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Rural-Urban Migration Among Women Farmers: Science Education, Survey, and Implication for Food Crop Production in Cross River State, Nigeria

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ABSTRACT

The main objectives of the study were to: identify the socioeconomic characteristics of the respondents, assess factors influencing women's food production activities and identify measures for reducing rural-urban migration among women farmers in the study area. A sample size of 200 farmers was randomly selected for the study. Data were collected using a set of structured questionnaires and interview schedules. The result obtained showed that most of the farmers were between the ages of 51-60 years (50.0%). Farmers' levels of education were the non-formal level of education (45.0%), primary level of education (35.0%), and secondary level of education (15%). Farming was their major occupation (52.5%) and trading (40.0%). 8-10 household size was the highest which promotes labour within the family (40.0%), 11 and above (30.0%). Family labour was the main source of labour supply (75.0%), and exchange labour (22.5%). Factors influencing women's crop production activities were lack of fertile farmland, old age, active engagement in domestic activities, and high cost of farm inputs, which were 22.5, 17.5, 13.5, and 11.5%, respectively. The findings showed that mechanization can reduce migration among women farmers. The study recommended that government should mechanise agriculture, loans should be given to corporative farmers while land tenure system should be reviewed to favour farming which will also help to reduce rural-urban migration among women farmers in Cross River State, Nigeria.

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1. INTRODUCTION

Agriculture has been the major economic base that has sustained livelihood in Nigeria over the years (Ugwu & Kanu, 2012). Before the discovery of petroleum products in commercial quantities in the country the agricultural sector was contributing between 70% and 80% of the total value of the country's export. The production of food and other by-products of agriculture is mostly carried out in the rural communities where farming is a major occupation. Rural communities equally have an abundance of farmland and fertile land for farming which encourages the production of food in commercial quantities (Kremen, 2015).

Farming activities are carried out by both gender (male and female) but one basic challenge of production is rural-urban migration. According to Okpo and Eze (2012), the need for better lives, economic reasons, cultural practices, and negligence on the part of government towards agriculture have contributed to the reduction of food supply in Cross River State in particular and in Nigeria in general. The migration of young women from rural to urban areas has drastically affected food supplies to urban centres and for export. Yue *et al.* (2010) included an attempt to raise one's social status as one of the reasons for rural-urban migration. The process of rural-urban migration has affected the rural economy by creating market changes in gender households since farming activities can only be carried out by healthy young men and women in the society.

Ye (2018), noted that migrants are considered to be pulled out of the rural areas because of a lack of transformation in the agricultural sector, into the urban areas to take advantage of expanding non-agricultural economics. Socio-economic inequality between the rural and urban dwellers is another cause of drifting from a rural area to the cities. Other reasons for migration include; violence, political instability, natural disasters such as famine, flood, war, poor infrastructural service supplies, and lack of access to quality education among others have contributed to rural-urban migration. However, the following measures were suggested to reduce rural-urban migration, including; creating appropriate rural-urban economic balance, expanding small scale labour-intensive industries and eliminating factor price distortion, the establishing industries, provision of social amenities, creating employment opportunities for youths and women in the rural centres to occupy government establishment, especially agriculture.

Notably, rural-urban migration both temporary and permanently has a positive and negative impact on the origin of a particular food production initiative (Yue et al., 2010). Some negative impacts of migration are; migration impoverishes rural areas because those that would have engaged in food production tend to leave for white-collar jobs, it creates labour shortage at a peak period and leads to a vicious circle of degradation as it generates smaller markets for local activities. Also, migration could also have a positive impact on food crop production when migrants send remittances in cash or food items to their loved ones to alleviate financial constraints faced while producing food Also, it is obvious that migration, reduces the population of rural areas thus decreases the supply of labour which leads to low agricultural production. It is on this premise that the researchers deem it necessary to assess the effect of rural -urban migration on women 's crop production capacity in Cross River State, Nigeria.

The following are the specific objectives of the study:

- (i) To identify the socio-economic characteristics of the respondents in the study area.
- (ii) Assess factors that influence women's food production activities in Cross River State, Nigeria.
- (iii) Identify measures for reducing rural-urban migration among women farmers in the study area.

The following are the hypothesis of the study: Ho1 (There is no significant relationship between some socioeconomic attributes of the migrant women farmers and food crop production in the study area).

