EFFECTS OF LAND COMMERCIALIZATION ON AGRICULTURAL PRODUCTION IN KACHIA AND KAJURU LOCAL GOVERNMENT AREAS OF KADUNA STATE, NIGERIA

BY

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DECLARATION

I hereby declare that this thesis was written by me and it is a record of my own research work, it has not been presented in any previous application for any degree in any university except where references are made to the published literature and duly acknowledged.

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The above declaration is confirmed

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Professor Jacob P. Voh
(Chairman, Supervisory Committee)

CERTIFICATION

This thesis entitled: "EFFECTS OF LAND COMMERCIALIZATION ON AGRICULTURAL PRODUCTION IN KACHIA AND KAJURU LOCAL GOVERNMENT AREAS OF KADUNA STATE, NIGERIA" by DUTSE FIDELIS, meets the regulations governing the award of the degree of Master of Science in Agricultural Extension and Rural Sociology, Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This work is dedicated to the Almighty God and to my blessed fruits of the womb: MIHAS and MIRIZI.

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ABSTRACT

This study examined the effects of land commercialization on agricultural production in Kachia and Kajuru Local Government Areas of Kaduna State. Six villages were randomly selected within which ten percent (10%) of the population of each village were randomly selected giving a total of seventy four (74) farmers who were interviewed during the survey period from May to July 2004. The data collected were analyzed using descriptive statistics, multiple regression and spatial correlation coefficient analysis. Results obtained from the analysis revealed that a large number of respondents have sold their farmland (about 88 hectares) and most of the sold farmlands were not cultivated. Only a few farmers (18.9%) admitted to have purchased land and some respondents (4.1%) have lost their land rights through fraudulent claim by other people in the court of law. Multiple regression analysis showed that educational level have a significant influence to sale of land at five (5%) percent, while income was negatively significant at one (1%) percent. It further shows that income and speculative purchase have significant contribution to purchase of land at one (1%) percent level while urban influence made a significant contribution to purchase of land at five (5%) percent level. The result of spatial correlation coefficient analysis also showed that variables such as income, quantity of land sold, quantity of land purchased and speculative purchase were significantly related to agricultural production at one (1%) percent level, while urban influence and household size were significantly related to agricultural production at five (5%) percent level of probability. The

study recommended that an appropriate policy framework should be formulated to regulate and control the sale of agricultural land to only genuine farmers. It was also suggested that the maximum ceiling for the purchase of agricultural land of the Land Use Act of 1978 should be reviewed periodically to reflect population increase and the demand for agricultural land.

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CHAPTER ONE

1.0 **INTRODUCTION**

To really understand the changes that have occurred in the Nigeria's land tenure system is to have recourse to the study of their historical evolution and development. According to Famoriyo (1987), the Nigeria's land tenure arrangements have a long history reflecting both political and social development. Its origin is only known in relation to time and process. These are further complicated by the large number of different tribal or ethnic units each with its own culture, social system and methods of land holdings devised to meet its own peculiar needs. However, there is a general consensus (Famoriyo, 1987; Hailey in Saul, 1993; Bassette 1993) that the present land tenure systems of Northern Nigeria evolved from the customary land tenure system. Also consensual oral clue presents that before the 18th century, communal land tenure was not embodied in statutory law (no written or legal right). Ega (1980) describes customary land tenure as a system in which the community jointly exercises control, occupation and use of a landed property. The rights of transfer and reversion were exercised only by the community as a whole. Right of occupancy depended upon residence within the community and the land so owned could be inherited but not alienated (sold). In this system of communal arrangement, access to farmlands by the farmers was guaranteed.

Owing to major changes that took place as a result of technological, political and socio-economic development, the British administration enacted the Land and Native Right proclamation No. 9 of 1910 in the then Northern Protectorate which declared all rights over land to be under the control of the government. After the

amalgamation of the Northern and Southern protectorates in 1914, the 1910 proclamation was re-enacted as the Land and Native Rights Ordinance of 1916 in the then Northern region. This was later revised and re-enacted as the 1962 Land Tenure Law which defined the extent of government obligations and rights with respect to land in Northern Nigeria. The 1962 law declares all land in northern Nigeria (except a few nominative land) occupied or not to be native lands over which the government (Native Authority) has power of control, alienation and administration. By 1978, a new innovative land law came into being to rationalize land use in Nigeria, otherwise known as the Land Use Act of 1978. It also declares all land in Nigeria to belong to the government. Under the law, the government has power to acquire land for public purpose, grant and revoke occupancy right for good cause, and under the law no individual family or community can own land except the right to occupy and use it. The law provides sale and purchase of land for agricultural purposes through its maximum ceiling for both cultivation and grazing i.e. 500 hectares and 5000 hectares respectively (Baba, 1975). From this historical development, the non-alienation of communal land tenure system changed to include sale and purchase. These too grew and emanated into land market and included other commercial tenure types on rural land to such an extent that land has become a highly tradable economic commodity in both rural and urban areas because of its value (Ega, 1983). Land prices have increased rapidly such that money and power had become the strongest instruments for acquisition of any size of land. This had given people with high financial status (wealthy persons) an impetus to buy land as much as they need from the poor

farmers and keep without cultivation. This compounded the scenario in which the small-scale farmers with limited land holdings characterize the Nigerian agricultural scene.

1.1 **Problem Statement**

In spite of the large cultivable land area of about 71.2 million hectares from the total land mass of about 93.4 million hectares of Nigeria land, only 34 million hectares, or about 50%, is put into cultivation (Ega, 1980; FMANR 1999; Omokhudu, 1998). It therefore calls for concern that many Nigerian farmers are landless and others (large proportion of them) have small land holdings which cannot support family subsistence. One of the reasons associated with this problem is that land is concentrated in the hands of a few individuals who had primarily acquired large area of land through purchase. This private ownership through commercial transaction in land, is believed, came in response to increased population pressure and commercialization in agriculture.

However, it must be doubted whether such lands acquired through purchase are (all or part) actually put into agricultural production in Nigeria. Large parcels of lands which were acquired through purchase from the farmers for agricultural production are seen uncultivated i.e. not use for that purpose along Kaduna – Kachia road, and Kaduna – Abuja road. Some of these purchased lands have become subjected to further commercial transactions like resale or giving out on tenancy arrangements by their owners. In addition, even purchased lands that have been “banked” for the descendants had often fallen prey to further commercial transaction because of the high price attended. This is because the land owners of uncultivated

lands might not be farmers but they might have purchased the land to make financial gain. This is as a result of the assumed land value, as such, it has enhanced grabbing of land without cultivation by wealthy persons from the poor small holders (farmers)who are the major crops producers in the study area. This scenario places less or no land in the hands of the large number of poor farmers and much land on few large land owners. This is counter to the concentration of a large number of poor small-scale farmers operating on a limited cultivable land area and who are also rigidly held by the tenets of customary inheritance which encourages further subdivision of their farm lands. Windfuhr (2002) indicated that in the rural areas of many countries the most dominant process is not land redistribution but land concentration. If this growing trend of proliferation of large uncultivated farms i.e when the trend of buying and keeping land is not checked, small scale farmers whose lands are being bought will either continue to loose their farms completely or continue to have their farm size reduced to a point which is not economically beneficial to agricultural investment or use the land as security for commercial bank loans. Therefore, to increase the incentives to invest or use the land for bank loans, small farmers need to be discourage from the sale of farm land because they need to own a reasonable amount of farmland in order to enjoy credit facilities. The above scenario must not ignore the background that the Nigerian small- scale farmers are the major agricultural producers and they are characterized by a perpetual small land holdings, landlessness and land - poor whose condition must have been initiated by either selling of their land or communal condition. Thus, traditional principle of inheritance seems inevitable in rural land tenure.

The study examined the effects of land commercialization on agricultural production. Therefore, in this study, land commercialization refers to any permanent exchange of land between a farmer (saler) and another (buyer) after cash payment or it's equivalent. The study focused and provided answers to the following research questions related to land commercialization:

1. What are the socio-economic characteristics of farmers in the study area?
2. What is the extent of land commercialization in the study area?
3. What are the factors responsible for the sale of land by farmers?
4. What are the factors that promote purchase of land by people?
5. How does land commercialization affect agricultural production?

1.2 Objectives of the Study

The general objective of the study was to examine the effects of land commercialization on agricultural production in the study area.

The specific objectives of the study were to:

i. describe the socio-economic characteristics of farmers in the study area;
ii. determine the extent of land commercialization in the study area;
iii. identify factors responsible for the sale of land by farmers in the study area;
iv. identify factors promoting purchase of land by people from farmers in the study area;
v. examine the effects of land commercialization on agricultural production in the study area;

1.3 Justification of the Study

The paradox posture of government and all stakeholders in agriculture, calling and encouraging the youth to go back to the farm has always been thwarted because it might have contradicted the unfortunate position of the youth in respect to land ownership. This is because some youth lost their land rights through sale and purchase before they reach farming age. Others inherited small holdings too small to achieve their farming aspirations, while others are farming under unsecured land rights which deterred meaningful investment. This dilemma made this study to be seen as time conscious.

The study would add more knowledge on the nature of sale of agricultural land that is prevailing in the study area as well as the use to which the lands acquired were put to. It is also anticipated that this study would provide useful information which could form the basis for constructive and effective policies on land matters in Nigeria for efficient agricultural production. Consequently, it will serve as reference materials to all stakeholders in agriculture.

