E-ISSN: 1115 – 831X P-ISSN: 3027-2963
MPRI-JAVS
INTERNATIONAL JOURNAL OF AGRICULTURAL AND VETERINARY SCIENCE
VOL. 09 NO. 1 - JULY, 2025

ASSESSMENT OF EFFECTS OF RURAL-URBAN MIGRATION ON AGRICULTURAL FOOD CROPS PRODUCTION IN RURAL COMMUNITIES OF AKKO LOCAL GOVERNMENT AREA, GOMBE STATE, NIGERIA

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DOI: https://doi.org/10.70382/mejavs.v9i1.034

Abstract

This study assesses the effects of rural-urban migration, on agricultural food crops production in rural communities of Akko Local Government Area, Gombe state, Nigeria. The assessed the determinants of migration, identified the level of food crops production over the years in the study area and poverty level caused by migration, it also examined the sources of households agricultural labour in the study area well as the policy framework that can be put in place to reduce rural-urban migration and poverty in the study area. Data for this study were collected using both primary and secondary sources. The primary data were collected through structured questionnaire administered that to the household heads in the study area, while the secondary data used for this study were collected from published sources. Relevant materials for this study were obtained from different research reports from Gombe Agricultural Development Programme (GADP) and Gombe state Ministry of agriculture. Stratified sampling technique was used to select villages where questionnaires were administered, and also simple random sampling was adopted to select the respondents within villages. The data were analyzed using both descriptive and inferential statistics. The descriptive statistical tools employed in this study were tables, frequencies, percentages, bar-graphs and pie-charts while inferential statistical tools of pearson's product moment correlation coefficient was used to determine the correlation

Key Wards:
Assessment, Rural-Urban Migration, Agricultural Food Crop Production

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between sources of agricultural labour supply and the level of crop production over the years in the study area. The results of the findings revealed that the major sources of agricultural labour in the study area is family and hired labour which constitute (51%) of the respondents in the study area, family labour (26%), and hired labour account for (23%).. The level of crop production over the years revealed that increased production constitute (35%), decreased (54%), while the same production over the years took the remaining (11%) of respondent in the study area. The study also revealed that the crop production over the years in the study area is decreasing due to outwards movement of able youths in the study area. The study recommend that government should promote and intensified on rural industrialization, banking services in terms of loans and credit scheme, infrastructural facilities should be made available to the rural people, provision of employment and established primary and secondary schools in rural areas to check the outflow of students from rural to urban areas.

Introduction

Background of the Study

Migration is the geographical mobility of people from one place to another for the purpose of taking up better socio-economic opportunities. It may be internal or international. Internal migration includes the movement of urban to urban, rural to urban, rural to rural and urban to rural areas within a country. The duration of migration can be long term or short term. Rural- to- urban migration is playing a significant role in rural development and poverty reduction. Rural to urban migration takes place when society transfers from agriculture to industrial sector, lack of employment opportunities in the rural areas, lack of adequate health care and education, liquidity constraints, marginalization of land, production shocks and inability of agriculture sector to absorb surplus rural labour. In addition to these socio-economic factors, the major driver of migration is poverty and therefore, there is a close relationship between migration and rural poverty.

Migration is defined as the movement of person or group of persons from one geographical unit to another country across an administrative or political border, wishing to settle permanently or temporarily in a place other than the place of origin (Bauer et al, 2004). The movement of human populations across the planet has characterized human societies throughout history. Together with birth (fertility), death (mortality), migration

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forms a third fundamental element in determining population growth and structure (Bello, 2015).

Migration has contributed to form the societies we live in today, and as such, it is part of our shared history. Both the causes and consequences of migration are multifaceted and complicated. While many people leave their homes as a result of conflict or poverty, others move under conditions of peace, political stability and development. People may also leave to study, reunite with family members or with the plan to find work and financially support their families back home. The movements from rural areas to cities form an important part of the structural transformation of an economy, and bring opportunities and challenges for rural economies. Remittances received by families, for example, have significant positive impacts on poverty reduction. In some cases, the loss of most dynamic members of rural societies can have a negative impact on agriculture (FAO, 2018)

Poverty has been a lingering problem in Nigeria and mostly affects the rural economy, which is the dwelling place for over 70% inhabitants who depend mainly on agricultural production for livelihood. Nigeria has about 79 million hectares of arable land of which 32 million hectares are cultivated. Over 90% of agricultural production is rain-fed, smallholders, mostly peasant account for over 80% of all farm holdings (Nwajinba, 2012). Both crops and livestock remain below potential as a result of inadequate access to and low uptake of high quality seeds, little or no fertilizer use, inadequate or absence of farm machineries, low application of agrochemical and insufficient production system as a result of rural poverty (Yahaya, 2010).

Agriculture in Nigeria has been the most important sector of the economy from history and a basis for rural employment, food production and major export earnings before the discovery of black gold (Oni, 2008). The assertion made above is based on the evidence that as at pre-independence to independence little was known of petroleum as a major source of revenue for Nigeria. The National agricultural system was able to produce enough food crops like yam, maize, sorghum, millet and soya beans to the extent that there was almost no need for importation. On the other hand, food crops productions was expected to keep pace with food demand as a result of increasing population, but this was not the situation. Okuneye (2015) reported that, the rate of food crops production was growing at an average of 2.5% compared with the rate of population which was put at 3.5%. This consequently has resulted in wide gap between domestic food production and total food requirement, an increase in food importation to bridge part of the wide gap between supply and demand, and high rate of increase in food prices due to

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supply deficit. However, Cuesta, et al. (2011) was of the view that domestic food production and supply is a complex issue involving multiple factors in Nigeria. For instance, food production challenge could be as a result of constraints such as: government expenditure on agricultural sector, rural poverty, growing urbanization resulting from the movement of labour away from rural areas and inadequate agricultural credit.

