment**: Subsidising modern, affordable rice processing equipment can significantly enhance the efficiency and productivity of rice value-addition activities.
3. **Enhanced Institutional Support**: Establishing more substantial credit facilities and support systems for young farmers can alleviate financial constraints and encourage youth participation in rice value addition.

4. **Effective Policy Implementation**: Government policies should ensure timely access to improved seeds, inputs, and technical support.
5. **Promotion of Cooperative Societies**: Encouraging the formation and strengthening of cooperative societies can provide a collective platform for young farmers to access funds, resources, and market information.
6. **Training and Education**: Continuous training programs on modern farming techniques, post-harvest handling, and value-addition processes can equip the youth with the necessary skills and knowledge.

Policy Implications

1. **Gender Inclusivity**: Policies should address gender inequality in agriculture by promoting inclusivity and providing equal opportunities for males and females in rice value-addition activities.
2. **Support for Smallholder Farmers**: Tailored policies that focus on the unique needs of smallholder farmers can help address the specific challenges they face, thereby enhancing their productivity and livelihoods.
3. **Financial Support Systems**: Creating accessible and flexible financial support systems can enable young farmers to invest in better farming and processing technologies.
4. **Infrastructure Development**: Investing in rural infrastructure, such as roads and power supply, can reduce transportation costs and improve the overall efficiency of rice value-addition activities.

Limitations of the Study

1. **Geographical Scope**: The study is limited to Kebbi State, and the findings may not be generalisable to other regions in Nigeria with different socio-economic and agricultural contexts.
2. **Sample Size**: The study's sample size may not represent the entire youth population involved in rice value addition in Kebbi State.
3. **Self-Reported Data**: The reliance on self-reported data may introduce bias, as respondents might overstate or understate certain constraints and coping strategies.
4. **Temporal Constraints**: The study captures a snapshot of the current constraints and coping strategies, which may change over time due to evolving economic, social, and environmental conditions.

References

Agboola, A. F., Adekunle, I. A. and Ogunjimi, S.I. (2015). Assessment of youth participation in indigenous farm practices of vegetable production in Oyo state, Nigeria. *Journal of Agricultural Extension and Rural Development*, Vol.7 (3), pp. 73-79 DOI:10.587/JAERD2014.0590.

Abidogun, O.G., Olajide, B.R., Amujoyegbe, B.J., Bamire, A.S., Kehinde, A.D. and Gaya, I., 2019. Gender Involvement in Cocoa Farming Activities in South West Nigeria. *Ife Journal of Agriculture*, *31*(1), pp.53-62.

Ankrah Twumasi, M., Jiang, Y., and Owusu Acheampong, M. (2020). Capital and credit constraints in the engagement of youth in Ghanaian agriculture. *Agricultural Finance Review*, *80*(1), 22-37.

ElDidi, H., Bidoli, T., and Ringler, C. (2020). *Agriculture and youth in Nigeria: Aspirations, challenges, constraints, and resilience* (Vol. 1946). Intl Food Policy Res Inst.

Glover, J. (2013). Capital usage in family farm businesses. *Journal of Family Business Management*, *3*(2), 136-162.

Hussaini, A. S., Oladimeji, Y. U., Sanni, S. A., and Abdulrahman, S. (2020). Determinants of rice farmers' investment in value addition and its effect on poverty status in Kebbi State, Nigeria. *Nigerian Journal of Basic and Applied Sciences*, *28*(1), 75-84.

Ibrahim, S. (2018): Determinants of Farm Succession Plan among Aged Cattle Rearers in Kebbi State, Nigeria. An unpublished MSc.

thesis, Obafemi Awolowo University, Ile-Ife, Nigeria. Pp. 79

Ibrahim, S. (2023): Assessment of Academic Performance of in-school Youth involved in Cattle Rearing Activities in Kebbi State, Nigeria. An unpublished Ph.D. Thesis. Department of Agricultural Extension and Rural Development, Faculty of Agriculture, Obafemi Awolowo University, Ile-Ife, Nigeria.

Khanal, S., Dhital, P., and Christian, S. (2021). Farming the future: Youth enthusiasm and transforming Nepal's economy through agriculture. *Journal of Agriculture, Food Systems, and Community Development*, *10*(2), 359-372.

National Bureau of Statistics (2016). National Household Survey report. https://nigerianstat.gov.ng/elibrary/read/476

Sahu, L. K., and Ayub, M. A. (2017). An economic analysis of value addition of paddy into flakes rice in Balodabazar-Bhatapara District of Chhattisgarh. *Indian Journal of Economics and Development*, *13*(2a), 540-542.

Suneetha, W. J., Kumar, J. H., Rao, P., and Prasad, Y. G. (2020). Enhancing Farmer Income through Value Addition to Rice in Khammam District, India. *International Journal of Environment and Climate Change*, *10*(9), 1-7.

Douglas, K., Singh, A. S., & Zvenyika, K. R. (2017). Perceptions of Swaziland's youth towards farming: A case of Manzini region. *Forestry Research and Engineering International Journal*, *1*(3), 83-89.

Geza, W., Ngidi, M., Ojo, T., Adetoro, A. A., Slotow, R., & Mabhaudhi, T. (2021). Youth participation in agriculture: A scoping review. *Sustainability*, *13*(16), 9120.

Etale, L. M., & Amaka, P. T. (2021). The Relationship between Bank Lending to Agricultural Sector and Agricultural Earnings in Nigeria.

Filusi, O. J., Ayinde, J. O., Oladimeji, F. V., & Olorunshola, E. O. (2022). Youth Involvement in Entrepreneurial Activities Along Oil Palm Fruit Processing Value Chain-a Call to Skill Development and Livelihood Sustenance in Nigeria. *Religion*, *8*(10), 13.