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ASSESSMENT OF EFFECTS OF RURAL- URBAN MIGRATION ON AGRICULTURAL PRODUCTION IN ESAN CENTRAL LOCAL GOVERNMENT AREA, EDO STATE, NIGERIA.

[1]Igene, C. A., [2]Onymekonwu R.C. [2] and [3]Ehiwario, F.A

[1]Department of Agricultural Economics and Extension, Ambrose Alli University, Ekpoma, Edo State.
[2]Department of Agricultural Extension and Rural Development, Deniss Osadebay University, Asaba, Delta State, Nigeria

Corresponding email: igenechris9@aauekpoma.edu.ng, igenechris9@gmail.com Phone no: 08038991966

ABSTRACT

The study examined the effects of rural- urban migration on agricultural production in Esan Central Local Government Area of Edo State. Multi-stage sampling procedure was adopted in selecting respondents for the study. Structured questionnaire and interview schedule were used to collect data from the respondents for the study. Data were analyzed using descriptive statistics such as frequency distribution, percentage and means while multiple regression was used to test the hypothesis. The result showed that the farmers were of mixed gender (56-3% male, 43.6% female). The mean age was 43years, 76.2% has formal education and an average household size of 5 persons with average of 2 migrants per household. Adequate extension education (mean = 1.16) was ranked first among the strategies for reducing rural migration while the multiple regression result showed that marital status (18.775, $\leq$ 0.05), education (20.900, $\geq$ 0.05), household size (20.025, $\leq$ 0.05) had significant relationship with the member of migrants in a household. It was concluded that migration majorly affected the respondents on labour shortage and significant relationship existed between the farmer's marital status, education, and the number of respondents in a household. The study recommended provision of proper agricultural extension programmes and needed social amenities in the study area as identified as major causes of rural- urban migration. Proper agricultural extension programmes should be made available in the study area as this would helped to increase farmers knowledge on production practices and possible ways of reducing the effects of labour shortages. Lastly, farmers are encouraged to adopt farming technologies that will require less number of persons to carry out e.g. mechanization. This will address the problem of labour shortage.

Keywords: effect, Rural-Urban, Migration, agriculture, production,

INTRODUCTION

Agriculture plays a very important role in the food chain and livelihoods of rural dwellers where it is their major sources of income and survival by employment to most of the rural communities. Majority of the rural population are small scale farmers that provide food for human consumption and raw materials for manufacturing industries in urban areas. Thus, agriculture is classified as one of the major sources of income in most rural homes in Nigeria (Mbah, Ezeano and Agada, 2016). The major problems facing agricultural development in Nigeria and particularly households in Edo State, includes lack of finance or credit facilities, poor transportation network, lack of storage and processing facilities, inadequate agricultural education and extension services, negative attitude to people towards faming due to its low income or output, rural-urban migration of youth, problems of pest and disease with inadequate land due to land tenure system (Aghanenu and Onemelease, 2016).

However, agriculture in Nigeria has not been able to get to the peak, considering the fact that there are still yield gaps and most of the population engaged in agriculture particularly in Edo State is still trapped in poverty. Many factors have been contributing to this poor performance of the agricultural sector but one of the major factors is the migration of the farming population from rural communities to urban cities resulting to the shifting of the labour force from rural area to urban centers. Rural-urban migrations both temporary and permanent have negative impacts on the agricultural production in Nigeria. Rural-urban migration is the physical movement of individuals or group of people irrespective of age and gender from rural areas to urban cities. However, the migration of people to other areas for improved standard of living is not a new practice. The increasing voluntary movement for better quality of life with high skill or wage workers from less developed rural areas to more developed urban areas, especially among the poor is of great concern (Ajaero and Onokola, 2015). Currently, Esan Central Local Government Area is not immune of this rural-urban drift with the effect being noticeable in the output of agriculture in the area. According to Sorenson, (2004), rural-urban migration comes from the search for perceived or real opportunities as a consequence of rural-urban inequality on wealth generation. These inequalities or urban bias in development comes from the overwhelming much of wealth, assets, purchasing capacity, economic activities and variety of services in the urban centers and degradation of rural areas (Ajearo and Mozie, 2011); migration has also been noted as a survival strategy

utilized by the rural dwellers, especially when they are not contributing anything to the family.