The problems migration to urban centers lead to over population, unemployment and general congestions in urban centers, thereby further leading to other problems such as a diseases, traffic congestions, low level of agricultural products and the major problem is pressure on resources . According to Amrevurayire, (2016) urban centers have large number of migrants residing on the basis of either permanent or temporal in their relocated environment which could spring up to over population, unplanned sprawl of towns, transport congestion, sanitation and slums are amongst the major challenges experience in the urban centers as stated by Sati, (2016). On the other hand, rural communities experience constant movement of people out of their villages to city centers which brings about decline in size and density in the communities as well turns out to be issues of poverty, poor social lives and under populated, especially among the younger ones (Awumbila et al, 2015; FAO, 2014; Gingsburg et al, 2014; Ikwuyatum, 2016). Migration deprive rural areas of labour in agricultural areas, increase the price of commodities, housing and transport in urban areas, also increase the rate of unemployment in urban areas since not all people who come to town to seek employment will be employed. It also lead to economic decline in rural areas because the resources are not fully utilized due to labour shortage, resulting in breaking of family cultural bond in rural areas, hence lead to shortage of social services in urban areas due to increase in population caused by this migration (Rutaremwa, 2011). Although a lot has been written on migration and food productions shortages in Nigeria, a country which is considered as a major food exporter, now found itself in most of food importation, where it was reported in 2012 that N155 billion was spent on the importation of food alone (Agriculture in Nigeria 2011). Abdulrahaman (2013), Abu (2012), Adebayo (2010) and Adeniyi et al. (2009) confirmed the existence of migration and food insecurity in Nigeria. Adaku (2012) is of the opinion that farm labour migration has a negative effect due to loss of labour caused by migration, which reduce agricultural productivity. Despite the wide coverage made by different reviews there is none of the literature that gives a clear picture on the effects of rural-urban migration on poverty and crop production in Akko Local Government Area. This makes this study necessary in filling the gap in this field work. Thus, it is hope that at the

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end it will provide measures or policy framework that will reduce the menace of rural-urban migration and improve the livelihood conditions of the dwellers in Akko LGA, Gombe State and the country at large.

The Location and Size of Study Area

Akko Local Government Area is located between latitude 10° 02ˡN and 10° 04ˡN and between longitude 11° 12ˡE and 11°21ˡE and it is about 44km south of Gombe town, the state has a total land area of about 2,840 square kilometers. It is bounded to the north by Gombe local government, to the south by Billiri local government, to the west by Bauchi state and to the east by Yamaltu – Deba local government area (Akko LGA Diary, 2006).

In term of population, Akko Local Government Area has a total population of 337,435, out of which males stood at 177,515 and for females stood at 159,920 with population growth rate at 2.58%. The projected population was calculated as 464,700 in 2016 by the National Population Commission, Gombe (Bello, 2015). The people of Akko LGA are said to be diverse in terms of different languages spoken, the customs and traditions been adhered to. According to Joseph Greenberg's (2000) linguistic classification, the most dominant linguistic group to found in this area is Afro-Asiatic and Niger-Congo family of languages. Thus, the ethno-linguistic composition of Akko LGA includes the Fulani, Tera, Bolawa, Tangale, Jukun and Kanuri. There are also recent settlers such as Hausa, Igbo's and Yoruba's. In addition to the speaking of all these various languages, Hausa language does serve the purpose of commerce, interaction and education at lower level school system. The English language remains the official language of communication as obtained all over Nigeria (Bello, 2015).

Agriculture and rearing of animals are the main occupation of the people of Akko local government area. Generally, good quality of soil added inceptives to the people as regard to the production of crops and domestication of animals. The practices of agriculture are subsistence which is characterized by the use of local farm implements and small farmlands. Food crops are cultivated in a large quantity which includes; maize, millet, rice, cassava, corn, guinea corn, and cash crops such as cotton and groundnut etc. Other economic activities include the retail shops, and other apprenticeship such as blacksmith, carpentering, tailoring and others (Bello, 2015).

