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EFFECT OF RURAL-URBAN MIGRATION AMONG YOUTHS ON AGRICULTURAL AND RURAL DEVELOPMENT IN TWO LGAs IN KADUNA STATE, NIGERIA

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ABSTRACT
This study examined rural-urban migration among youths on agricultural and rural development in Kaduna state, Nigeria. It ascertain the push factors, age bracket, economic effects of rural-urban migration and reliable strategies to reduce migration of youths from rural to urban areas. A multi-stage random sampling procedure was used to select 80 respondents from 8 communities in 2 local government areas. Descriptive and inferential statistics were used to analyze the study's objectives and hypotheses. Results revealed that the average age, household size, farm size and farm experience was 32.38 years, 9 persons, 3.4ha. and 13.06 years respectively. Poverty level of the people, low income level of the people and education were amongst the push-factors to rural-urban migration. The average farm earnings of the farmers before and after rural–urban youth migration was ₦300,000 and ₦160,000 respectively. Some of the strategies to curb rural-urban migration were provision of farm inputs to farmers, making agricultural extension services available to the farmers and provision of social amenities / infrastructure in the rural areas. Gender, age, level of education, household size and annual farm income were the variables found to be significant to difference in income of farmers earnings before and after youth migration. The study thus recommends government's provision of the needed and adequate farm inputs to farmers for their farm operations, and as well encourage old and new entrepreneurs in the rural areas with business promotion strategies that would help boost their businesses and as well create job opportunities to the ruralites.
***Keywords**: Migration, farmers, rural areas, urban areas, income, youth, earnings, unemployment, social amenities*

INTRODUCTION

Nigeria is a country that occupies a land area of about 923,768 km^2 (Nigeria-Wikipedia, 2021), and as at 2020, it had an estimated population of about 200 million people (NPC, 2018) with greater proportion (over 70%) being engaged in the agricultural sector and this they do at subsistence level (FAO, 2021). Most of these rural areas where farming takes place are endowed with so much of human and natural resources which for one reason or the other have remained untapped for the development of the areas (Yohanna, 2014). Stressing further, Yohanna (2014) stated that rural areas are plagued with so many challenges like unavailability of basic amenities like good housing, good motor able roads, pipe-borne water, good health facilities and electricity. Adebayo and Okuneye (2005) also identified the rural areas to be characterized by a strong dependence on agricultural labour market, little or no forms of savings and the adoption of high labour intensive cultural practices. The absence of these laudable and important facilities or infrastructure in the rural areas have led to the migration of the rural youths to the urban areas in order to enjoy these facilities. Such migration has thus led to the steady decline of the agricultural sector, more impoverished state of the residents and underdevelopment of the areas. It is against this background, Yohanna (2014) acknowledged that the impact of rural-urban migration of youths cannot be over-emphasized.

Migration is defined as the relocation of residents for a specified duration and for various reasons (Hussain, 2001). The author noted that the movement may take place within or out of a particular geographical boundary of a country. Hussain (2001) stressed that migration create impacts both at the demographic, economic, socio-cultural and environmental levels. The author further stated that migration often gives rise to problems as well as provide solutions to problems. The issue of concern now is that having established that migration has had a negative effect on agricultural production and rural development, to what extent is the negative effect on the people in particular and development of the area in general. In this light, the study examined rural-urban migration among youths and its implications on agricultural and rural development in some parts of Kaduna State. More specifically, the study:

i. Examined the socio-economic characteristics of the respondents of the study in Kaduna State.

ii. Ascertained the push factors of rural-urban migration of rural youths in the study area.

iii. Determined the age bracket of the youths during which migration takes place most in the area.

iv. Determined the economic effects of rural-urban migration on the people of the area; and

v. Identify reliable strategies to reduce migration of youths from rural to urban areas.

Hypotheses of the study

H_{oi}: Socio-economic characteristics of respondents have no significant influence on the difference in

farm income earned before and after youth rural-urban migration.

$H_{oii:}$ There is no significant difference in farm income earned by the farmers before and after migration of youths from the rural to the urban areas.

