EFFECT OF RURAL YOUTHS MIGRATION ON MAIZE PRODUCTION IN KONTAGORA LOCAL GOVERNMENT AREA OF NIGER STATE, NIGERIA

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ABSTRACT

The study assessed the effect of rural youths' migration on maize production in Kontagora Local Government Area of Niger State, Nigeria. The specific objectives were to; describe the socio-economic characteristics of farmers; ascertain the causes of youths' migration, determine the extent of youths' migration, access the effect of youths' migration on maize production and identify the problems associated with youths' migration in the area. To achieve these objectives, 120 maize farmers were randomly selected through multi-stage sampling technique. Data were analyzed using descriptive statistics and multiple regression analysis. The result on socio-economic characteristics shows that majority (52.5%) of the respondents are still in their active age of between 21- 40 years with mean age of 39years. Equally, respondents were males (72.5%), married (77.5%) with Non formal education (40%). Only a few (18.3%) attained tertiary education. Similarly, majority (90%) had a household size of between 1 – 10 persons with average size of 6 persons per household. The average maize farming experience among the respondents was 17 years. The major causes of youths' migration in the area includes: lack of employment opportunities (90%), furthering of education (77.5%), and lack of access to modern amenities (55%). The extent of Youths migration in the area is relatively moderate (45.8%) with averagely 31 youths leaving each village every year. The peak period of migration is usually during the off-season (50.8%). The result of the regression analysis shows Cob-Douglass as the lead equation. The result revealed that youths' migration affect production negatively while labour, agro chemicals and fertilizer are positively significant. The problems of youths migration in the area include; loss of cultural values (75%), reduction in rural population (54.2%) and dull village life (47.5). To this end, youths' migration limits maize production thus, government should provide functional schools and employment opportunities to engage rural youths.

INTRODUCTION

Nigeria was previously an agricultural economy when farming sector contributes to the majority of her total export. The income and revenue obtained from farming sector was sufficient to not only cater for the farmers' needs but also sustain the Government (Adejugbe, 2004). The rural areas accounted for the bulk (75%) of the Nigerian farming activities. To this end, Nigeria was among the largest producers of cocoa, groundnut, palm oil and rubber thereby, generating revenue for the development of several infrastructures and educational institution like Ahmadu Bello University of Zaria and Obafemi Awolowo University of Ife, two of the best learning institutions in the present era. However, the discovery of crude oil and its subsequent exploration and exportation in 1970's brought setback to Nigeria agricultural sector as government shifted their attention to the easy money-making oil industry at the expense of Agricultural development.

Consequently, rural youths were tempted to move to the urban centers where they can have their own share of the national cake. This act of movement of people away from their current place of living to another geographical area is known as **'migration'**. Thus, movement of people from the rural area to the urban centre is called '**rural-urban migration**' (Tacoli, 1998).

The Movement away from the places of origin of either on a permanent or a temporary nature had become an option to improve the life chance of a wider spectrum of the population of developing countries especially farm youths (Solomon, 2005). Therefore, migration is an economic choice where individuals or households decide to migrate to other areas, if there is a higher anticipated income. By implication, migration results in response to ruralurban dissimilarities in anticipated rather than actual incomes (Okhankhuele, 2013), The basic premise is that migrants consciously deliberate on the various opportunities or labour market prospects accessible to them between the rural and urban sectors, and select the one which maximizes their anticipated

gains or benefit from migration. Hence, the movement of people from the rural to urban centres can be seen as a spontaneous human reaction or effort to achieve balance between population and resources. Ofuoku (2015) pointed out that, one of the main effects of rural-urban migration is the shortage of labour supply needed for farming activities. Rural-urban pattern of migration takes more young men than the aged people out of the rural areas, leaving the few elderly men and women as well as children whose effort in farming operation is limited (Eliss and Harris, 2004).

Presently, Nigeria like most African countries is at a stage where it realized that proficiency in rural development depends on sustained growth in rural incomes and standard of living derived primarily from agriculture (De Haan *et al.*, 2002). In view of the above drive, this study seeks to achieve the following objectives:
  (i) describe the socio-economic characteristics of the farmers,
  (ii) examine the causes of rural-urban migration in the study area,
  (iii) determine the extent of rural-urban migration,
  (iv) determine the effect of youths' rural-urban migration on maize production,
  (v) identify the problems associated with youths' migration in rural areas.