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Map of the Study Area

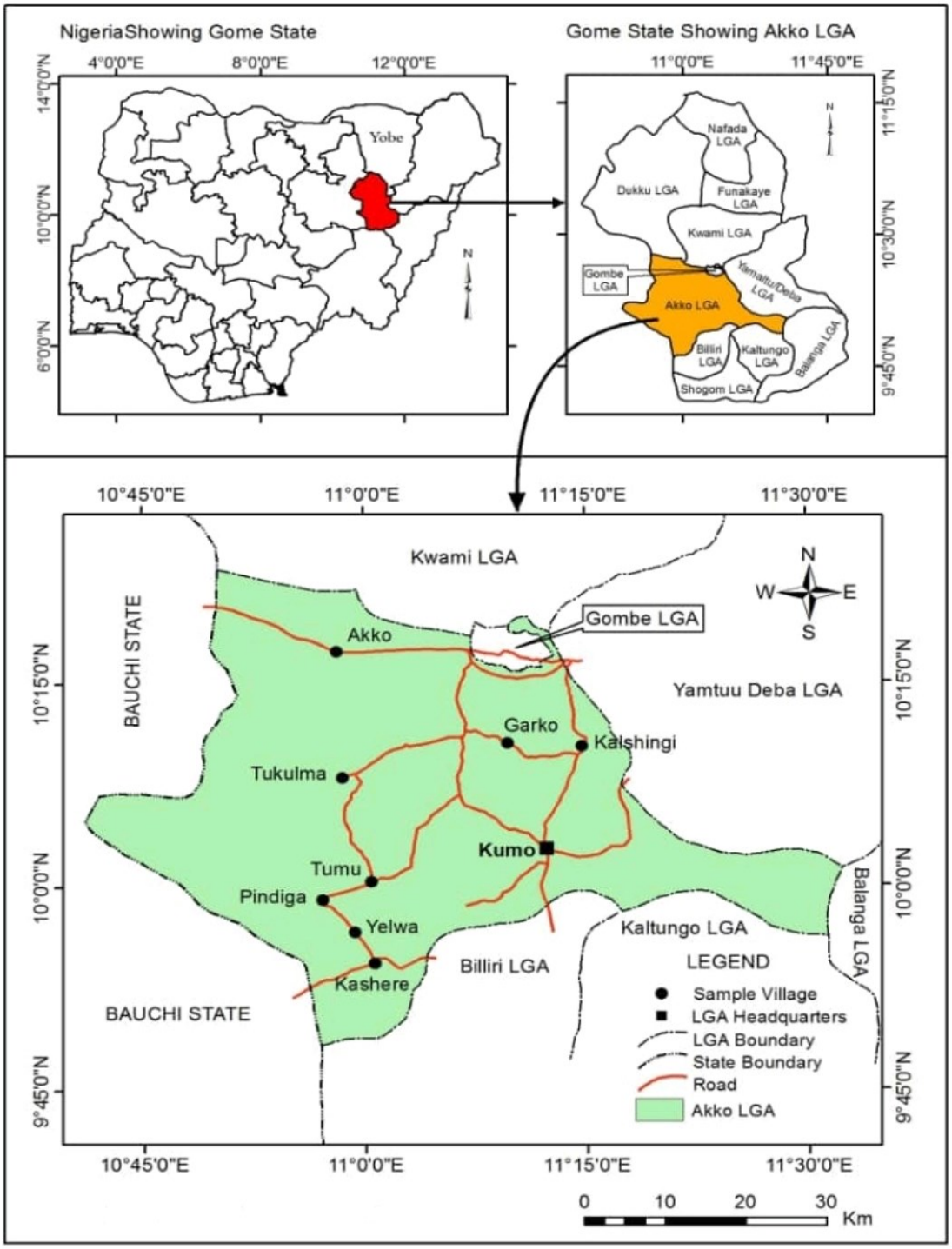

Figure 1: The study area showing sampled villages

Source: Zonal Advanced Space and Technology Applications Laboratory (ZASTAL) Kashere, 2021

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Methodology

The data were collected through structured questionnaire that administered to the targeted population from villages in Akko Local Government Area of Gombe state (study area). The structured questionnaires were administered among the household heads in the study area. The structured questionnaires source information on demographic characteristics of the respondents, income of respondents, sources of agricultural labour and types of agricultural labour force involves in productivity, level of poverty and suggested remedies to the problems.

The secondary data were collected from research reports, ADP report in Gombe State, and other materials such as text books, ministry of agriculture publications, National Population Commission Gombe, journals, internet, articles, research papers and various published and unpublished articles relevant to the study.

Sample/Sampling Size

The study population involved rural village settlers from 10 villages within Akko Local Government Area of Gombe State. These rural settlers includes the farmers, traders, civil or public servants, hunters, fishermen, employed, unemployed, and other people of different tribes living within the study area. The research is limited to rural people and household's heads in Akko LGA. Simple random sampling technique was used to select the villages where the questionnaires administered and systematic sampling was adopted to select respondents within the villages based using Yamane's formula (1967).A total of four hundred (400) respondents were selected for this research based using Yamene's formula (1967).The formula is given as,

$$SS = \frac{N}{1+N\,(e)2}$$

Where:

SS = Sample Size

N = Total Population

1= Constant

e = Margin of error at 0.05 or 5%

Based on Yamane's formula, the questionnaires were administered to 400 respondents in the study area. Each village was given a number of questionnaires according to its population size. See table 1 above.

Data collected for this study were analyzed through simple descriptive statistical tools and inferential statistical tools such as the use of tables, frequencies, percentages, bar-graphs and pie-charts while inferential statistics used in this research is correlation analysis.

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Results and Discussions

Presentation of Results and Discussion

Demographic Characteristics of the Respondents

TABLE 1.1: Gender of the Respondents

Gender	Frequency (F)	Percentage (%)
Males	369	92.25
Females	31	7.75
Total	400	100

Source: Field work, 2019

The Table 1 shows the gender distributions of the respondents, which indicates that males account for 92.25% while females accounted for 7.75% of the total respondents in the study area. The males constitute the highest percentage of the respondents since the households heads are majority involved in crops production in Akko Local Government Area of Gombe State. The low percentage of women in Agricultural production is due largely to religious and cultural believes that women are suppose to be full house wives and not engaged in food production.

