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IMPACT OF RURAL-URBAN MIGRATION AMONG YOUTH FARMERS OF SELECTED RURAL AREAS OF KADUNA STATE, NIGERIA

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ABSTRACT

The study examined the impacts of rural-urban migration among youth farmers of selected rural areas of Kaduna state, Nigeria. The study used 80 respondents, sampled from 8 communities across 2 LGAs. Descriptive statistics, correlation and regression analysis were used to analyse the data. Results revealed that the respondents mean age, household size, farm size and farm experience of 32 years, 8.6 persons, 3.46 ha and 13.6 years respectively. Rural youth migration was high (53.80%) and it has impacted on farm income (mean = 3.32), rural poverty (mean = 3.30), low level provision of basic amenities (mean = 3.22) and remittances to their families (mean = 3.13). Increase in economic activities (mean = 3.40), relative peace obtained in the urban areas (mean = 3.19) and reduction of poverty status of the urban residents were some reasons for youth migration. Socio-economic characteristics such as gender (b = 0.941; t = 0.06), age (b = -1.063; t = 0.41), level of education (b = 2.827; t = 0.19), farm experience (b = 1.544; t = 1.17) and annual farm income (-2.623; t = 0.491) were significant variables to the rate of youth migration. Also, significant correlation exists between difference in annual farm income and youth rural-urban migration. The study thus recommended that government needs to put in place policies that can guarantee the farmers with provision of ideal and improved inputs need by the farmers at subsidized rate and made available when needed.

Keywords: Rural-urban migration; agricultural production; youth farmers

INTRODUCTION

Over the years, agriculture has been described as the backbone of the economy of Nigeria in general and the rural sector in particular (Yohanna, 2014). This assertion according to Yohanna (2014) is evident in its ability to generate about 30% of the nation's gross domestic product (GDP) and largest provider of employment to the populace. The author further stated that agriculture and its related activities stands out as the occupation of majority of the rural populace.

For some time, the contribution of agriculture to nation building has continued to decline and this is due to the neglect of the rural areas which has resulted to the migration of the youths (who are potential operators of most of the farms and are domicile in the areas) from the rural areas to the urban areas (Agesa and Kim, 2001). Adewale (2005) defined migration as the movement of people from one geographical area to another, which may be on temporary or permanent basis. Eze (2016) acknowledged that migration is multi-dimensional as it could be rural-urban, urban-rural, urban-urban and rural-rural. The most common amongst the aforementioned is the rural-urban migration which involves the movement of people from the rural areas to the urban areas. In most cases, the movement takes place to meet up with or to enjoy livelihood requirements especially the social amenities and job opportunities that are unavailable in the rural areas (Aworemi *et al.*, 2011). Three categories of reasons have so far been advanced by Aworemi *et al.* (2011) for rural-urban migration. The first amongst them is the need for education and skill acquisition in various vocations, second is the search for job opportunities that are absent in the rural areas coupled with the difficulties associated with agricultural activities, while the third is the drive for social amenities.

Migration as it were, according to Alarima (2018) was initially positively perceived to have released surplus rural labour to the urban industrial sector for well-paying jobs and making remittances to their relatives in the rural areas and such remittances are used for improvement of their well-being. The reverse about rural-urban migration is what is observed today as Agesa and Kim (2001) found that the movement has resulted to shortage of labour and food insecurity as well as rapid population growth of the urban centres thereby creating pressure on the inadequate available urban facilities. In a bid to address these different assumptions, this study was carried out to analyse the impacts of rural-urban migration among youth farmers on selected rural areas of Kaduna state, Nigeria.

METHODLOGY

Area of the Study

Kaduna North and Kaduna South Local Government Areas (LGAs) are both in Kaduna Central Agricultural zone of Kaduna State and they were the areas used for the study. Kaduna South Local Government area is the smallest local government area in Kaduna State as it is known to cover an area of 59.0 km². The Local Government Area is bounded to the North by Kaduna North Local Government Area, to the east and south by Chikun Local Government Area, and to the west by Igabi Local Government Area. There are 13 communities in the Local Government Area with its headquarters at Badikko. Kaduna South LGA has an estimated population of 402,731 (NPC, 2018). In the case of Kaduna North LGA, it covers an area of 72km² and have its headquarters at Doka with an estimated population of 423,580 people (NPC, 2018).

