

Rural-Urban Drift and Its Effects On Agricultural Labour in Yagba East Local Government Area of Kogi State, Nigeria

Owojaiye Oluwasanjo Biodun, Olaitan Tunde Rafiu, Atibioko Oluwatoyin Adeola, Aina Olusegun Babatunde, Babatunde Olaolu and Akinola-soji Blessing.

* Department, Institute Name
Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria,
K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

DOI: 10.29322/IJSRP.9.03.2019.p8763
<http://dx.doi.org/10.29322/IJSRP.9.03.2019.p8763>

Abstract- The study investigated the effects of rural-urban drift on agricultural labour supply in Yagba East Local Government area of Kogi State, Nigeria. 100 household heads were randomly sampled in the study area. The principal result of the study reveals that labour wage and household migration were the most important factors affecting the labour supply while lack of capital and inadequate labour supply ranked highest as constraints to agricultural production, the study reveals that 92.7% of the respondent in the study area have household migrants, 41.1% had between 4-6 migrants, 58.8% of the migrants were male, 68.0% were single and 76.3% of them were between the ages of 15-20 years.

Hypotheses testing show that there is a positive and significant association between availability of hired labour and farmers' labour costs ($r=0.532$, $p=0.000$). There is also a strong and positive association between farmers labour costs and household migration ($r=0.668$, $p=0.000$).

Index Terms- Rural-urban drift, agricultural labour, Yagba east, Kogi State.

I. INTRODUCTION

The issue of rural-urban drift has become a major challenge for many developing countries, Nigeria inclusive. Migration in the developing world is an economic survival strategy and rural-urban migration as the dominant economic migration pattern is associated with push from rural restrictive poor economic environments and pull to urban areas with economic opportunities and possibilities (Ukwandu & Iroh, 2011). This movement of people from the rural areas to urban centres has a double effect; both on the place from which they move and the settlements into they move. The most obvious of these is the receiving centres witnessing an increase in population while the rural areas experience a reduction in population. Nigeria's agricultural production is highly labour intensive and the bulk of the production activities take place in the rural areas. The greater percentage of crop and livestock production on which the populace depends for her food needs, and the government for foreign exchange earnings and revenue by way of cash crops is

carried out in rural communities. Agricultural production here relies on the labour supplied by family members, and in the absence of family labour, hired labour is usually employed to carry out farm work.

However, rural-urban drift and the movement of people away from agriculture are making labour increasingly pause (Nsikak-Abasi et al 2011). The steady increase in the number of migrants from these places to the urban centres has resulted in a steady decline in agricultural productivity. This is caused by the loss of productive members of the community to towns and cities where most often than not they do not participate in agricultural production activities. The movement of people in itself, if moderate, balanced and reciprocal does not constitute a problem to agriculture, the fact that their movement out of villages almost always ensures their non-involvement in agriculture is. The crisis of labour shortages in rural Nigeria is demonstrated and manifested by rural-urban migration (Abass, 1993). Labour has become a major constraint to expanding the scope and size of farming by small-scale resource farmers, because the rapid rural-urban drift reduces the active farm labour force i.e. the movement depletes the existing pool of labour available for both subsistence and commercial farming. The reason for this decline is not far-fetched; the drift reduces the quantity of farm hands, and therefore a reduction in the general agricultural productivity, which is the amount of goods and services produced in a given period of time. The absence of household members reduces the agricultural labour supply (World Bank Report, 2008). This affects the availability of labour for farm activities such as land clearing, ridging weeding and harvesting among others. Rural-Urban drift as a social malaise as imposed several constraints on farm activities and agriculture in general.

1.2 Problem statement

Rural-Urban drift significantly affects a core factor of production, labour. Labour is one of the four factors of production alongside land, capital and management and changes in the labour structure can only be ignored at the nation's peril. Reduced labour culminates into less production as a result of increased labour shortages in the rural communities where most of the production activities take place. This, if left unchecked, will eventually lead to severe food shortages, dependence on food importation will be

in the overdrive and a shortfall in the revenue derived from agriculture. Agro-allied industries will also have operational difficulties in sourcing for their raw materials. In essence, if this trend is not addressed, a food and industrial crisis may be looming on the horizon.

Rural-Urban drift imposes a critical challenge on rural areas – an ageing farm population that is fast depleting. Aged people are left to perform the tasks associated with farming since most of the youths have moved to urban centres. These added responsibilities will cause a reduction in the quality of job done and will decrease the productive capacity of the old ones who already do not possess the desired energy for most farm activities. In other words, the drift leads to increasing involvement of aged men and women in agricultural production.

