A SURVEY OF FARMING AND CROPPING SYSTEMS IN SOME SELECTED LOCAL GOVERNMENT AREAS OF KWARA STATE

BY

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A RESEARCH PROJECT REPORT SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL AND BIO-ENVIRONMENTAL ENGINEERING TECHNOLOGY, INSTITUTE OF TECHNOLOGY, KWARA STATE POLYTECHNIC, ILORIN.

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN AGRICULTURAL AND BIO-ENVIRONMENTAL ENGINEERING TECHNOLOGY, IN THE DEPARTMENT OF AGRICULTURAL AND BIO-ENVIRONMENTAL ENGINEERING TECHNOLOGY, KWARA STATE POLYTECHNIC, ILORIN.

JULY, 2025.

CERTIFICATION

This is to certify that this research project report title **A SURVEY OF FARMING AND CROPPING SYSTEMS IN TEN SELECTED LOCAL GOVERNMENT AREAS OF KWARA STATE,** submitted by Alao Basit Damilola with matriculation number HND/23/ABE/FT/0022. Was carried out under my supervision in the department of Agricultural and Bio-Environmental Engineering Technology, Kwara State Polytechnic, Ilorin. This project report has been read and approved meeting the requirements for the award of Higher National Diploma (HND) in Agricultural and Bio-Environmental Engineering Technology.

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DEDICATION

This research project is dedicated to Almighty Allah.

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I thank Allah for sustaining me with serenity, tranquility and love through the stages of school and for his faithfulness in my life right from the womb to the moment of writing this project report your name shall forever be praised.

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ABSTRACT

A survey of farming and cropping system in SOME SELECTED LOCAL GOVERNMENT Areas of kwara state was carried out to investigate farming and cropping systems practiced in the study Areas. The farming and cropping systems practiced in the study Areas was established through the study. Primary data was collected from one hundred and eighty farmers across the SOME SELECTED LOCAL GOVERNMENT Areas of kwara state. The results of the study were presented in descriptive statistical tables. The finding of the study reveals that about 94.4%farmers practiced extensive farming's across the study Areas it also shows that 5.6% of farmers across the study Areas does not practiced extensive farming, It was observed that 100% of the farmers across the study Areas practiced mixed cropping which shows that all farmers across the study Areas practiced mixed cropping, but mono cropping. It was observed that farmers across the study Areas do not enjoy government policy on Agriculture. However this study recommend government intervention on farming and cropping system that will allowed farm mechanization practice in the study Areas. Since the ease of mechanization do rely on the farming and cropping systems practiced. The study reveals that most of the farming and cropping systems practiced do not encourage or allowed mechanization practiced in most parts of Kwara State.

TABLE OF CONTENT

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Farming systems in Nigeria involve diverse cropping systems, including inter cropping which entails growing two or more crops simultaneously on the same field. It is common among subsistence farmers who practice low-input agriculture and those who lack adequate farm lands. Farming systems encompass all components of a farm enterprise. Including cropland, cropping systems, livestock, common grazing land and woodlots managed by several farmers in a community and off-farm activities, within the framework of markets, land, labour, production input farm products, credit and knowledge.

There are several traditional cropping systems in Nigeria evolving from responses to existing soil, climate and social conditions. Nigeria is blessed with natural resources that are supportive to agricultural productivity and food security. Africa socio economic development is mainly agrarian and about 70 percent of the labour force and 80 percent of its poor people are directly engaged in agriculture live in the rural area depend on agriculture for livelihood (New Partnership for African Development (NEPAD, 2004). According to Olagunju 2005.agricultural sector is an engine room for sustaining growth to Nigeria economy, he also stated that agriculture still remain the mainstay of the economy of most Africa states. And current estimates indicates that some 200 million or 28 percent of Africa's population are chronically hungry (lheke, 2008).

Agriculture in West Africa is intensifying in response to increasing population humans and livestock. Consequently, increased productivity demand is placed upon integrated crop-livestock system and more emphasis is on the roles of legumes such as cowpea and groundnut (Tarawali *et al*, 2003).

Crop farming is n important aspect of agriculture in most countries of the world. In fact, there is likelihood that crop production is older than human civilization and its essential features have remained almost unchanged since the dawn of history, In the past decades most Nigeria farmers merely engaged in subsistence farming to provide food for their family while every little of their produce is available for market sale. However, in recent years, growth in agricultural output in Nigeria has no doubt been in the rise as farmers are stepping away from subsistence agriculture to embrace modern civilization and investing in large scale farming and ultimately increasing agricultural products.