CHAPTER TWO

LITERATURE REVIEW

2.1 Economic characteristics of farmers

Factors that include, the demand for land for agricultural production by the large size of farmers and the sale of agricultural land to other people have combine to increase the value of land. This had made land to be regarded as a trusted financial asset (Fabiyi 1974; Smith et al 1996). In this regard money and power determine the size of land acquired and this had made it possible for wealthy individuals to purchase large parcels of land at low price from the poor small-scale farmers who do not know their land sizes in modern measuring terms except on estimation. Meek (1946) in Migot *et al* (1989) noted that wealthy native capitalists are increasing and despite increases in agricultural debt, many peasants are becoming labourers on lands which were once their own. Similarly, Mayer (1979) and Kankwenda (2001) observed that immigrants and foreign local elites had increased their influence which invested their wealth in the acquisition of land to the point that they bought piece by piece of peasants lands in choice areas and some of these rich land owners are not only reluctant to sell their existing landed properties but are eager to acquire more lands where available. These traditional capitalists are noted to come from the elite class. They are rich serving or retired public servants who invest their wealth and influence to develop private property on rural land. This does not guarantee sustainable land use to the poor small-scale farmers but could only lead them (small farmers) to face the consequence of land sale.

2.2 Extent of land commercialization

O'Keefe and Wisner (1977) noted that in the making of African cultural land tenure coupled with the underlying processes of change presents instructive parallels between Europe and Africa tenure development. Such parallels may be attributed to a more obvious aspects of historical changes affecting land law, systematic individualization of tenure through purchase of land or the emergence of a free peasantry. By contrast, the historical changes of tenure in developed countries were largely driven by the operation of the market forces arising from the increased demand of raw materials by growing industries. In this development, farmers were encouraged to acquire suitable agricultural lands as much as they could acquired for commercial production. While seen from the African perspectives, changes in land tenure have largely been driven by social factors and less by economic utilization (ie agricultural production of land). It is easily seen and not uncommon that large estates of privately owned cultivable lands which were bought were left uncultivated to the extent that in rural areas of many countries (study area inclusive), the dominant process is land concentration in the hands of a few people which is an evidence of socio-economic inequality and a likelihood of land speculation and land grabbing (Windfuhr, 2002; Ega, 1980).

2.3 Uses of commercialized Land

Zimmermann (2002) observed that the growing trend had emerged such that productive lands are not always in the hands of the most productive farmers. This is because some purchasers of good agricultural lands often left them uncultivated or sometimes on rare occasion lend the land out on tenancy arrangements. Some of

these purchased lands are either banked for descendants or used to build assets or serves as social security to the owners thereby leaving such land unfarmed. Christopher (2001) noted that holders of purchased large land often laid false claim that such lands are held for their agricultural production use only. Whereas some hold lands because of the expected increase in land value in the near future arising from the expected sitting of development projects which usually attracts higher price in land. Therefore such lands are often left uncultivated.

2.4.0 Factors responsible for land commercialization

Many factors are responsible for the sale and purchase of agricultural land. Some of these factors include population pressure, poverty and urbanization.

2.4.1 Population pressure

Boserup (1965) in Baba (1975) and Oji (1999) observed that increase in population has brought about the evolutionary trends in farming systems advancing from less intensive to more intensive cultivation. The increased in cultivation of agricultural land has been driven by the need to meet the increased demand for food by the growing population and the expansion of agricultural export (Adegboye, 1964). This had necessitated the farmers to own and acquire more land through purchase, the extent of which culminated into an intensive land purchase. As a result of high demand on lands, the value of land had progressively increased along its price. The high price on agricultural land sometimes arises from speculative activities which are determined, among other factors, by some major agricultural commodities (cocoa in Nigeria) and therefore, such agricultural land becomes an attractive form of investment (Lioyd 1993, Famoriyo 1987). Thus, more lands have been purchased

from the poor farmers and are kept or left uncultivated and these farmers are losing their farm sizes.

Land is a determining factor for capacity production. This implies that farmers who have been displaced by land sale to rich land owners are conditioned to acquire land or more to meet their demand for necessities and as well to keep in the path of production. Therefore, purchase of land and tenancy arrangements including all forms of commercial transaction on land become an important option for expansion of holdings. As a consequence to this development few small-scale farmers may increase their land holdings through their farm savings while the larger proportion with small portion of land of their own may continue to have their land sizes reduced progressively through customary principle of inheritance or to face land sale to the elite.

2.4.2 Poverty

Windfuhr (2002) observed that around the world, the poorest of the poor are the landless in rural areas who depend on cultivating the land for sustenance. They are followed closely by the land poor i.e those whose poor quality plots are too small to support a family. According to Quan (2002), poverty can make land to be sold, loaned or rented in the time of hardship to provide some financial security to the owner. The traditional principle of inheritance and land sale to wealthy personality by small-scale farmers because of poverty has combined to reduce their farm sizes and is a threat of complete possible loss of their farm land. Thus, the rich individuals are taking advantage of the poverty of the rural farmers and are buying off some of their lands. This unfair sale and purchase does not encourage investment on the part of

the rural poor because many poor farmers can not afford to buy or even rent land. Quan(2002) observed that, it is difficult for the poor farmer to buy his land back once it has been sold. Therefore, they can only loose their land. Poverty is more pronounced among these rural households because cultivation of land is the major (if not the only) means of sustenance and the rate of poverty has increased significantly in Nigeria (Kankwenda, 2001). Therefore, without assuring adequate access to land, the most basic production resource coupled with other incentives to small scale farmers who are the major producers, the goal of eradicating poverty, reducing hunger and promoting more broad-based and inclusive rural economic development will remain elusive (IFAD, 2001 in Windfuhr, 2002).

2.4.3 Urbanization

Ega (1983) observed that greater pressure exists for change in the direction of commercial transaction in land such as purchase and rent for agricultural production which is due largely by the exposure of rural communities to urban capital. The pressure from an increasing urban population that emphasized non-agricultural land use has further exposed agricultural land to sale and purchase (Oji, 1999). The rich individuals live in urban centres and take advantage of good road laid out to open an area for economic development and buy cultivable land from the poor farmers along the roads in closely located villages (Saul, 1993). It is to this extent that around the rural-urban fringes some people have acquired land irrespective of quality with the intention of reselling for development. Given that farmlands with development potentials are typically priced higher than their agricultural land values in the rural area. As such, such rural lands are easily bought

at low price for future investments, with the expectation that the city will develop further. In this regard, there is a dual effect since not only does such a sale diminishes the supply of farm land but the proceeds from the sales are re-invested in other farm land to build more assets. Hence, large expands of agricultural land in rural areas surrounding or close to most Nigerian cities located along the highways are said to have been bought in anticipation of any development project that may attract high price in land sale and such is the trend that many farmers around these areas have lost their traditional land holdings

(Hill,1977;Kehinde,1998) .

2.5 Effects of land commercialization on agricultural production

According to Mayer (1979) purchases of private land affects the annual redistribution of land, as a result, differences in the amount of land available to families become more generalized. There is increased pressure on the land which had brought about shortening of fallow period and consequently, small landholders are gradually pushed off from their traditional land holdings (Huth, 1969). Hence, many peasants are landless and have since become tenants on large farms. Under this condition, small scale farmers can not make any meaningful or longtime investments or adopt some improved technologies which have the potential to provide higher income as would have been expected from a well developed land market system that promotes increased investment.

Therefore, sale of agricultural land has led to land grabbing, land concentration in the hands of rich people, landlessness among the rural small farmers and increasing marginalization of the poor. Smith *et al*. (1996) added that, it

also slows down intensification and prolong the pressure on native land as well as management problem. This resulted to high price on land arising from market imperfection. The negotiation power of huge landowners and landless farmers is unequal to the extent that small scale farmers find it difficult to buy land because they are poor and also lands are sold at top price. Therefore, the accumulation of land for speculative purpose by wealthy persons is preventing land from being productively used.

2.6 Theoretical Framework

This study is premised on the theoretical concept of social change which is guided by two perspectives of social change: These are:-

(i) the evolutionary perspective; and

(ii) conflict perspective

2.6.1 Social change perspective

A theory is a set of propositions that tries to explain interrelationship among events. In other words, a theory is a systematic way of looking at phenomena. Social change on the other hand, refers to the transformation of social structures and social relationships in a society (Horton and Hunt, 1968). Social change theory basically seeks to explain what really constitutes social realities.

All societies experience a certain amount of change in their social structures and cultures overtime. This implies also that the mode of production in a social system basically determines the trend of change and development that occurs in a society. Strauss (1959) stressed that the essence of human life are change, development and growth. The three words, change, development and growth are

often used Inter-changeably to associate the dynamics of society with progress. While social change is associated with progress in this regard, it could as well be retrogressive thus, connoting two types of changes: progressive and retrogressive changes which may result from either planned or unplanned change. Progress carries a value judgement i.e. progressive change means change in a desirable direction, while retrogressive change refers to change in an undesirable direction.

The two extremes of changes continuum are determined by many factors with culture as an example. Most of the social change in many known societies have developed through diffusion of cultures from other societies. When two cultures come into contact and one culture is dominated by the other, the low-status society generally absorbs more traits from the high-status society.

The theory of social change seeks to understand the social reality which demonstrates the changes that have taken place in the land tenure systems. The theory treats the customary and the commercial land tenure systems as exclusive categories so that any favourable development model should take into consideration all the land tenure systems in Nigeria.