The major spoken language of both LGAs is Hausa while English remains the official language. Many educational institutions are bound in the areas. Kaduna North and Kaduna South LGAs are respectively dominated by the Muslim and Christian communities. Agriculture is the major activity of the people as they are known to be major producers of crops like yam, cotton, ground nut, maize, beans, sorghum, millet and rice. They also involved in animal rearing.

Population, Sampling Procedures and Sampling Size

The population of the study was drawn from the farmers who are domiciled in Kaduna North and Kaduna South LGAs of Kaduna State.

Multi-stage random sampling technique was adopted in drawing the sample for the study. It started with the random selection of Kaduna North and Kaduna South LGAs from Kaduna Central Agricultural Zone of the State (stage one). This was followed by a random selection of four (4) communities from each of the LGAs (stage 2). Communities like Badikko, Barnawa, Kakuri-Gwari and Sabon Gari were randomly selected from Kaduna South LGA. While Malali, Badarawa, Doka and Unguwan Sarki communities were randomly selected from Kaduna North LGA. The third stage involved the random selection of eleven (11) respondents who were heads of households from each of the communities (thus making the number to be eighty (88) respondents. It was however, ensured that the randomly selected heads of households were people who possess the characteristics of adulthood and seemed to have children.

This was however followed by the administration of the research instruments to the respondents through the assistance of trained enumerators. The retrieval of the instruments was also carried out by the trained enumerators. The instruments suitable for analysis were selected and subsequently coded them for analysis. Out of the 88 distributed question instruments, 80 of them (90.91%) were found suitable for the purpose of the research.

Source of Data and Data Collection Instruments

Data were generally sourced from primary source. These data were collected from the respondents with the use of questionnaire (for literate respondents) and interview schedule (for non-illiterate respondents).

Evaluation of Research Instrument

The research instrument was validated using face validity method and test-re-test method for reliability. Face content method involved the use of experts in the field of Agricultural Extension to screen the instrument to be sure that it was able to meet with the objectives of the study. Test-re-test method involved administering the instruments to the respondents in a pilot study. This was done twice in two consecutive months. These produced two different scores which were analyzed and produced a Correlation Coefficient ('r') value of 0.710, thus indicating that the instrument was reliable.

Data Analytical Techniques

Primary data were analyzed using descriptive and inferential statistics. Descriptive statistics include frequency table, percent, mean and standard deviation. They were used to analyze the socio-economic characteristics of the respondents and the rate of migration of the youths from rural to urban areas. Four-point Likert scale was used to analyze the impact of socio-economic impact of rural-urban migration, ascertain the reasons for migration and the strategies to reduce migration of rural youth to urban areas. Likert scale ranged from Strongly Agree (coded 4), Agree (coded 3), Disagree (coded 2) and Strongly Disagree (coded 1). A mean score of 2.50 (obtained as $4 + 3 + 2 + 1 = 10/4 = 2.50$) and above were agreed to; areas

where rural-urban migration has socio-impact on the people of the rural areas, reasons for migration of the people from their rural areas and strategies to reduce migration of people from the rural areas. On the other hand, values less than 2.50 (mean < 2.50) were considered otherwise.

Inferential statistics which involved regression analysis was used to test hypothesis one which states that: Socio-economic characteristics of the respondents have no significant relationship with the rate of rural-urban migration. In the analysis, Linear, Cobb-Douglas, Exponential and Semi-log functions were produced. Out of these, the Linear function was adopted as the lead equation for reasons such as it produced the highest number of significant variables, conformity of the variables to *a priori* expectations and the co-efficient of determination (R^2) value produced which was 57.2% and considered to show the extent to which the explanatory variables have explained the impact of rural-urban migration in the State. (Iyoha and Ekanem, 2002). The implicit form of the equation is expressed below as:

$$Y = a + b_iX_i + e$$

Where; Y = Output (Rate of youth migration from rural to urban areas)
a = Point of intersection
b_i = Coefficients of the independent variables
X_i = Socio-economic variables
e = Error term

Explicitly, the function is expressed as:

$$Y = a + b_1Xi + b_2X_2 + b_3X_3 + b_nX_n + e$$

Where Y = Output (Rural-Urban migration)
Y = Rate of youth rural-urban migration (High = 1; Low = 0)
X_1 = Gender (dummy: male = 1; female = 2)
X_2 = Age of migrants (Years)
X_3 = Marital status (Single, married, divorced and widow(er))
X_4 = Level of education (No formal educ., primary educ., sec. educ. and tertiary education)
X_5 = Household size (No. of persons living and feeding together)
X_6 = Farming experience (Years)
X_7 = Farmers/residents annual farm income range (₦)
X_8 = Estimated farm size (ha)