METHODOLOGY Area of Study

This study was conducted in Kontagora Local Government Area (LGA) of Niger State, Nigeria. The Area covers approximately 2,179 km^2 lands mass and a projected population size of 185,698 people (Niger State Bureau of statistics (NSBS), 2016). The Area is located between longitude 10^0 and 24^0 North and latitude 5^0 and 28^0 East. It is bordered by Rijau LGA to the north; Mashegu LGA to the south; Magama and Mariga LGA to the west and east, respectively. Kontagora LGA has distinct dry and wet seasons with an average annual rainfall of about 1,300mm. The Area is divided into thirteen (13) major Communities with farming as the major occupation of the people.

Sampling Technique and Sample Size The sample population for this study consisted of mainly maize farmers in Kontagora LGA of Niger State. A multi-stage sampling technique was used to select the respondents for this study. The first stage involved random selection of six (6) out of the 13 rural communities in the study area. The second stage involves selection of registered maize farmers (as

sample frame) from each of the selected communities. While the third stage, involves random selection of 20% of the registered farmers as the sample size of the study. A total of 120 farmers were considered as respondents for this study.

Method of Data Collection
Primary data were utilized for this study. The data were obtained using a structured questionnaire and interview schedule.

Method of Data Analysis
Data were analyzed by means of descriptive statistics such as frequency counts, percentages and multiple regression analysis. The multiple regression analysis was utilized to examine the effect of rural-urban migration on maize production.

Model Specification Multiple regression model
Multiple regression model - shows the relationship between a dependent variable and combination of independent variables. The value of dependent variable is defined as a combination of independent variables plus error term.
Thus, the implicit form of the regression model is stated as: $Y = f(X_1, X_2, X_3 \dots X_n, ei)$ (i)

In this study, four (4) regression functions were tested in order to determine the best fit. The explicit forms of the four (4) functional models were expressed as:
1. Linear: $Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$
2. Semi-log: $Y = a + \beta_1 l_n X_1 + \beta_2 l_n X_2 + \beta_3 l_n X_3 + \beta_4 l_n X_4 + \beta_5 l_n X_5 + \beta_6 l_n X_6 + e$
3. Double-log: $l_n Y = a + \beta_1 l_n X_1 + \beta_2 l_n X_2 + \beta_3 l_n X_3 + \beta_4 l_n X_4 + \beta_5 l_n X_5 + \beta_6 l_n X_6 + e$
4. Exponential: $l_n Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$

Where:
Y_i = Total maize output (Kg) $\beta_1 - \beta_6$
= Parameters to be estimated $X_1 -$
X_6 = independent variables. Where;
X_1 = Migration (number of migrants per household)
X_2 = farm labour (Man days)
X_3 = Agro chemicals (liters)
X_4 = Quantity of seed (kg)
X_5 = Fertilizer (kg)
X_6 = Land
(hectares) a =
Constant
e = Error term

RESULTS AND DISCUSSION   Socio-economic Characteristics of the Respondents

Socio-economic characteristics influence the thought, feelings and behaviors of farmers towards making decisions in their daily farming operations. Some of these attributes includes gender: which help to identify the involvement of males and females in farming operations, age, marital status, educational status, household size and farming experience. Therefore, the results in Table 1 revealed that majority (52.5%) of the respondents were between the ages of 21 – 40 years with a mean age of 39 years. This implies that, the respondents were still in their active age and therefore constitute readily available labour supply for maize production. This result corroborate with the findings of Obidike (2015) who reported that, the average age of respondents among farmers in Abia State was 40years. The Table also reveals that majority (72.5%) of the respondents were males, while female farmers in the area accounted for 27.5% of the population. This is perhaps due to the cultural and religious belief that tends to restrict females to household keeps rather than participating in farming activities. This result is also consistent with the findings of Obidike (2015) who reported that majority of rural farmers who tend to migrate to urban centers of Abia State were male. Equally, majority (77.5%) of the respondents were married thus, farm households are likely to have large labour supply for farming activities. This result corroborate with the findings of Ofuoku (2015) who pointed out that, married persons were more involved in farming activities due to higher food demand in the household. Furthermore, the result revealed that all the respondents had one form of education or the other. However, majority (40%) of the respondents had Non formal type of education related to skills acquisition and training while 18% of the respondents attended tertiary education. Meaning that, there is low literacy level in the study area. This finding agreed with Olajide and Udoh (2012) who reported that personal characteristic especially, education influences adoption of new technology and when it is lacking among farmers decrease in innovation adoption rate and low production may result.

