AN ASSESSMENT OF AGRICULTURAL LAND USE IN SALKA DIRTRICT OF MAGAMA LOCAL GOVERNMENT AREA OF NIGER STATE

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A PROJECT SUBMITTED TO THE
DEPARTMENT OF GEOGRAPHY
NIGER STATE COLLEGE OF EDUCATION, MINNA

SEPTEMBER, 2015.

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APPROVAL PAGE

This research project has been read and approved as meeting the requirement for the award of Nigeria Certificate in Education, Niger State College of Education, Minna.

Jiya, S.B
Project Supervisor

14/09/15
Sign/Date

Head of Department

Sign/Date

DEDICATION

This research work is dedicated to God Almighty, who graciously provided the inspiration and knowledge and also the ability to carryout this research work. May His name alone be praised both now and forever, Amen.

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We give thanks to Almighty God who gave us life and wisdom to carry out this project and guide us throughout all our stay in the college.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Agriculture is the preparation of plant animal product for human consumption and industrial use.

Agriculture is the cultivation of land and rearing of animals for the production of raw materials for industrial and human use.

The crop which the farmer grows either arable or tree crop can be used by the farmer in different ways. In the situation whereby the farmer grows only enough for his own need and the need of his family, it is said to be subsistence agriculture.

A farmer who grows more than he needs will sell the crops he does not need. Some of the crop he sells such as maize, rice are used for food; others such as cotton are used for industrial purpose.

Agricultural land use either for planting of crop or rearing of animals for the production of food for man's use is the most important role or function of agriculture. In our locality at the early or ancient period, every man or

individual was a farmer and produced his own food to feed his family and to provide for the animals; every man was a subsistence farmer i.e. for his family consumption.

Nowadays, a large part of the population live in towns, cities, metropolis, etc movement of people from rural to urban area is taking place rapidly thereby causing the reduction of agricultural production. The town and city dwellers generally do not engage mainly on agricultural activities rather they engage themselves on industrial and administrative function. In this situation, it is important for our farmers to grow more food they need for themselves.

The second vital activities of agriculture is the preparation of plant and animal product. For industry, we heard a lot about the importance of industries but perhaps we do not realize how many of these industries rely on agriculture.

The third importance of agriculture is that it provides income and employment for the majority of the population in a geographical area or locality and improves economic development of a particular nation.

Finally, agriculture export one of the great importance in earning foreign exchange. The country which by these productions pay for them in their own currency the foreign exchange earned from agriculture are used to purchase manufactured goods (e.g. vehicles, electronics, generators, computers and technological facilities which are vital for economic development.

1.2 Statement of the Problem

Land use pattern, how do the indigenes of the land use the land agriculturally and non-agriculturally.

Crop patter, what type of crop do the people plant.

Crop ranking and crop combination, what crop is best grown within the area and other minor crops.

Are the farmers being given support by the government?

1.3 Objectives of the Study

2 This research intend to study the different types of soil in Salka district and problems associated with them.

3 To relate soil type to agricultural land use.

4 To study whether agricultural land is effectively used.

5 To study the cropping pattern and land use pattern.

6 Also intend to study crop ranking, crop combination and crop identification at Salka district.

1.4 Scope and Limitation of the Study

To look into the various lands in any particular place will be too demanding and as such, the researchers limited the study to agricultural land use only within the air circumference of Salka district.

The researcher also intend to look into the problems involved and the utilization of land and soil within Salka district.

1.5 Historical Background of Salka District

Salka came into existence in the year 1992; the district is bounded by Nasko district in the northern part, Auna district in the Western part, Ibeto district in the eastern part and Mashegu local government area. The growth after the inception of colonial administration on the northern Nigeria,

Salka district was part of the then Kontagora native province.

However, with the local government reform 1976 and the subsequent local governments that were created, Salka district was under Magama local government with headquarters at Rijau which is now a local government of its own.

Salka district is predominantly populated by the Kanbari speaking people who are the indigenes of the area; other tribes such as Hausa, Nupe, Fulani, Igbo, Dakarkari, Dakuwa, Yoruba and others continue to enjoy in Salka district.