It is in light of this, that this study seeks to examine the general objective of the study which is the rural-urban drift phenomenon and its constraints on agricultural labour supply in Yagba East Local Government Area of Kogi state.

1.3 Objectives of the study

1. To identify and describe the socio-economic characteristics of farm household heads.
2. To identify the sources of labour to the farmers.
3. To identify the factors influencing household members to drift.
4. To identify the factors affecting labour availability.
5. To identify the effects of rural-urban drift on farm activities.

1.4 Hypothesis

- ❖ H₀₁: There is no significant association between farmers' labour cost and labourers' availability..
- ❖ H₀₂: There is no significant association between farmers' labour cost and household migration

II. RESEARCH METHODOLOGY

2.1 The study area

The research was carried out in Kogi state, in Yagba East local government area of the state. Yagba East local government is one of the 21 local governments in Kogi state. The area of study covers Makutu-Isanlu, the local government headquarters and other villages in the local government.

Kogi state was formed in 1991 from parts of Kwara and Benue states. The state is found in the central region of Nigeria, in the north central geopolitical zone. It is popularly called the confluence state because the confluence of the rivers Niger and Benue, i.e. where the two rivers meet, is at its state capital, Lokoja, the first administrative capital of modern day Nigeria. It was in Lokoja that the name Nigeria was coined by Flora Shaw, the future wife of Lord Lugard, a British colonial administrator.

The state covers about 29, 833km² with a population of 3,278, 487 consisting of 1,691,737 males and 1,586,750 females (2006 National Population Commission). The state shares boundaries with Niger and Plateau states and the Federal Capital Territory in the North; Benue and Enugu states in the East; Edo, Ondo, Ekiti and Kwara states in the west and Anambra state to the south.

Yagba east local government area of Kogi state is found in the Okun-speaking western part of the state. It has a population of

140,150 (National Population Commission, 2006) and covers 1,396km². It comprises of several villages amongst which are Ijowa, Isanlu, Irunda, Idofin, Alu, Takete, Oranre, Imela, Aginmi, Jege, Iddo-Ojasha, Ponyan, Igbagun, Surulere, Ife-Olukotun, Ilafin, Odogbe, Iye and Ejuku.

The major occupation of the people of the area is farming although non-farm occupations are steadily on the rise. Crops grown in the area include maize, millet, oil palm, groundnut, cashew, yam, okra, tomato, melon, beniseed etc. Other occupations of the people include blacksmithing, hunting, dyeing, weaving among many others.

2.2 The study population

The study population consists of all the farming households in Yagba East local government area of Kogi state.

2.3 The sample size

The sample size consists of a hundred respondents drawn from five villages in the local government.

2.4 The sample technique

A Multi-stage random sampling technique was employed. As there are ten wards in the local government according to its political delineation, numbered one to ten, at the first stage, five wards were selected from the ten wards. At the second stage of the sampling procedure, a village was selected from each of the five wards and at the third stage; twenty respondents were selected from each of the five villages, making a total of a hundred respondents for the study. Well-structured close ended questionnaires were administered to the farmers in the villages to elicit information from them.

2.5 DATA ANALYSIS

Descriptive and statistical analytical tools were employed in analyzing the data collected. Utilizing Descriptive statistics for this study entailed the use of statistical tools such as frequencies and percentages. Pearson product moment correlation coefficient was used in testing both hypotheses of the study. SPSS was used in the analysis of the data and testing of the hypothesis.

III. RESULTS AND DISCUSSION.

3.1 SOCIO-ECONOMICS CHARACTERISTICS OF RESPONDENTS

The result in Table 2, shows most of the respondents were males as they constituted 84.5% of the total number of respondents. This was due to the fact that heads of the households were the ones mostly selected for the study and were in most cases, males except in the case of widows.

The age distribution of respondents showed that the middle age group of 41 to 60 years has the highest frequency of 66 respondents constituting 68.1% of the total number of respondents. In other words, majority of them were between 41 to 60 years. This means that majority of the household heads were advanced in age. The young age bracket (farmers of 40 years and below) constituted only 17.5% which is an indication of decrease of youth activities in farming activities. This agrees with the work of Okwu & Daudu (2011) that there is a decline in youth's involvement in agriculture. Most of the respondents (89.7%) were

married and 2.1% were separated. Only 2.1% were single while six (6.2%) were widows.