The foregoing brief description of social change relates to the introduction and development of commercial land tenure systems in which land can be sold, bought and rented into the rigidly held system of customary land tenure in which land could only be inherited. This transition in the land tenure system has become elements of social theory.

2.6.2 The evolutionary perspective

Evolution can be described as a process of opening out or developing. Needham (1931) in Timasheff (1967) sees evolution as the passage from simplicity to complexity, from homogeneity to heterogeneity which may be deduced to have occurred and to be occurring. This literarily means coming into existence of new things or system together with the old one. The two extremes of evolutionary continnum-old (traditional) and new phenomenon (modern) depict trend of development. Therefore, evolution can be equated with development. Hence, evolution is referred to as development of more complicated forms, from simpler forms and from homogeneity to heterogeneity.

Development connotes the idea that positive change has occurred or will occur (i.e as a result of planning) between two points in time with reference to the phenomenon under study. It assumes that the phenomenon is being assessed within a given value system without which the change that occurred cannot be said to be either negative or positive. Developmental process occurs gradually or suddenly and this brings about changes in the social system, as such development is associated with change in the social system.

The evolutionary theory treats the two extremes of the change continnum from the customary to the commercial land tenure systems. This is, to explain the historical development of land tenure systems in Nigeria which is important in formulating and executing effective development programmes of action for the improvement of the quality of life of the people. Thus, evolutionary perspective can be used in this sense to achieve social change.

The relevance of evolutionary theory to this study is eminent to the fact that some land tenure systems, otherwise known as modern system, evolved from the traditional end of the continuum, and have produced a social change. Agricultural production on the other hand also depicts the modernity of the continuum because agricultural production is characterized by land commoditization. The sector is largely moved by a very large number of poor small-scale farmers who are held by customary inheritance in Nigeria. Thus, this perspective was used to explain the historical events that led to the issue of land commercialization and its effects on agricultural production.

2.6.4 Conflict perspective

Conflict theory is considered as a revolutionary perspective and a paradigm of social change. According to this perspective, life involves a struggle for control of resources. The theory looked at conflict as an ever present and inevitable features of the social system, and conflict is a clash of interest between classes or groups of people who have come together to effectively compete for scarce resources. Thus, society is viewed as made up of class. Horton and Hunt (1968) defined social class as a stratum of people of similar position in the social status continuum. Similarly, Wilmot (1973) stressed that, so far as millions of families live under economic conditions of existence that separate their mode of life their interest and their culture from those of the other classes and put them in hostile opposition to the latter, they form a class. It implies that the members of a particular social class viewed one another as social equals, they may often have about the same amount of money, but

what is much more important is that they have much the same attitudes, values and way of life.

Several principal social classes have been viewed as points along a status continuum but very significant is that class differences depict upper and lower level. For example, Marx in Buzuev (1987) identified the principal social class as - the wage worker (proletariat) and the capitalist (bourgeoisie) with a middle group (other petty bourgeoisie) which was on the way out. Ricardo in Timasheff (1967) on the other hand consider economic society as having three groups of actors; capitalist, laborers and landlords.

The capitalists class formed the core of Marxian analysis. The capitalists class are viewed as those who have and control the means of production, and because of this very nature of capitalist production and the centralization of capital, the capitalists exploit the workers who have only their labour power to sell. Hence, Buzuev (1987) added that in the capitalist world, every thing - houses, land, factories etc can be bought and sold. On the other hand, Fanon in Wilmot (1973) described the capitalists of the developing countries as, "People who are not engaged in production, nor invention, nor labour. It is completely canalized into activities of the intermediary type with an innermost impulse just to keep in the running and to be part of the racket; its psychology is that of the businessman not that of the captain of industry".

Marx in Buzuev (1987) saw the poor small-holding peasants as the lower class in the society and they form a vast mass and the members of which live in similar conditions. Their mode of production isolates them from one another and their isolation is increased also by the poverty of the peasant. Their small-landholding admits little or no application of science and therefore no diversity of development.

Viewing from above, it can be argued that every social change is the result of conflict or clash of interest arising from competition in the distribution of scarce resources between social classes. Conflict can be used in this direction to achieve social change. All societies today consist of distinct social classes and the descriptions of social class implied that money or wealth separates people into different grouping. Therefore, struggle is inevitable among groups in the acquisition of scarce resources. The dominant or stronger group continues to suppresse the weaker one thus, perpetual subjugation of the lower class. In this regard, it can be argued that change can only occur in the forms of exploitation, with each formation succeeding one another in an objective process.

The relevance of this theory as applied to this study demonstrates the existence of distinct social classes in the struggle for land ownership. Therefore, social class is a useful concept in this study because rich individuals have purchased large area of land from the poor farmers and left unfarmed, and the poor small-landholding farmers are the main producers in the study area. These poor farmers in turn have lost or reduced their farm sizes through land sale to wealthy individuals. This loss or reduction of farmland hinders the farmers from making any meaningful investment in their farms, neither can such small farm units guarantee agricultural loan. These features are a significant social reality in the study area. Therefore, this perspective provides the bases in explaining the possible competing and conflicting interest in land ownership among farmers. The capitalist class refers to in this study are those rich people who have bought large expanse of land and left uncultivated awaiting for the possible rise in price. It implies that only the capitalists save and what they save is what they invest. The wage workers on the other hand are the small

scale farmers whose land has been purchased. Consequently, they are cultivating under the risk of continue reduction of their farm sizes and a complete possible loss of farm land to sell is eminent.

(As a consequence some farmers are pruned to take refuge under tenancy arrangements on large farms which were once their own. Thus, change in retrogression).

For the purpose of this study the preceeding model have emerged (Fig.1).

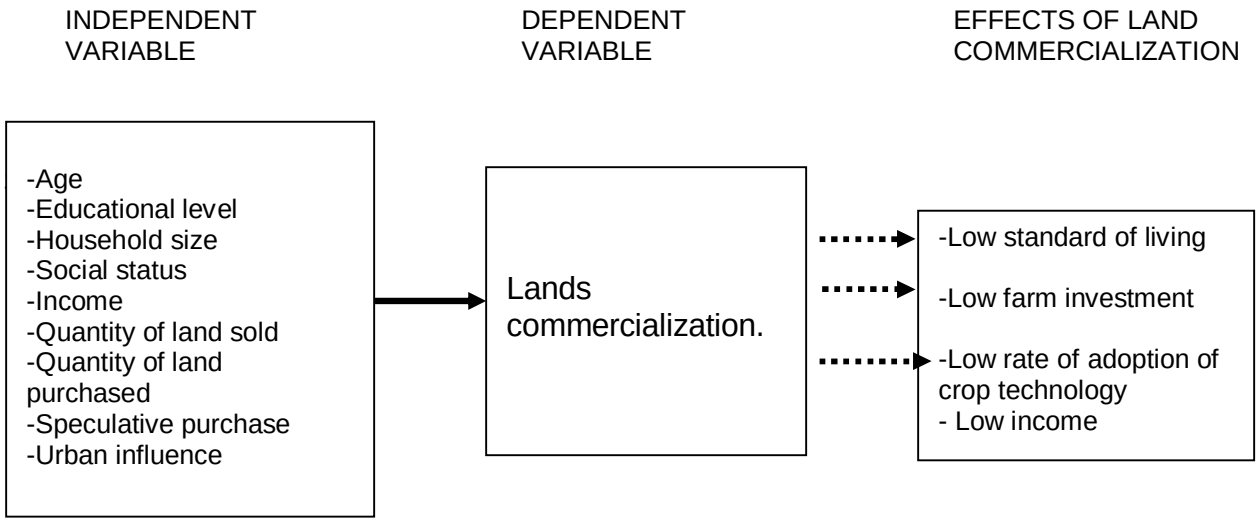


Fig.1: Diagram illustrating the effects of independent variables on land commercialization

In the context of this study, the independent variables in the model were age, educational level, household size, social status, income, quantity of land sold, quantity of land purchased, speculative purchase and urban influence while land commercialization was the dependent variable. Land commercialization of farmland is the consequence of conflicting interest in the competition for land. This had resulted from the large number of poor small-landholding peasant farmers who are

also the major producers, who had sold their land to the rich and influential individuals (capitalist) and some of these farm lands are not cultivated. This activity has brought about negative effects on the part of the rural farmers through loss of part or reduction in their farm sizes. This makes it difficult for the farmer to make a long time or appreciable investment on their farms, brought about low standard of living because of their level of poverty and possible low rate of adoption of improved crop technology. These effects were measured during the time of study and are put into broken arrows in the model to show the consequences of land commercialization.

CHAPTER THREE

3.0 METHODOLOGY

3.1 STUDY AREA

This study was conducted in Kachia and Kajuru Local Government Areas of Kaduna State. Kaduna state is made up of 23 Local Government Areas (LGAs). Kachia and Kajuru Local Government Areas were chosen as the study area because they are more affected by land commercialization (reconnaissance survey).