Product Moment Correlation Coefficient (r) was used to analyze Hypothesis 2. The Correlation Coefficient (r) measures linear association between interval variables (Ajayi, 2005). The value of Product Moment Correlation Coefficient (r) ranges between -1 to +1. A situation where r = +1, implies that there is a perfect positive (linear) relationship between X (migration of youths from rural to urban areas (independent variable)) and Y (difference in annual farm income earned by rural households (dependent variable)). In this case, a unit increase in X would always results to a constant increase in Y. Contrarily, when r = -1, is an indication that there is a perfect negative functional relationship between variables X and Y, and it is such that, a unit increase in X leads to a constant decrease in Y. Again, when "r" =

0, it means there is no relationship at all between X and Y. The formular for computation of Product Moment Correlation Coefficient is shown below:

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{[\,n\sum X2 - (\sum X)^2]\,[n\sum Y2 - (\sum Y)^2]}}$$

Decision rule: The null hypothesis is rejected and the alternative accepted when there is statistical significance of the parameter estimate (ie values of standard error is less than the half of the value of the parameter estimate).

RESULTS AND DISCUSSION

Socioeconomic Characteristics of the Respondents

The respondents' socio-economic characteristics are shown in Table 1. Results revealed that majority (71.30%) of the respondents were males, while few of them (28.70%) were females. The result implies that the distribution of the respondents was not gender friendly since it was skewed towards the males. The result further revealed that most (31.30%) of the respondents were between the age bracket of 30 – 34 years. The average age was 32.38 years. The results implies that the respondents were adults and going by rural settings, they are likely to have children that could be allowed to enjoy some level of independence (that can involve migrating from the rural to urban areas). The results is in agreement with the findings of Alakpa and Onemolease (2014) who reported that most farmers, especially those in the rural areas are in their active age group and that they are capable of having grown up children that are capable of independent lives and could migrate from one place to another.

Half (50%) of the respondents were married. Being married is an indication that they have responsibility and possibly dependents to cater for in their households. The study further revealed that most (86.30%) of the respondents were Muslims. The dominance of Muslims in the area could be ascribed to the fact that it is the religion mostly welcomed and practiced by people in the area. The results on gender, marital status and religion agrees with Okwuokenye and Petu-Ibikunle (2021) who found out in the study carried out in same area, the dominance of male farmers who are described as responsible is because they are married and Muslims in religion. The respondent's level of education revealed that most (57.50%) of them had secondary education and largely (56.30%) engages into farming occupation. The results implies that the respondents are literates and so can be favourably disposed to the use of modern farm technologies. The dominance of the respondents in farming could be a result of the fact that it is the main occupation within their reach. Results on educational level is in conformity with findings of Alarima (2018) who reported secondary education attainment by farmers domiciled in the rural areas. Okwuokenye (2020) also opined that such educational level helps to improve farmers capacity in terms of application of improved farm innovations thereby increasing their farm yield.

The household size had an average of 9 persons with 26.30% of the respondents having between 4 – 6 persons. Furthermore, 11.30% and 62.50%, respectively had less than 4 persons and more than 6 persons in their households. In line with the fraction of the respondents with more than 6 persons, it could be said that the respondents had a household size that could be used as a source of farm labour. The result is in consonance with Alarima

(2018) who reported similar household size amongst rural households. Majority (35%) of the respondents had between 14 – 18 years of farming experience. The average farming experience was 13.06 years. This is an indication that the rural farmers have more than a decade experience in farming. In terms of farm size, the average was 3.46 ha and majority (61.25%) of the respondents had between 2 and 4 ha.