In the same vein, the result revealed that majority (90%) of the respondents had a household size of between 1– 10 persons with average size of six (6) persons per household. This implies that the respondents had a fairly large family size and by implication large family labour for farming. This finding corroborate with the result of Gimba (2004) who reported that, the average household size among the migrant maize farmers in Maiduguri Metropolis was eight (8) persons.

In terms of maize farming experience, the respondents had fairly large years of experience as majority (52.5%) of the respondents had been into maize production for 8 – 21 years. The average farming experience among the respondents was 17 years. This finding thus, conforms to the traditional assertion that 'every rural person is a farmer from birth'.

Causes of Rural Youths Migration

In other to ascertain the causes of rural youths drift, a collection of factors were presented to the respondents: the options were as presented in Table 2. The Table shows a mix results ranging from educational, political, and socio-economic factors. Majority (90%) of the respondents were of the opinion that, youths in their community migrate to the urban centres in other to secure employment particularly, the more paying and less stressful white-collar job that is often lacking in rural areas. This implies that most of the migrants have formal Education certificate or training that could secure their livelihood outside farming thus, seek greener pasture in the cities. Similarly, 77.5% of the respondents believed that youths migrate to the cities in other to further their education which has necessitated by the ineffective schools and learning facilities in most villages. Other respondents (55%) reported lack of social amenities as the driving force behind rural-urban migration. Meaning that; youths whom constitute the literate class of the community wish to enjoy access to social infrastructures which are grossly inadequate in the rural areas. This result agrees with the findings of Okhankhuele (2013) who reported that, people migrate to cities in other to further their Education, to seek for employment opportunities and to enjoy recreational amenities.

Extent of Rural Youths Migration

The extent of out migration describes the level and peak period of youths migration to urban centres. The result in Table 3 revealed split opinion among the farmers on the level of youths' migration. While majority (45.8%) of the respondents described youths' migration in their village to be moderate others (25.8%) believed that it is on the high side with averagely 31 youths leaving each village every year. It therefore implies that maize farmers in the study area are feeling the pressure of losing their loved ones to the cities hence, considers it as threat to family labour supply. This result corroborate with the findings of Adejugbe (2004) who reported that, with averagely twenty (20) persons leaving the

village yearly to settle in the urban areas, farmers' access to family labour is grossly limited. Similarly, majority (50.8%) of the respondents observed that, the peak period of migration in their village is during the off-season when farming activities are being put to rest due to lack of rain fall. This finding is further supported by the 28.3% of the respondents who stated that, most youths migrated to the cities immediately after completing their studies. This is perhaps due to the strong determination of youths to pursue more educational qualification that will afford them life outside farming through white-collar job. This result conforms to the findings of Olajide and Udoh (2012) who reported that, migrants are often reluctant to return to their villages in spite of the problems perceived in the cities and would rather that the government used motorbikes and other experimental development programs as instruments of poverty reduction instead of farm inputs.

Effect of Youths Migration on maize Production

The results of the regression model showing the effect of youth's migration on maize production were as presented in Table 4. From the regression analysis result, output of the double-log regression gave the best fit based on the significance of the F-value, the value of the coefficient of determination (R^2), number and signs of significant parameters estimated in conformity with the aprior expectation. The R- Square (R^2) value of 0.7842 shows that 78.42% variation in the maize farmers' production were explained by the independent variables included in the model.

The result also revealed that youths' migration was negatively significant at 10% probability level. While labour, agro chemicals and fertilizer were all positively significant at 1% level of probability. This shows that increase in youths migration to urban areas will results to decrease in maize production. In other words, the loss of a single youth to urban area will result to 0.17kg probability decrease in the quantity of maize grain produced. This is perhaps due to the fact that majority of the rural maize farmers in the practices subsistence production system hence; greatly depend on the family labour for cultivation. This is in agreement with the finding of Ofuoku (2015) who reported among other reasons that rural families keeps larger household members in other to meet with the labour requirement of cultivating larger farm size. The result further indicates that farm labour had a significant and positive effect on maize production in the area. Meaning that, a day increase in farm labour will result to 0.39kg probability increase in maize output. Similarly, agro chemical is positively significant to maize production thus; continuous application of agro chemicals in

maize farm will lead to increase in the quantity of output produced. By implication, one liter increase in agro chemical application will result to 0.53kg probability increase in the quantity of output generated by the farmers. Equally, fertilizer had a significant and positive effect on maize production therefore; one kilogram (1kg) increase in the quantity of fertilizer application will result to 0.19kg probability increase in the quantity of maize produced. These findings is in line with the apriori expectations of the study which tend to consider labour, agro chemicals and fertilizer as important factors required for maize production. In the same vein, the result corroborate with the findings of Adesiyan (2015) and Adaku (2013) who reported that labour, agro chemicals and fertilizer are the main determinant of crop farmers' productivity in rural areas.