TABLE 1.2: Age of the Respondents

Age	Frequency (F)	Percentage (%)
18-20	53	13.25
21-40	78	19.5
41-60	186	46.5
61 and above	83	20.75
Total	400	100

Source: Field work, 2019

The Age of the respondents was examined in the study area as depicted in Table 2. The table shows that 13.25% respondents falls within the age of 18-20 years, 19.5% falls within the age of 21-40 years while 46.5% falls within the age of 41-60 years of ages, whereas 20.75% falls within the age of 61and above years. The majority number of the respondents who answered these questionnaires constitute 79.25% are falls within the age of 18-60 years.

TABLE 1.3: Marital Status of the Respondents

Marital status	Frequency (F)	Percentages (%)
Single	146	36.5
Married	228	57
Spinster	6	1.5

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Marital status	Frequency (F)	Percentages (%)
Widow	9	2.25
Divorced	11	2.75
Total	400	100

Source: Field work, 2019

The Marital status of the respondents was considered and the results as depicted in tabl 3. The Table revealed that 36.5% are single, while 57% of are married. The remaining constitute 6.5% respectively.

TABLE 1.4: Occupation of the Respondents

Occupation	Frequency (F)	Percentages (%)
Farming	207	51.75
Trading	35	8.75
Civil servant	75	18.75
Teaching	38	9.5
Fishing	15	3.75
Animal sellers	19	4.75
Hunting	11	2.75
Total	400	100

Source: Author's field work, 2019

The major occupation of people in the study area is farming. The finding shows that, farming took 51.75%, trading 8.75%, while civil servants 18.75%, followed by the teaching staff 9.5%, also fishing account for 3.75%, while animal sellers including goats, sheep, rams, donkeys and cattle account for only 4.75%, whereas hunting took 2.75% of the respondents respectively. Results showed that the main occupation of the respondents is farming because it constitutes the majority number of respondents in the study area.

TABLE 1.5: Educational Level of the Respondents

Education	Frequency (F)	Percentages (%)
Non formal	108	27
Primary	192	48
Secondary	67	16.75
Tertiary	33	8.25
Total	400	100

Source: Field work, 2019

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Education is an important variable in human life as it affect human agricultural production directly or indirectly, as it take away the able youths out of their origins. The finding of the study in table 6 above shows that the non-formal accounts for 27%, primary 48%. This implied that the level of literacy in the study area is high. Respondents with secondary school represent 16.75%, whereas tertiary took the remaining 8.25%. This result is in consonance with the finding of Awoniyi and Salma (2012) who pointed out that high educational level of household could increase farm income earnings and reduce poverty level.

Motivational Factors of Migration

The poverty differences cut across gender, age, ethnicity, location (rural versus urban), and income sources. In households; children and women often suffer than men and in the community; minority ethnic or religious groups suffer more than majority groups and the rural poor suffer more than the urban poor also among rural poor; landless wage workers often suffer more than small landowners or tenants. These differences mentioned above are the vivid motivational factors of migration

TABLE 2.1: Motivational Factors of Migration

Motivational factors	Frequency (F)	Percentages (%)
Unemployment	179	44.75
Landlessness	14	3.5
Homelessness	33	8.25
Loss of income	41	10.25
Drought	6	1.5
Flood	0	0
Lack of education	116	29
Lack of healthcare services	11	2.75
Total	400	100

Source: Field work, 2019

Unemployment, lack of education and lost of income constitute the majority percentages which accounts for 84%, the remaining landlessness, homelessnes, drought and flood took 16% in the study area. This revealed that, the major determinants of migration in the study area are unemployment, lack of education and lost of income. People tend to leave their origins in search for white collar jobs and for education in the study area.

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TABLE 2.2: Types of Migration in the Study Area

Types of migration	Frequency (F)	Percentages (%)
Temporary	254	63.5
Permanent	23	5.75
Seasonal	123	30.75
Total	400	100

Source: Field work, 2019

The Table 5 shows the types of migration in the study area. The temporary migration took 63.5% respondents in the study area. This finding revealed that the majority of the migrants left their origin as for temporary basis which they could return home after some time, permanent type 5.75%, whereas seasonal migration constitutes 30.75% respondents in the study area. This finding shows that majority of the migrants are farmers and students because temporary migration consists of unemployed people, students and visiting families while seasonal migrants are usually farmers who left home during dry season and spent half of a year in towns and coming back home during rainy season to farm.

Table 2.3: Migrants Sending Remittances or Not in the Study Area

Remittance	Frequency (F)	Percentage (%)
Yes	194	48.5
No	206	51.5
Total	400	100

Source: Field work, 2019

Remittances are money or goods that migrants send back to family and friends in origin. The table 4.4.5 above shows that the migrants that are sending remittances to origin account for (48.5%) in the study area, while do not send remittances tohome (51.5%) respectively. This shows that majority of the migrants do not send remittances to family and friends which assisted in contributing poverty and declining in crop production in the study area.

Table 2.4: Duration for Migrants Sending Remittances

Duration	Frequency (F)	Percentage (%)
After one month	0	0
After two months	15	3.75
After three months	48	12

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Duration	Frequency (F)	Percentage (%)
After four months	65	16.25
After five months	109	27.25
Yearly	163	40.75
Total	400	100

Source: Field work, 2019

The duration for migrants sending remittances to family and friends in the study area revealed that the majority sends remittances quarterly and yearly which took the highest of 68%, and the remaining 32% of migrants sending remittances less than 6 months.