Kaduna State occupies a land mass of 46,016 square kilometres covering about 5% of the total land area of Nigeria. Kaduna State lies between latitude 12^{o}N and 9^{o}N of the equator and longitude 9^{o}E and 6^{o}E of the prime meridian. The state is bounded in the north by Katsina, Zamfara and Kano States. It also shares common boundaries with Niger state to the west, Bauchi, Plateau, Nassarawa States and Federal Capital Territory Abuja to the east and south, respectively. Kachia and Kajuru LGAs are located in the southern part of the state with a total land mass of about 11,467km^2 (Kaduna State Statistical Year Book, 1996). The area has a tropical continental climate which is sub-humid in nature characterized by a north-easterly dry wind known as harmattan (locally) and a moist south-west wind. The study area has a mean annual rainfall of 1,201mm spread between six to seven (6-7) months and a dry season of about six (6) months. The vegetation cover is the southern guinea savannah woodland with different types and varying kinds of trees with dense shrubs and other herbs. The soil is blackish in nature and very fertile (especially areas of low depression). Farming is the traditional occupation with main emphasis on cultivation of crops and keeping of livestock. Important crops grown include

maize, sorghum, millet, rice, soyabean, groundnut, yam, cassava, sweet potato, ginger, pepper and tomato. Cattle are reared by the nomadic Fulani people. Sheep, goats and poultry are kept on free range basis. This shows the extent to which the people are dependent on land for their livelihood. The major tribes found in Kachia and Kajuru Local Government Areas are Adara (kadara), Jaba and Kuturmi while the minor tribes include Bajju (Kaje) and Hausa-Fulani. Christianity is the major religion of the people. The people live in big settlements (rural towns) or small units (village or hamlet). The big settlements serve as centres for the distribution of agricultural inputs and services when available.

3.2 Sampling Procedure

The study covered six (6) villages from Kachia and Kajuru Local Government Areas, namely Sabon gari Ajuwa, Iburu, Dutsen-Gaiya, Akilbu, Rijana and Doka. These villages were selected after a reconnaissance survey was conducted. A simple random sampling technique was used to select the villages and the respondents from the farmers population list (fertilizer list) that was obtained from the village heads of the respective villages of the two Local Government Areas. Therefore, the fertilizer lists of all the farmers in the six villages formed the sample frame of the study. The selections of the respondents in each village was proportional to its total population (fertilizer list). Ten percent (10%) of the population of farmers in each village were selected. Therefore ten percent of the population of farmers in the six villages put together formed the sampled size of the study (farmers include the bona fide farmers who are engaged in either crop production only or both crop and animal production).

The simple random sampling was used to determine respondents that have sold their land, respondents that have sold their land but such lands were not cultivated at the time of this study, respondents that have purchased land and respondents that were tenants on other people's farms at the time of study.

3.3 Data Collection

Primary and secondary data were used in this study. Sources of the secondary data include, textbooks, journals and unpublished thesis and reports from Ministry of Land and Survey.

The study relied mostly on primary data. The primary data were obtained through the use of questionnaire using the interview schedule and informal observation. These were used to collect data on the farmer's socio-economic characteristics such as age, household size, level of education, farming experience, income and landholding. Also data were collected on the types of tenure arrangements which include quantity of land purchased, quantity of land sold, forms of tenancy, forms of payment, security of tenure or duration and use of purchased land. Other data included farmers living standard, investment opportunities, credit obtained, source of farm labour, technologies adopted, amount of yield and income obtained. Additional data were collected from the community leaders e.g. district heads, village heads, ward heads and clan heads concerning land tenure principles namely; land holding, rights of acquisition and transfer of land certificate, land disputes as a result of sale, purchase, and tenancy arrangements. Data on the general agricultural practices in the area were also obtained from the community

leaders. This is because they were associated with land administration. The interview schedule used a checklist for the community leaders.

3.4 ANALYTICAL TECHNIQUE

3.4.1 Simple descriptive statistics

The descriptive statistics which comprise of measures of central tendencies (mean, median and mode) and dispersion (range) were used to analyse most of the data. This is because the data generated were qualitative in nature and qualitative research data require the use of descriptive statistics. This method was adopted from Baba (1975) and Adegboye (1964). This was employed to achieve objective 1 and 2.

Objective 2 of the study was achieved by determining the extent of sale of land. To achieve this, the number of farmers who have sold their land was first of all determined and this was done by,

1. determining the percent of extent of sale of land by farmers. This was followed by determining the quantity or the total size of land that had been sold by the farmers. This was done by;
2. determining the extent of sale of land by quantity (proportion) of land sold by the farmers in hectares.

3.4.2 Multiple regression model

Multiple regression model arises because;

i. It is used to determine which independent variable has the greatest impact on a dependent variable e.g. which of the following that has greater influence in determining land commercialization– Educational level, family size, social status,

quantity of land sold, quantity of land purchased, age, income, speculative purchase and urban influence. This will allow land commercialization to be singled out as a factor determining agricultural production.

To achieve objectives three and four, multiple regression analysis was used to analyze the effects of independent variables over the dependent variable. One percent and five percent levels of significance were used to explain the significance of the relationship between land commercialization and the selected independent variables.

The model is specified as follows:

$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + u$

Y = land commercialization (ha)

X_1 = Age (years)

X_2=Educational level (number)

X_3 = Household size (number)

X_4 = Social status

X_5 = Income (naira)

X_6 = Quantity of land sold (ha)

X_7 = Quantity of land purchased (ha)

X_8 = Speculative purchase (ha)

X_9 = Urban influence (score)

U = Error term

3.4.3 Spatial correlation coefficient model

Spatial correlation coefficient model was used to analyze the influence of independent variables over the dependent variable. One (1%) percent and five (5%) percent levels of significance were used to explain the significance of the relationship

between factors of land commercialization and the agricultural production. This was used to achieve objective 5 of the study.

3.5 Definition and Operationalization of Variables

Independent variables:

(i) **Age (X_1):** Age has an important influence on the desire by farmers to hold land than to sell it. The aged and elderly persons are not expected to sell their farms more than the young counterparts. In this study, age was measured by the actual number of years of the respondent at the time of study. Categories of respondents were grouped into 29-39 years, 40-50 years, 51-61 years and 62 years and above. This grouping was done because the selection of respondents was based on household heads only as they are assumed to have the customary right to transfer land.

(ii) **Educational level (X_2):** Educational level refers to the extent by which the respondents have acquired knowledge through organized or informal schooling or through informal training. The level of education of the farmers could play an important role in their ability to sell the land or to hold it. Farmers with no or lower educational level are expected to sell land more than farmers with high educational level. Level of education was measured by asking the respondents to state the highest level of education they have acquired. The levels were: non or informal education, primary education, secondary education and post secondary education. The variables were given a score as follows: those who have non formal education and informal schooling were

scored 1 (they were grouped together because their differences might not be significant to separate them into different groups in relation to the sell of their land), those who had primary education 2, those who had secondary education 3, and those who had post secondary education 4.

(iii) **Household Size (X_3):** This refers to the total number of people in the household which includes the wives, children and other dependents who reside within the same household. The number of people in a household is an important factor that could influence sale of farms. Small household size with the ownership status of large farms could have a tendency to sell more farms than those with large household size. Similarly, the sex of household members could play a role. Household with few or no male children\child are expected to sell their land more than their counterparts. In this study household size was measured by the actual number of wives, children and dependents of the farmers at the time of study. The respondents were asked to state the number of household members within their household. The respondents were grouped and the grouping were given the score as follows: respondents with 1-3 household members were scored 3, 4-6 were scored 2, 7-9 were scored 1 and 10 and above were given the score of 0.

iv. **Social Status (X_4):** This refers to the leadership status held by the respondents in the community. Leadership position of the respondents play a role in the sell of land. An individual's social status either as a community leader, ward head, village head, district head, chief can enhance his capability

to sell farm lands than the farmers without such social status. Social status was measured by assigning 0 to leaders and 1 to non-leaders.

v. **Income (X_5):** This refers to the total amount of money the farmer earned from the usual sales of agricultural produce and from other sources of income which may include salary, gains from trading or services etc. The income level of the farmers has an important role to play in the sale or purchase of land. Respondents that have little or who are low income earners could have the desire to sell their land to meet other necessities than the high income earners. Farm income was calculated by converting the produce into monetary (naira) value and were categorized as follows: ₦1,000-₦50,000, ₦50,001-₦100,000, ₦100,001-₦150,000, ₦150,001-₦200,000, ₦200,001-₦250,000, ₦250,001-₦300,000, greater than ₦300,000. Similarly, non-farm income was categorized as follows: ₦1,000-₦30,000, ₦30,001-₦60,000, ₦60,001 and above.

vi. **Quantity of land sold (X_6):** This refers to the unit of land area released permanently to another person(s) by the farmer after cash payment or its equivalent. Sizes of farmlands that were sold were measured by estimation of their sizes in hectare and were converted into percentage. The respondents were asked to state the sizes of their farm lands that were sold in their own measurement and these were converted into hectares. Respondents that have sold their land were categorized according to the size of farms that were sold and these were given scores as follows: respondents that have sold 1-5

ha were scored 4, 6-10 ha were scored 3, 11-15 ha were scored 2, and 16 ha and above were scored 1.

vii. **Quantity of land purchase (X_7):** This refers to the unit of land area acquired permanently by the respondents after payment of money or its equivalent. Sizes of farmland that were purchased were measured in hectares. The respondents were asked to state the size of their farmlands that were purchased in their own measurement and these were converted into hectares at the time of study. Also farmers that have purchased land were grouped according to the quantity of land purchased and were scored as follows: 1-5 ha were scored 4, 6-10 ha were scored 3, 11-15 ha were scored 2 and 16 ha and above were given a score of 1.

viii. **Speculative purchase (X_8):** This refers to the farms that were purchased and were left uncultivated with the aim of making an unusual gain in the near future. The respondents were asked to state the size of the farm they purchased and were not cultivated. This was measured in hectares and were scored as follows; 1 – 5 ha were scored 4, 6 – 10 ha were scored 3, 11 – 15 ha were scored 2 and 16 ha and above were given a score of 1.

ix. **Urban influence (X_9):** In this study, urban influence refers to the distance or proximity of the farm to the major road that links urban cities or towns. The respondents were asked to state whether the farm lands that were sold and the farm lands that were purchased were close to the major road or far from the major road linking cities. This was measured by assigning 0 to farm lands close to the major road and 1 to the farms far from the major road.