Table 1: Socio–economic characteristics of the respondents (n = 80)

Variables	Categories	Frequency	Percentage	Mean
Gender	Male	57	71.30	
	Female	23	28.70	
Age	< 15	2	2.50	
	15 – 19	4	5.00	
	20 – 24	5	6.30	
	25 – 29	11	13.80	
	30 – 34	25	31.30	
	35 – 39	19	23.80	
	40 and above	14	17.50	32.38
Marital Status	Single	29	36.3	
	Married	40	50.0	
	Divorced	09	11.3	
	Widow(er)	02	2.5	
Level of Education	No formal Education.	16	20.00	
	Primary Education	03	3.80	
	Secondary Education	46	57.50	
	Tertiary Education	15	18.80	
Occupation	Farmer	45	56.3	
	Civil servant	9	11.3	
	Trader	3	3.8	
Household size	< 3	9	11.30	
	4 – 6	21	26.30	
	7 – 9	14	17.50	
	10 – 12	16	20.00	
	13 and above	20	25.00	9
Farm size (ha)	< 2	13	16.25	
	2 – 4	49	61.25	
	5 – 7	15	18.75	
	8 and above	3	3.75	3.46 ha
Farm experience	≤ 3	06	7.50	
	4 – 8	11	13.80	
	9 – 13	21	26.30	
	14 – 18	28	35.00	
	19 and above	14	17.50	13.06
Religion	Islam	69	86.30	
	Christianity	10	12.50	
	Traditional	01	1.30	

The results implies that rural farmers are small-scale farmers. Rural farmers are described as such because they farm on land areas usually less than 4 ha. This result was confirmed by the findings of Okwuokenye and Petu-Ibikunle (2021) who found that rural farmers are well experienced in their farming activities and that most rural farmers are small-scale in nature because their farms are most times less than 4 ha.

Impact of Youth Rural-urban Migration

Rural-urban migration of youths has really impacted on people in the rural areas in particular and the community in general. Table 2 below shows the areas of impact to include: decline in farm income (mean = 3.32), rural poverty (mean = 3.30), low level of provision of basic amenities in the areas (mean = 3.22) and decline in agricultural production (mean = 3.16). They ranked 1st, 2nd, 3rd and 4th major impacts of youth rural-urban migration, respectively. Other impacts were remittances of cash to relations and for community development, inflation in economy, decline in job opportunities, under-development of the rural areas and high rate of criminal activities in the rural areas. The above-mentioned factors had means of 3.13, 3.06, 3.01, 2.99, 2.74, and 2.72. They ranked the 5th, 6th, 7th, 8th, 9th and 10th, respectively.

Table 2: Socio-economic impact of rural-urban migration

Socio-impact	Mean	SD	Ranking
- Decline in farm income	3.32	0.8	1st
- Rural poverty	3.30	0.8	2nd
- Low level provision of basic amenities in the area	3.22	0.7	3rd
- Decline in agricultural production	3.16	0.8	4th
- Remittances of cash to relations and for rural development	3.13	0.8	5th
- Inflation in economy	3.06	0.8	6th
- Decline in job opportunities	3.01	0.8	7th
- Under population of the rural areas	2.99	0.8	8th
- Under development of the rural areas	2.74	1.1	9th
- High rate of criminal activities	2.72	0.6	10th
- Frustration of development efforts by developers	2.34	0.8	11th

** Agree (mean ≥ 2.50)*

Results on cash remittance to relations and community development was confirmed by the findings of Ajaero and Onokala (2013) who stated that remittance made by people who have drifted to the cities or urban areas is a major source of development for the rural populace and critical source for the sustenance of receiving households and nation building. The findings of Yohanna (2014) agrees with this study on low level provision of basic amenities, decline in agricultural production, decline in farm income and rural poverty in the rural areas. The researcher stated that the inequality between rural-urban areas in the distribution of basic amenities is basically responsible for youth rural-urban migration in Nigeria. The researcher stressed further by stating that low level of agricultural productivity results to decline in farm income, and rural poverty which then led to low standard of living are amongst other factors creating a push to migration of youths from rural to urban areas. Similarly, drifts of youths from rural to urban areas has led to over-crowded cities and over-stretch of few available facilities as well as created an increase in crime rate in the cities.

Further, decline in job opportunities in the rural areas may have resulted from the concentration of industries, government offices and organizations in the urban areas. The findings of Chikaire *et al.* (2012) are also in conformity with of the results of this study on under population and under-development of the rural areas. They observed that rural population is gradually shrinking due to migration of youths from rural to urban areas, which has only left behind children and aged to constitute labour force of the rural areas.

Rate of Youth Rural-urban Migration

Table 3 shows the rate at which youths in the study area have migrated to the urban areas. The results revealed that majority (53.80%) of the respondents indicated that the rate of youth rural-urban migration was high. Other respondents in the proportion of 28.7% and 17.5% indicated that the rate of rural-urban migration was of very high and average, respectively. The results implies that the rate at which youth migrate from rural to urban areas is high and this will consequently cause shortage of manpower in the rural areas and overcrowd of the urban areas. This result is supported by the findings of Chikaire *et al.* (2012) who noted that there has been rapid population growth in cities due to rising drift of youths from the rural to urban areas.