Although, studies have shown that 70 percent of Nigeria's agricultural output comes from peasant farmers who reside in the rural areas. However in recent times, agricultural sector has significantly contributed to real growth in agricultural output in Nigeria (Egul 2016)Integrated crop-livestock farming system offers opportunities to promote organic agriculture, and carry-over of carton nutrients from one cropping season to the nest. in Northern guineas savannas of Nigeria, almost all above ground biomass disappears from the held during the dry season but the common practice among farmer in collecting plant residues, feeding them to ruminants over the period of the dry season, and returning the manure of the ruminant to the field at the subsequent planting helps to reduce carbon and nutrient losses (Franbie *et al*, 2009)

The type of faring system practiced in Nigeria are arable farming, mixed farming commercial farming, subsistence farming extensive fanning, intensive farming and sedentary farming also known an in active farming Also the these major farming systems practiced in Nigeria are as follows:

I. Rotational fallow agriculture:- This consist of the following practices; shifting (long fallow) agriculture, Rotational bush fallow (short fallow) agriculture. Rotational grass fallow (short fallow) agriculture, Rotational planted fallow (short fallow)

agriculture of all these, only shifting (long fallow) agriculture involve occasional movement of settlement in conjunction with field. For rotational bush fallow, rotational grass fallow agriculture, rotational planted fallow agriculture, settlement remains fixed.

II. Annual semi-permanent or permanent agriculture:- This consist of compound farming, annual dry land farming, peasant small scale tree crop farming, large scale tree plantations farming, food plain utilization farming.

III. Mixed agriculture:- This involve animal and crop production on the same piece of land at the same period of time.

The type of cropping systems practiced in Nigeria are mono cropping, relay cropping, inter cropping, sequential cropping, crop rotation, fallow system, multiple cropping (mixed cropping), contour strip cropping and shifting cultivation cropping.

1.2 Problem Statement

It is generally know that farming and cropping system practiced in many community investigate the level of their mechanization practice a situation that in turn investigate the level of their productivity. According to (Faseyiro and *Taiwo, 2012*),the present rice production and processing situation in Nigeria shows that traditional system of farming with insufficient farming implement and technique account for 80% while modern sustain of farming tahe only 20%.

Therefore, to improve food crop production in Nigeria through mechanization practice, then there is need to investigate through surveys farming and cropping system practiced in every state of the federation. This study aimed to investigate the farming and cropping system practiced in Kwara state as a case study.

1.3 Aim and Objectives of the study

The main aim of this study is to investigate farming and cropping system practiced in SOME SELECTED LOCAL GOVERNMENT areas of Kwara State.

The specific objectives of this study are to;

i. investigate farming and cropping system practiced in the study areas.

ii. investigate the factors responsible for the farming and cropping system practiced in the study areas.

1.4 Justification of the study

Traditional farming system is a great threat to national food security. The efficient of traditional farming and cropping system is always low, a situation that caused short supply of agricultural produce in Nigeria. However, if the decision of the Federal Government of Nigeria to stop the importation of food crops produce in Nigeria is anything to go by then there is need to investigate farming and cropping system practiced in every state of the federation. This study in view of this needs decide to survey the farming and cropping system practiced in Kwara State with the aim to investigate the status of mechanization among the food crops farmers in the study area as a case study.

1.5 Scope of the study

This scope of this study is focused on farming and cropping system practices in SOME SELECTED LOCAL GOVERNMENT areas of Kwara State in relation to mechanization practice.

CHAPTER TWO

LITERATURE REVIEW

2.1 Farming system, cropping system and agricultural productivity in Nigeria

Evolving large scale agricultural production via mechanization is basically a developmental process and therefore will require an all-embracing strategy on the part of the government and the entire citizens of this nation for its effective realization. However, before any meaningful progress can be made there is need to identify and appraise the "State of the act" as regards the concept of mechanization/farming and cropping system in Nigeria.

Anazodo (1986) and Adewale(1987) support the purpose of mechanization as it increases land area cultivated greater yields, reduced labor requirement, reduce losses, removal of drudgery and heavy demand on human muscle as energy source, reduction in cost of production, planting at optimum dates resulting from timely operation, increased dignity of farming and increased agro-services activity among others. Kline *et al* (1969) asserted that there is a great demand for the use of improved tools and machines by farmers in all the countries of Africa.

Aderounmu (1987) was of the view that no realistic change can be expected from the present native Nigeria agriculture or from the drudgery attached to the existing hoe and cutlass technique of cultivation. Agunbiade (1984) observed mechanization as the only acceptable element in the country's program of rural development. According to him, rural development involves a wide range of innovations, suitable among them, he observed was mechanical farming. He identified mechanization as a technological innovation aimed at improving agricultural productivity, increase marketable surplus and cash incomes. He with present urge to expand food production, human muscle power alone can no longer feed

Nigeria's growing population and farmers need to go mechanized or else food production will continue to fail to keep peace with the population growth.

2.2 Overview of The Evolution of Agricultural Mechanization in Nigeria

Demand for mechanization in Nigeria is growing in a fairly consistence way predicted by economic theories. The farming system has intensified and the use of animal traction tag grown at a substantial rate. Demand side factors considerably explain the low adoptions of tractors; the private sector has emerged over time as a more efficient provider of hiring services (particularly farmer to farmer service) than the public sector, Condition are consistence with the hypothesis that because of generally low support for the agricultural sector in a Nigeria in the past few decades agricultural mechanization (tractor use in particular) has remained low despite the declining share of the workforce engaged in the agricultural sector. Agricultural transformation in he form of a declining agricultural labor force has happens partly through the growth in the oil industry since 1970s,instead of inducing further exit from farming, tractor adoptions in Nigeria have helped those who have remained in farming to start expanding their production scale.