Notwithstanding, the need for the assessment of the effects of rural-urban migration have been emphasized, pointing out its relevance in the transformation of individual destinies, family and rural community development (Ajaero and Onokola, 2013). Consequently, the effects of these migrations of agricultural production in rural areas or origin of migrants may manifest in various ways. According to Vargas-Lundius and Lanly (2007); it impoverishes rural area because the most able bodied young people tend to leave for urban areas, creating labour shortage at peak periods of agricultural production thereby leading to a vicious circle of degradation as it generates smaller markets in the rural areas. Rural-urban youth migration is the most important aspects of labour migrations because it affects the structures and composition of the farmers population. However, the products from the farms supply are major factors accounting for rural-urban pattern of migration in Nigeria. Vargas-Lundius and Lanly (2007) noted that the rural-urban pattern of migration takes more young men than women out of the rural communities resulting in many women becoming the head of the household and being responsible for agricultural production. With this migration of youth to urban areas, agricultural production is now left for older people who may lack the required energy and modern technicalities associated with modern farming, this would be an added burden to the aged farmers. The end result is likely that the added responsibilities of accomplishing the task will reduce the production performance of the few left farmers and agricultural production in the society in general. To this end, it becomes pertinent to examine the effect of rural urban migration in the study area.

The main objective of the study is to examine the causes and effects of rural-urban migration on agricultural production in Esan Central Local Government Area, Edo State, Nigeria. The specific objectives are to; describe the socio-economic characteristics of the farming households in the study area, identify the causes of rural-urban migration in the study area, identify the effects of rural urban migration on agricultural production in the study area and examine the strategies for reducing rural-urban migration in the study area**.**

Hypothesis of the study

A null hypothesis formulated for the study is, there is no significant relationship between farmer's socio-economic characteristics and the number of migrants in a household

METHODOLOGY

The study area was carried out in Esan Central Local Government Area of Edo State, Nigeria. The Local Government Area is located in Edo Central agricultural zone with it administrative headquarter in Irrua situated in Latitude 6^0 44'45" North and Longitude 6^0.13' 42" East of the equator. (mapcarta.com, 2022). It is one of the local government areas of Edo State, sharing boundaries with Etsako West to the North, Esan North East to the East, Iguenben to the South East and Esan West LGAs to the West and South West. The area is known for the production of food crop such as yams, cassava, plantains, and assorted types of fruits and vegetables such as mango, banana, and orange.

Multi-stage sampling procedure was used in selecting respondents for the study. The first stage was the purposive selection Irrua and its environs because of the high intensity of agricultural production and high level of rural-urban migration. At the second stage, ten (10) notable agrarian communities were purposely selected. At the third and last stage, eight (8) household heads per community were randomly sampled, giving a total of 80 respondents. Trained enumerators were used to elicit information from the respondents, under the supervision of the researcher. Primary data was obtained from farmers with the aid of a well-structured questionnaire. Descriptive statistical tools such as frequency distribution, mean and percentage were used, while chi-square was used to test the hypothesis.

Table 1: Sampling frame

S/N	Community	Number of household per community	Number respondents per community
1	Udowo	8	8
2	Ibore	8	8
3	Agwa	8	8
4	Eko-Iyobhebhe	8	8
5	Ugbokhare	8	8
6	Usugbenu	8	8
7	Atuabgo	8	8
8	Afuda	8	8
9	Ujabhole	8	8
10	Idinegbon	8	8
	Total	80	80

Source: Field Survey, 2021

RESULT AND DISCUSSION

Socio-economic characteristics of respondents in the study area

The results of the socio-economic characteristics of sampled respondents as presented in Table 2.

The result shows that 56.3% of the respondents were male while 43.6% were female suggesting that male and female were involved in farming in the study area and that the responses were not gender biased, by implication if provided with the need crops that are gender based in the area can be cultivated, as both male and female are involved in farming. A similar result reflecting the involvement of male and female involvement in farming was reported by Alakpa and Onemolease, (2014) who reported 48.0% female and 52.0% male respectively.

The age distribution of the respondents as presented in Table 2 revealed a high percentage (36.6%) of the respondent were into the age bracket of 38 – 48 years with a mean age of 43 years. This result suggests that the respondents were young and still in their productive age, implying that if provided with the needed production resources, they are capable of producing enough food for family consumption and overall national. This result is in line with Aghanenu and Idiake Ochei (2016) who reported a mean age of 40.3 years. The educational status of the famer (Table 1) shows that majority (76.2%) of the respondents had formal education which implies that the respondents can read and write. An implication of this result is that respondents can read and write information on agricultural innovation that could enhance their production. The result is also in line with Alakpa and Onemolease, (2014) found that 74.1% of farmers sampled had formal education. The household size of the respondents as presented in Table 1 shows that a high proportion of the respondents (36.3%) had a household size 1-3 persons with a mean household size 5 persons. This result suggests that the respondents have a fairly large household size, implying that family labour could be utilized for farm operation. This result is slightly in variance with Inedia *et al*, (2016), Okoedo-Okojie, (2016) who reported a mean household size of 7 persons for farmers in Edo State, Nigeria.