Table 3: Determination of the rate of youth rural-urban migration

Rate of migration	Frequency	Percent
Very high	23	28.70
High	43	53.80
Average	14	17.50

Reasons for Youth Rural-urban Migration

Some of the reasons agreed for youth rural-urban migration are shown in Table 4 below. Factors with mean of 2.50 and above were agreed to be the reasons for youth migration from the rural to urban areas. Increase in economic activities in the urban areas (mean = 3.40) and relative peace obtained in the urban areas (mean = 3.19) ranked as the 1st and 2nd important reasons for rural-urban migration of the youths. These two reasons were in consonance with the findings of Eze (2016) who identified poor income generating opportunities, escaping from conflict and insecurity of life as some of the push factors responsible for migration of youths from rural to urban areas.

Table 4: Reasons for youth rural-urban migration

Reasons for migration	Mean	SD	Ranking
- Increase in economic activities in the urban areas	3.40	0.6	1st
- Relative peace obtained in urban areas	3.19	0.7	2nd
- Reduction in poverty status of the rural people	3.15	0.8	3rd
- Increase in job opportunities in the urban areas	3.04	0.9	4th
- Social amenities / infrastructure in the urban areas	2.98	0.8	5th
- Improved living condition of the urban dwellers	2.65	0.7	6th
- Increase in white-collar jobs	2.46	1.0	7th

Agreed ≥ 2.50

In addition, reduction in poverty status of the urban people, increase in job opportunities in the urban areas, presence of social amenities/infrastructure in the urban areas and improved living condition of the urban dwellers had means of 3.15, 3.04, 2.98 and 2.65 and ranked 3rd, 4th, 5th and 6th reasons for rural-urban migration of youths, respectively. The findings of Danejo *et al.* (2015) advanced that youth migration from rural to urban areas was due to lack of social amenities and employment opportunities which are more available in the urban areas, together with the people's engagement in one form of business or the other for the purpose of generating income to cushion their poverty status thereby improving their living standards.

Strategies to Reduce Rural-urban Migration of Youths

Table 5 shows the strategies that could help to reduce rural-urban migration of youths. Strategies with values of 2.50 and above were agreed to be able to reduce the migration of youths. Strategies like provision of inputs to farmers (mean = 3.20), making agricultural extension services available to the farmers (mean = 3.20) and provision of social amenities/infrastructure (mean = 3.20) ranked 1st and rated by the respondents as the first line of strategies that could be used to reduce rural-urban migration.

Table 5: Strategies on how to reduce migration

Strategies	Mean	SD	Ranking
- Provision of farm inputs to farmers	3.20	0.8	1st
- Making agricultural extension services available to the farmers	3.20	0.7	1st
- Provision of social amenities / infrastructure in the rural areas	3.20	0.8	1st
- Creating job opportunities in the rural areas	3.16	0.7	2nd
- Making agriculture an interesting or lucrative business	3.11	0.8	3rd
- Subsidy of farm inputs	3.03	0.7	4th
- Provision of agricultural storage facilities	2.79	0.8	5th
- Making farmland available for farming	2.78	1.0	6th

** Agree (mean ≥ 2.50)*

Creating job opportunities in the area (mean = 3.16) and making agriculture an interesting or lucrative business (mean = 3.11) respectively ranked 2nd and 3rd amongst the agreed strategies to curb youth rural-urban migration. Provision of subsidy on farm inputs (mean = 3.03), provision of agricultural storage facilities (mean = 2.79) and making farmland available for farming (mean = 2.78) respectively ranked the 4th, 5th and 6th to other agreed strategies that could help reduce to rural-urban migration.

The aforementioned are all agriculture-related and agreed by the respondents to be strategies that could help to reduce rural-urban migration of youths. The results concurred with the findings of Alarima (2018) who stated that provision of farm inputs at subsidized prices and tax incentives to agro-based industries would go a long way in helping to make agriculture an interesting business, boost farmers yield and increase farm income. Provision of social amenities/infrastructure and creating job opportunities in the area are in line with the recommendations of Alarima (2018) which advanced that government should do her best to encourage business and potential businessmen through provision of incentives that could help to grow businesses in the rural areas and encourage the engagement of the youths in

such businesses and as well provide social amenities in the needed quantities in the rural areas. Leaving up to this expectation will drastically reduce the youth's tendency to migrate from the rural to urban areas.