2.2.1 History of agricultural mechanization in Nigeria

The first administration to introduce or import the first set of tractors into the country was that of the first republic in 1963.Then the federal government of Nigeria discovered that to meet up with the demand of the international market and also to tackle the menace of rising unemployment with the increasing number of graduates, it had to make agriculture way attractive to the youth at that time. More tractors were purchased by the federal government during this period. It is on record that between 1972 and 1974 a total of 462 tractors were imported by federal government. The total cost of purchasing the tractor was estimated to be 16 million naira.

Also this period, some companies involved in the supply and distribution of farm machines and equipment in the world came to establish their branches in Nigeria. An example of this is C. Woermann Nigeria Limited which started its operation in Nigeria continued until the period of the oil boom which started in the early 1970, which a negative attitude towards agriculture was developing.

Although towards the end of the last section, it was stated that there was a negative attitude developed towards the adoption of farm mechanization, attempt were made by the federal government to encourage the mechanization of farming and cropping activities One of the attempts of this administration was the formulation of the Operation Feed the Nation program (OFN). To ensure the success of this program, the government encouraged the importation of more tractors. A total amount of 22050 was imported between 1975 and 1983The federal government encouraged some foreign companies to come to Nigeria to establish a supply and distribution chain that provided tractors and other farm machinery. The governments at the federal and state levels have formulated some policies to encourage farm mechanization; some of the practical step taken by the government has been the provision of loans and subsidies, establishment to financial institutions whose task is to provide financial aids to farmers and also the importation of more tractors and farm machinery. But in spite of all those efforts, the country is yet to see an improvement in the yield of farmer's products.

2.2.2 The problem facing farm mechanization in Nigeria

With the attempts made by previous and current administration to adopt mechanization into farming and cropping activities in Nigeria. Farm mechanization is facing some touch challenges.

These challenges are;

I. The non-suitability of the imported machines to the environment of most farmers in Nigeria.

II. The high purchasing and running cost of these farm machine.

III. Frequent breakdown of tractors and other farm machinery.

2.2.3 Possible Solution to the problems militating against farm mechanization in Nigeria

i. "Maintenance personnel who would be involved in the repairs and maintenance should be trained to ensure the long use of tractors and farm machines.

ii. The maintenance programs be organized by the government at all levels to prevent frequently breakdowns of farm machinery.

iii. Expert advice should be sought before the importation and purchase of farm machinery.

iv. This will reduce wastage of funds used to procure farm machinery.

2.2.4 The Impact of Mechanization on the Development of Nigeria agriculture and economy

Agriculture constitutes one of the most important sector in any nation economy. However, statics has revealed that Nigeria is one of the least mechanized countries in the world. The rate of embracement of agricultural mechanization in Nigeria is still very low. A large proportion of farming area is being cultivated by simple tools, of which the rate of productivity resulting from this is minimal. Nigeria was known to be a major exporter of some agricultural products such as cocoa, groundnut, palm produce etc. This further increased the nations GDOP to 60%. However, in the 1970s the focus was shifted from agriculture to petroleum, the development of the agricultural sector was neglected and this led to a fall in the nation GDP to 20%. Agricultural mechanization is the application of agricultural engineering principles, machines and technologies to agricultural practices, using mechanical systems in food, fiber, fuel and for processing and also in the production processing, handling and storage of agricultural products. Food security according to food and agricultural organization (FAO) exists when all people at all times have physical, social

and economic access to sufficient, safe and food preferences for an active and healthy life. This definition above highlights the criteria to satisfy that a nation food is secured, the criteria listed include;

- Availability of food at all times in terms of the physical existence of food.
- Accessibility by all in terms of incomes and resources to sufficient food.
- Utilization that is; it meets the dietary needs of the people.
- Stability in terms of constant supply.

However, the only strategy Nigeria can employ to manage food insecurity and satisfy these criteria is to embrace agricultural mechanization. It is only solution of sufficient agricultural production. Peasant farming is widely practiced in Nigeria and a higher percentage of the population largely depends on production from these peasant farmers who cultivate lands on a small scale with simple tools. In a report by CBN (1991), 95% of Nigerian farmers are peasant farmers who don't have the resources to farm on a large scale. They are also the major recipients of government supports.

2.3 Economics of Mechanization in Agricultural Production

The agricultural revolution that is taking place in most developing countries including Nigeria calls for considerable change in agricultural technology, Over 80% of the cultivated area in Nigeria is tilled and farmed using hand tools and traditional implements. The area a farmer can cultivate annually is inherently limited to about 2 hectares to produce what barely suffices to feed his family. Avocatios if hand tools technology for agriculture amints to virtual enslavement that condemns a large group of Nigeria to perpetual poverty (Odighoh, 1991).Animal-drought power in the form of a pair or team of work bull oxen or even donkey is used to some extent by farmers in the northern parts of Nigeria.