This table shows that 74.2% of the respondents were involved majorly in farming activities only, while 13.4% engaged in non-farming activities. 12.4% engaged in both farming and non-farming activities.

A greater percentage of the respondents (61.9%) have some form of formal education. However, less than one-tenth of the respondents (6.2%) have tertiary education. This could be an indication of the lack of interest in agriculture by many young graduates (Muhammed-Lawal et al, 2009). However, 71.1% of them have either no formal or primary education. This result shows their educational background conforms to general farm-level survey data which asserts and classify most Nigerian farmers as illiterates i.e. having no formal or low (primary) educational status (Ekong, 2003)

About 24.7% of the respondents had one wife, while the remaining 75.3% had more than one wife and this supports the assertion of Ekong (1988) that farmers marry many wives to raise large families that could cope with labour required in farms.

The distribution of household size among the farmers showed that majority of them (71.9%) had more than six children. The medium class of those with between four and six children constituted 22.9% of the respondents. Those with three children or less constituted just 5.2% of the total respondents.

This table indicates that 50.5% of the respondents cultivated a land area of 1 hectare while only 21.6% of them had farm sizes greater than 2 hectares. This shows that farming in the area is predominantly small scale. This finding is consistent with that of Adekunle & Okunlola (2000), Olagunju & Ogunniyi (2006) and Ogunlela & Mukhtar, 2009 that majority of the farmers in Nigeria have relatively small cultivated land areas.

The table also shows that 45.4% of the respondents had over 30 years of experience in farming, while only 9.3% of them had 10 years or less farming experience. The remaining 45.4% of them had experience spanning between 11 and 30 years.

This result also indicates that a greater percentage (84.6%) of the respondents do not have access to the use of mechanized equipment on their farms, while 13.6% of them do.

3.2 Source of labour

Results presented in the table 3 shows that most respondents relied on more than one source of labour. Labour supply through self and family is low

(11.22%); majority (48.5%) relied more on family and hired labour; 18.6% of the respondents relied solely on hired labour while 7.2% employed family and cooperative labour. This findings correlate with those of Allen and Lueck (1998) that the family unit has been the dominant organization in farming since the earliest days of agriculture and it represents the dominant form of agricultural organization in most countries. The dominance of family farms in agriculture has been strengthened by a greater decline in hired labour input relative to family labour (Schmitt, 1991).

3.3 Factors influencing household members to drift

Table 4, shows the results of the analysis of the likert-type scale that identified the factors influencing household members to drift away from the locality. The mean scores of factors

influencing household members to drift are used to rank them in order of importance as obtained from the respondents. Results show that household members that leave the rural areas are mainly influenced by the need for higher education (2.72), need for enhanced wage (2.67), and employment at slack farm season (2.64), Family decision (2.63) and poor income from their farms (2.53). A similar situation was found by Jahan (2012) and he concluded that, job opportunities, better educational facilities and fast and colourful life in the city attracted many migrants. Similarly, Iyorakpo (2011) noted that migration (rural-urban) is basically a reflection of the imbalance in opportunities and life chances which exist between the rural-urban areas.

Inadequate farmland for agricultural production (2.00) and the chance of enjoying urban facilities (1.99) were not considered by the respondents as important influences on the decision of household members to leave the rural areas.

3.4 Factors affecting labour supply

Table 5, shows the results of the analysis of the likert-type scale that identified the factors affecting labour supply in the study area. The mean scores of factors affecting the supply of labour for farm activities are used to rank them in order of importance as obtained from the respondents.

The labour wage (2.80) ranks as the most important factor affecting the supply of labour for farm activities in the study area. The rate of household migration (2.72), the household size (2.70), the season (2.56) and age (2.55) are other important factors affecting labour supply for farm activities in the rural households. The level of education (2.45) and gender (2.37) rank lowest among these factors affecting labour supply.

The results show that the respondents do not consider the level of education and gender as important as the other factors affecting the supply of labour. This suggests that both males and females are involved in farming in equal measure in the study area.

3.5 Effect of household members' drift on labour supply for farm activities

Table 6, presents the effects the drift of household members has on labour supply for farm activities. There are both direct and indirect effects of migration on farm labour participation (Lass et al., 1991). About 85.6% of the respondents indicated that the drift of household members has highly affected land clearing activities, while 72.2% and 70.1% of them stated that it highly affected the labour supply for ridging and weeding respectively.