Dependent variable: Land commercialization (Y): This dependent variable referred to any permanent exchange of land between a farmer and another after cash payment or its equivalent. This includes all types of tenancy on farmland that entail payment of money or it's equivalent. This was measured in hectares.

3.6 Limitations of the Study

The major limitation of this study is that, the study made more consideration on land sale than on purchase as one aspect of land commercialization. This is because majority of the people that have bought land were absentee landlords, so it was difficult to include them in the sample to obtain necessary information.

Another limitation of the study is that, traditional rulers who are said to be involved in a doubtful honesty of land transaction were reluctant to provide useful information for the fear of unknown.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Objective One: Socio-Economic Characteristics of Farmers

The description of the socio-economic characteristics of respondents in the study area explain the first objective of this study. These socio-economic characteristics are age, educational level, household size, social status and income (farm and non farm income) of therespondents.

4.1.0 **The socio-economic characteristics of the farmers.**

This section deals with the socio-economic characteristics of the farmers in the study area.

4.1.1 **Age:** The result obtained from this study indicated that age groups among the seventy four (74) sampled respondents varied. The result shows that 36.5 percent of the respondents were between the age of 29-39 years, 25.7 percent of them were between 51-61 years while the respondents within 40-50 years bracket and 62 years and above are 23.0 percent and 14.9 percent respectively (Table 1). However, there was no significant relationship between age and their ability to sell land. Therefore, from the findings it shows that majority (41.3%) of the respondents that have sold their farmland were between 29 years - 39 years of age. This is inline with the researcher's expectation because older respondents are expected to hold (keep) land for inheritance status than younger respondents. Also, the sale had helped to reduce the size of landholding and consequently the size to be offered as collateral for bank’s loan.

Table 1: **Distribution of respondents according to their age.**

Age Group	Frequency	Percentage
29-39 years	27	36.5
40-50 years	17	23.0
51-61 years	19	25.7
62 and above	11	14.9
Total	74	100.00

4.1.2 Educational Level

The result obtained from this study shows a wide gab in the educational levels among the respondents in the study area. It indicates that 44.6 percent of the farmers had non/informal education and 27.0 percent of the farmers were literates with primary education while 24.3 percent of the farmers had secondary education, with only 4.1 percent of the farmers having post secondary education (Table 2). The implication of these findings is that farmers might not fully understand that sale of land might affect their ability to use land as security for bank's loan in near future.

Table 2: **Distribution of respondents according to educational level.**

Educational Level	Frequency	Percentage
Non/informal education	33	44.6
Primary	20	27.0
Secondary	18	24.3
Post secondary	3	4.1
Total	74	100.0

4.1.3 Household Size:

Tables 3a and 3b show the distribution of household members and sex of the children among the respondents. The result indicates that 33.8 percent of the respondents had household members numbering between 4-6 while 32.4 percent of the respondents had 7-9 members of household. Also, 31.1 percent of the respondents had household members numbering 10 and above, while only 2.7 percent had 1-3 members of household.

Table 3b indicates the sex distribution of children among the farmers. It shows that 43.2 percent of the respondents had 3-4 male children, 24.2 percent and 17.6 percent of them had 1-2 and 5-6 male child/children respectively. A 18 percent of the respondents had 5-6 female children while 33.8 percent had female children between 1-2 and 3-4 respectively. The findings further revealed that majority (43.2%) of the farmers that had male children more than the female children. This is inline with the researcher's expectation because only the male children have the right to inherit farmland in the study area according to the custom of the people. Perhaps, lack of many male children in the family could become an impetus to land sale.

Table 3a: **Household size: Distribution of respondents according to number of wives and children**

Number of Household	Frequency	Percentage
1-3	2	2.7
4-6	25	33.8
7-9	24	32.4
10 and above	23	31.1
Total	74	100.0

Table 3b: **Distribution of respondents according to sex of the children**

Sex of Children:	Frequency	Percentage
Males:		
0	2	2.7
1-2	18	24.3
3-4	32	43.2
5-6	13	17.6
7-8	7	9.5
9 and above	2	2.7
Total	74	100.0
Female:		
0	3	4.1
1-2	25	33.8
3-4	25	33.8
5-6	13	17.6
7-8	5	6.8
9 and above	3	4.1
Total	74	100.0

4.1.4 **Income (Farm and Non-Farm) of the Farmers:**

Table 4 shows the farm income and non-farm income realized by the respondents (2003). The result shows variations in the distribution of income among farmers in the study area. It shows 32.4 percent and 40.5 percent of the respondents, respectively, realized between ₦1,000-₦50,000 and ₦50,001-₦100,000 from the sale of crops produce and animals in the last growing season, while 12.2 percent of the respondents realized between ₦100,001- ₦150,000. Respondents who realized between ₦150,001- ₦200,000 and ₦250,001- ₦300,000 only constitute 5.4 percent each and only 2.7 percent of the farmers realized more than ₦300,000 from the farm. These findings indicated that about 72.9 percent of the farmers were small-scale producers who realized not more than ₦100,000 only in the 2003 growing season, and only about 8.1 percent of the farmers put together that realized more than ₦250,000 from their farms. Similarly, the small-scale status of the farmers that characterizes the study area is augmented by the low investment in non-farm activities to complement farm income. The result indicates that 73.0 percent of the farmers earned between ₦1,000-₦30,000 from the non-farm activities such as trading, weaving, crafting etc in the year 2003. About 8.1 percent of the farmers earned between ₦30,001-₦60,000 only while farmers that earned between ₦60,001 and above constitute 18.9 percent only. These results further revealed that majority (81.1%) of the farmers were low income earners in non-farm activities in the study area. This makes it difficult for farmers to buy production inputs and other necessities when the need or desire to increase the size of cultivation arises.

Therefore, these results relate to the level of poverty among farmers in the study area which are characterized by their low standard of living.

Table 4: **Distribution of respondents according to their income earnings characteristics**

Income	Frequency	Percentage
Farm Income:		
N1000-N50,000	24	32.4
N50,001-N100,000	30	40.5
N100,001-N150,000	9	12.2
N150,001-N200,000	4	5.4
N200,001-N250,000	1	1.4
N250,001-N300,000	4	5.4
N300,001 and above	2	2.7
Total	74	100.0
Non-Farm Income:		
N1000-N30,000	54	73.0
N30,001-N60,000	6	8.1
N60,001 and above	14	18.9
Total	74	100.0

4.2 **Objective 2: Extent of land commercialization in the study area**

The second objective of this study was to determine the extent of land commercialization in the study area. The incidence of commercial land acquisition through sale and its quantity is reported in Tables 5a,b and c. The results shows

that 52.7 percent of the respondents have sold part (transferred) of their farm land in the study area, with only 18.9 percent of the farmers have purchased land and about 4.1 percent of them farmers had loss their land or had their land transferred permanently through fraudulent claim in the court of law. Only 17.6 percent of the respondents were tenants on farm land. The result indicates that, farmers initial total size of land was 242 hectares and about 36.4 percent (88 ha) of land had been sold and out of these number, 46.2 percent of the respondents have sold between 1 – 5 hectares of farm land while 20.5 percent of them have sold between 6 – 10 hectares. It further shows that, 17.9 percent of the respondents have sold between 11 – 15 hectares of farm land and only 10.3 percent of them have sold 16 hectares and above. The findings also indicate that 31.1 percent (23) of the respondents sold their farm land in Kachia LGA while 21.6 percent (16) of them sold their farmlands in Kajuru LGA. It further shows that 69.3 percent (61 ha) of farm lans sold in Kachia LGA and only 30.7 percent (27 ha) of farm lands were sold in Kajuru LGA. Similarly, Migot *et al*. (1987) reported similar findings in which 18 percent and 17.4 percent of the farmers in Wassa and Ruhengeri, respectively, sold their land. Hill (1977) reported that 44 percent of farm lands were bought by the rich men in Batagarawa. Kehindel (1998) reported that 68 percent of the farmers have sold their land and about 32 percent of land had been transacted by the village heads in Zaria. The result further showed that, 87.2 percent of the farmer's response indicate that sale of their land in the study area had affected their ability to use improved crop technologies. This was represented by 87.2 percent of the farmer's response. The finding was in line with the

researcher's expectation on the level of indiscriminate sale of agricultural land and the possible negative effects on the farmers and to agricultural development. The implication of these findings is that, the size of land holding of the farmers is being reduced and consequently the size to be offered as collateral for bank's loan is gradually diminishing which is not economical to agricultural investment.