Table 2.5: Duration for Migrants Visiting Home

Duration for migrants visiting home	Frequency (F)	Percentage (%)
One-three months	29	7.25
One-five months	62	15.5
Seasonally	100	25
Yearly	91	22.75
After one year	118	29.5
Total	400	100

Source: Field work, 2019

Table 2.5 above showed the duration for migrants visiting home. Those visiting home yearly and after took the majority of 52.25%, followed by the rest visiting home less than a year constitute 47.75% of migrants in the study area.

Sources of Agricultural Labour in the Study Area

The major sources agricultural labours in the study area of Akko Local Government Area of Gombe State are family labour, hired labour and family/hired labour respectively. The result for the sources of agricultural labour in the study area is presented in table 3.1 below.

Table 3.1: Sources of Agricultural Labour in the Study Area

Sources	Akko	Garko	Kalshingi	Tukulma	Kashere	Pindiga	Tumu	Yalwa
Family	28	51	30	22	13	22	17	18
Hired	7	14	12	10	9	11	6	3
Family and hired	12	20	15	14	21	15	24	6

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Total	47	85	57	46	43	48	47	27

Source: Author's Field Work, 2019

Table above revealed the agricultural labour supply. The respondents in Akko village that used family labour in agricultural production represent 59.57%, followed by hired labour 14.89% and respondents who use family and hired labour constitute 25.54%.
Garko village also revealed that family labour uses took 60%, hired labour 16.47% and both uses family and hired labour in their farms 23.53%.
Kalshingi village shows that family labour took 52.63% workers; hired labour 21.1% and remaining 26.3% used family and hired labour in their farms.
Tukulma village also revealed that family labour represent 47.83%, followed by hired labour 30.43% whereas 23.91% uses family and hired labour.
Result on Kashere also shows that 30.23% of the respondents use family labour, and 20.93% hired labour, while 48.84% of the respondents use family and hired labour in their agricultural production.
Also finding on Pindiga shows that 45.83% of the respondents use family labour, and 22.92% hired labour, while 31.25% of the respondents uses family and hired labour in their agricultural production.
Result on Tumu also shows that 36.2% of the respondents use family labour, and 12.78% hired labour, while 51% of the respondents use family and hired labour in their farm activities.
Yalwa village result also revealed that family labour represent 66.67%, followed by hired labour 11.11% whereas 22.22% use both family and hired labour.

Table 3.2: Number of Children that Assists in Farm Production

No. of children	Frequency (F)	Percentage (%)
2-4	87	21.75
5-7	174	43.5
8-10	89	22.25
11 and above	50	12.5
Total	400	100

Source: Field work, 2019

Table 4.5.2 above shows numbers of children that assisted their parents in farming operations. 2-4 children assisted their parents in farming took 21.75%, 5-7 children 43.5% and 8-10 children account for 22.25%, whereas those fall within the category of 11 and above children account for 12.5% of the respondents in the study area. This finding

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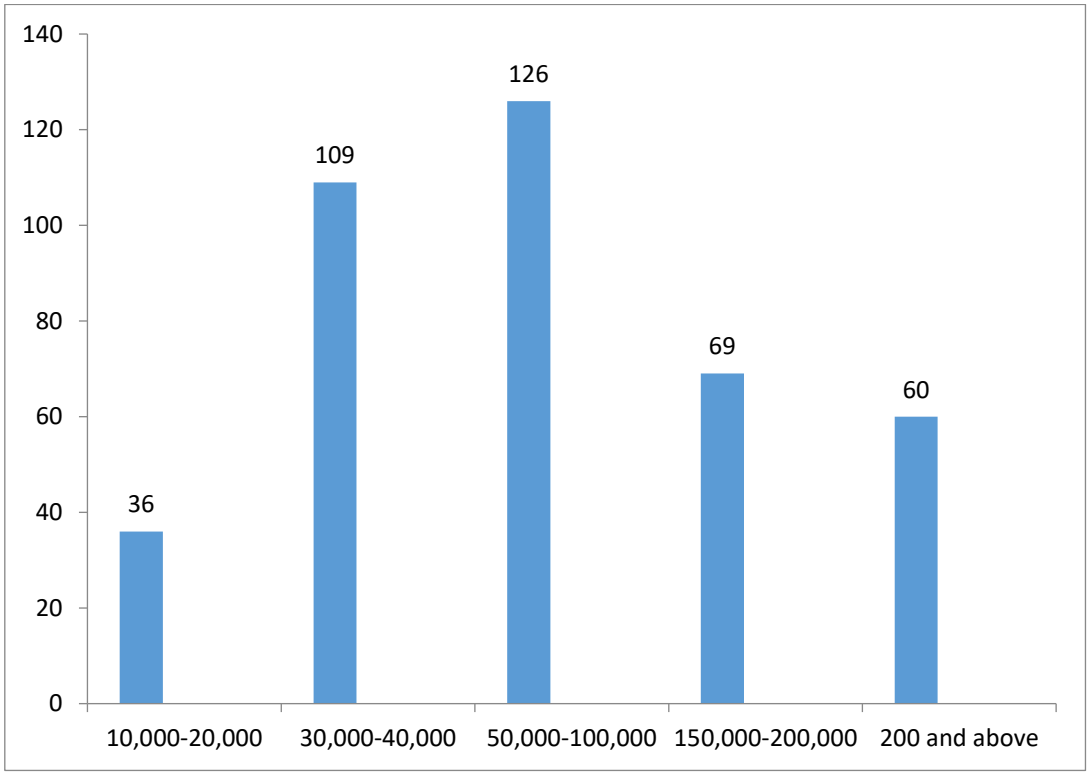
revealed that the farmers are practicing polygamy marriage where a man marries many wives which resulted in producing many children that assisted their parents in farming activities. Majority of the farmers have children from 2-11 and above that helped them in farming.