METHODOLOGY

Area of Study

The study was carried out in Kaduna North and Kaduna South LGAs both in Kaduna Central Agricultural zone. The state is one of the Northern States of Nigeria and it is located in the North-West geopolitical zone of the country, Nigeria. Most of the people (about 80%) are mainly engaged in agricultural activities and are known to grow wide range variety of crops like cotton, yam, maize, millet, ginger, rice, cassava, groundnut, beans, tobacco and guinea corn (Kaduna State Wikipedia, 2016).

Sampling Procedures and Sampling Size

Multi stage random sampling procedure was used to select the respondents of the study. First, was the purposive selection of Kaduna North and Kaduna South LGAs. Second step was the random selection of four (4) communities per LGA. The communities were Doka, Malali, Badarawa, and Unguwan Sarki randomly selected from Kaduna North LGA while, Badiko, Barnawa, Kakuri Gwari and Sabon Gari South were the ones randomly selected from Kaduna South LGA. The third stage involved random selection of eleven (11) respondents each from the eight LGA. The respondents were identified with the help of the trained enumerators who were domiciled in the communities of study. This brought the number of respondents to eighty (88) respondents.

From the eighty-eight (88) administered questionnaire, eighty (80) (70.40%) of them were found suitable for analysis.

Data Analytical Techniques

Descriptive and inferential statistical tools were used in data anlysis. The respondents' socio-economic characteristics, economic effects of rural-urban migration and the age bracket at which youths majorly migrate from the rural areas to the urban were analyzed using descriptive statistics.

The push factors of rural-urban migration and the strategies advanced to reduce rural-urban migration were analyzed with the use of four-point Likert scale. Where the push factors for

rural-urban migration were concerned, a mean of 2.50 (obtained as 4 + 3 + 2 + 1 = 10/4 = 2.50) and above was agreed as push factors of rural-urban migration, while values less than 2.50 were considered otherwise. On the other hand, values of 2.50 and above were considered as strategies that could help to curb the menace of rural-urban migration.

Multiple regression analysis was used to analyze hypothesis one. In the process, four functions (Cobb-Douglas, Linear, Exponential and Semi-log functions) were produced and the Linear function was adopted as the lead equation.

Hypothesis two was analyzed with the use of t-test statistics. T-test was used to determine if a significant difference existed between mean income earned by farmers before and after migration of youths in the rural areas.

RESULTS AND DISCUSSION

Socio-economic Characteristics of respondents of the study. N = 80

Table 1 shows the socio-economic characteristics of the respondents. The results revealed that most (71.30%) of the respondents were males while the other fraction (28.70%) were females. Also, majority (50%) of them were married with most (57.50%) of them having secondary education, mostly (56.30%) engaged in farming activities and were as well found to be mostly (86.30%) of Islam religion. The result implies that the residents of the area were male dominated and are married, implying that farm activities were mostly carried out by males, who are responsible and are literate. The result further implied that farming was the occupational aspiration of the people of the area. Such occupational aspiration may be attributed to the unavailability of any other job in the area. The result agreed with the findings of Okwuokenye and Petu-Ibikunle (2021)

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	8.6 = 9 persons
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	

Source: Field survey, 2020

The age bracket of most (31.30%) of the respondents was 30 – 34 years. Respondents' average age was 32.28 years with about 24% and 28% of them been above 34 years and below 30 years respectively. The age bracket indicated that the respondents were old enough to be married and live their own lives. This finding is in agreement with results of Alakpa and Onemolease (2014). The average household size of the respondents was 9 persons with majority (26.30%) of them having between 4 – 6 persons in their households. The result implies that majority of the households in the rural areas have large household size and this could be intentionally kept for the purpose of using the people as a source of farm labour. This study agreed with the findings of Ango *et al*. (2014)

Farm size of the respondents revealed that most (61.25%) of them had farm size of between 2 – 4 ha. and their average farm size was 3.46 ha. The respondents farm size of less than 4 ha. was an indication that they are small – scale in nature. Respondents' average farm experience was 13.06 years with majority (35%) of them having farm experience of between 14 – 18 years.