Furthermore, 57.7% indicated that the drift highly affected planting of crops and 45.4% reported that it highly affected harvesting. To a lesser degree, fertilizing (30.9%), pest control (37.1%), and marketing (30.9%) are highly affected by the absence of household members. This finding clearly shows that rural-urban drift as affected virtually all facets of farm activities, by creating a shortage of farming hands needed by households for optimum production. This finding is similar to that of Nwosu (1980) which showed that the greatest problem affecting pattern of agricultural production was population who have taken to other non-agricultural occupations in the urban areas, and that of Angba (2003) which showed that the consequence of rural urban drift is increasing labour shortage. Farm operations have been highly affected by absence of household members at different levels, heightened by the deserting of farming by a large section of the

rural population who now reside in urban centres. This is a situation similarly observed by Hossian (2011) that declining labour availability in agricultural communities is likely to reduce agricultural productivity.

3.6 HYPOTHESES TESTING

Decision rule:

If the Sig., or probability (p), associated with the r -value is .05 or less, then we reject H_0 , and conclude that there is a statistically significant relationship between pair of variables. If $p > .05$, then we retain H_0 , and conclude that the variables are unrelated.

- r values greater than **.50** indicate a **strong** correlation
- r values around **.30** indicate a **moderate** correlation
- r values less than **.20** indicate a **weak** correlation

3.6.1 H_{01} : There is no significant association between farmers' labour cost and labourers' availability.

Pearson's $r=.532$, $p=0.000$. Therefore, the null hypothesis that there is no significant association between farmers' labour cost and labourers' availability is rejected.

Table 7, presents Pearson Product Moment Correlation that shows there exists a positive and significant association between the farmers' labour costs and the availability of labourers. The strong correlation ($r=.532$) implies that increase in availability of labourers is matched with an increase in the farmers' labour cost for each cropping season. This is interpreted to mean that an increase in the rural labour pool implies a possibility of an increase in farmers' labour cost, i.e. farmers' will engage more hired labourers on their farms to undertake various farm activities if there were to be an increase in the labourers' availability.

3.6.2 H_{02} : There is no significant association between farmers' labour cost and household migration.

Pearson's $r=.668$, $p=0.000$. Therefore, the null hypothesis that there is no significant association between farmers' labour cost and household migration is rejected.

Table 7, shows results of the correlation analysis showing a statistically positive and significant relationship between farmers' labour cost per cropping season and the household migration ($r = .668$) at 1% level. This indicates that an increase in the household migration is accompanied by an increase in the farmers' labour cost. In other words, as the number of household migrants increase, there is tendency for the farmers' labour cost to increase. This means that increase in the number of household members that drift will reduce the amount of family labour available to the farmer, hence he has to source for external labour sources to prosecute farm operations. The hired comes at a rate, and inevitably drives up the labour cost per cropping season.

IV. CONCLUSION

The study shows that rural-urban drift is a selective process; the young, single or unmarried persons predominate among rural-urban migrants including those with some form of education. The motives for migration are primarily economic, including the desire for education, job opportunities and apparently high earning prospects in the urban formal and informal sectors.

Inadequate labour supply for farm operations is the major constraint imposed by rural-urban drift, as it reduces the amount of family available to the farmers, increases the wage of available labourers (due to their scarcity) and consequently reduces the farm area under cultivation by the farmers i.e. farmers are now compelled to grow only as much food as they can handle alone, or with their little children for lack of sufficient supply of labour. Majority of the farmers cannot afford the ongoing labour wage as they do not have required capital. Indeed, it can be said that a combination of lack of capital and inadequate labour supply are the greatest problems of farmers in the study area.

If rural-urban drift continues at this rate, farmers may become more impoverished over time and overall food production will suffer a great decline.

V. TABLES AND FIGURES

**Table 1: SAMPLE DESIGN OUTLAY FOR THE STUDY
 YAGBA EAST LOCAL GOVERNMENT AREA**

WARD	COMMUNITY	RESPONDENTS
Ward 3	Ponyan	20
Ward 6	Takete	20
Ward 7	Makutu Isanlu	20
Ward 9	Mopo	20
Ward 10	Iddo-Ojesha	20
Total		100