Salka district is blessed by natural sceneries, Salka district is one of the pretty spots on the state because of its congenial climate or conducive climate, mostly called favourable climate, streams, delicious foods, innumerable springs and other natural features.

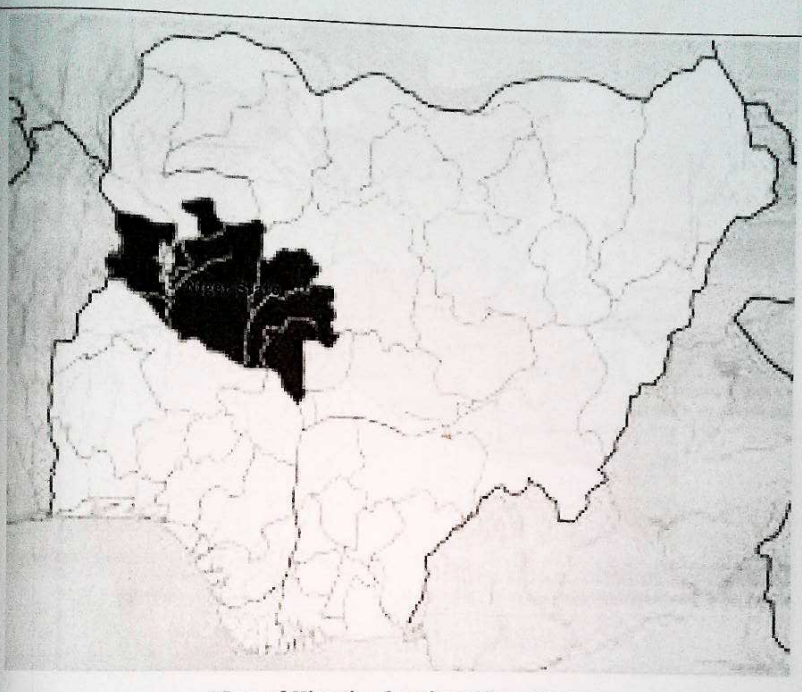
The district is called groundnut and beans bowl of Niger State for maximum production of groundnut and beans taking to Kano, Ilorin and Ibadan, etc.

Salka is called U'UWAWA AGUJIYA because of highly groundnut production. The physiographic of the district Salka is highly uneven.

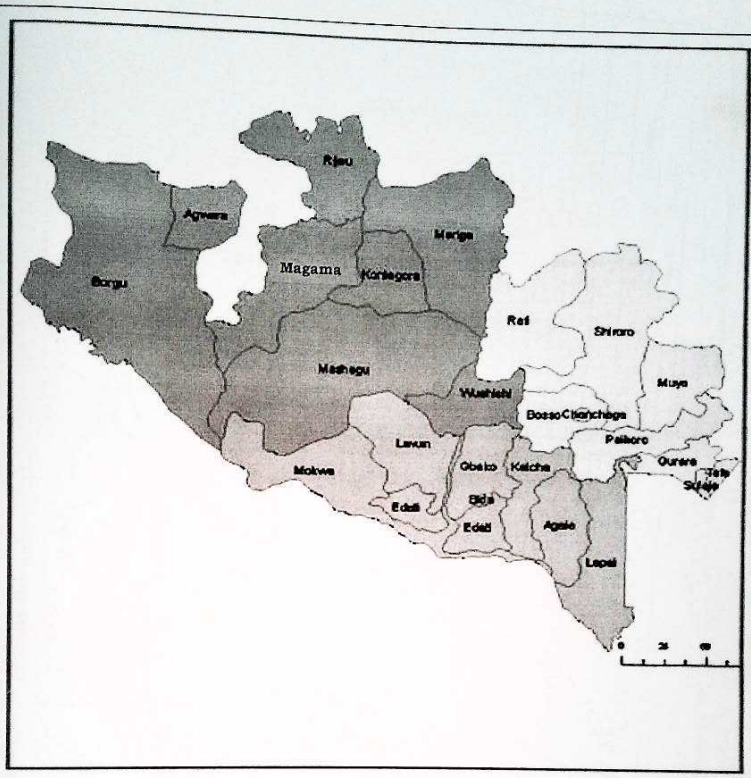
The Kanbari people are famous for the cultivation of both cash crop and food crops besides major crops grown in the district are groundnut, beans, maize, millet, guinea corn, bambaranut, rice, vegetables and fruits.