The push factors responsible for rural – urban migration

The push factors responsible for rural – urban migration is shown in Table 2. Six out of the out lined factors were found to be responsible (mean ≥ 2.50) for youths' migration from the rural to urban areas. First amongst these factors was poverty level of the people (mean = 3.34). Low income level of the people (mean = 3.14), drive for education (mean = 3.00), insecurity of the area (mean = 2.96), unemployment (mean = 2.89) and lack of infrastructure (mean = 2.76) were respectively the 2nd, 3rd, 4th, 5th and 6th most important push factors to youth migration from the rural to urban areas. The result was supported by findings of Yohanna (2014)

Table 2: Push factors of rural – urban migration

Push factors	Mean	Standard Dev.	Ranking
- Poverty level of the people	3.34*	0.7	1st
- Low income level of the people	3.14*	1.1	2nd
- Drive for education	3.00*	0.8	3rd
- Insecurity of the area	2.96*	0.8	4th
- Unemployment	2.89*	1.2	5th
- Lack of Infrastructure	2.76*	0.9	6th
- Conflict	2.49	0.9	7th
- Modern Technology	2.38	0.9	8th

*Source: Field survey, 2020 ; -*Agree (mean ≥ 2.50)*

Economic effects of rural – urban migration

The economic effects of rural – urban migration is shown in Table 3. The effects were assessed in two categories. These categories were the farmers income before and after migration of youths from rural to urban areas. The result showed that most (37.50%) of the farmers annual farm income was between ₦200,000 – ₦299,999 before the youths migrated from the rural to urban areas. On the other hand, most (46.25%) of the rural farmers experienced an annual farm earnings of between ₦100,000 – ₦199,999 after the youths migrated from the rural to the urban areas. The average farm earnings of the farmers before and after rural – urban youth migration was ₦300,000 and ₦160,000 respectively.

Through personal communication, the farmers asserted that the difference (₦140,000) in average farm earnings was due to the migration of the youths (which were supposed to be major source of farm labour) from the rural areas, leaving behind the children and aged who are weak and can only do relatively little in where farm work is concerned. The result is in line with that of Chikire *et al*. (2012)

Table 3: Estimated annual farm income of the respondents

Annual Income (₦)	Income before migration of household members			Income after migration of household members		
	Frequency	Percentage	Mean	Frequency	Percentage	Mean
<100,000	0	0		21	26.25	
100,000 – 199,999	22	27.5		37	46.25	
200,000 – 299,999	30	37.5		16	20.00	
300,000 – 399,999	10	12.5		5	6.25	
400,000 – 499,999	8	10.0		1	1.25	
500,000 – 599,999	6	7.50		0	0	
600,000 – 699,999	2	2.50		0	0	
700,000	2	2.50		0	0	
Total	80	100.00	300,000	80	100.00	160,000

Source: field survey, 2020; Difference in average = N140,000

Age bracket of youth rural – urban migration

The age bracket of youth rural – urban migration is shown in Table 4. The result shows that most (22.50%) of the youths migrate within the age bracket of 30 – 34 years. Closely following this category was 20% of the youths who migrate between the age bracket of 20 – 25 years. The average age of youth migration was 28.96 years. The result implies that the youths migrate at their active age period and this could be for the purpose of seeking good earnings from opportunities availed in urban areas in order to take care of their responsibilities and also be able to leave independent lives. Results of Hussain (2001) revealed that age is not only an influence to rural – urban migration but also that the youths migrate from rural to urban areas in their active age period for search of greener pastures, therefore in line with the findings of this study.