Table 2: Socio-economic characteristics of respondents (N=80)

Variable	Category	Frequency	Percentage	Mean
Gender	Male	45	56.3	
	Female	35	43.6	
Age (years)	19 – 38	26	36.6	
	39 – 48	20	25.5	43
	49 – 58	21	26.4	
	59 and above	10	12.7	
Marital status	Single	23	28.7	
	Married	44	55.0	
	Divorced	13	16.3	
Educational status	No formal education	19	23.8	
	Primary	37	46.3	
	Secondary	12	15.0	
	Tertiary	12	15.0	
Household size	1 – 3	29	36.3	
	4 – 6	15	18.8	5
	7- 9	26	32.6	
	10 and above	10	12.6	

Source: Field survey data, (2021)

Number of migrants in a household

The number of migrants in a household as presented in Table 3, indicate that 51.4% of the respondents had 0-2 migrants in their household in the farming season with a mean of 2 migrants in a household. This result suggests that migration is common among the household in the study area. Therefore, if the migration is not tackled, it could gradually increase to the detriment of agricultural production thereby reducing food production. This result agrees with Igbinaduwa, (2021) who reported a mean of 2 migrants per household in Egor local government area of Edo Sate, Nigeria.

Table 3: Number of migrants in household (N=80)

Variable	Categories	Frequency	Percentage	Mean
Number of migrants in household	0– 2	41	51.4	
	3 – 5	29	36.3	
	6 – 8	6	7.5	2
	9 and above	4	5.0	

Source: Field survey data, (2021)

Causes out- migration

The factors that account for migration out of the study area as presented in Table 4 shows that poor quality housing (31.3%) was ranked 1st, followed by unemployment (17.5%). Other factors include conflict within the farming environment and poor health services (13.8%) respectively while famine (3.8%) was least amongst other factors. This result suggests that variety of factors account for the migration of people out of the study area, therefore, if the factors are not given full consideration, agricultural production may be threatened. This result is in aligns with Burkar *et al*., (2021) who reported that unemployment and lack of basic amenities were the major causes of rural urban migration in Yobe State, Nigeria.

Table 4: Farming related factors account for the out-migration

Factors	Frequency	Percentage	Rank
Poor quality housing	25	31.3	1
Unemployment agric. Graduates	14	17.5	2
Conflict	11	13.8	3
Poor health services	11	13.8	4
Poor crop yield	9	11.3	5
Poor agric. education services	7	8.8	6
Famine	3	3.8	7

Source: Field survey data, (2021

Effects of migration on the livelihood of farmers

The effect of rural-urban migration on the livelihood of the farmers (Table 5 shows that (71.3%) of the respondents were of the view that migration has led to labour shortage in the study area, decrease in income from farming (21.3%) and decrease in time spent in farming (7.5%). This result suggests that migration has major negative effects on farm labour in the study area. If the issue of migration is not addressed, there would be reduction of farm outputs. By implication agricultural production will be affected as labour is a major factor to be considered in agricultural production. This agrees with Maharjan *et al*., (2013) summited that migration reduces the use of both family male labour and hired male labour in Nepal.

Table 5: Effect of migration on livelihood

Area of effect	Frequency	Percentage
Labor shortage	57	71.3
Decreased income from farming	17	21.3
Decreased time spent in farming	6	7.5

Source: Field survey, (2021)

Coping strategies of farmers in the study area.

As presented in Table 6, the result on the strategies for resolving farming constraints associated with labour shortage reveals that (73.8%) of the respondents resolved their farming constraints by hiring labourers, (10%) respectively resolved their farming constraints by working with neighbours and the help of their children while (6.3%) resolved by through the help of their extended families. This suggests that the respondents experienced labour shortage in their production but have devised various means of handling this issue. The implication of this result is that cost production will be affected as farmers will depend more on hired labour which will directly increase their cost of production.