There are some small scale industries like groundnut company and some local machine used in producing groundnut oil and African biscuit locally called kwuli kwuli and lots more.

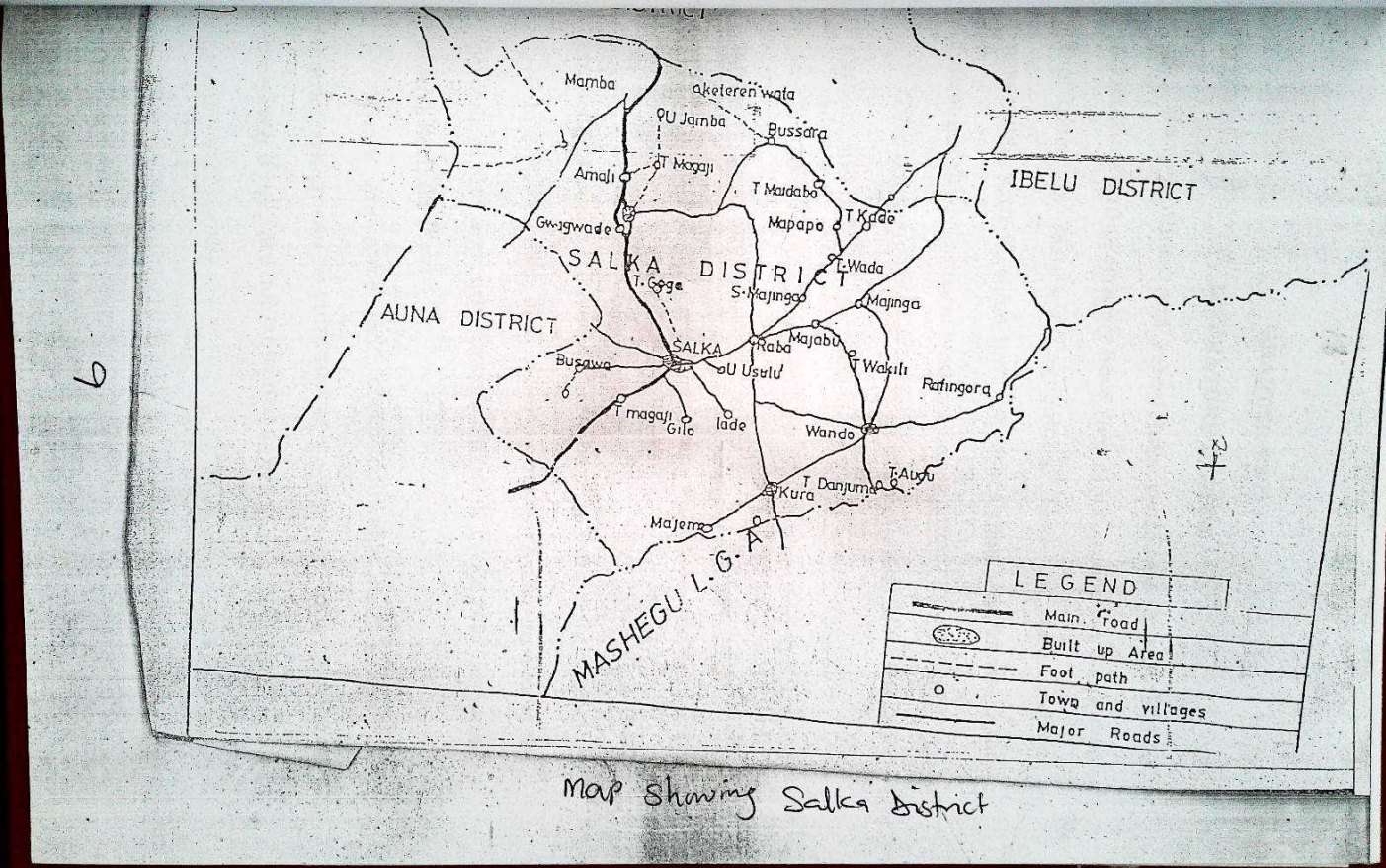
Salka is devided into four – Isalika, Ukura, Atunga, Uliya politically.