Table 4: Age bracket of youth rural – urban migration

Age Range	Frequency	Percentage	Mean
< 15	7	8.8	
15 – 19	7	8.8	
20 – 24	12	15.0	
25 – 29	16	20.0	
30 – 34	18	22.5	
35 – 39	9	11.3	
40 – 44	3	3.8	
45 – 49	8	10.0	
Total	80	100.0	28.96

Source: field survey, 2020

Strategies to reduce youth rural – urban migration

The strategies of how to reduce rural – urban migration of youths is shown in Table 5. The strategies with means ≥ 2.50 are agreed by the respondents as strategies to reduce migration of youths from rural – urban areas. Amongst them, provision of farm inputs to farmers (mean = 3.20), making agricultural extension services available to the farmers (mean = 3.20) and provision of social amenities / infrastructure in the rural areas (mean = 3.20) all ranked highest or number one strategies that could be adopted to reduce rural – urban migration of youths. Creating job opportunities in the rural areas, making agriculture an interesting or lucrative business, subsidizing of farm inputs to the farmers and provision of agricultural storage facilities for produce surplus had means of 3.16, 3.11, 3.03 and 2.79 with 2nd, 3rd, 4th and 5th rankings of strategies that could help reduce youth rural – urban migration. By implication, an adoption and implementation of the above mentioned strategies will go a long way in reducing the migration of youths from the rural to urban areas.

Table 5: Strategies on how to reduce migration

Strategies	Mean	Standard Dev.	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
- Subsidizing of farm inputs to the farmers	3.03	0.7	4th
- Provision of agricultural storage facilities for produce surplus	2.79	0.8	5th
- Making farmland available for farming	2.78	1.0	6th

Source: Field survey, 2020

** Agree (mean ≥ 2.50)*

Influence of socio-economic characteristics on difference in farm income earned by respondents

Table 6 shows the influence of socio-economic characteristics of the respondents on the difference earned by respondents on farm income before and after migration of youths from the rural to urban areas (hypothesis 1). Multiple regression was used to analyze the hypothesis. The independent variables such as gender, age, marital status, level of education, household size, farming experience, farm size and annual farm income jointly accounted for 61.30% influence on the dependent variable (difference earned by respondents on farm income before and after rural – urban migration of youths). Five of the variables (gender, age, level of education, household size and annual farm income) out of the eight socio-economic variables were found to significantly influence the dependent variable.

Gender (b = 4,268; t = 2,28) was found to positively influence the dependent variable (difference in farm income) at the 1% level. From the results in Table 1, since males constituted the majority (71,30%), it implies that more engagement of males in farming activities would result to more difference in income earned by the respondents before and after rural – urban

youth migration. The difference in farm income is not unconnected to the strength males have over females and that males can quantifiably work many times over their female counterparts. This result is in agreement with the assertion of Alarima (2018). The odd ratio was 4.33 which implies that the involvement of more males in farming will result to 4 times the difference in farm income that will be earned by the respondents before and after rural – urban migration. The age of respondents had a beta coefficient of -0.912 and t-value of 0.09. The relationship had a negative influence and significant at the 5% level to the dependent variable. The implication is that the older farmers are in age, the less would be the difference in income that would be earned before and after youth rural – urban migration.

Level of education was significant at the 1% level and was positively signed to the difference in income earned by respondents before and after rural-urban migration of youth. Its beta co-efficient was 1.353 and had a t-value of 2.61. This implies that the more educated farmers are, the more / higher the difference that would be earned by the respondents in farm income before and after rural-urban migration of youth. This assertion is in line with results of Omoregbe and Okoedo-Okojie (2008). The odd ratio was 3.15 and this means that higher level of education will result to 3 times the difference in income likely to be earned by respondents before and after youth migration from the rural to urban areas. Respondents' household size respectively had a beta co-efficient and t-value of 0.847 and 0.19. It was positively signed and significant at the 1% level to the difference in farm income earned before and after youth migration. The implication of the result is that, more number of households will result to higher difference earned by respondents in farm income before and after migration of youths. The result agreed with findings of Ango *et al*. (2014). The odd ratio was 2.78, implying that larger households will produce about 3 times the difference in income earned by farmers before and after rural-urban migration of youths.