Fig. 1.4: Amount Spent on Farming Annually



Source: Field work, 2019

The Bar-graph above shows the amount spent on farming annually by the respondents. About 9% of the farmers spent 10,000-20,000 on farming annually, while 30,000-40,000 represent 27.25%, 50,000-100, 000 annually took highest of 31.5%, while farmers spending 150,000-200,000 on farming annually account for 17.25%, whereas farmers spending 200,000 and above on farming annually constitute 15% out of 400 respondents in the study area. This finding revealed that majority of the farmers in the study area are poor people which spent their money on farming from 10,000-100,000 annually represent 67.75% of respondents in the study area.

Types of Crops Cultivated in the Study Area

This indicates the major types of crops cultivated in the study area which involves maize; beans, millet, guinea corn, soya beans, cassava, cocoyam and sorghum etc.

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Table 4.1: Types of Crops Cultivated in the Study Area

Types of crops cultivated	Frequency (F)	Percentage (%)
Maize	133	33.25
Beans	101	25.25
Millet	36	9
Guinea corn	23	5.75
Soya beans	26	6.5
Cassava	25	6.25
Cocoyam	28	7
Sorghum	28	7
Total	400	100

Source: Field work, 2019

The major crop cultivated in the study area is maize which account for 33.25% of the respondents, followed by beans 25.25%, millet 9%, followed by guinea corn with 5.75%, while soya beans constitute 6.5% and also cassava 6.25%, followed by cocoyam account for 7% and sorghum also represent 7% of crops grown in Akko Local Government Area of Gombe State.. This report revealed that the major crops produced in the study area are maize and beans because they constitute the highest number of the types of crops grown with 58.5% respectively.

Table 4.2: Number of Household Size in the Study Area

Household size	Frequency (F)	Percentage (%)
1-4	26	6.5
5-7	86	21.5
8-10	117	29.25
11-14	109	27.25
Others	62	15.5
Total	400	100

Source: Field work, 2019

Table 15 above shows the number of household sizes in the study area. Where the household heads with 1-4 children took 6.5%, while 5-7 account for 21.5%, followed by 8-10 represent 29.25% of the respondents in the study area, and those with 11-14 household sizes took 27.25%, whereas 14 and above household sizes constitute 15.5% of the respondents in the study area. This result shows that the majority of the household heads have 1-14 because they constitute the highest number of 84.5% of household size in the study area.

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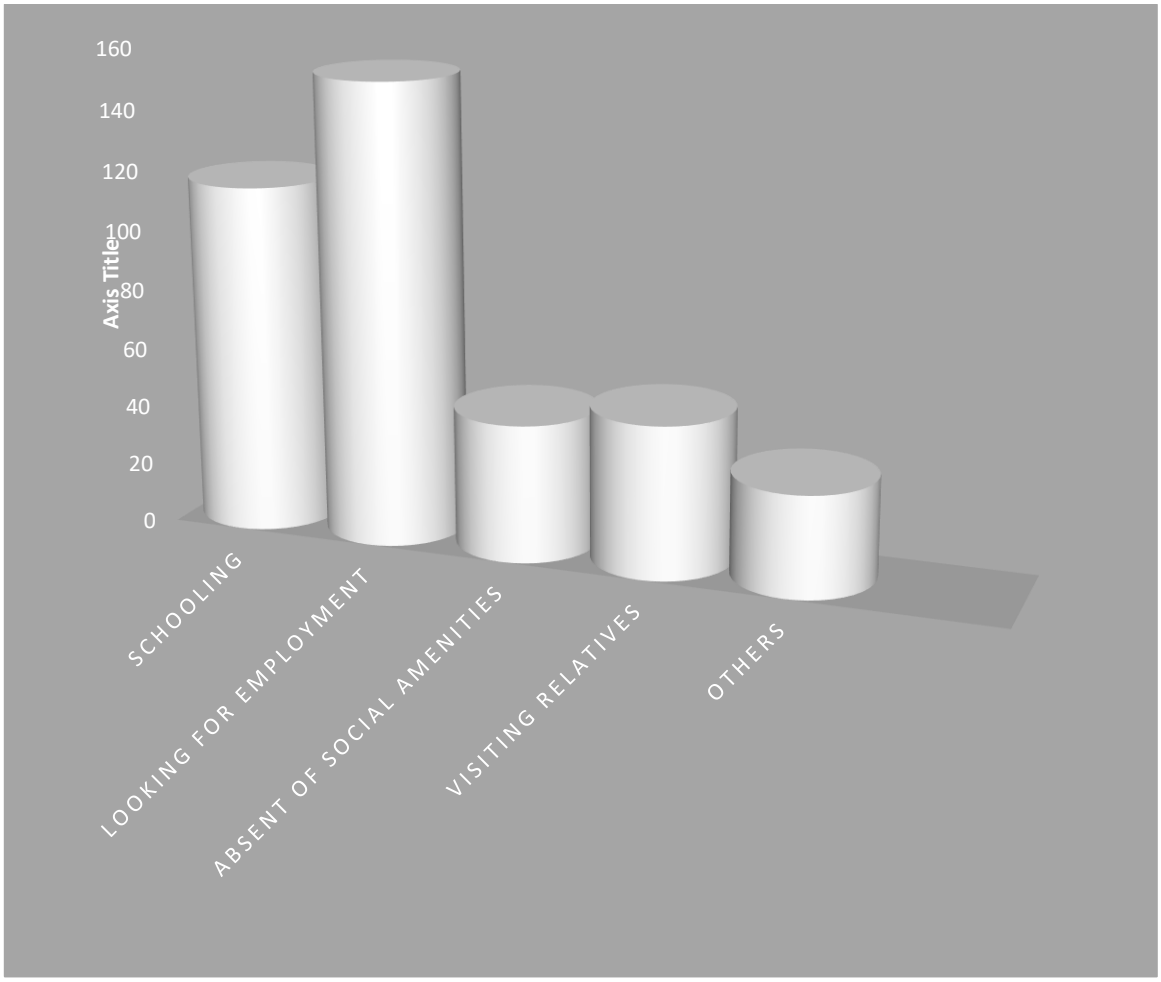
Fig 1.1: Bar Graph: Purpose of Migrants leaving their Origin