Animal drought technology is becoming increasingly unrealistic in Nigeria where it is feed with many serious limitations (Odighoh, 1991). Considering all the factors involved.

Power mechanization is the appropriate technology package for agricultural intensification programmes in Nigeria. All real stake holders genuinely interested in the welfare of Nigeria and Nigerians, must acknowledge that the war against hunger and scarcity of agro-industrial raw materials is too complex and too sophisticated for the armament of hoes and diggers in the hands of army of aged and ageing peasant farmers or yoked behind malnourished muks, oxen and donkeys (Odighoh, 1991).

2.4 Assessment of Mechanization Problems of Peasant Farmers

Farm mechanization has been seen as the pivot to agricultural revolution in many parts of the world and has contributed greatly to increased output of food crops and other agricultural product to meet the demands of the over increasing world production. Through farm mechanization many industrial raw material are produce for the rapidly expanding world industries. Tools, implements and powered machinery are essential and major inputs to agriculture. The term mechanization is generally used as an overall description of the application o these inputs.

Agricultural mechanization has made a significant contribution to agricultural and rural development in many part of he world. Level of product have increased, soil and water conservation measure were conducted, the profitability of farming and cropping system improved the quality of rural life enhanced and development in he industrial and service sectors was stimulated (Anazodo *et al*). Iheanacho *et al* stated that the machine used for agricultural production in Nigeria include hand tolls, animal drawn implements, two wheel and four wheel drive tractors, motorized or mechanically driven post harvest handling and processing machines, crop storage equipment and pumps for irrigation. This agricultural mechanization in Nigeria can be divided into three level of technology. Hand tools technology, draught animal technology and engine power technology.

2.5 Factors Limiting Small Scale Framers Access and Use of Mechanization For Agriculture

Nigeria is one of the major importer of food items in the sub-saharan Africa. FAO (2013) indicated that Nigeria become the highest importer of rice in the sub-Africa region. To worsen the situation, most of the young and able bodies men who are supposed to adopt farm mechanization are continuously leaving the rural areas for urban cities in search jobs with better remuneration.

This urgly scenario call for a serious concerns because the inability of Nigeria to feed her teeming population that has estimated to be growing at the rate of 2.3 percent per annum (NPC, 2006) is a pointer to national calamity. In order to improve food production. Nigeria farmers have to adopt farm mechanization because it is a means of enhancing human productivity and often with the intention to achieve results beyond the capacity for human labour(FAO, 2008). To embrace agricultural mechanization, one of the most important agricultural technologies that Nigeria farmers must have access to is tractor and it's implements. Although farm mechanization according to Maharajah and Cheltin (2006) encompasses in it's widest sense, hand tools, draught animals and mechanical technologies. Tractor is one of the important mechanical power because it is a major clement in farm mechanization (Ishola Adeoti, 2004).

Some Nigeria farmers have been advised to embrace agricultural mechanization as a way of increasing food population and report by NAERLS and NPES (2001) indicated that most states in Nigeria including Abuja had some functional tractors for farm mechanization in Nigeria. This is very important because if tractor are not affordable to farmers or available in public and private offices but not accessible, it makes no meaning to a farmer who needs it for production purpose.

2.6 Advantages of Agricultural Mechanization

I. It removes the difficulties in farming. Farm work is considered by people to be very hard. The use of machine makes farming enjoyable.

II. Large area of farmland can be prepared within very short time. This means that mechanizations saves time.

III. It allows the farmers to perform some difficult job easily for example, the felling of tree is easy with motor, saw instead of the axe and cutlass.

IV. Mechanization saves labour. Very few labours are required when machines are employed on the farm.

V. It increase farm productivity because of large scope of operations. Increased productivity leads to higher farm income and standard of living.

VI. The cost of using machines on the fiurmis cheaper in the long run compared with the cost of firm labour that is always rising.

VII. It prevents bad agricultural practice such as complete burning all vegetations for new farm land.

VIII. It enables the farmers to use surplus farm product profitably.

IX. The use of machine in farming and cropping system may attract young and educated persons to take up farming and cropping as an occupation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Description of the Study Area

The study area covers Offa, Asa, Patigi, llorin South, Ilorin East, Ifelodun, Irepodun, Moro, Edu, and Oyun Local Government Area of Kwara State. Kwara State lies between latitude: 8° 29' 47.90" N longitude: 4° 32' 31.70" E. Kwara State is a state in Western Nigeria, bordered to the east by Kogi State, to the north by Niger State, and to the south by Ekiti, Osun, and Oyo states while its western border makes uppant of the international border with Benin Republic. Its capital is the city of florin and the state has 16 local government areas.

Asa is a Local Government Area in Kwara State, Nigeria. The Asa local government secretariat is located in the town of Afon. The Asa LGA contains several towns and villages which include Ogbondoroko, Afon, Laduba, Aboto, Balah, Eyenkonn, Pampo, Ogele, and Olowokere.