Table 6: Influence of socio-economic characteristics on difference in farm income earned by respondents

Socio-economic variables	B-Coefficient	Standard Error	t-value	Prob. Level	Odd ratio
- Constant	9.175	4.004	1.54	0.124	
- Gender	4.268**	1.875	2.28	0.002	4.38
- Age	-0.912*	-0.017	0.09	0.241	2.03
- Marital status	0.417	0.293	1.04	0.113	1.32
- Level of educ.	1.353**	0.518	2.61	0.009	3.15
- Household size	0.847*	0.211	0.19	0.001	2.76
- Farming exp.	1.345	0.927	0.81	1.004	1.65
- Farm size	0.635	0.524	1.30	0.81	1.02
- Annual farm income	2.417*	0.181	1.76	0.003	3.11

*** Significant at the 1% level; * Significant at the 5% level; Chi-square < 30.50; df = 8; P < 0.05*
Goodness-of-fit Chi-square = 42.70; df = 55; P > 0.05;
Pseudo Coefficient of determination = 0.613 (61.30%)

The annual farm income (b = 2.417; t = 1.76) of the respondents was positively signed and significant at the 5% level to the difference in farm income earned by respondents before and after rural-urban migration of youths. The result implies that higher annual farm income will result to more difference in income of farmers before and after rural-urban migration of the youths. The odd ratio was 3.11 which implies that an increase in annual farm income will result to 3 times the difference in income that would be earned by farmers before and after rural-urban migration of the youths.

Relationship between youth migration and farmers' farm income

The relationship between rural-urban youth migration and their farm economy is shown in Table 7. This relationship has to do with the analysis of hypothesis two which states that: there is no significant difference in farm income earned by the farmers before and after migration of youths from the rural to the urban areas. The analysis was carried out with t-test statistics. The results revealed that the average farm income of the farmers before youth migration was ₦300,000 while that of the farmers after migration dropped to ₦160,000. The difference in farm income was ₦140,000 in favour of the farmers before the youth migrated from the rural to urban areas. The difference in farm income was significant at the 5% level. From results, the calculated t-value (14.98) was higher than the tabulated t-value (1.645), and this led to the rejection of the null and acceptance of the alternative hypothesis indicating that there is a significant difference in farm income earned by farmers before and after youth migration from the rural to urban areas.

Table 7: Effect of migration on farmers' farm economy (t-test)

Youth status	N	Mean Income (₦)	Difference (₦)	T – value
- Farm income before youth migration	80	300,000		
			140,000	14.98*
- Farm income after youth migration	80	160,000		

Significant at the 5% level (critical t – value = 1.645)

CONCLUSION AND RECOMMENDATIONS

Several factors like poverty level, income generation, education level, insecurity, unemployment and absence of infrastructure were found to be the push-factors responsible for youth rural-urban migration which actively takes place at the average age of 28.96 years. Meanwhile, migration of youths from rural to urban areas was found to negatively impact on the farm income earnings of the farmers. This was evident in the difference in farm income (₦140,000) which was less than the amount earned by the farmers after migration of youths from the rural to urban areas. The farm income difference was influenced by socio-economic characteristics that include gender, age, level of education, household size and annual farm income.

Strategies related to provision of job opportunities, social amenities in adequate quantities and a conducive environment for agricultural production by government were advanced to help curb the menace of rural-urban migration.

Based on findings, the following recommendations were made:

i. There is need by the government through her agricultural agencies to provide the needed and adequate farm inputs to farmers for their farm operations. Again the inputs should be provided at subsidized prices so that they can be affordable by the farmers.

ii. In addition, extension services provided to the farmers need to be improved so that the farmers will be better informed about modern agricultural innovations and practices. Doing this will make agricultural activities more interesting, welcomed by the rural people and more rewarding in terms of income provision, thereby helping to curb youth rural-urban migration and making them more available for farm work and consequently increasing farm income.

iii. On job opportunity consideration, government needs to encourage old and new entrepreneurs in the rural areas with tax evasion and other business promotion strategies that would help boost their businesses and as well create job opportunities to the people so that the rural people will not have a need to leave the rural areas thereby making them available for farm work.

iv. On a social consideration, there is need for the establishment and spread of social amenities in commensurate quantities in the rural areas. Such provision will help make the rural areas an interesting place to stay and have youths available for agricultural production and thereby having farm income increased.

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