Map of Nigeria showing Niger State



Map of Niger State showing Magama Local Government Area



Map Showing Salka District

CHAPTER TWO

2.0 LITERATURE REVIEW

Many authors and researchers especially in the field of agriculture and geography have view and comment in one way or the other on issues of agricultural land use and problem associated with it. some have expressed their own views to the fullest about agricultural land use and relation.

The subsequent analysis is an attempt made to review those authors and researchers' work to the study under way.

Dr. Mohammad Magbool Bhat (2013) identified agricultural land use as a land under net sown area, fallow and cultivable. This land under sown are those areas cultivated and seen crop on them. those that are cultivable also are areas that can be cultivated but not cultivated at that particular time.

In Salka district, land are also available for sown, almost 80 percent of the area are always cultivated, every year crops are always seen on them.

There are some land called cultivable land in Salkka district, which can be cultivated at any moment, without delay of time even if they are not cultivated now.

There are also fallow land, some of the people living in Salka district are subsistence farmers who farm just for his consumption and his family, so by this they allowed their land to decay and decompose for some few years in order to bring back manure after that he comes back to farm. Example of these people are Busura people, T/sara people, Maidobo. Dr. Mohammad Magbool Bhat (2013) further identified that agricultural land use deals with cropping pattern i.e. how crop are cultivated and the system used on cropping them either single, mixed or multiple.

In Salka district, cropping are carried out in different pattern, most of the lands are used for different crops. In one particular land, groundnut will be planted, beans will also be planted and guinea corn to get much output because of the fertility of the soil.

J. S. Oguntojimbo (2011) stated that in Nigeria the bulk of food crops production takes place under traditional system without the use of mechanical power holdings are small and the main tools includes hoes, cutlasses, axes and other implements. These characteristics and other forms of practices have been passed down from one generation to another and they pose a

formidable obstacle to some agricultural modernization. Agriculture a little bit modernized in Salka district as traditional local tools are applied on the farm lands, yielding low output of production, and usually intensive.

The practice has a little bit change but not all works, but in times of making ridges and grading the farm product tractors and other agricultural materials are used. This also is passed to the young farmers as a threat to agriculture modernization.

J. M. Pritchard (2008) identified categories of basic food crops. He further states that these basic food crops are grown as subsistence crops. He made emphasis on internal exchange of crops that these crops are produced in large quantities so that there will be surplus for the market in other parts of the countries. The crops that fall within this category in Salka district include groundnut, beans, millet and late millet, corn and bambaranut all the surplus are always taken to other markets for sales. The only problem involved in transporting surplus crops to the market is that they might get damaged on the way probably due to accidents. This lead to serious losses.

Though this does not suppress farmers from sending the extra out, they always bear the risks hence every producer must bear the risk in any production.

Mufakharul Islam (2010) says with the development of better irrigation facilities of crops, new varieties of crops can be induced in the place of traditional and profitable agricultural system. That is, the use of technological and traditional application of water to the crops will introduce new kind of crops in the area and improve the economic growth.

Although in Salka district irrigation is done traditionally not technologically, by doing this it improved the economic growth of the place and new crops and improve seeds are increasing in the area e.g. water leatus, new type of pepper, new improved dry season maze, etc are well recognized in the area.

Barakade A. J. (2011) identified agricultural land use in this way that land use for agriculture are divided into four parts; some for cash crops, tree crops, grain crops and others. He emphasized on tree crops. In Salka district, there are many trees most of them planted by man and some naturally occur in the land example loco tree, mango tree, sheer butter tree, boaba tree. Some of these are economically grown trees like sheer butter is

now used in different ways but not much utilized in Salka district because of shortage of the technology.