2. METHOD

The study was carried out in Cross River State, Nigeria. The state is located in the south-south region of Nigeria and has eighteen (18) local government areas. The state shares a common boundary with Akwa Ibom State, Ebonyi State, Benue State and the Republic of Cameroon. The major occupation of the people in this area is farming, civil service and the mining of query. However, agriculture dominates other occupations as most rural dwellers are peasant farmers. Two local government areas were randomly selected for the study, namely; Odukpani and Ogoja local government areas, representing the northern and southern Cross River State. A multi-stage sampling technique was used for the study. At stage one, two agricultural zones, southern and northern zones were randomly selected. At stage two, two local government areas Odukpani and Ogoja were purposively selected for the study based on their geographical location and involvement in agricultural activities. The third stage was the random selection of 200 farmers with 100 each from Odukpani and Ogoja local government areas in Cross River State. Data were collected from both primary and secondary sources. The primary source was obtained from the field while secondary sources were obtained from the internet, journals and articles, among others.

3. RESULTS AND DISCUSSION

Table 1 shows that majority of women farmers were between the ages of 51-60years, 41-50years and 31-40years representing (50%), (28%) and (12.5%) respectively. The result further reveals that most of the women farmers were married (50.0%), (35.0%) divorced and (12.5%) widowed. Farming was recorded as the highest occupation of the rural women (52.5%), civil service (2.5%) and teaching (5.0%). 8-10 persons per household were recorded as the highest household size with (40.0%), 11 and above was (30.0%) while 5-7 person was (20.0%). The major source of farm labour was family labour (75.0%), exchange labour (22.5%) and hired labour (2.5%). The majority of the women farmer had no formal education (45.0%), primary education (35.0%) and secondary education (2.25%). Also, farmers' low level of education in sub-Saharan Africa has reduced agricultural production. The results also show that old age, unmarried people, higher educational qualifications, civil servants and mechanized farming were low-level socioeconomic factors affecting women farmers' food crop production in the study area.

Table 1. Distribution of respondents by socio-economic characteristics.

Variable	Frequency	Percentage (%)
Age:		
20-30	7	3.5
31-40	25	12.5
41-50	56	28.0
51-60	100	50.0
61 and above	12	6.0
Total	200	100

Table 1 (continue). Distribution of respondents by socio-economic characteristics.

Variable	Frequency	Percentage (%)
Marital status:		
Single	5	2.5
Married	100	50.0
Divorced	70	35.0
Widowed	25	12.5
Total	200	100
Level of education:		
Non-formal	90	45.0
Primary	70	35.0
Secondary	30	15.0
Higher education	10	5.0
Total	200	100
Occupation:		
Farming	105	52.5
Trading	80	40.0
Civil servant	5	2.5
Teaching	10	5.0
Total	200	100
Household size:		
1-4	20	10.0
5-7	40	20.0
8-10	80	40.0
10 and above	60	30.0
Total	200	100
Labour supply:		
Family	150	75.0
Hired labour	5	2.5
Mechanized	0	0.0
Exchange labour	45	22.5
Total	200	100

Table 2 shows the result of factors affecting women's crop production activities in the study and from the result, the major factors influencing women's crop production capacity were lack of access to fertile and productive land, old age of women farmers, active engagement in daily domestic activities, high cost of farm inputs and insufficient access to agricultural extension workers (Ugwu & Kanu, 2012). These items were (22.5%), (17.5%), (13.5%), (11.5%) and (10.0%) respectively. The world of physical work and agriculture, women perform nearly two-thirds of the farm work if they have access to land, finance and labour supply (Kremen, 2015). The access to extension agents would help to influence the adoption of farming innovations to increase food production capacity in any given environment. The results also showed that factors such as lack of agricultural innovations, lack of farmers' access to credit facilities, unavailability of cheap labour supply, expensive cost of hiring labour and poor interest of the rural dwellers in farming were low factors responsible for influencing women food crop farming in Cross River State, Nigeria.

Table 3 shows the distribution of respondents based on ways of reducing rural -urban migration in the study area . These results showed that increasing farm mechanization to reduce drudgery x=4 was (ranked-1st), adequate extension service delivery x=3.06 (ranked-2 nd), review of land tenure system of 1978 x=2.72 (ranked -3rd), provision of basic social infrastructural amenities such as pipe-borne water, electricity, access roads, x=2.56 (ranked-4 th) respectively.