Offa is a city in Kwara State of Nigeria, with a population of about 166,112 inhabitants. The town is noted for its weaving and dyeing trade, using vegetable dyes made from locally grown indigo and other plants. Offa is well known for cultivation of sweet potatoes and maize which also formed part of the favorite staple foods of the indigenes in the town. Cattle, goats and sheep are also raised there. The main religions practiced in the town are Islam, Christianity and traditional religions. The ancient tradition for which the town is known is wrestling. Offatedo in Osun state, Iyana Offa in Oyo State, Offa in Cote d'lvoire were established by the people from Offa. Offa is centrally located. There is a big market in the city centre, known as "Owode market", which serves both the members of the community and its neighboring towns. It has an area of 1,286 km2 and a population of 126,435 at the

2006 census. Islam and Christianity are the widely practiced religions in Asa LGA while ethnic groups such as the Yoruba, Hausa, and Fulani are represented in the area.

Ilorin West is a Local Government Area in Kwara State, Nigeria. Its headquarters are in the town of Wara Osin Area. It has an area of 105 km2 and a population of 364.666 at the 2006 census. Ilorin South is a Local Government Area in Kwara State, Nigeria. Its headquarters are in the town of Ipata. It has an area of 174 km2 and a population of 208.691at the 2006 census.

Edu is a Local Government Area in Kwara State. A Nupe speaking area in Nigeria.Edu consists of Lafiagi, Tsaragi and Tshonga Town. Its headquarters are in the town of Lafiagi. It has an area of 2,542 km2 and a population of 201,469 as of the 2006 census.

Pategi or Patigi is a town and Local government in Kwara State. Nigeria with the headquarters located at the town. The town is the headquarters of Pategi Emirate. It is inhabited by the Nupe people who also exhibit a linguistic repertoire of the Yoruba dlialect. They are farmers, aquatic sellers/fishers and traders. They are known to be governed by a monarch.

Moro is a Local Government Area in Kwara State, NVigeria. It has an area of 3.272km2 and a population of 108,792 at the 2006 census.

Ifelodun is a local government area in Kwara State, Nigeria. Its headquarters is in the town of Share. The people of Ifelodun are Yorubas and mostly of Igbomnina origin with roots in Ife, Oyo and Ketu. Much of the Ifelodun domain was overtaken by the Afonja/Alimi era and annexed to the present Ilorin enclave. It has an area of 3,435 km2 and a population of 206,042 at the 2006 census. It includes at least 80 villages and towns.

Irepodun is a Local Government Area in Kwara State, Nigeria. Its headquarters is in the town of Omu-Aran. The local government is located on 8.5381° N, 5.1431° E. It has an

area of 737 km2 and a population of 148,610 at the 2006 census. It has very significant Yoruba cultural and historical significance. And is populated by the Igbomina people. The people of Ifelodun are Yorubas and mostly of Igbomina origin with roots in Ife, Oyo and Ketu. Much of the Ifelodun domain was overtaken by the Afonja/Alimi era and annexed to the present Ilorin enclave. It has an area of 3,435 km and includes at least 80 villages and towns including Idofian, Okanle, Jimba-Oja, Koko-Araromi, Ilota, Arugbo, Igbo-Owu, and Amodu.

Oyun is a Local Government Area in Kwara State, Nigeria. Its headquarters are in the town of Ilemona. It has an area of 476 km2 and a population of 94,253 at the 2006 census.