Anon (2000) stated that "in different parts of the world and in different times in men's history, different systems of farming have been used". The aim of the farmer has always been the same to make his land to produce as much as he needs and to keep the soil fertile to support sufficient agricultural produce at the time when every man was a farmer (even in some parts of Salka district today) each farmer grew all he needed for himself and for his family and his animals. He did not rely on buying food from outside his own farm, this type of farming is called subsistence farming.

In Salka district also, some people still practice subsistence crop rotation in alternative to shifting agriculture. It enables farmers to keep their soil fertile without leaving the land fallow for long period. It is bear practice by farmers who do not have sufficient land to leave land to fallow for long period. It thus enables farmers to make maximum use of farm land.

Rayamane A. S. (2001) says for the farmers the goat is a small animal found within the area. Goat can maintain themselves will in many areas than other animals with some

grasses and ruminant in the bushes they can survive. An important function of housing goat is to protect their wealth. Just like other (domestic) animals, goats wander freely in dry season and in raining season the goats are kept panned only. This is also applicable to Salka district. While the goats are free grazing in the area during the dry season.

T. I. Shaye (2009) commented that the agricultural practices of the present cultivators are influences by three major factors. According to him, there is firstly the ecological limitation of the particular environment. Secondly his practice will be influenced by the material and techniques at his disposal. Thirdly, community customs and traditions will influence his agricultural practices.

This is what expertly happens in Salka district; the problem encountered from those that are in the northern part of the district such as Busura, T/Magaji, Mapopu these areas have or are influenced by the cultural means, the traditions and customs of the farmers.

Dr. Mohammad Magbool Bhat (2013) advance that the crop fetch handsome return to the cultivator and should provide the farmers employment and income all year round. The farmer

should ensure the optimum utilization of his resources, particularly input like irrigation water, chemical fertilizers and insecticide.

In this case Salka people especially Kambari people have gotten their job through farming and different categories of agriculture. By this practice of agriculture, some of them drain profit from the crops planted by selling them in the market.

In this system also, they have some found to buy chemical fertilizer to apply in beans and maize, also groundnut but not much because chemical fertilizers are only used in times of planting.

Insecticides are also gotten from the government and market and farmers farm properget crops in order to get insecticide to apply to beans so it will produce well and acceptable way.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter basically deals with the research design, population of the study, sample and sampling techniques, research instrument, method of data collection, method of data analysis.

3.1 Research Design

The research is designed to suit the research objective. This was done by giving a set of questions that enable the respondents provide the vital information and the researchers divided the district into four portion for observation.

3.2 Population of the Study

The study covers Salka district of Magama local government area of Niger State.

3.3 Sample and Sampling Technique

The sample in this research is being done randomly among the areas covered while the sampling technique is systematic sampling technique.

3.4 The Research Instrument

The research instrument used in this research is observation and interview method.

3.5 Method of Collecting Data

The data was collected through observation and interview by the researchers and some extension workers, some farmers were selected for the interview.

3.6 Method of Data Analysis

The data collected from the respondents were subjected to statistical analysis, the statistical tools used for analyzing the data are simple frequencies and percentage.

CHAPTER FOUR

4.0 DATA ANALYSIS

Agricultural land use means land under net sown area fallow land and cultivable land excluding permanent fallow land. Cultivable area is known as agricultural land.

Most of the data were by the researchers and some farmers in Salka district of Magama local government area. Some other data were collected through group observation and interview with some selected farmers just stated in the previous chapter.

This chapter deals with the soil related to agricultural land use, cropping pattern, crop ranking, crop combination as earlier stated in the chapter. Three Salka district is been divided into four portions which are also known as zones. These include:

Zone A East: It covers the area from Raba, Majinga, Tunga Kade and Wando. It has sandy loam type of soil which is used to cultivate crop like millet, maize and groundnut.

