



LAND TENURE SYSTEM, FARM MANAGEMENT PRACTICES AND PRODUCTIVITY OF ARABLE CROP FARMERS IN PERI-URBAN IBADAN, OYO STATE, NIGERIA

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Abstract

This study analysed the relationship between land tenure systems, farm management practices and productivity of arable crop farmers in peri-urban Ibadan. Multistage sampling procedure was used to select 200 arable crop farmers, who were selected proportionate to size from four Local Government Areas (LGAs) out of the six LGAs in peri-urban Ibadan. Primary data were obtained using structured questionnaire. Data were analysed using Descriptive Statistics, Total Factor Productivity and Tobit Regression Model. Farmers that practiced land tenure by gift, market (rent and lease) and borrowing were 38.5%, 9.0%, and 0.5%, respectively. Farm management practices by the arable farmers were mainly by manual means as less than one-fifth of the farmers used tractors for harrowing (17.0%) and ploughing (14.5%). The mean productivity level was 1.094(\pm 2.098). Continuous use of borrowed land and manual application of herbicides will decrease arable crop farmers' productivity by 27.8% and 17.5%, respectively, while continuous use of manual ridging increases productivity by 24.6%. Secure land tenure system, coupled with farm management practices, are important in achieving increases in yield and productivity. Therefore, improving land tenure system to secure long term access to farmlands is a pre-requisite to use of improved farm management practices and crop productivity.

Keywords: Inheritance, Rent, Lease, Borrowed land, Productivity

INTRODUCTION

Land is a vital factor in agricultural production. The availability, accessibility, quantity and quality factors of land are parts of major prerequisites that determine crop productivity, due to artificial amendments that can improve productivity of land (Fakoya *et al.*, 2007). Access to agricultural lands depends on land tenure system and the extent of competition by non-agricultural land uses (Udoh, 2000); the productivity role of land is determined and controlled by land tenure security and land uses. Land lies at the heart of social, political and economic life of most African countries and a vital factor for economic growth and development (Ukaejiofo, 2009).

Idoma and Isma'il (2014) defined land tenure system as the right of people to own, make use and control land and its resources for agricultural purposes. Land tenure security is an element of property rights; the right to remain on one's land and make use of, and profit from that land in ways the individuals or groups value, so long as they do not harm others (Pia, 2019). In rural settings, land tenure is insecure for the poor (Karol, 2009). Tenure security induces high investment in land. According to Deininger (2003), tenure security increases the incentives of households and individuals to invest, and often provide them with better credit access. Also, tenure security provides preventive measure to risks and shocks. Land tenure can determine the use of farm management practices.

Farm management practices are acts of minimizing the effects of nutrient leaching and run-off, and reducing sediment loss from land. According to Ganiyu *et al.* (2018), farm management practices are the techniques used by farmers to improve the quality of soil structure and fertility of farmland in order to increase crop yield. Farm management practices used by arable crop farmers in Nigeria include weeding, land rotation, tillage, crop rotation, planting cover crop, manure application, mulching, fertilizer application, irrigation, and planting trees to intercept wind (Bankole and Nnamani, 2012). These farm management practices help in improving the soil, leading to increased productivity of the arable farmers.

Agricultural productivity is the measure of the ratio of agricultural outputs to agricultural inputs. The level of productivity in the agriculture sector is a determinant of the level of agricultural income. The levels of agricultural incomes are affected by the degree of access to rights in land (Idoma and Isma'il, 2014). Concurrently, for farmers to obtain optimum crop yields, they need to adopt sustainable farm management practices and be land secure. Secure land rights give sufficient incentives to arable farmers by increasing their efficiencies and productivity and ensuring environmental sustainability.

The synergy between land tenure, farm management practices and arable farmers' output is that there is inter-connectivity between them. As a result, when land tenure is secure,

rural farmers will be efficient in utilizing the farm management practices necessary in making the arable crops grow in appreciable manner. This leads to high crop productivity and food security, leading to accumulation of income, and improving the standard of living at the same pace. Shimelles *et al.* (2009) identified tenure insecurity as one of the obstacles to increased agricultural output. This is because insecure land tenure restricts farmers' access to credit that is required for improvement of farm management practices, which leads to low productivity of the arable farmers.