Table 6: Way of resolving farming constraints associated with rural urban migration

	Frequency	Percent
Hiring of labour	59	73.8
By working with neighbours	8	10.0
With the help of children	8	10.0
With the help of extended family	5	6.3
Total	80	100.0

Source: Field survey, (2021)

Mitigating strategies for reducing rural-urban migration

The ranking of the strategies for reducing rural urban migration as presented in Table 7 shows that provision of adequate extension education (mean=1.16) was ranked 1st, followed by adequate orientation programmes (mean=1.13). Other factors had a mean of (1.00) as such were ranked 3rd. These factors include provision of medical facilities and health center, provision of standard education system, good resources for livelihood, good electricity, good road, good water supply, job creation and provision of NGOs. This result suggests that farmers have various strategies in mind that could help reduce rural-urban migration, if such strategies are considered by appropriate government agencies the problem of rural-urban migration could be resolved.

Table 7: Mitigating strategies for Reducing Rural – Urban Migration

Strategies	Yes frequency	% yes	Mean	SD	Rank
Provision of agricultural extension education	83	67	1.16	1.37	1
Adequate orientation programmes	69	86	1.13	0.34	2
Provision of medical facilities and health centers	80	100	1.00	0.00	3
Provision of standard education system	80	100	1.00	0.00	3
Good resources for livelihood	80	100	1.00	0.00	3
Good Electricity	80	100	1.00	0.00	3
Good roads	80	100	1.00	0.00	3
Good water supply	80	100	1.00	0.00	3
Creation of jobs	80	100	1.00	0.00	3
Provision of NGOs	80	100	1.00	0.00	3

Source: field survey, 2021 * multiple responses allowed

Relationship between farmer's socio-economic characteristics and the number of migrants in a household

Multiple regression was used to test the relationship between farmer's socio-economic characteristics and the number of migrants in a household (Table 8). The calculated F value (F=29.04) was significant ($p< 0.050$) showing thatthe independent variables have significant influence on the number of migrants in a household. The adjusted R^2 (0.714) implies that the independent variable explained or accounts for 71.4% of the number of migrants in a household. The t- value shows that age, marital status, education, household size, more jobs opportunity and access to white collar job were significant factors affecting the number of migrants in a household. The coefficient for age was positive (0.006). This result implies that older the farmers become, the more positively disposed the farmers are, by extension the more the number of migrants in their household. This agrees with Maharjan *et al*., (2013) that more matured male tends to migrate to urban areas creating male labour shortage in the rural areas. The coefficient for education was negative and significant (-0.067), which implies that the lower the educational level, the more migrants in their household. The coefficient for household size was positive and significant; suggesting that the more the household size, the more the tendency to migrants to urban area. The coefficient for more jobs opportunity was positive and significant, indicating the more jobs opportunities, the more the famers tend to migrate to urban areas. Accordingly, the coefficient for access to white collar job was positive and significant, indicating that the more access to white collar job, the more the farmers tends to migrate form their household to urban areas.

Table 8: Relationship between farmer's socio-economic characteristics and the number of migrants in a household

Independent variables	Coefficient (B)	t-value	Prob. Level
Constant	0.651	9.258	0.000
Gender	-0.070	-0.245	0.836
Age	0.006	3.504	0.000*
Marital status	0.492	4.001	0.033*
Education	-0.067	2.677	0.008*
Household size	0.554	1.074	0.001*
More job opportunity	0.010	5.082	0.000*
Access to white collar job	0.043	9.755	0.000*
Better health	-0.011	1.635	0.104
Urban facilities and their way of life	-1.590	-0.245	0.807

F value = 29.04($p<0.050$)
Adjusted R square = 0.714
*significant at 5% (critical t = 1.95)

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, it was concluded that migration majorly affected the respondents on labour shortage. However, significant relationship existed between the farmer's marital status, education, and the number of respondents in a household. There is need to intensify adequate extension education and proper orientation programme as these have been viewed by the respondents to be a better way of reducing rural-urban migration. It was recommended that proper agricultural extension programmes should be made available in the study area as this would helped to increase farmers knowledge on production practices and possible ways of reducing the effects of labour shortages. Also appropriate government agencies should organize the needed orientation programmes in the study area. This will help in sensitizing the farming communities the negative effects of rural-urban migration. Needed social amenities should be provided in the study area as these have been identified as major causes of rural- urban migration. Lastly, farmers should be encouraged to adopt farming technologies that will require less number of persons to carry out e.g. mechanization. This will address the problem of labour shortage.

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