Zone B North: This zone covers the area from Maidabo, Busura, Angwa Jamba, Manba, it has rocky soil, it is coarse

in nature. This type of soil is commonly used to cultivate groundnut, beans, bambaranut.

Zone C West: This zone covers area from Gwagwade, Tungan Goje, Amah, Busawa. The soil type if rocky and clay soil and areas near the stream they normally cultivate rice, guinea corn and vegetables.

Zone D South: This zone covers areas from Ladegilo, Tunga Magaji, Majeme, Kura , Tunga Dayuma. It has clay loam soil which is used for the cultivation of groundnut, late millet, bambara nut, beans and small scale yam farming.

The table below indicates the type of soil found in each zone and the crops grown in each of the zones.

Zone	**Village**	**Soil Type**	**Crops**	**Percentage**	**Km^2 Area**
Zone A East	Raba, Majinga, Tunga Kade, Wando	Sandy loam	Millet, maize, groundnut	4.4%	10.6347.7km^2
Zone B North	Maidabo, Busura, Ungwan Jamba, Mamba	Rocky soil	Groundnut, bambaranut	33.3%	79760.75km^2

Zone C West	Tugan Goge, Amali, Busawa, Gwagwade	Rocky and clay soil	Rice, guinea corn, vegetable	11.2%	29586.94km^2
Zone D South	Lade, Gilo, Tungan Magaji, Majeme Kura, Usulu		Groundnut, bambaranut, beans, yam	11.1%	26586.90km^2
			Total	**100%**	**239,282.35mk^2**

Source: Agricultural Department, Magama

Farming is the main occupation of the people engaging more than 85% of the working population about 65% of area is under cultivation and about 20% are under commercial activities, the remaining area s either left barren or uncultivable/cultivable waste.

The total geographical area of Salka district is 23928.55 among of these total area they are some land kept aside for towns and settlement which mainly use for buildings there are some land that are not used for agriculture or put on non agricultural use these are used for

commercial purpose such as transportation small scale market.

Land under miscellaneous crop: these involve crop that are perishable such as pepper, tomatoes, garden egg.

Cultivable waste land: these are land that are fertile and good for agricultural purpose but are not cultivated.

Area sown more than one: these are the land that involve planting of crop more than one season these could be raining or dry season.

Cultivable land: these are land that are fertile and good for agriculture and they have make good use of it properly.

Monocroping area: these are land that is been set aside for one single crop cultivation.

Area irrigated: these are land that are use for irrigation farming, found beside a river banks e.g. beside river Kontogor river, Maraha river.

Water logged area: these are area that are referred to as area that are muddy in nature and absorbed water and does not allow water to pass through it easily.

The table below show land use statistics in Salka district or description.

Geographical Area	Magnitude	Percentage
Town and settlement	23928.235	10%
Land put on non agricultural use	4785.647	
Barren and uncultivated land	16749.765	7%
Land under miscellaneous crop	17015.633	80%
Cultivable waste	12761.725	
Area sown more than once	57427.764	
Cultivable area	191425.88	
Water logged area	57427.767	
Mixed crop	76570.352	
Monocrop area	19142.588	
Area irrigated	8567.8167	3%
Total	**239282.35**	**100%**

Source: Agricultural Department, Magama

Salka district land is used for different purposes but majorly is used for agriculture, beans, rice, groundnut, bambara nut, maize, guinea corn, millet and late millet, are the major crop grown in the district.

Town and settlement are the areas set aside for towns and settlement and it covers about 10 percent of the land

area with the total land area of about 23928.235, base on the town and settlement.

There are also some land that are barren and uncultivable due to some geographical phenomena like rocky area and hills, places like Maidabo, Busura, Hungavai, Janba, Manba. These are the areas that consist of rocky soil and it is found at the Northern part of the district. It covers about 7% of the land area, with the total land area of about 16749.765.