Relationship between Socio-economic Characteristics and Rate of Rural-urban Migration

The relationship between the socio-economic characteristics of the respondents and rate of rural-urban migration was established using Logit regression (Table 7). This analyzes hypothesis one which states thus: Socio-economic characteristics of the respondents have no significant relationship with the rate of rural-urban migration. The socio-economic variables were eight in number and they included age, gender, marital status, level of education, household size, farm size, farm experience and annual farm income. These variables jointly accounted for 57.2% variation on the rate of migration of youths from the rural to urban areas. Five (gender, age, level of education, farming experience and annual farm income) out of the eight socio-economic variables were significant, though at different levels of significance.

Gender of the respondents had a beta coefficient of 0.941 and t-value of 0.06. The relationship between gender and rate of youth rural-urban migration was positive and significant at the 1%. Since male constituted the majority (71.30%), it suffice to say that the increase in number of males in the rural areas will result to higher rate of migration of the youths to the urban areas. Such migration is anchored on the premise that the males are very likely to be the bread winners of their families, hence the need to migrate to urban areas in order to get better and improved sources of livelihood to cater for members of their households. The results is in agreement with the findings of Ajero *et al.* (2013) who identified males to be more involved than their female counterparts in rural-urban migration. The odd ratio was 3.01 which means that the increase in the number of males in the rural areas will lead to three times the rate of migration that will take place from the rural to urban areas.

Age of the respondents had a better coefficient and t-value of -1.063 and 0.14, respectively, with rate of youth rural-urban migration. The relationship was negative and significant at the 5%. By implication, the older people will have less desire to migrate from their rural to urban areas and vice versa. This may not be unconnected to the less desire of the old to take risk that would ordinarily be attempted or welcomed by the relatively younger ones in the same area. This result was confirmed by the findings of Mutandwa *et al.* (2011) who reported an inverse relationship between age of residents and desire to migrate from the rural to urban areas. The odd ratio was 2.37 which implies that having younger people in the rural areas will lead to 2 times the rate at which the people will migrate from the rural to urban areas. Relationship of respondents' level of education ($b = 2.827$; $t = 0.19$) with the rate of rural-urban migration was positive and significant at the 5%. The relationship implies that the more educated, the higher would be the youth's rate of migration to urban areas. Findings of Alarima (2018) agreed with results of this study as the researcher expressed that educational level influences rural people's decision to migrate to urban areas. The odd ratio was 3.19 which means that improvement in the educational status of the rural youths will result to as much as 3 times the rate at which they would want to migrate from the rural to urban areas.

Relationship of farming experience of the respondents with rate of migration of youths from the rural to urban areas was positive and significant at the 5%. It had a beta coefficient of 1.544 and t-value of 1.17. The results implies that respondents with more farming

experience will engage in higher rate of migration from rural to urban areas. Through personal communication, the respondents noted the positive relationship is attributed to the negative feeling of the rural people towards agricultural production in terms of how slow it yields income to the people. The negative feeling was asserted by Yohanna (2014) to be in line with issues regarding absence of industries and companies and boredom in agriculture all of which result to deterioration of the rural economy, chronic poverty, and food insecurity. The odd ratio was 2.12, thus, implying that more farm experience of respondents will lead to 2 times the rate at which youth migration will take place from rural to urban areas. Annual farm income of the respondents had a negative relationship with rate of migration to urban areas. The relationship had a bate coefficient of -2.623 and t-value of 0.491 and was significant at the 1%. The implication of the result is that declining level of farm income will result to higher rate of migration of the youths from rural to urban areas. This result agrees with the findings of Alarima (2018) which asserted that the loss of manpower necessarily needed for agricultural activities and production will lead to steady reduction of farm income and if not checked will bring about chronic poverty and food insecurity in the shortest possible time. The odd ratio was 3.73 which implies that the farmers annual farm income will drop as much as approximately 4 times as rate of migration increases.