It should be noted that in a natural way, without secure land tenure rights, farmers are not emotionally attached to the land they cultivate, do not invest in land development and may not be able to make use of inputs efficiently (Shimelles *et al.*, 2009). This study analyzed the relationship between land tenure types, farm management practices and productivity of arable crop farmers in peri-urban Ibadan. To achieve the overall objective, the study

- i. Identified land tenure types among arable crop farmers
- ii. Examined farm management practices used by arable crop farmers
- iii. Determined the levels of productivity of arable crop farmers
- iv. Assessed the effects of land tenure types and farm management practices on productivity of arable crop farmers.

LITERATURE REVIEW

Theoretical Review

Property rights theory

Property rights are the social institutions that define or delimit the range of privileges granted to individuals of specific resources, such as parcels of land or water. Private ownership of these resources may involve a variety of property rights, including the right to exclude non-owners from access, the right to appropriate the stream of economic rents from use of and investments in the resource, and the rights to sell or otherwise transfer the resource to others. Property rights institutions range from formal arrangements, including constitutional provisions, statutes, and judicial rulings, to informal conventions and customs regarding the allocations and uses of property. Such institutions critically affect decision making regarding resource use, and hence, affect economic behaviour and economic performance (Jongwook and Mahoney, 2005). Land tenure and property rights affect the application of technologies for agricultural and natural resource management. Secure property rights give sufficient incentives to the farmers to increase their efficiencies in terms of productivity and ensure environmental sustainability.

Farm-system Theory

A system is an organized unitary whole consisting of a set of interrelated elements, components or subsystems, each of which is related directly or indirectly to every other element, component or subsystem in the system. Farm-system theory views a farm as a unique goal-setting (that is, purposeful) open stochastic dynamic artificial (that is, man-made) system, having a major aim of generating income (in cash or kind) for its stakeholders through agricultural production (Dillon, 1992). Farm-system goals will be set by the owner(s) or stakeholder(s) of the system. For small farms, this will be the farm family or its head, who will often be the farm manager. The actual strategic goals likely to be chosen - survival, profit, growth and resource conservation. Such strategic goals lie at the top of a means-end schema in which the achievement of lower-level objectives or sub-goals is an end serving as a means to the attainment of higher-level objectives. Hence, management by objectives relates, not just to final objectives or strategic goals, but to the whole means-end hierarchy of objectives or goals.

Conceptual Framework

This study illustrates the important interactions between tenure types, farm management practices and productivity among arable farmers. How the lands used for farming are acquired influence land ownership and tenure security, which in turn influence productivity. Land tenure types and farm management practices have implications on farmers' productivity. Farm management practices can either be manual or by tractor (mechanised). Effective use of farm management practises such as ploughing, harrowing, ridging, fertilizer application, weeding, and etcetera, enhances the yield and output of crops. Secure tenure types with proper application farm management practices will lead to high productivity of arable crop farmers. However, while tenant land (insecure land) may lead to low productivity, owned land (secure land) may lead to high productivity.

RESEARCH METHODOLOGY

Study Area

This study was carried out in peri-urban Ibadan. Ibadan is the capital city of Oyo State. The city covers a total land area of 3,123.30km² of which about 15 percent is urban and the remaining 85 percent is classified as peri-urban (Adelekan *et al.*, 2014). Ibadan metropolitan area is made up of eleven local government areas (LGAs). Five of these constitute the urban local governments; Ibadan North, Ibadan North East, Ibadan North West, Ibadan South East and Ibadan South West. The remaining six LGAs; Akinyele, Egbeda, Ido, Lagelu, Oluyole and Ona-Ara, are predominantly peri-urban settlements. The peri-urban Ibadan is an agricultural

economic base, which has evidence of a transforming landscape in terms of physical development and a diversity of economic activities. The major arable crops grown include yam, cassava, maize, vegetable, pepper, melon, soybeans, beans, eggplant, table tomato, and potato. The major form of crop husbandry in this region is the rain-fed cultivation of crops.

Source of Data

Primary data were used for this study. Data were collected from arable farmers using structured questionnaire which was divided into four sections. Section A sought information on the socio-economic characteristics of arable farmers (age, sex, marital status, level of education, farming experience, farm size, yield, off-farm income, membership of association and farm income); section B sought information on land tenure (purchase, gift, inheritance, borrowed land, rent and lease). Section C sought information on land use and farm management practices (weeding, shifting cultivation, tillage, crop rotation, cover crop, manure application, mulching, fertilizer application, irrigation, bush burning and planting trees to intercept wind); section D sought information on cost of farm management practices.