Cultivable areas are the areas that are fertile in nature and crops are properly grown or planted in these areas as a result of the fertility of the soil. It covers about 80% of the land area, with the total land area of about 191425.88 in these areas. The area is splited into 6 categories, irrigated area, monocrop, area sown more than once, cultivable waste, land under miscellaneous crop, mixed crop.

Irrigated areas: these are the areas that involve the artificial application of water on a farm land with the percentage of 3% of the land area.

Monocroping: although most of the people in Salka district plant some single crop in a land e.g. beans, melon,

millet, guinea corn, etc with the percentage of about 8% of the land area. T.L.A is 19142.588.

Mixed cropping: this involves the process whereby a farmer plants different kind land. This is also applicable to farmers in Salka district; they plant groundnut with guinea corn and beans in the same farm land, with the percentage of 32% with the total land area of about 76570.352.

Area sown more than once: these are the areas that are cultivated more than once in a year, which could be annual crop e.g maize. After planting the maize they will harvest, before going further to plant beans. Also after planting groundnut, they will later harvest it to plant beans. Mellon, after planting mellon, they will later harvest and replant beans.

Land under miscellaneous crops: these are those areas used to plant perishable crops like tomatoes, pepper, garden egg, vegetables, okra and ngechepekwe. It covers 7% of the land area with the total number of 57427.764.

Crop Ranking

Ranking of the crop depend on geographical reality and cropping structure. In Salka district, the district has been

divided into four zones as earlier stated in table one. Zone a which is the eastern part of the district and the zone B northern part of the district, zone C which is the western part of the district and zone D which is the southern part of the district because of nature of the zones crop ranking is been done in order to know the major and minor crops of the zone.

This table shows the crop ranking according to each of the zones.

	Zone	**First Rank**	**Second Rank**	**Third Rank**
1.	Zone A	Groundnut	Maize	Millet
2.	Zone B	Groundnut	Beans	Bambaranut
3.	Zone C	Beans	Guinea corn	Rice
4.	Zone D	Groundnut	Beans	Bambaranut

Source: Extension workers, Agricultural Department, Magama

First ranking: It is clear from the table that the groundnut has attain supremacy in the zones except in zone C where it is taken over by beans. Zone A is on the top list and having more than 60% of the cultivable area of Salka district.

Second ranking: Beans has emerged as the second ranking crop in all zones except in zone A and zone C where maize and guinea corn occupies the second rank of the district.

Third ranking: Bambaranut emerged as the third rank crop of the district because it has occupied two zones, which are zone D and zone B except in zone A and zone C which are occupied by rice and millet within these zones.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This research work is set to assess the agricultural land use in Salka district of Magama local government area of Niger State Nigeria.

In this research, the data used were obtained from primary and secondary sources, primary data were collected through interview and observation with some selected farmers while the secondary data were collected from the agricultural extension workers and agricultural department of Magama local government area.

The assessment of agricultural land use in Salka district is being carried out and discover that the 80% of the land mass is being used for agricultural purpose and this agricultural activity is being done base on the type of soil found in Salka district.

However, Salka district has been categorized into four zones. The zones comprise of different varieties of soil, some are used for growing of maize, groundnut, millet, etc.

Although some of these zones experience some challenges in terms of cultivation especially in zone B which is the northern part of the district.

While the remaining 20% of the district are occupied by town and settlement and also commercial activities such as market, etc.

5.2 Conclusion

Based on the research finding in the assessment of agriculture land use in Salka district and Magama at large, agriculture is viewed as the first priority of the inhabitant of Salka district because it is find out that almost the 90% of the dwellers or people are farmers and also the 80% of the land mass are used for cultivation of different kinds of crops.

Hence the dwellers are farmers; they normally use simple farm tools to till the ground, only few of the people use advance farm implement.

5.3 Recommendation

Agricultural land use in Salka district of Magama local government needs to be improved by the government through the means of:

i. Provision of fertilizer to the farmers to reduce strager problem.

ii. Provision of loan to the farmers in order to improve the economic strength of the farmers.

iii. Farmers on their own need to adapt to the modern means of farming.

iv. The farmers within the region of cultivable waste land should try o assess the area in order to utilize the land.

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