Problems of Rural-Urban Migration Rural-urban migration has long been recognized as a great challenge in the developmental effort of the rural areas (Olajide and Udoh, 2012). Government programmes to improve the rural people and regulate rural-urban drift had yielded mix result, particularly now that human population is increasing at geometric pace as against arithmetic increase in food production (Okhankhuele, 2013). Some major problems of ruralurban migration in the study area were as presented in Table 5. These problems include loss of cultural values (75%) which ranked highest, followed by decrease in rural population (54.2%) and dull village life (47.5%). This implies that, with continuous migration of rural youths to the urban centers, the entire social life of the rural people is threatened. Youths whom are presumably the future of every community are less available for the smooth transfer of cultural values. These perhaps are the main reasons for loss of cultural identity in some of the rural areas in the country. This result agrees with the findings of Okhankhuele (2013) who reported that, out-migration of youths in large number has led to a dull village life since youths were no longer available to help parents carry out domestic chores and family vocation thereby, resulting in decreased production and living condition among rural dwellers.

CONCLUSION AND RECOMMENDATIONS

It is an appreciable fact that rural-dwellers in kontagora Local Government Area of Niger State are fully involved in maize production. Thus, youths' migration is in response to the socio-economic deprivation existing in the area which tends to threaten not only the sustainability of cultural values but also the economy development of the community, especially, maize farming enterprise. To this end, public authorities and

educational stakeholders should collaborate to establish functional Schools, skill acquisition centres and workshops in rural areas. This will go a long way to reducing youths migration to the urban centres searching for knowledge and skills that will empower them to acquire white cola job. Similarly, social infrastructures and loans should be made available by those in authority and financial institutions so as to bridge the social gap in living condition between rural and urban dwellers.

Table 1: Socio economic Characteristics of the respondents

Variables	Frequency (120)	Percentage (%)	Mean
Age			
20 and below 9 7.5 39			
21 – 40 63 52.5			
41 – 60			
61 and above			
Gender			
Male	87	72.5	
Female	33	27.5	
Marital status			
Married	93	77.5	
Single	21	17.5	
Divorced	4	3.3	
Widow	2	1.7	
Educational Status			
Non formal	48	40	
Primary Education	17	14.2	
Secondary Education	33	27.5	
Tertiary Education	22	18.3	
Household size			
10 and below	108	90.0	6
11 – 15	10	8.3	
16 and above	2	1.7	
Maize farming experience			
7 and below			17
8 – 14	44	36.7	

	4	3.3
	21	17.5
	31	25.8
15 – 21	32	26.7
Above 21 years	36	30.0

Source: ICAAT, 2018

Table 2: Distribution of respondents based on the causes of rural-urban migration

	Frequency (120)	Percentage (%)	Rank
Further education	93	77.5	2nd
To secure employment	108	90	1st
		55	3rd
		18.3	7th
		23.3	6th
		40	4th
		24.2	5th

Table 3: Distribution of respondents based on the extent of youths' migration in the study area

Parameters	Frequency (120)	Percentage	Average num of migrants per village
Level of migration in the area			
Low	34	28.3	31
Moderate	55	45.8	
High	31	25.8	
Period of peak migration			
During festivals/elections	6	4.2	
During planting season	13	10.8	
Immediately after harvest	61	50.8	
After acquiring vocational training	7	5.8	
After acquiring educational qualification	34	28.3	

Source: ICAAT, 2018

Causes of Migration

Lack of social amenities	66	
Find partner for business	22	

Natural disaster	28
Change of environment	48
Marriage	29

Source: ICAAT, 2018

Variables		Semi-Log	Double-log	Exponential
Migration	-135.164 (-1.06)	-220.9455 (-1.20)	-0.1656325 (-1.70*)	-0.030089 (-0.33)