Table 5a: **Distribution of respondents according to type of land transfer.**

Type of Land Transfer by Farmers	Frequency	Percentage
Farmers that did not transferred land	18	24.3
Farmers that transferred through court case	3	4.1
Farmers that transferred land through sale	39	52.7
Farmers that purchased land	14	18.9
Total	74	100.0

Table 5b: **Distribution of respondents who sold their land and the size of land sold (ha)**

Quantity or size of land sold (ha)	Frequency	Percentage
0	2	5.1
1- 5	18	46.2
6-10	8	20.5
11-15	7	17.9
16 and above	4	10.3
Total	39	100.0

Table 5c: **Extent of sale of land (quantity of land sold) in the two local government areas**

Local Government	Number of Farmers that sold their land		Total Quantity of Land Initially Owned by Farmers that have Sold Land (ha)	Total Quantity of Land Sold	
	Frequency	Percentage		Hectares	Percentage
Kachia	23	31.1	129	61	69.3
Kajuru	16	21.6	113	27	30.7
Total	39	52.7	242	88	100.0

4.3 Objective 3: Factors responsible for the sale of land by farmers

The third objective of this study was to identify factors responsible for the sale of land by the respondents in the study area.

The result obtained from the multiple regression analysis showed that two (2) of the independent variables studied had significant contribution to sale of land by farmers in the study area (Table 6). These variables were educational level and income.

Educational level made significant contribution to sale of land by farmers at live percent (5%) level of probability in a positive direction. The implication of this finding is that the low level of education of the majority (44.6%) of the respondents might have hindered them to fully know or understand that sale of land might affect their ability to use land as security for banks loan in near future. Therefore, increase in the number of respondents with low-level of education will bring about increase in the sale of land, and also increase in the number of respondents with high-level of education will bring about decrease in the sale of farmlands by the respondents.

Income is the second variable found to influence the sale of land by the respondents at one percent (1%) level of significance, however, in a negative direction. This indicates that when income is low the chances for the sale of land by the respondents are high. Therefore respondents that are characterized with low income were compelled to sell their land to buy farm inputs and to acquire those things that were needed and necessary for their well-being. The implication of this finding is that low income can bring about a reduction in size of land holding of the respondents and consequently affects farm investments of the respondents. The low level of income of the respondents relate to their level of poverty. This study revealed that majority (51.4%) of the respondents sold their land because of various genuine reasons related to their level of poverty.

The other variables such as age, household size and social status did not have significant influence on sale of land in the study area.

Table 6: **Result of multiple regression analysis to explain the relationship between independent variables and sale of land by respondents**.

Variable	Regression coefficient	SE	T-value	Level of significance
Age(x_1)	-.018499	0.32677	-0.566	ns
Educational level (x_2)	.174520	.119895	1.456	0.05*
Household size (x_3)	.737528	.588207	1.254	ns
Social status (x_4)	.051229	.357240	.143	ns
Income (x_5)	-1.32492E-05	3.41168E-06	-3.883	0.01**

Y = 0.839

* significance at 5% level of probability

** significance at 1% level of probability

ns = not significant

4.4 Objective 4: Factors that promote purchase of land by people in the study area.

The fourth objective of the study was to identify factors that promote purchase of land by people from farmers in the study area.

The result from the multiple regression analysis revealed that three (3) of the independent variables (factors) studied made significant contribution to purchase of land by people from the respondents in the study area (Table 7).

Income made significant contribution to purchase of land by people from the respondents at one (1%) level of probability. This result indicates that farmers and non-farmers that obtained high income from both farm and non-farm activities purchased land to either increase the size of their land cultivation or to banked for future use. The implication of this finding is that the significant influence of income on purchase of land can lead to or promote land grabbing and land concentration in the hands of few wealthy persons who may not be able to put all such lands into cultivation.

Speculative purchase was the second variable found to have significant influence to purchase of land at one percent (1%) level of probability but in a negative direction. The negative influence might be because speculators have purchased land and kept without cultivation. While the willing cultivators (farmers) find it difficult to purchase land in choice areas owned by speculators, the alternative might exist only on tenancy arrangement on speculated land. Under this condition the farmer operates on unsecured land rights i.e. the farmer can not use such land as collateral for bank loan and this will deter meaningful farm investment. The study

discovered that about 69.2% of the farmers whose land were bought responded that such lands are not cultivated by the owners (speculators).

Urban influence is the third variable that significantly made contribution to purchase of land by people from farmers at five percent (5%) level of probability. Urban cities develop along with their road network that links them. Therefore, farm lands located in choice areas along the major roads are easily purchased and are better priced than farmland located far from the road. This study discovered that, majority (89.7%) of the farmers that have sold their land responded that such lands (purchased land) were located close to or along the high or major road linking major cities (Kaduna-Abuja and Kaduna-Kachia town road).

Educational level did not made significant contribution to purchase of land in the study area.

Table 7: **Result of multiple regression analysis to explain the relationship between independent variables (factors) and purchase of land by people from the farmers**.

Variable	Regression coefficient	SE	T-value	Level of significant
Educational level (x_2)	.027973	.040280	.694	Ns
Income (x_5)	4.234178E-06	1.57040E-06	2.696	0.01**
Speculative purchase (x_8)	-.195786	.080198	-2.441	0.01**
Urban influence (x_9)	.139183	.229761	.606	0.05*

Y = 0.010

* significance at 5% level of probability

** significance at 1% level of probability

Ns = not significant

4.5 Objective 5: Effect of land commercialization on agricultural production

The fifth objective of this study was to examine the effects of land commercialization on agricultural production in the study area. The result of the Pearson spatial correlation analysis in Table 8 indicated that six (6) out of the nine variables were found to have significant influence on agricultural production. These variables are income, quantity of land sold, speculative purchase, urban influence, quantity of land purchased and household size.

Income (r = 0.84) was positively and significantly related to agricultural production at 1 percent (1%) level of significance. This indicates that respondents that have high income have the capacity to acquire and use inputs and intermediate technologies to increase agricultural production. Quantity of land purchased (r = 0.51) also has positive relationship to agricultural production at 1 percent (1%) level of probability. This shows that respondents that have purchased land had the ability to increase their size of land cultivation for increased agricultural production. About 18.9 percent of the respondents who had purchased land in the study area reported that they have increased their sizes of land cultivation. Household size (r = 0.16) was positively related to agricultural production at 5 percent level of significance. It is an indication that when the size of household is large, family labour input supply is used to augment other sources of labour input to increase production.

On the other hand, quantity of land sold, speculative purchase and urban influence were strongly and significantly related to agricultural production at 1 percent and 5 percent levels of significance, however, in a negative direction. Quantity of land sold (r = -0.36) was found to have indirect relationship to agricultural

production. This negative effect could be because, farmlands (parts) that were cultivated by the farmers have been sold and this had reduced their sizes of land cultivation and farm investments in general. About 84.6 percent of the respondents that have sold their land claimed that the size of their farms can not be used for long time investment and still have enough portion to grow food crops and other cash crops.

Speculative purchase (r = -0.39) was another variable found to have strong relationship to agricultural production at one percent (1%) level of probability in a negative direction. The inverse relationship indicates that farmland that were purchased and kept or left uncultivated were affecting agricultural production negatively, i.e. reduction in output. The implications of this result is that productive land can not be put to agricultural use to derive its maximum agricultural potentials by the willing cultivator (farmer). About 69.2 percent of the respondents that have sold their land asserted that they have never seen such farms cultivated. Urban influence (r = -0.37) also made a strong negative relationship to agricultural production at five percent (5 %) level of probability. The negative influence might be because of the major roads or highways that link the urban cities. Farmlands along these roads and around the urban fringes are easily bought and kept (left uncultivated) for the expected increase or rise in land value in the near future. Majority (89.7%) of the respondents who have sold their land reported that the purchased farmlands are close to the highways or major roads.

Other variables: age (r = -0.01), educational level (r = 0.12) and social status (r = 0.01) were related with agricultural production but not significant at 5 percent.

Table 8: **Result of spatial correlation coefficient to explain the relationship between the independent variables and agricultural production**.

Independent variables	Correlation coefficient
Age	-0.0118
Educational level	0.1153
Household size	0.1629*
Social status	0.0108
Income	0.8490**
Quantity of land sold	-0.3635**
Quantity of land purchased	0.5124**
Speculative purchase	-0.3970**
Urban influence	-0.3752*

* significance at 5% level of probability

** significance at 1% level of probability

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF THE FINDINGS

From the analysis on the socio-economic characteristics of the respondents, it was discovered that 36.5% of them were of youthful age of about 40 years. Majority, 55.4% of the farmers were literates with formal education meaning that they could read and write. However, there was no significant relationship between their level of education and the ability to sell their land. Majority, 63.5% of the respondents have seven (7) household members and above, while 43.2% of them have 3 to 4 male children. However, majority, 43.2% of the respondents had more male children than female children. Majority, 72.9%, of the respondents can be considered as small-scale producers who realized not more than ₦100,000 from their farm produce in the year 2003. This had affected their investment capabilities in non-farm activities such that more than one third, 73.0%, of the respondents earned not more than N30,000 from non-farm activities in the last year.

A very large (88ha) area of land had been sold by more than half 52.7% of the respondents. Majority, 87.2% of them believed that sale of their land had affected the rate of use of improved crop technologies. A large number, 84.6%, of the respondents reported that it is difficult to make a long time investment on their farms and still have enough portion to grow food crops.

The multiple regression analysis shows that two (2) variables for sell of land, namely, income and educational level have significant relationship to sale of land. Regression coefficients for income was negatively related to sell of land

which indicates indirect relationship, while educational level of the farmers was positively related which indicates direct relationship.

Also, the multiple regression analysis shows that three (3) variables (factors responsible to purchase of land, income, speculative purchase and urban influence were found to have a significant relationship to purchase of land. Income and urban influence were positively related to purchase of land while speculative purchase was negatively related to land purchase.