Sampling Procedure

Multi-stage sampling procedure was used to select arable crop farmers for the study. The first stage involved random selection of four LGAs out of the six LGAs in peri-urban Ibadan. The second stage involved simple random selection of four communities from each local government area. In the third stage, arable crop farmers were selected proportionate to size from the communities. A total of 20, 50, 60 and 70 were randomly selected in Oluyole, Egbeda, Ido and Akinyele LGAs respectively. This gives a total sample size of 200 arable crop farmers used for this study.

Methods of Data Analysis

Data were analyzed using descriptive statistics, Total Factor Productivity (TFP) Model and Tobit Regression Model.

Descriptive Statistics

Descriptive statistics were used to identify land tenure types among arable crop farmers (Objective 1) and examine farm management practices among arable farmers (objective 2). They were also used to analyze the socio-economic characteristics of the farmers. The descriptive statistics include frequency, percentages, and mean. Results are presented in frequency distribution tables.

Total Factor Productivity Model

The level of productivity among arable crop farmers (Objective 3) was analysed using Total Factor Productivity Model. $TFP = \frac{Y}{TVC} = \frac{Y}{\sum P_i X_i}$

Given that $AVC = \frac{TVC}{Y}$ Then $TFP = \frac{Y}{TVC} = \frac{1}{AVC}$

Where Y = Quantity of output (₹)

P_i = Unit price of the i th variable input (₹)

X_i = Quantity of i th variable input

AVC = Average variable cost

TVC = Total variable cost

TFP=1 is a break-even point

TFP>1 indicates high productivity

TFP<1 indicates low productivity

Tobit Regression Model

Tobit Model was used to assess the effect of land tenure types and farm management practices on productivity of arable crop farmers (objective 4). This model was chosen because productivity of arable crop farmers tends to be censored at the lower limit of zero (Gujarati, 2007). The Tobit model specification is given as follows:

$$Y_i^* = X_i \beta + \mu_i$$

$$i = 1, 2, \dots, n$$

$$y_i^* = y_i \text{ if } y_i > 0, \quad 0 \text{ if } y_i \leq 0$$

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots + \beta_9 X_9 + E_i$$

Where

Y_i is the observed productivity of arable crop farmers

Y_i^* is the latent variable which is not observed

β_i is Vector of unknown parameters, E_i is the error term

X_i is vector of independent variables affecting productivity of arable crop farmers.

These are:

X_1 =Land tenure types (Gift, Inheritance, Rent, Lease, Borrowed),

X_2 =Membership of cooperative (Yes=1; No=0),

X_3 =Access to Credit (Yes=1; No=0)

X_4 =Conflict on land (Yes=1; No=0),

X_5 =Ridging (Manual=1; Tractor=0)

X_6 =Weeding (Manual=1; Tractor=0),

X_7 =herbicides application (Manual =1; Tractor=0)

X_8 =Land clearing (Manual =1; Tractor=0),

X_9 =Education (No formal education, Primary education, Secondary education, Tertiary education)

RESULTS AND DISCUSSIONS

Socio-economic Characteristics of Arable Crop Farmers in Peri-urban Ibadan

The results of socio-economic characteristics of the arable crop farmers are presented in Table 1. Majority (82.0%) of the respondents were between the ages of 31 and 60 years, and the mean age was 51.38years (± 10.89). Majority were males (88.5%) and married (91.5%). Also, majority (91.0%) of the respondents had formal education although half (50.0%) had secondary education. Almost half (49.5%) of the farmers had farm sizes of 2.01-5.0ha, and mean farm size was 4.40ha (± 4.04). Majority (83.0%) of the respondents had farming experiences above 10 years, and an average of about 22 years. The mean annual farm income was ₦409,580 ($\pm 2,954.26$), and less than half (46.5%) of the respondents had farm income of ₦400,000 and above per annum. This amount was higher than the National Minimum Wage of ₦360,000 per annum. However, access to facilitating services was very low as less than one-quarter of the farmers had access to credit (21.5%) and extension agents (22.0%), and belonged to cooperative societies (16.5%). Majority (94.0%) of the respondents used both family and hired labour

Table 1: Socio-economic characteristics of Arable Crop Farmers in Peri-Urban Ibadan

Variables	Frequency (n=200)	Percentage
Age		
≤ 30	9	4.5
31-60	164	82.0
> 60	27	13.5
Min: 15, Max: 100, Mean: 51.38 \pm 10.89		
Sex		
Male	177	88.5
Female	23	11.5
Marital Status		
Married	183	91.5
Divorced	15	7.5
Widowed	1	0.5
Separated	1	0.5