Farm labour	5.214618 (2.44***)	351.5758 (1.66*)	.3903902 (3.49***)	.0062227 (4.05***)
Agro chemical	85.45099 (4.59***) Linear	728.3588 (4.24***)	0.5332885 (5.87***)	0.0533042 (3.98***)
Seed	-2.635642 (-1.15)	-74.00239 (-0.37)	-0.0070767 (-0.07)	-0.0016207 (-0.98)
Fertilizer				
Land				
Constant				
R-squared				
F-value		48.14***		

NOTE: * = Significant at 10%   ** = Significant at 5%   *** = Significant at 1%

Source: ICAAT, 2018

Table 5: problems of rural-urban migration

Problem of Migration	Frequency (n = 120)	Percentage (%)	Rank
Dull village life	57	47.5	3rd
Decrease in rural population	65	54.2	2nd
Uneven development	40	33.3	6th
Decrease in family labour	54	45	4th
Loss of cultural values	90	75	1st
Reduction in annual farm income	48	40	5th
Low farm productivity	38	31.7	7th

Source: ICAAT, 2018

Table 4: Functional forms of multiple regression analysis on effect of rural–urban migration

0.8893374 (1.76*)	517.0963 (3.57***)	.1939732 (2.53***)	0.0003991 (1.10)
238.3197 (1.97**)	88.87863 (0.57)	-0.063606 (-0.77)	0.0437035 (0.50)
151.9428 (0.67)	-3844.332 (-3.18***)	3.574919 (5.58***)	6.211076 (37.93***)
0.7858	0.7188	0.7842	0.6972

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69.09***   68.42***   43.36***

REFERENCES

Adaku, A. A. (2013). The effect of rural-urban migration on agricultural production in the northern region of Ghana. Journal of Agricultural Science Application, *2*(4), 193–201. http://doi.org/10.14511/jasa.2013.020402.

Adejugbe, M. A. (2004): Industrialization, Urbanization and Development in Nigeria: An Introduction in Industrialization , Urbanization and Development in Nigeria 1950-1999. Concept Publications Limited. pp. 11, 15-16.

Adesiyan, A. T. (2015). Economic Analysis of Maize Production in Osun State: A Case Study of Ilesa East and West of Osun State. *Journal of Economics and Sustainable Development* 6(9), 268-279.

De Haan, A. & Rogally, B. (2002): Migrant Workers and their Role in Rural Change. *Journal of Development Studies.* 38(5), 1 – 14.

Eliss, F. & Harris, N. (2004). In New Agriculturist on-Line: *Reporting Agriculture for the 21ˢᵗ Century. 1ˢᵗ September 2004. p.1. http//www.new-ag.info/04-5/dev.1.html.*

Gimba, Z. (2004). Causes and Effects of Rural-Urban Migration in Borno State : a Case Study of Maiduguri Metropolis, *Asian Journal of Business Management Science.* 1(1), 168172.

Niger State Bureau of Statistics (NSBS), (2013). Online: Retrieved from https://www.citypopulation.de/php/nigeria admin.php?adm1id=NGA 027:21 March, 2016

Obidike, P. C. (2015). Managing rural-urban migration and brain drain for sustainable economic recovery in Nigeria: Constraints and options. International Business *Management Journal,* 1*(1),* 1-7.

Ofuoku, A. (2015). Effect of rural-urban migrants' remittances on arable crop production in Delta State, Nigeria. *Journal of Agricultural Sciences, Belgrade*, 60(1), 49–59.

Okhankhuele, O. T. (2013). Causes and Consequences of Rural-Urban Migration Nigeria : A Case Study of Ogun Waterside Local Government Area of Ogun State , Nigeria . *British Journal of Arts and Social Sciences»,* 16(I), 185–194.

Olajide, A., & Udoh, G. (2012). Rural-Urban Migration : Migrants Perceptions of Problems and Benefits in Oyo State Nigeria, *Journal of Agricultural Extension and* Rural *Development,* 187–191.

Solomon, K. (2005): *Housing Development as Instrument to Alleviate Urban Poverty*: The case of Addis Ababa. At the International Conference for Integrating Urban Knowledge and Practice, Gothenburg, Sweden, May 29 to June 3, 2005.

Tacoli, C. (1998). Rural-urban interactions : a guide to the literature. *Environment & Urbanization* 10*(1): 147-166.*