Map of Kwara State

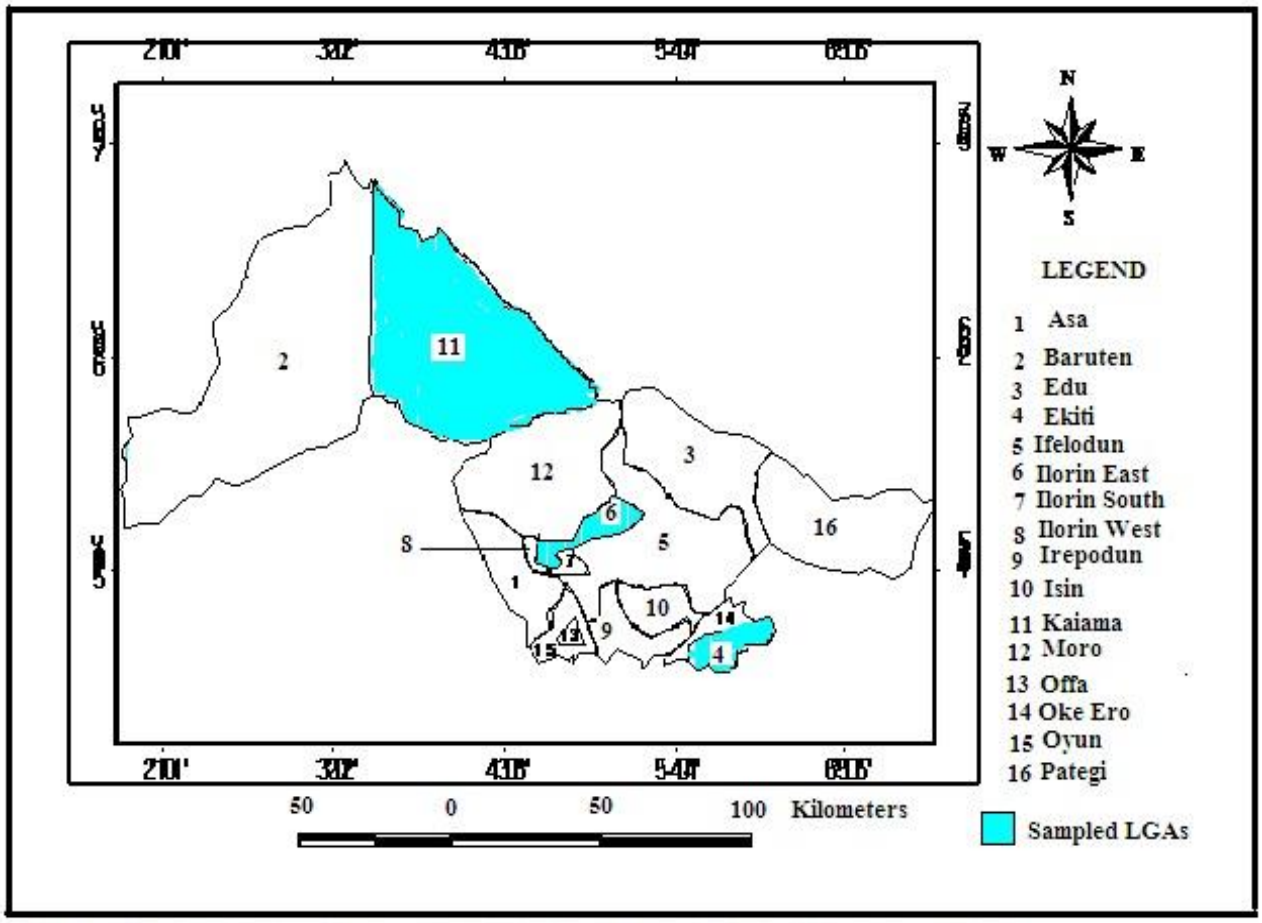

Plate I: Map of the Study Area

3.2 Sampling Method

The type of sampling method used for this project study is systematic sampling method. Sampling is a technique of selecting individual members or a subset of the population to make statistical inferences from them and estimate the characteristics of the whole population. Systematic sampling is the method the researchers used to choose or select the sample members of a population at regular intervals. It usually requires selecting a starting point for the sample and sample size determination that can be repeated at regular intervals. This type of sampling method has a predefined range: hence. this sampling technique is the least time-consuming.

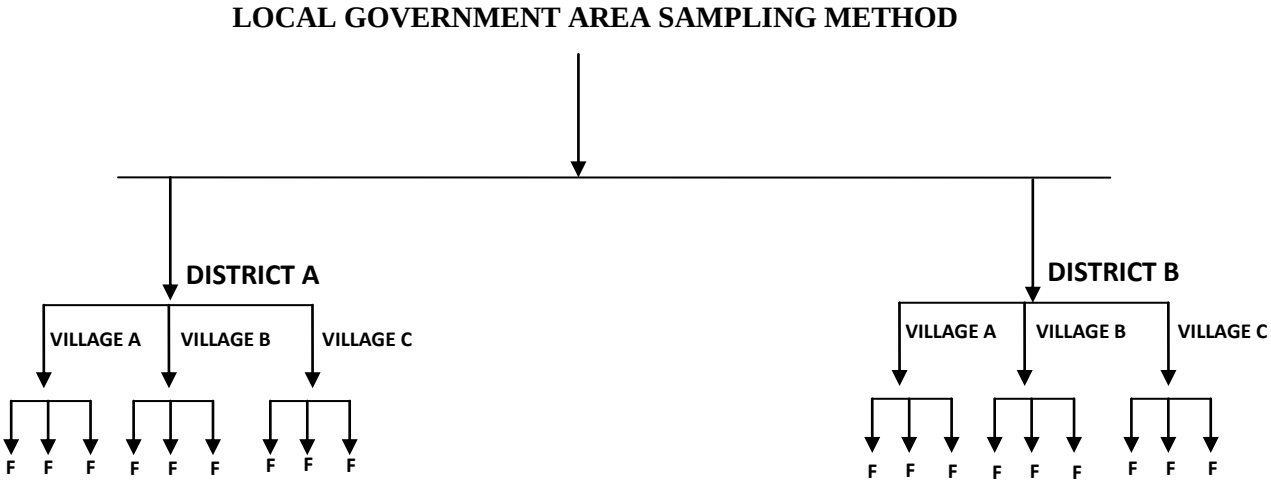

Fig. 3.1: Local Government Area Sample

3.3 Data Collection Technique

The data used for this project work is primary data which is in inform of survey data. Survey data is defined as the resultant data that is collected from a sample of respondents that took a survey. The data was collected from the ten (10) selected Local Government Area across Kwara State, the study area, with the help of the questionnaire distributed to the farmers across the state. Eighteen (18) questionnaires were distributed to Asa, Offa, Patigi, Ilorin-West, Ilorin-South, Ifelodun, Irepodun, Edu, Oyun and Moro areas. The total number of 180 questionnaires was answered by the respondents from the ten (10) selected Local Government Areas of Kwara State which covers Kwara North (Patigi, Edu and

Moro), Kwara Central (llorin-west, Ilorin-South and Asa) and Kwara South (Offa, Ifelodun, Irepodun and Oyun) respectively.