Table 6: Relationship between socio-economic characteristics and rate of rural-urban migration

Variables	Coefficients	SE	t-value	p-value	Odds ratio
Constant	21.447	8.002	1.54	0.113	
Gender	0.941**	0.214	0.06	0.023	3.01
Age	-1.063*	-0.032	0.41	0.035	2.37
Marital status	0.573	0.314	1.30	0.791	1.86
Level of educ.	2.827*	1.005	0.19	0.095	3.19
Household size	2.192	1.873	1.26	0.009	2.43
Farming experience	1.544*	0.410	1.17	0.0418	2.12
Annual farm income	-2.623**	-0.118	0.491	0.082	3.73
Farm size	1.364	0.991	1.40	0.613	0.28

*** Significant at the 1% level; *Significant at the 5% level*
Chi-Square < 41.36; df = 8; p < 0.05
Pseudo Coefficient of determination = 0.572 (57.2)

Relationship between Difference in Annual Farm Income of Rural Households and Migration of Youths from Rural to Urban Areas

The relationship between the difference in annual farm income of the rural households and migration of youths from rural to urban areas was analyzed using the Product Moment Correlation Coefficient. This was expressed in hypothesis two in the null form as: difference in annual farm income earned by rural households has no significant correlation with migration of youths from rural to urban areas. Migration was measured as the number of youths who have left the rural to urban areas within the past five years, and this was rated to by very high (27.70%) and high (54%). Migration has a relationship with annual farm income because the exit of the youths from the rural areas will make it impossible to have sufficient hands for agricultural production which will consequently lead to lower or reduced farm income.

Table 7: Statistical variables showing relationship between difference in annual farm income of rural households and migration of youths

Statistical variables	Parameter estimates
Parameter estimate of X variable	0.7362
Standard error of X variable	0.1476
Correlation coefficient 'r'	-0.641
R^2	0.6115
Half of the Parameter estimate of X variable	0.3681

Source: Field survey, 2020

Results revealed that the value, 0.3681 is half of the parameter estimate variable X (migration of youths from rural to urban areas (obtained as 0.7362 / 2 = 0.3681). The value (0.3681) is greater than the standard error (0.1476) of X variable. This implies that the variable, migration of youths from the rural areas to urban areas is statistically significant to the difference in annual farm income earned by rural households. Based on findings, the alternative hypothesis (difference in annual farm income earned by rural households has significant correlation with migration of youths from rural to urban areas) was accepted against the null hypothesis. Result of Correlation Coefficient 'r' was -0.641. The value of 'r' was negative indicating that an increase in the migration of youths from the rural to urban areas will negative impact on the farmers' farm income. This was however confirmed by the findings where the respondents agreed that migration of youths has resulted to decline in agricultural production and their farm income. The result agrees with the assertion of Yohanna (2014) which summed that the impact of rural-urban migration has resulted to reduction of rural households' farm income and deterioration of the rural economy which has both led to chronic poverty and food insecurity amongst the rural people.

CONCLUSION

In conclusion, the study examined the impact of rural-urban migration among youth farmers on selected rural areas of Kaduna State, Nigeria. The study found that rural-urban migration has really taken place on a high note, and this has resulted to shortage of farm labour which has consequently led to reduction in farm output, decline in farm income, high rate of criminal activities under-development of the rural areas and rural poverty. The drift of rural youths to the urban centres can be checked through the adoption of strategies like provision of farm inputs, proper functional extension service system together with generally making agricultural operations more interesting in line with making basic amenities / infrastructure and job opportunities more available to the people of the rural areas.

Based on the findings, the study recommends that: There is a need of the government to put in place policies that can guarantee the farmers with provision of ideal and improved farm inputs need by the farmers at subsidized rate and made available when needed (since agricultural activities are usually time-bound). This will help to encourage farmers in their farming activities, increase or boost their level of productivity, increase their farm income level and therefore reduce their poverty status.

Businessmen and potential entrepreneurs need to be supported in their businesses through tax evasion and other promotional strategies by the government. Doing this will help to grow their businesses and create multiplier effects that can help to boost economic activities and improve job opportunities in the rural areas. This can cause the youths to re-

direct their thoughts of wanting to migrate and staying back in the rural areas and make themselves available to agricultural production.

Since the respondents agreed that migration of youths is strongly caused by availability of social amenities in the urban areas, it becomes necessary for same social amenities to be provided in the rural areas in commensurate quantities so that many of the youths would find it interesting to stay back in the rural areas and continue to get engaged in farming activities, have their income increased and assured of food security.

Increasing crime rate in the rural areas was agreed as a major reason for rural-urban migration, it then becomes important for some kind of security architecture to be developed and given government support in the rural areas that would help to check banditry and other vices as it seems prevalent in the areas at the moment.

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