Source: Field work, 2019

The bar-graph above shows different reasons for migrants leaving their origin. This is in line with the theory of push and pulls factors of migration. The migrants leaving for schooling constitute 29% migrants, while migrants leaving their origin in search for white collar jobs in town account for 38.25% migrants in the study area, followed by those migrated due to absence of social amenities in the study area constitute 11.5 migrants, visiting relatives over a long time in the study area account for 12.75% in the study area, a little bits higher than those for social amenities, whereas migrants leaving origin for other purposes account for only 8.5% of migrants in the study area.

Level of Crops Productions over the Years

The level of crops produces in the study area can be low, moderate or high. The result of crops cultivated over the years in the study area is presented in the table 4.7.1

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Table 5.1: Level of Production for the Past eight (8) Years in the Study Area

Production	Akko	Garko	Kalshingi	Tukulma	Kashere	Pindiga	Tumu	Yalwa
Increased	12	22	16	15	16	13	14	8
Decreased	28	52	31	22	21	25	26	15
The same	7	11	10	9	6	10	7	4
Total	47	85	57	46	43	48	47	27

Source: Field work, 2019

Result in Akko village on the level of crop production over eight years revealed that increased 25.53%, while decreased in crops production represent 59.57, whereas respondents whose production stood at the same level over the eight years of farming constitute 14.9% of the respondents.

Result on Garko village stated that increased in crops production represent 25.89%, decreased in production took 61.2%, whereas respondents with same production level constitute 12.9%.

The result on Kalshingi village also crop production increased to 28.2%, while decreased in production 54.4%, and also respondents with the same levelof production over eight years of farming constitute 17.54% of the respondents in the study area.

The result on Tukulma village revealed that increased in crop production 32.61%, while decreased in production 47.82%, also respondents with the same levelof production constitute 19.57% of the respondents in the study area of Tukulma village.

The result on Kashere village also announced that increased constitute 37.22%, while decreased in production took 48.83%, followed by respondents with the same levelof production over the years constitute 13.95% of the respondents in Kashere.

The result on Pindiga village showed that increased in crop production represent 27%, while decreased in production 52%, and also respondents with the same levelof production took the remaining 20.83% of the respondents.

Result on Tumu village stated that respondents with increased crops production over 8 yearsaccount for 29.79%, decreased in production took the majority of the respondents with (55.31%), whereas respondents with same production level constitute 14.9%.

Finally, the finding in Yalwa village revealed that respondents with increased in production over the years constitute 29.63%, followed by respondents with decreased in production 55.56%, whereas respondents with same production level took the remaining 14.81% respectively.The above findings revealed that agricultural production have reduced to over 55% due migration and poverty in the study area.

Table 5.2: Production Capacity, Amounts Spent and Number of Labour Employed over the years in the Study Area

Years of Farming	Number of bags Produced	Amount Spent	No. of Labour Employed
2018	48, 631	24, 849,000.00	5,481
2019	45, 078	23,102,000.00	5,204
2020	40, 245	20,998,000.00	4,882
2021	46, 748	26,756,000.00	4,921
2022	37, 102	23,101,000.00	5,289
2023	38, 270	25,436,000.00	4,625
2024	34, 869	26,789,000.00	5,238

Source: Author's Field work, 2019

Table above revealed that in 2018 the number of bags produced in selected villages was calculated as 48,631 bags and the amount spent on farming state as 24, 849,000.00 with 5,481 numbers of labour employed. While in 2019 cultivated 45, 078 with total amount of money spent 23,102,000.00 and 5,204 labour supplied. In 2020 the number of bags have reduced to 40, 245 with 20,998,000.00 amount spent and 4,882 hired labour. 2021 increased to 46, 748 bags with 26,756,000.00 amount spent and 4,921 labour employed. The 2022 production decreased to 37, 102 bags with amount of 23,101,000.00 spent followed by labour used 5,289 respectively. As for 2023 also decreased 38, 270 bags with increased of 25,436,000.00 amount spent and 4,625 labour employed. Whereas the 2024 production decreased to 34, 869 and increased amount to 26,789,000.00 with also increased in labour supplied 5,238 respectively. Result revealed that the number of crop produced in the study area is decreasing from 2018 to 2024 and the amount spends is increasing except of 2021 where the bags and money spent increased but decreased in labour supplied.