3.4 Data Processing

The data collected from the ten (10) selected Local Government Areas within Kwara State was processed using Microsoft Excel 2016 version software to compute the data and SPSS 220 version software was used to analyze the data Survey analysis method was adopted for this project stady. Survey analysis refers to the process of analyzing resultant data collected from a sample respondent. The result of data processed will be display in chapter four.

3.4 Data Analysis

The statistical analysis method used for this project study is multiple response analysis which comprises of frequencies, cross tabulation method and charts in SPSS. Cross-tabulation is most broadly used data analysis methods, especially for survey data set. It uses a basic tabulation framework to make sense of data. This statistical analysis method helps to tabulate data into easily understandable rows and columns, which helps to draw conclusion between different research parameters. It contains data that is equally selected or has some connection with each other. The result of data analyze will be display in chapter four.

CHAPTER FOUR

4.0 RESULT AND DISCUSSION

4.1 Determination of Farming and Cropping System Practiced in the Study Area

Table 4.1: Fanning System Practiced in the Study Area

LGA	Type of Farming System Practiced	Number of Response	No of Respondent	Percentage (%)
Offa	Extensive	17	18	94.4%
	Intensive	1	18	5.6%
	Small_scale	2	18	11.1%
	Commercial	16	18	88.9%
	Crop	8	18	44.4%
	Livestock	10	18	55.6%
	Rainfed	12	18	66.7%
	Irrigated	17	18	94.4%
Asa	Extensive	9	18	50.0%
	Intensive	9	18	50.0%
	Smal_scale	6	18	33.3%
	Commercial	4	18	22.2%
	Crop	10	18	55.6%
	Livestock	8	18	44.4%
	Irrigated	2	18	11.1%
	Rainfed	5	18	27.8%
Patigi	Extensive	17	18	94.4%
	Intensive	1	18	5.6%
	Smal_scale	8	18	44.4%
	Large_scale	10	18	55.6%
	Crop	2	18	11.1%
	Livestock	16	18	88.9%
	Irrigated	12	18	66.7%
	Rainfed	6	18	33.3%
Ilorin South	Extensive	11	18	61.1%
	Intensive	7	18	38.9%
	Small_scale	14	18	77.8%
	Large_scale	4	18	22.2%

	Crop	14	18	77.8%
	Irrigated	12	18	66.7%
	Livestock	4	18	22.2%
	Rainfed	18	18	100.0%

LGA	Type of Farming System Practiced	Number of Response	No of Respondent	Percentage(%)
Ilorin East	Extensive	14	18	77.8%
	Intensive	4	18	22.2%
	Small_scale	6	18	33.3%
	Large_scale	12	18	66.7%
	Crop	7	18	38.9%
	Livestock	11	18	61.1%
	Irrigated	13	18	72.2%
	Rainfed	5	18	27.8%
Ifelodun	Extensive	10	18	55.6%
	Intensive	8	18	44.4%
	Small_scale	8	18	44.4%
	Large_scale	10	18	55.6%
	Crop	10	18	55.6%
	Livestock	8	18	44.4%
	Irrigated	2	18	11.1%
	Rainfed	16	18	88.9%
Moro	Extensive	11	18	61.1%
	Intensive	7	18	38.9%
	Small_scale	14	18	77.8%
	Large_scale	4	18	22.2%
	Crop	14	18	77.8%
	Livestock	4	18	22.2%
	Rainfed	18	18	100.0%
	Irrigated	4	18	22.2%
Edu	Extensive	11	18	61.1%
	Small_scale	14	18	77.8%
	Large_scale	4	18	22.2%
	Intensive	7	18	38.9%
	Crop	14	18	77.8%
	Livestock	8	18	44.4%
	Irrigated	4	18	22.2%
	Rainfed	18	18	100.0%
Oyun	Extensive	11	18	61.1%

	Intensive	7	18	38.9%
	Small_scale	14	18	77.8%
	Large_scale	4	18	22.2%
	Crop	14	18	77.8%
	Livestock	4	18	22.2%
	Irrigated	4	18	22.2%
	Rainfed	18	18	100.0%

LGA	Type of Cropping System Practiced	Number of Response	Total No of Respondents	Percentage (%)
Irepodun	Extensive	11	18	61.1%
	Intensive	7	18	38.9%
	Small_scale	14	18	77.8%
	Large_scale	4	18	22.2%
	Crop	14	18	77.8%
	Livestock	4	18	22.2%
	Irrigated	4	18	22.2%
	Rainfed	18	18	100.0%