Table 2: Socio-economics Characteristics of Respondents

Gender	Frequency	Percentage
Male	82	84.5
Female	15	15.5
Total	97	100.0

Age(years)	Frequency	Percentage
31-40	17	17.5
41-50	19	19.6
51-60	47	48.5
61-70	12	12.4
71-80	2	2.1
Total	97	100.0
Marital status	Frequency	Percentage
Single	2	2.1
Married	87	89.7
Divorced	2	2.0
Widowed	6	6.2
Total	97	100.0
Occupation	Frequency	Percentage
Farming	72	74.2
Non-farming	13	13.4
Both	12	12.4
Total	97	100.0
Level of education	Frequency	Percentage
Primary education	32	33.0
Secondary education	13	13.4
Tertiary education	6	6.2
Adult education	9	9.3
No formal education	37	38.1
Total	97	100.0
Number of wives	Frequency	Valid Percentage
One	20	24.7
Two	27	33.3
Three	19	23.5
Four	8	9.9
Above four	7	8.6
Total	81	100.0
Number of children	Frequency	Valid Percentage
1-3	5	5.2
4-6	22	22.9
7-9	38	39.6
Above 9	31	32.3
Total	97	100.0
Farm Size	Frequency	Percentage
1ha	49	50.5
2ha	27	27.8
3ha	10	10.3
4ha	11	11.3
Total	97	100.0
Experience(years)	Frequency	Percentage
1-10	9	9.3
11-20	16	16.5
21-30	28	28.9
31-40	44	45.4
Total	97	100.0
Mechanized equipment	Frequency	Percentage
Yes	13	13.6
No	84	84.6
Total	97	100.0

Source: Field Survey, 2017.

Table 3: Source of labour

Source of labour	Frequency	Percentage
Self & family	11	11.2
Hired labour only	18	18.6
Self, family & hired	47	48.5
Self, family & communal	7	7.2
Self, family, hired & communal	14	14.4
Total	97	100.0

Source: Field Survey, 2017.

Table 4: Factors influencing household members to drift

Factors	Strongly agree (3)	Agree (2)	Disagree (1)	Mean score	Ranking
Poor farm income	61(1.89)	26(0.54)	10(0.10)	2.53	5
Need for higher education	73(2.26)	21(0.43)	3(0.03)	2.72	1
Employment at slack farm period	67(2.07)	25(0.52)	5(0.05)	2.64	3
Family decision	71(2.20)	16(0.33)	10(0.10)	2.63	4
Inadequate farmland	32(0.99)	32(0.66)	33(0.34)	1.99	7
Need for enhanced wage	72(2.23)	18(0.37)	7(0.07)	2.67	2
Chance of enjoying urban facilities	31(0.96)	35(0.72)	31(0.32)	2.00	6

Figures in parentheses are individual scores.

Source: Field Survey, 2017.

Table 5: Factors affecting labour supply

Factor	Strongly agree (3)	Agree (2)	Disagree (1)	Mean score	Ranking
Age	63(1.95)	24(0.49)	10(0.10)	2.55	5
Gender	52(1.61)	29(0.60)	16(0.16)	2.37	7
Household size	73(2.26)	19(0.39)	5(0.05)	2.70	3
Labour wage	80(2.47)	15(0.31)	2(0.02)	2.80	1
Household migration	75(2.32)	17(0.35)	5(0.05)	2.72	2
Education level	53(1.64)	35(0.72)	9(0.09)	2.45	6
Season	62(1.92)	27(0.56)	8(0.08)	2.56	4

Figures in parentheses are individual scores.

Source: Field Survey, 2017.

Table 6: Effect of household members' drift on labour supply for farm activities

Activities	No effect %	Little effect %	Moderate effect %	High effect %
Land clearing	0	9.3	5.2	85.6

Ridging	5.2	4.1	18.6	72.2
Planting	7.2	9.3	25.8	57.7
Weeding	8.2	7.2	14.4	70.1
Fertilizing	22.7	25.8	20.6	30.9
Pest control	4.1	30.9	27.8	37.1
Harvesting	7.2	23.7	23.7	45.4
Transporting	21.6	14.4	23.7	40.2
Marketing	25.8	16.5	26.8	30.9

Source: Field Survey, 2017.

Table 7: Pearson Product Moment Correlation between farmers' labour costs and labourers' availability.

Variable	Farmers' labour cost	Labourers availability
Farmers' labour cost	1	.532**
		0.000
	97	97
Labour availability	.532**	1
	0.000	
	97	97

**significant r -value at the 0.01 level.

Source: Field Survey, 2017.

Table 8: Pearson Product Moment Correlation between farmers' labour costs and Household migration.