Table 2. Distribution of respondents based on factors influencing women's crop production activities in the study areas.

S/N	Variables	Frequency	Percentage	Mean	Rank
			(%)	(x)	
1	There is no access to credit facilities	12	16.0	0.96	7 th
2.	I have insufficient access to extension services/workers	20	10.0	1.00	5 th
3.	There is no fertile and productive land	45	22.5	5.06	1 st
4.	The cost of hiring labour is very expensive	9	4.5	0.20	9 th
5.	Labour is not readily available	10	5.0	0.25	8 th
6.	There is no interest in farming	6	3.0	0.09	10 th
7.	I am actively engaged in domestic activities	27	13.5	1.82	3 rd
8.	I am too old to continue with farm work	35	17.5	3.06	2 nd
9.	No agric innovations to improve yield and productivity	13	6.5	0.42	6 th
10.	Farm inputs are very expensive	23	11.5	1.32	4 th
	Total	200	100		

This result agrees with literature Kremen (2015) who opined that availability, accessibility of arable, fertile and productive land access to finance by women farmers is a way forward for increasing food production. Concurrently, the provision of financial incentives, machines, electricity, a good road network, and quality water supply to the rural people will help reduce rural-urban migration thereby increasing the food production capacities of rural women farmers 'workforce (Ye, 2018). This result also shows that; job-creating opportunities, the establishment of industries and improved access to credit facilities were low-level ways of reducing rural-urban migration in the study area.

Table 3. Distribution of respondents based on ways of reducing rural-urban migration in the study area.

S/N	Variables	Frequency	Percentage (%)	Mean (x)	Rank
1.	Creation of job opportunities	27	13.5	1.82	5 th
2.	Improved access to credit facilities	15	7.5	0.56	7 th
3.	Provision of basic social infrastructural amenities e.g pipe-borne water, electricity, accessible roads	32	16.0	2.56	4 th
4.	Establishment of industries	18	9.0	0.81	6 th
5.	Review of the land tenure system of 1978 to allow women to have access to arable land	33	16.5	2.72	3 rd
6.	Adequate extension services delivery system	35	17.5	3.06	2 nd
7	Increased farm mechanization to reduce drudgery and fatigue associated with subsistence and local farming	40	20.0	4.00	1 st
	Total	200	100		

Source: Field survey data, 2021

Table 4 show relationship between some socioeconomic attributes of migrant women farmers and food crop production: Results showed that there was no significant relationship between many years spent at the primary level of education and food crop production among migrant women farmers in the study area (r=0.76). However, age and number of years spent as women farmers have a significant relationship (r=0.52), with computed r of 0.762 and 0.520 respectively at a critical r-value of 0.4. Older women crop farmers tend to migrate from rural to urban centres mostly because they need to visit their children in the cities, particularly

during childbirth to the detriment of their crop production ventures. On the contrary, however, women crop farmers with a higher level of education are more likely to reduce migration habits because most of them prefer to be visited at home.

Table 4. Relationship between some socioeconomic attributes of migrant women farmers and food crop production.

Socioeconomic attributes of MWF	Modalities used
	computed r
51-60 years of age	0.762
Years spent as a farmer	0.520
Years spent in primary level education	0.485

4. CONCLUSION

The findings of this study indicated that rural-urban migration has negative implications on women's crop production capacity in Cross River State, Nigeria. The study, therefore, concluded that the state agricultural activities should be made attractive through the provision of social amenities, the review of the land tenure system, provision of loan facilities and labour reduction through mechanization, women will be encouraged to do better in farming to sustain food production and food security initiatives in the study area. This study, therefore, made the following recommendations: (i) Efforts should be made to invest in agricultural mechanization as a way forward to checkmate the supply of labour in agricultural activities among women farmers; (ii) Financial institutions should grant loans to women farmers with little or no collateral securities and at a low-interest rate to boost food production capacity in Cross River State in particular and Nigeria in general. This, therefore, is a sure way of increasing food production; (iii) The land act decree of 1978 should be reviewed to ensure equal distribution and availability of agricultural land for farming. This is because as land becomes fragmented crop production becomes low. This will also help to solve the problem of the tenure system in the state and Nigeria in general.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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