Education level		
No formal education	18	9.0
Primary education	67	33.5
Secondary education	100	50.0
Tertiary education	15	7.5
Total Farm size(Ha)		
≤2	32	16.0
2.01-5	99	49.5
>5	69	34.5
Min: 0.1, Max: 40, Mean: 4.40 ± 4.04		
Farming experience		
≤10	34	17.0
11-20	65	32.5
21-30	67	33.5
>30	34	17.0
Min: 0, Max- 60, Mean: 22.26 ±10.33		
Annual Farm Income/Annum		
≤100,000	10	5.0
100,001-200,000	20	10.0
200,001-300,000	37	18.5
300,001-400,000	40	20.0
400,001-500,000	60	30.0
>500,001	33	16.5
Min: 70,000, Max: 4,000,000		
Mean: 409,580 ± 2,954.26		
Access to credit	43	21.5
Access to Extension Service	44	22.0
Sources of Farm Labour		
Family labour	5	2.5
Hire labour	7	3.5
Both	188	94.0
Membership of Cooperative Society	33	16.5

Land Tenure Types among Arable Crop Farmers in Peri-Urban Ibadan

Land Tenure Types

The major land tenure types among arable crop farmers in the study area are presented in Table 2. There are five land tenure types among the farmers; 52.0% had access through inheritance, 38.5% acquired their lands through gift, 7.5% had access through rent, 1.5% of the farmers acquired their lands through lease while 0.5% of the farmers borrowed land for arable crop production. These imply that inheritance and gift of arable land were the prevalent land tenure types in the study area. Inheritance has always been the dominant form of land ownership in Nigeria (Alawode *et al.*, 2018; Mailumo *et al.*, 2011; Bamire, 2010). Access to arable land through rent and lease confirms the existence of land market in peri-urban Ibadan.

Number of Plots of Land Held

Farm plot, in this study, refers to a separate contiguous parcel of land cultivated in a farm location. Table 2 shows the number of plots held by the respondents. Most of the respondents (47.0%) held 2 plots, and the mean number of plots held by the respondents was 2.55 (± 0.846). This means that on the average, farmers held approximately 3 plots of lands for growing arable crops.

Possession of Land Documents

Results from Table 2 show that majority (84.0%) of the respondents did not possess land documents. That is, certificate of occupancy (C of O) of the land held, while few (16.0%) possessed land documents. Possession of land documents depicts ownership of land. This implies that majority of the arable crop farmers cannot claim security of their farmland, (especially at the peri-urban areas where development can take away land at any time). The farmers who gained access to land through gift, rent, lease and borrowing do not have permanent rights in the lands they cultivate as the land can revert back to the owners at the end of an agreed period. These can imply tenure insecurity which can affect their productivity negatively.

Reasons for not possessing of Land Documents

On the reasons for not possessing land documents, most (69.0%) of the respondents saw no need for title document as they were not owners of the land or there could be counter claims on the lands acquired by inheritance. However, 30.0% attributed their lack of land documents to complex and very expensive registration process, while 1.0% found it time consuming. The lands cannot be used as collaterals because of lack of officially recognised land document.

Conflicts on Land

Very few respondents (6.5%) had conflicts on their farmland within the past three years. The reasons for these conflicts have to do with land tenure and land rights, and disputes between residential and commercial use of land. This result confirms the findings of Bah *et al.* (2003) that conflicts in major urban and peri-urban areas often have to do with land tenure and land rights, and increasing competition between residential and commercial use of land, as the peri-urban development continues to expand into traditional agricultural areas.

Table 2: Land Tenure Types among Arable Crop Farmers in Peri-urban Ibadan

Land Tenure among farmers	Frequency n=200	Percentage
Land Tenure type		
Gift	77	38.5
Inheritance	104	52.0
Rent	15	7.5
Lease	3	1.5
Borrowed	1	0.5
Number of plots of land held		
1	15	7.5
2	94	47.0
3	68	34.0
4	21	10.5
6	2	1.0
Min- 1, Max- 6, Mean (2.55 ± 0.85)		
Possession of Land documents		
Yes	32	16.0
No	168	84.0
Reasons for not Possessing Land documents		
Time consuming	2	1.0
Complex and very expensive registration process	60	30.0
No need for title document	138	69.0
Conflicts on the Land in the past Three Years		
Yes	13	6.5
No	187	93.5

Farm Management Practices among Arable Crop Farmers in Peri-Urban Ibadan

Farm Management Practices

Results of farm management practices used by the arable farmers are presented in Table 3. The farm management practices used are land clearing, harrowing, ploughing, ridging, weeding, irrigation, fertilizer application, harvesting, and herbicide application.