Variable	Farmers' labour cost	Household migration
Farmers' labour cost	1	.668**
		0.000
	97	97
Household migration	.668**	1
	0.000	
	97	97

**significant r -value at the 0.01 level.

Source: Field Survey, 2017.

REFERENCES

- [1] Abbass, I. M. (1993) "The Challenge of Rural Development in a Deregulated Economy" A Paper presented at a National Seminar on Rural Development Resources in a Deregulated Economy organized by New Nigerian Newspapers in Collaboration with Arthur Green Consultants, Shiroro Hotel Minna, 10-12 February, 1993.
- [2] Adekunle O.A. & Okunlola J.O. (2000) "Indigenous knowledge approach for rice pests and disease control by rice farmers in Niger State, Nigeria for sustainable environmental management" *Journal of Environmental Extension*, 1 (1): 28 – 35
- [3] Allen, D.W. & Lueck, D. (1998), "The Nature of the Farm", *Journal of Law and Economics*, Vol. 41, No. 2, pp. 343-386.
- [4] Angba A.O. (2003). "Effects of rural urban migration of youths on Agricultural labour supply in Umuahia North Local government area of Abia state, Nigeria". *Journal of Agricultural research*, vol. 3, no.2 pp. 77-83
- [5] Ekong E.E (2003). "An Introduction to Rural Sociology" Uyo: Dove Educational Publishers, pp. 35 – 47.
- [6] Hossain, I. (2011). A rapid situation assessment of migration and remittances and their impact on food security, agriculture and rural development. Thakurleon, Ramphal Centre, FAO: 29.
- [7] Iyorakpo J. (2011) Rural-urban Migration and Physical Development Control Contravention in Yenagoa capital of Bayelsa state, Nigeria. *International Journal of Social and Policy Issues*. 2011; 8(1):61-71.
- [8] Jahan, M. (2012). Impact of rural urban migration on physical and social environment: The case of Dhaka city. *International Journal of Development and Sustainability*. 1 (2) 186-194 Lass, D.A.
- [9] Findeis, J.L. & Hallberg, M.C. (1991), "Factors Affecting the Supply of Off-Farm
- [10] Labour: A Review of Empirical Evidence" in *Multiple Job-Holding Among Farm*
- [11] *Families*, eds. M.C. Hallberg, J.L. Findeis & D.A. Lass, Ames, IO: Iowa State University Press.
- [12] Muhammad-Lawal, A., Omotesho, O.A. and Falola, (2009) A. "Technical efficiency of youth participation in agriculture: a case study of the youth - in - agriculture programme in Ondo state, south western Nigeria." *Nigerian Journal of Agriculture, Food and Environment* 5(1):20-26
- [13] Okwu, O. J., Daudu S. (2011) "Extension communication channels' usage and preference by farmers in Benue State, Nigeria" *Journal of Agricultural Extension and Rural Development* Vol. 3(5), pp. 88-94, 2011.
- [14] Olagunju, F.I. & L.T. Ogunniyi, (2006). "Implication of Agricultural Credits Corporations Facilities to Small holder Farmers for Food Security in Southwestern Nigeria" *Int. J. Agric. Apicult. Res.*, 2: 137-145
- [15] Schmitt, G. (1991), "Why Is the Agriculture of Advanced Western Economies Still Organized
- [16] by Family Farms? Will This Continue to Be So in the Future?" *European Review of Agricultural Economics*, Vol. 18, No. 3, pp. 443-458
- [17] Ukwandu E., Iroh S. (2011) "Influence of ICT in the rural-urban migration in Owerri zone of Imo state, Nigeria" *Journal of information technology impact* ISSN 1098-139
- [18] World Bank Development Report 2008: "Agriculture for Development" 2008.

AUTHORS

First Author – Owójaiye Oluwasanjo Biodun, Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria, K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

Second Author – Olaitan Tunde Rafiu, Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria, K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

Third Author – Atibioké Oluwatoyin Adeola, Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria, K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

Fourth Author – Aina Olusegun Babatunde, Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria, K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

Fifth Author – Babatunde Olaolu, Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria, K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

Sixth Author – Akinola-soji Blessing, Nigerian Stored Products Research Institute, Ilorin, Kwara State, Nigeria, K M 3, Asa Dam Road, P.M.B 1489, Ilorin, Kwara State, Nigeria.

Corresponding Author: aztunde2004@gmail.com
Telephone No: +2348065966192.