The result of spatial correlation coefficient analysis indicates that six (6) variables were significantly related to agricultural production. These variables are household size, quantity of land sold, quantity of land purchased, income, speculative purchase ad urban influence. The variables strongly made significant contribution to agricultural production at 1% level of probability.

5.2 CONCLUSION

It can be concluded based on the findings obtained from this study that majority of the respondents were young household heads. Majority of them were low income earners. However, more than half of the respondents have sold their land to many non-indigenes and the farm lands are located along the majorhigh ways and majority of the land sold were not cultivated. There were many factors responsible for the sale of land and purchase of land and some of the factors strongly affect agricultural production. However, only a few of the respondents were identified to have purchased land and were cultivating them all and they were indigenes of the community.

RECOMMENDATIONS

1. It was discovered that majority of the farmers have sold their land and this had reduced the size of their land holding. It is therefore recommended that an appropriate policy framework should be instituted which should regulate and control the sale of land. Where sale must be made, it should be sold to only farmers certified to put such land into agricultural production.
2. The study revealed that most of the land purchased (uncultivated land) were said to be acquired for agricultural purposes as stipulated by the Nigeria land policy (1978 Land Use Act) and these lands were not being used for that purpose. This study therefore, recommends that maximum ceiling (500 ha and 5,000 ha) for the purchase of agricultural land of the 1978 Land Use Act should be reviewed periodically to reflect the population increase and the demand for agricultural land. Also, a policy framework should be formulated to subject all purchased uncultivated land to an annual or farming season taxation. Alternatively, such a land should first of all be given a specific duration when it should be cultivated, failure to that, the land should be leased out to private interest who will invest in agricultural production. Under this arrangement, an appropriate and flexible policy that is adaptable to local conditions should be formulated for the leased land. Such land should be operated under a conceived maximum duration of fallow period.
3. The findings also revealed that some respondents have lost their land in the court resulting from fraudulent claims made by the influential illegitimate

claimants through the presentation of certificate of occupancy (C of O) in collaboration with the excessiveness of the traditional rulers. It is therefore, suggested that all rural land should be registered at the rural community level through the Village Head in collaboration with the youth group of the village. Records of registration should be produced and kept by the Village Head, youth leader and head of every clan or family depending on the social arrangement of the locality. A clean copy should be forwarded to the appropriate land registration authority. This will go along way to safeguard the future of youth and the unborn on land rights.

4. It was also noted that most of the respondents sold their land because of the reasons associated with their low economic level or poverty. It is therefore recommended that units of cottage industries should be established in farming communities. This will help to facilitate the improvement in the quality of life of the rural farmers through their involvement in rural microeconomic activities that would discourage them from the sale of land as an alternative to solve problem of necessities or needs.

REFERENCES

Adegboye, R.O. (1964). “Improving land use in Nigeria through removing defects in land inheritance. Ph.D Thesis, University Microfilms, Ann Arbor, Michigan.

Baba, M.J. (1975). Induced Agricultural change in a densely populated district: A study of the existing agricultural systems in Kura District and the projected impact of the Kano River Irrigation Project, Kano State. An unpublished Ph.D thesis submitted to the department of Geography, Ahmadu Bello University, Zaria.

Bassette, J.T. (1993), “Land use conflicts in pastoral development in northern Cote d' ivoire". In: Bassette, J.T. and Crummey, E.D (eds). *Land in African Agrarian Systems.* The University of Wisconsin Press, Madison, Wisconsin, U.S.A. Pp.141-142.

Buzuev, A. (1987). *What is capitalism*? Progress Publishers, Moscow.

Christopher, E.A. (2001). An open letter to the Governor of Kaduna State. The Cross News Papers, No. 111 July 2001, Published by the Office of Communications. Archdiocese of Kaduna.

Ega, L.A. (1980). Status, problems and prospects of rural land tenure in Kaduna State and some reflections on land tenure policy in Nigeria. An unpublished Ph.D. Thesis, Cornell University, USA.

Ega, L.A. (1983). *Land acquisition and land transfer in Zaria villages in Nigeria.* Institute for Agricultural Research, Samaru - Zaria. Elsevier Applied Science Publishers Ltd. England.

Fabiyi, Y.L. (1974). Land Tenure Innovations in rural development: The problems in Western Nigeria with some Tanzanian comparisons. Ph.D. Thesis, University of Wisconsin. Microfilm xerography, Michigan, USA.

Famoriyo, S. (1987). Land Tenure in Nigeria's Agricultural Development. Inaugural Lecture Series 4. The University of Agriculture, Akure, Babsons Press Ltd., Ondo.

Federal Ministry of Agriculture and Natural Resources (1999). State of Agricultural Land Use in Nigeria, Evolving an effective Agricultural land use policy for Nigeria. Proceedings of the National seminar on land use policies and practices, July 19-23, 1998, Ibadan.

Hill, P. (1977). Population, Prosperity and Poverty. Rural Kano 1900 and 1970. Cambridge University Press, London, pp. 28 and 130.

Horton, B.P. and Hunt, L.C. (1968). Sociology. 2nd Edition, McGraw Hill, Inc. New York, USA.

Huth, W.P. (1969). Policies for promoting Agricultural Development. In: David Hapgood (ed). A report of a conference on productivity and innovation in Agriculture in underdeveloped countries; Centre for International Studies, Masschusetts Institute of Technology, Cambridge, USA.

Kaduna State Statistical Year Book (1996). 1996 Edition. Ministry of Finance and Economic Planning. Statistics and Research Department, Kaduna.

Kankwenda, M. (2001). Nigeria Common Country Assessment. United Nation System in Nigeria, March 2001 Report.

Kehinde, S.M. (1998). Effect of land commercialization on Agricultural Production in three selected villages in Zaria. An M.Sc. Thesis Department of Agricultural Economics and Rural Sociology, Ahmadu Bello University, Zaria.

Land Use Decree (1978). Decree No. 6 Law Lords Publication, Efon-Alaye, Ekiti, Nigeria.

Lioyd, T.A. (1993). Outliers in Agriculture: An intervention analysis of agricultural land values. *Journal of Agricultural Economics,* Copyright CAB International. Department of Economics, University of Nothingham, University Park, UK. Vol.8 No.0021-857x Pp.446.

Mayer, E. (1979). *Land use in the Andes Ecology and Agriculture in the Mantaro valley of Peru with special reference to potatoes*. Social Sc. Unit Robert Rhoades and Douglas Horton (Ed). International Potato Centre (CIP) Lima, Peru.

Migot, S., Migot, A.S., Hazell, P., Blanel, B. and Place, F. (1989). "Land Tenure Security and Agricultural production in sub-Saharan Africa" In: Meyers, R.L. (ed). *Innovation in Resource Management*. Proceedings of the Ninth Agricultural Sector Symposium. The International Bank for Reconstruction and Development. The World Bank, Washington, DC, Pp.108-116.

Oji, O.K. (1999). Effects of population pressure on cropping systems and fallow periods in South Eastern Nigeria: Implication for rural extension. In: Terry A. Olowu. (ed), Proceedings of the Fifth Annual National

Conference of the Agricultural Extension Society of Nigeria, 12-14 April, 1999, Ibadan.

O'keefe, P. and Wisner, B. (1977). "Land Use and Development. African Environment Special Report. International African Institute.

Omokhudu, C.A. (1998). "The roles and potentials of NGOs in sustainable Agricultural Development in Nigeria. In: Terry A. Olowu (ed.): Sustainable Agricultural Extension in Nigeria, Proceedings of the third Annual National Conference of the Agricultural Extension Society of Nigeria 17th-19th June, 1998, Benin City.

Quan J. (2000). "Land Tenure Economic Growth and Poverty in sub-Saharan Africa." In: Toulmin, C. and Quan, J. (eds): *Evolving Land Rights, Policy and Tenure in Africa*. Russell Press, Nottingham, UK. Pp.32-47.

Saul, M. (1993). "Land custom in Bare, Agnatic cooperation and rural capitalism in Western Burkina." In: Bassette, J.T. and Crummey. E.D. (eds), *Land in African Agrarian System*. The University of Wisconsin Press. Madison, Wisconsin, USA. Pp.79-81.

Smith, J., Cadavid, J.V., Rincon, A. and Vera, R. (1996). Land speculation and intensification at the frontier: A seeming paradox in the Colombian Savanna. Centro Internacional de Agricultura Tropica (CIAT) Cali, *Agricultural Systems Journal,* Colombia. Vol.173 No.0308-521x Pp.513.

Strauss, A. (1959) "Mirrors and masks". Cited in R.H. Laver and W.H. Handel (eds.). Social Psychology – The theory and application of symbolic interactionism, Houghton Mifflin Company, USA.

Timasheff, S.N. (1967). *Sociological Theory: Its Nature and Growth*. Random House Inc. New York, U.S.A.

Wilmot, P.F. (1973). "Sociology in Africa. A book of readings. Ahmadu Bello University, Zaria, Nigeria.

Windfuhr, M. (2002). "Agrarian Reform and Rural Development." In: Brauer D. (ed), *Development and Cooperation* (D+C), No. 2 March/Apri,l 2002. Deutsche stiftung fur international, Heidelberg, Germany.

Zimmermann, W. (2002). "Fair Access to land and security of land rights. An updated strategy on land reform." In: Brauer, D. (ed), *Development and Cooperation* (D+C), No.2 March/April 2002. Deutsche Stiftung fur international, Heidelberg, Germany.