Majority (98.5%) of the farmers used manual land clearing because it requires less capital. This implies that reduced portion of land can be opened up for agriculture using manual land clearing. Also, majority (85.5%) of the farmers used manual ploughing because farmers believe manual ploughing influences soil health and crop response, and also helps in reducing input cost. Further, majority (83.0%) of the farmers used manual harrowing, practiced manual ridging (93.5%) and manual planting (97.0%). Manual weeding and irrigation were practiced by 96.50% and 86.5% of the farmers, respectively. Fertilizer application, herbicide application and crop harvesting were mainly done through manual means; 87.5%, 86.5% and 95.50% of the farmers, respectively.

Results show that majority of the arable crop farmers performed farm management practices manually, mainly to reduce the costs of operations on the farm, as compared to mechanization. This can lead to drudgery and it can affect productivity negatively.

Table 3: Farm Management Practices among Farmers

Farm management practice	Manual		Tractor	
	Frequency (n=200)	Percentage	Frequency (n=200)	Percentage
Land clearing	197	98.5	3	1.5
Ploughing	171	85.5	29	14.5
Harrowing	166	83.0	34	17.0
Ridging	187	93.5	13	6.5
Planting	194	97.0	6	3.0
Weeding	193	96.5	7	3.5
Irrigation	173	86.5	27	13.5
Fertilizer application	175	87.5	25	12.5
Harvesting	191	95.5	9	4.5
Herbicide application	173	86.5	27	13.5

Costs of Farm Management Practices

The mean amounts paid for farm management practices carried out on arable crops in the study area are shown in Table 4. Results show that the mean amount paid (wage) ranges between ₦3,575.28 and ₦10,078.51. Findings show that ridging had the highest cost of ₦10,078.51 while herbicide application had the least cost of ₦3,575.28. Moreover, it could be said that ridging of farmland had highest cost because it is more tedious and energy consuming. This is in conformity with Oluyole *et al.* (2013) that ridging had the highest mean wage rate in Nigeria.

The mean costs of other farm management practices were ₦9,711.23, ₦8,756.17, ₦7,953.72, ₦7,596.19, ₦6,952.84, ₦6,052.62, ₦5,713.89, ₦4,452.38 for land clearing, irrigation, planting of arable crops, weeding, fertilizer application, harvesting, ploughing, and harrowing, respectively.

Table 4: Costs of Management Practices

Farm Management Practice	Number of Farmers (n=200)	Mean	Standard deviation	Minimum	Maximum
Land clearing	188	9711.23	9520.91	222.22	62500
Ploughing	10	5713.89	6471.82	666.67	20000
Harrowing	7	4452.38	2486.48	2500	9500

Ridging	184	10076.51	9199.82	480	50000
Planting	138	7953.72	8793.82	214.29	66667
Weeding	113	7596.19	8617.02	400	66667
Irrigation	18	8756.18	15075.41	750	66667
Fertilizer Application	28	6952.84	7734.58	740.74	30000
Harvesting	144	6052.62	5504.07	375	28000
Herbicide Application	130	3575.28	3523.67	171.43	18000

Table 4...

Level of Productivity among Arable Crop Farmers in Peri-Urban Ibadan

As indicated in Table 5, 61.0% of the respondents had productivity level below 1.00. This indicates higher average cost per unit of output, meaning low productivity. About 8.0% of the farmers were at break even, while 31.0% of the respondents had productivity above 1. This implies lower average cost per unit of output produced (high productivity). This agrees with the findings of Ibitola *et al.* (2019), who found that 50.7% of maize farmers in Oyo State have productivity below 1.0. The mean TFP was 1.094(\pm 2.098) showing that on the average, the farmers had moderate productivity.

Table 5: Total Factor Productivity Distribution of the Respondents

Total Factor Productivity	Frequency	Percentage
TFP<1	122	61
TFP=1	16	8
TFP>1	62	31
Mean: 1.094 \pm 2.098		
Total	200	100

Effect of Land Tenure types and Farm Management Practices on Productivity

Results of the Tobit Model are shown in Table 6. The model is significant at 1%. The results explain the effect of land tenure types and farm management practices on productivity. The variables that were found to be statistically significant include borrowed land (land tenure system), manual ridging and manual herbicide application (farm management practices), and education (primary, secondary and tertiary).