Correlation between Amounts Spent on Farming, Labour Employed and Crop Production in Bags in the Study Area

Table 4.8.1 shows the correlation between the amounts spent; labour employed and crops productionsin bags. The result shows that there is a very strong positive correlation between the amounts spends; labour employed andcrop production in bagsunder study to a certain extent.

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Table 5.3: Correlation Analysis

Items	Amounts spend	No. Of labour employed
No. of bags produced	0.0006	0.0571

Source: Computation. Correlation is significant at the 0.05 level

This reveals that there is a positive relationship between the amounts spent, number of labour employed and the productions in bags in the study area. This shows that amount spent account for (0.0006) and the number of labour employed constitute (0.0571) respectively.

Solution to Rural-Urban Migration in the Study Area

Table 6.1: Possible Solution to Rural-Urban Migration in the Study Area

Possible solution	Frequency (F)	Percentage (%)
Job creation/employment	59	14.75
Raise the minimum wage	34	8.5
Support pay equity	29	7.25
Establishment of rural industries	61	15.25
Improve rural agricultural system	67	16.75
Provision of infrastructural facilities	59	14.75
Provision of social amenities	76	19
Creation of tourist centers	15	3.75
Total	400	100

Source: Field work, 2019

Table 6.1 above shows the possible solutions to rural-urban migration in the study area. The respondents suggested that provision of employment constitute (14.75%), raise the minimum wage (8.5%) of the respondents, support pay equity (7.25%), while establishment of rural industries (15.25%), followed by improve rural agricultural system as a solution to rural-urban migration took (16.75%), and provision of infrastructural facilities(14.75%), while for the provision of social amenities like hospitals, schools, electricity, pipe bone water, etc.constitute the highest number of (19%), whereas creation of tourist centers as a solution to migration in the study area account for (3.75) respondents. Results revealed that if government, private organizations or donor agencies should put the above suggestions into practice, rural-urban migration will be reduced in the study area, state and the country at large.

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Conclusion

Based on the empirical evidence from the findings of this study, it could be concluded that majority of the farmers were married, educated, highly experienced and actively involved in food crop production, although, they are small scale farmers. The desire for better change and improved living standard of people in the study area makes them to migrate. Other important factors that explained the reasons for migration in the study area include; unemployment, business expansion, landlessness, homelessness, loss of income, drought, flood, healthcare service and sanitation as well as search for education availability in urban areas which were not available in rural areas. The most prominent type of migration in the study area is temporary migration where migrants returning back home during rainy season.

Some of the factors that influence poverty incidence in the study area were household size and income of people, while household size, income and remittance significantly influenced rural labour migration in the study area. However, poverty incidence and labour migration have a significant effect in depriving crops production over the years in the study area.

Also migration take place as a result of the theory of pull and push factors which stated that, pull factors are those factors that attract (drag) migrants to the urban areas which include availability of employment and other opportunities such as social amenities and infrastructural facilities., whereas push factors are factors that force people to migrate from rural areas to urban areas which include the following: lack of infrastructural facilities, unemployment, farming, bad government policy, drought, flooding and desertification etc. These lead to migration from one area to another.

In order to develop rural areas there must be an interaction between rural and urban areas. Migration brings a lot of changes but when we take a look at both the causes and consequences of the movement we discovered that a lot of changes have been set in both the life of the migrants and non-migrants. Therefore, people are migrating to urban areas in order to improve their living standard, need for business expansion and search for education. Also it will be very difficult to prevent rural people from migrating to urban areas as far as rural life is made un-conducive, hardship and undesirable to the rural dwellers.

Recommendations

Based on the results obtained from the objectives of the study, the following recommendations are put forward:

i. Government should set-up rural development projects (infrastructures) such as water supply, rural electrification projects, feeder roads, health facilities, rural education, adult education and rural industrializations. All these projects will help

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in developing rural areas, hence reduce rural youth's migration and improve agricultural productions and diversify rural economy.

ii. Government and private partners should provide credit facilities to poor farmers, landless persons, unemployed youths, and women in the rural areas to expand their farming activities and to engage in other sectors of the economy. This will no doubt assist in reducing rural poverty and provide employment opportunities especially, the youths in the study area.

iii. Also government, NGOs, and other donor agencies to assist in the provision of agricultural inputs such as chemical fertilizers, insecticides, pesticides, herbicides, and other basic farm inputs and to purchase farm inputs from the companies and sell it to the farmers at a subsidized rate on credit to be paid in installment. These can encourage both the family and hired labour to engage in different farming system in the study area.

iv. Government should also improve the level of productions in the study area, through intensifying efforts in establishing rural industries, such as (agro-based and agro-allied industries, as well as ancillary industries like animal husbandry, poultry, diary, fisheries, horticultural and floricultural productions). These can promote and improve agricultural productions in the study area, hence influenced their income level and results to rising their standard of living.

v. There is need for government to overhaul the health sector and other related infrastructures that can bring development to the rural areas of Akko Local Government Area of Gombe state. This will no doubt results to curving the influx of rural people to urban areas.

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