APPENDICES

AHMADU BELLO UNIVERSITY, ZARIA
DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY
M.Sc. AGRICULTURAL EXTENSION AND RURAL SOCIOLOGY

RESEARCH TOPIC: **Effects of land speculation on agricultural production in Kachia and Kajuru Local Government Areas of Kaduna State.**

Questions for Farmers Interview

A. **BACKGROUND DATA/FARMERS SOCIO-ECONOMIC CHARACTERISTICSS**

1. Farmers Name:_____
2. Age:_____
3. Village/Town:_____
4. Local Government Area:_____
5. Farming Experience in years:_____
6. Marital status (tick):

   (a) Married ( ) (b) Single ( )

7a. How many years of formal education have you?

   (a) Primary ..... years (b) Secondary ..... years

   (c) Post secondary ..... years Informal schooling ……. years

   (e) Others (specify)..... years

7b. If informal, how many years of education have you?

   (a) Quaranic school ..... years

   (b) Adult education ..... years

   (c) Others (specify) ..... years.

B. **SIZE OF HOUSEHOLD:**

8. Total number of children:.....
9. Number of children staying with you at present?

   (a) Males..... (b) Female .....

10. Number of wives at present: .....

11. What is the source of your labour in the farm? tick:

    (a) Household ( ) (b) Hire ( )

12. How many of the household members contribute to the family labour? ..... member(s). Male ( ) Female ( )

C. **SOCIAL POSITION:**

13. What is your social position in the family: .....

14. Do you hold a traditional title/traditional ruler in the village? tick:
    (a) Yes ( ) (b) No ( )

15. If yes, what title?: .....

16. Are you involved in any form of land transfer? tick:

    (a) Yes ( ) (b) No ( )

17. If yes, what type(s) of transfer? Pls tick.

    (a) Inheritance ( ) (b) Purchase ( )

    (c) Sale ( ) (d) Renting ( )

    (e) Hire ( ) (f) Loan ( )

    (g) Share cropping ( ) (h) Lease ( )

    (i) Mortgage ( )

D. **OCCUPATION:**

18. What is your major occupation? ……

19. What are your secondary occupations? ……..

E. **FARMERS ANNUAL INCOME LEVEL:**

20. Give an estimate of amount of money you earned from the sale of crops and animals in the last growing season.

Produce	Farm Size (ha) No. of Animals	Amount Invested (₦)	Amount Realized (₦)
Crops			
Animals			
Total			

21. Give an estimate of amount of money you earned from each non-farm activity last year.

Non Farm Activities	Income (₦)
1 2 3 4	

F. **SIZE OF FARM**

22. How many farm plots do you have?: .....

23. Give an estimate of their sizes (ha)

Farm Plots (No)	Sizes (ha)

24. How many of these farm plots are under cultivation? .....…….

25. How many of the farm plots not cultivated? .....…….

26. Why are they not cultivated? ……

27. How is/are the location of your farm(s)? Pls tick.

(a) Close to the main road ( )

(b) Far away from the main road ( )

G. **LAND HOLDING**

28. How did you acquire land? Pls tick.

(a) Inheritance ( ) (b) Gift ( )

(c) Purchase ( ) (d) Rent ( )

(e) Hire ( ) (e) Loan ( )

(f) Lease ( ) (g) Mortgage ( )

(h) Others (specify) ……

29. Have you ever loss your piece(s) of land permanently?
(a) Yes ( ) (b) No ( )

30. If yes, through what type of arrangement? Pls (Tick)
(a) Court case ( ) (b) Sale ( ) (c) Gift ( )
(d) Others (specify) ……

31. If loss through sale, at what condition did you sale?

(a) At will ( ) (b) Under inducement ( )
(c) Under compulsion ( ) (d) Others (specify) ……

32. If sold at will, what were your reasons for selling?

_____

33. Whom did you sell the land to? Pls tick.
(a) Indigene farmer ( ) (b) Outsider ( )

34. What is the location of the farm that was sold? Tick
(a) Close to the main road ( )
(b) Far away from main road ( )

35. How many farm plots have you sold?..... and how many are left?.....

36. What is the estimate of the size of the farm(s) you have sold ..... ha.

Plot 1 (size) … Plot 2 (size) ….. Plot 3 (size) Plot 4 (size) …. Plot 5(size) ….

37. What was the total price of land sold? ₦.....
38. The land that was sold, were the farms? pls tick,
(a) cultivated ( ) (b) not cultivated ( )

39. If cultivated, give an estimate of the amount of money realised from the sale of crops and animals (₦) in the last growing season before the land was sold.

Produce	farm size (ha)/ No. of animals	Amount realised (₦)
Crops		
Animals		

40. Have you been using improved crops technology in your farm?
    (a) Yes ( ) (b) No ( )

41. If yes, name them ……

42. Does the sale of land reduced the rate of use of improved technology in your farm?
    (a) Yes ( ) (b) No ( )

43. Can you make a longtime investment in your land like planting of economic trees and still have a portion enough to grow other food crops?
    (a) Yes ( ) (b) No ( )

44. Can you increase the size of land cultivation in your farm when production opportunities are provided? (a) Yes ( ) (b) No ( )

45. If yes, how? ……. ……

46. The money realised from the sale of land, what did you used it for?

H. **ACQUISITION OF LAND THROUGH PURCHASE**

47. Have you ever purchase land?
    (a) Yes ( ) (b) No ( )

48. If Yes, from whom did you buy the land?
    (a) Government agent ( )
    (b) Traditional ruler/agent ( )
    (c) Clan head of family ( )
    (d) Farmer ( )

49. Who were involved in the transaction?
    (a) Government agent ( )
    (b) District head ( )
    (c) Village head ( )
    (d) Sectional head ( )
    (e) Others (specify) ……..

50. What is the total size of land you purchased? …….ha

51. What is the total price of land purchased? .....……...₦

52. How many farm plots were on the land before you bought the land? ..... plots.

53. Does these farm units belong to different farm families before you bought the land?
    (a) Yes ( ) (b) No ( )

54. Before you bought the land, was the land:
    (a) Cultivated ( ) (b) Uncultivated ( )

55. If cultivated, was it cultivated in: (a) Part ( ) or All ( )

56. Is the purchased land now:
    (a) Cultivated ( ) or (b) Not cultivated ( )

57. If not cultivated, what are you using the land for?

    _____

58. If cultivated, is it done by you or it is hired/rent out to outsiders (tenants) to farm? (a) Cultivated by the owner ( ) (b) Rent out ( )

59. If cultivated by you, what type of production are you using the land for? (a) Crop production only ( ) (b) Animal grazing only ( )
    (c) Both crops and animal production ( )

60. Do you make use of improved technologies in your farm?
    (a) Yes ( ) (b) No ( )

61. If yes, name them: 1…… 2…… 3……. 4……. 5…….

62. Give an estimate of the total amount of money you realised from the sale of produce in the last growing season.

Produce	Amount Realised (₦)
Crop	
Animal	

I. **ACQUISITION OF LAND THROUGH TENANCY:**

63. Are you a tenant farmer?
    (a) Yes ( ) (b) No ( )

64. If Yes, what type of tenant arrangement?

    (a) Rent/hire ( ) (b) Loan ( )

    (c) share cropping ( ) (d) Mortgage ( )

    (e) Others (specify) ……

65. What are your reasons of becoming a tenant on another person's farm?

    _____

66. Do you make use of improved crops technologies in your tenanted farm?
    (a) Yes ( ) (b) No ( )

67. If yes, name them: 1…… 2…… 3……. 4……. 5…….

68. Did the condition of tenancy arrangement, allow you to make longtime investment on the farm?
    (a) Yes ( ) (b) No ( )

69. If yes, name one of it you have made?……..

70. What is the mode of payment for the use of the land?
    (a) Payment in cash ( )
    (b) Payment in crop produce ( )
    (c) Payment in animals ( )
    (d) Others (specify) ……

71. How much is the amount or quantity paid for the use of the farm?

Price	Farm Size	Amount/Quantity
Cash		
Crops		
Animal		

72. Do you produce more than when you were only cultivating your own farm?
    (a) Yes ( ) (b) No ( )

73. Give an estimate of the amount of money you realised from the sale of produce in the last growing season? .....₦

74. Have you ever encountered the problem of ejection from the farm by the landlord? (a) Yes ( ) (b) No ( )

75. If Yes, did the problem affected your level of commitment or work in the farm? (a) Yes ( ) (b) No ( )

76. If Yes, what precaution are you taking to avoid future occurrence: _____

77. Have you ever obtained loan from the bank?
(a) Yes ( ) (b) No ( )

78. If No, do you think that lack of owning a farm of your own, can deprived you from getting a loan from the bank?
(a) Yes ( ) (b) No ( )

79. How many bags of fertilizer did you apply in the last growing season? …….. bags

80. How did you acquire the fertilizer? (a) Bought from the market ( )
(b) Bought from government agent ( )
(c) Others specify ……

81. Where they enough for you? Please tick: (a) Yes ( ) (b) No

82. Given the opportunity would you increase the use of more numbers of bags in the next growing season? Please tick
(a) Yes ( ) (b) No

83. What type of roof do you have on your house? Please tick
(a) Thatched grasses or leaves ( )
(b) Zinc ( )
(c) Alluminium ( )
(d) Others (specify) ……

84. If zinc or allumium roof, what was the main source of your money? Please tick:
(a) From sell of land ( )
(b) From sell of farm produce ( )
(c) Savings from salary ( )
(d) Others (specify) ……..