Land Tenure Types

From the 5 types of tenure systems practised in the study area; gift, inheritance, rent, lease and borrowing (gift is stata base), only borrowed land has significant effect on productivity when compared to land tenure by gift. Rent and lease have positive but insignificant effects on productivity while inheritance has negative but also, insignificant effect on productivity.

The estimated coefficient of borrowed land is statistically significant at 1%. This implies that cultivating borrowed land has a negative effect on productivity of arable farmers. The results show that continuous use of borrowed land will decrease arable crop farmers' productivity by 27.8%. Farmers are likely not to invest in lands acquired through borrowing because of the likelihood of the land reverting to the owner after the agreed period of use.

Farm Management Practices

From the farm management practices included in the model, manual ridging and manual herbicide application have significant effects on productivity.

Manual ridging has positive and statistically significant effect on productivity of the respondents at 1%. The result shows that continuous use of manual ridging on the land increases arable crop farmers' productivity by 24.6%.

Manual herbicide application has significant negative effect on productivity at 10%. This can be traced to the effect of wrong application of herbicides which may have a resultant effects on the crops planted. The results show that for continuous application of herbicides manually, there is a 17.5% decrease in arable crop farmers' productivity.

Other Socio-Economic Variables

Educational level of the arable crop farmers is positive and statistically significant at 5% in influencing the productivity of the respondents. This implies that education at all levels have positive effects on productivity. The results show that when compared to farmers with no formal education, having primary, secondary and tertiary education increases productivity by 18.7%, 16.6% and 26.48%, respectively.

Table 6: Effects of Land Tenure types and Farm Management Practices on Productivity

Explanatory Variables	Coefficient	Standard Error	t-value	P-Value	Marginal Effect
Inheritance	-0.043543	0.057670	-0.75	0.451	-0.043541
Rent	0.107349	0.107812	1.00	0.321	0.107349
Lease	0.042303	0.224306	0.19	0.851	0.042303
Borrowed	-0.278049	0.097784	-2.84	0.005	-0.278049***
Membership of Cooperatives	0.055501	0.074932	0.74	0.460	0.055501
Access to Credit	0.083561	0.067945	1.23	0.220	0.083561
Conflicts	0.154626	0.099081	1.56	0.120	0.154626
Ridging (manual)	0.246248	0.079768	3.09	0.002	0.246248***
Weeding (manual)	0.015073	0.142983	0.11	0.916	0.015073
Herbicide application (manual)	-0.175849	0.096571	-1.82	0.070	-0.175849*
Land clearing (manual)	-0.161479	0.182534	-0.88	0.377	-0.161479

Primary Education	0.187002	0.079180	2.36	0.019	0.187002**
Secondary Education	0.166413	0.073609	2.26	0.025	0.166413**
Tertiary Education	0.264841	0.121677	2.18	0.031	0.264841**
_cons	0.227582	0.248466	0.92	0.361	

Table 6...

Number of observation: 200

F (14, 186) = 9.69, Prob > F = 0.0000, Pseudo R² = 0.1217, Log pseudolikelihood = -74.361928

**** Significant at 1%, ** Significant at 5%, * Significant at 10%*

CONCLUSIONS

This study showed the nexus between land tenure system, farm management practices and crop productivity of arable crop farmers in peri-urban Ibadan. The main land tenure systems are by inheritance and gift. Arable land is the most important arable crop production input; tenure systems determine the use of farm management practices. Land tenure systems, coupled with farm management practices are important in achieving increase in yield and productivity. Land tenure security brings about long term investments on land for agricultural production activities. Improving land tenure system in a manner that secures longer term access to farmlands is a pre-requisite to improving agricultural productivity.

To the crop farmers, obtaining land documents is a time consuming, complex and very expensive registration process. Efforts at viable policy that will focus on creating a more effective and efficient land title registration system among farming population will attract farmers to get title documents to their lands. This will enhance individual land tenure security. Tenure security will make the farmers to feel emotionally attached to the land they cultivate and this will enhance increased investments in land as well as improved farm management practices, leading to higher productivity and greater food availability.

SUGGESTIONS FOR FURTHER STUDIES

Since land is the most important critical factor in arable crop production, further studies on land tenure system, farm management practices and productivity of arable crop farmers in Southwest Nigeria will be helpful in shedding light into what State Governments can do to increase arable crop production in the region. This will help in attaining self-sufficiency in food in Southwest region/zone, in order to feed its teeming non-farming population. This will reduce the cost of food items, especially in the post covid-19 period.

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