4.2. Cropping System Practiced in the Study Area

Table 4.2: Cropping System Practiced in the Study Area

LGA	Type of Cropping System Practiced	Number of Response	Total No of Respondent	Percentage (%)
Offa	Mono_Cropping	5	18	27.8%
	Mixed_Cropping	18	18	100.0%
	Crop_Rotation	10	18	55.6%
	Relay_Cropping	8	18	44.4%
	Sequential_Cropping	6	18	33.3%
	Inter_Cropping	12	18	·66.7%
Asa	Mono_Cropping	5	18	27.8%
	Mixed_Cropping	13	18	72.2%
	Crop_Rotation	5	18	27.8%
	Relay_Cropping	5	18	27.8%
	Sequential_Cropping	9	18	50.0%
	Inter_Cropping	8	18	44.4%
Patigi	Mono_Cropping	5	18	27.8%
	Mixed_Cropping	13	18	72.2%
	Crop_Rotation	13	18	72.2%
	Relay_Cropping	13	18	72.2%
	Sequential_Cropping	7	18	38.9%

	Inter_Cropping	11	18	61.1%
Ilorin South	Mono_Cropping	5	18	27.8%
	Mixed_Cropping	13	18	72.2%
	Crop_Rotation	7	18	38.9%
	Relay_Cropping	7	18	39.9%
	Sequential_Cropping	10	18	55.6%
	Inter_Cropping	8	18	44.4
Ilorin East	Mono_Cropping	5	18	27.8%
	Mixed_Cropping	18	18	100.0%
	Crop_Rotation	2	18	11.1%
	Relay_Cropping	2	18	11.1%
	Sequential_Cropping	2	18	11.1%
	Inter_Cropping	16	18	88.9%
Ifelodun	Mono_Cropping	6	18	33.3%
	Mixed_Cropping	18	18	100.0%
	Crop_Rotation	2	18	11.1%
	Relay_Cropping	2	18	11.1%
	Sequential_Cropping	2	18	11.1%
	Inter_Cropping	16	18	88.9%
Moro	Mono_Cropping	6	18	33.3%
	Mixed_Cropping	12	18	66.7%
	Crop_Rotation	11	18	61.1%
	Relay_Cropping	11	18	61.1%
	Sequential_Cropping	5	18	27.8%
	Inter_Cropping	13	18	72.2%
Oyun	Mono_Cropping	6	18	33.3%
	Mixed_Cropping	12	18	66.7%
	Crop_Rotation	15	18	83.3%
	Relay_Cropping	3	18	16.7%
	Inter_Cropping	13	18	72.2%
	Sequential_Cropping	18	18	100.0%
Irepodun	Mono_Cropping	4	18	22.2%
	Mixed_Cropping	14	18	77.8%
	Crop_Rotation	13	18	72.2%
	Relay_Cropping	5	18	27.8%
	Sequential_Cropping	6	18	33.3%
	Inter_Cropping	12	18	66.7%

Edu	Mono_Cropping	7	18	38.9%
	Mixed_Cropping	11	18	61.1%
	Crop_Rotation	9	18	50.0%
	Relay_Cropping	6	18	33.3%
	Sequential_Cropping	10	18	55.6%
	Inter_Cropping	9	18	50.0%

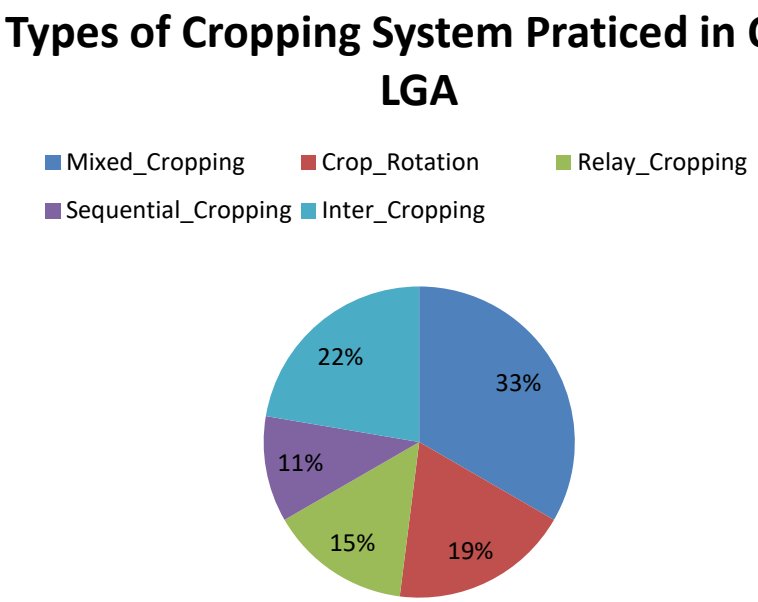

Figure 4.1: Type of Cropping System Practiced in Offa LGA

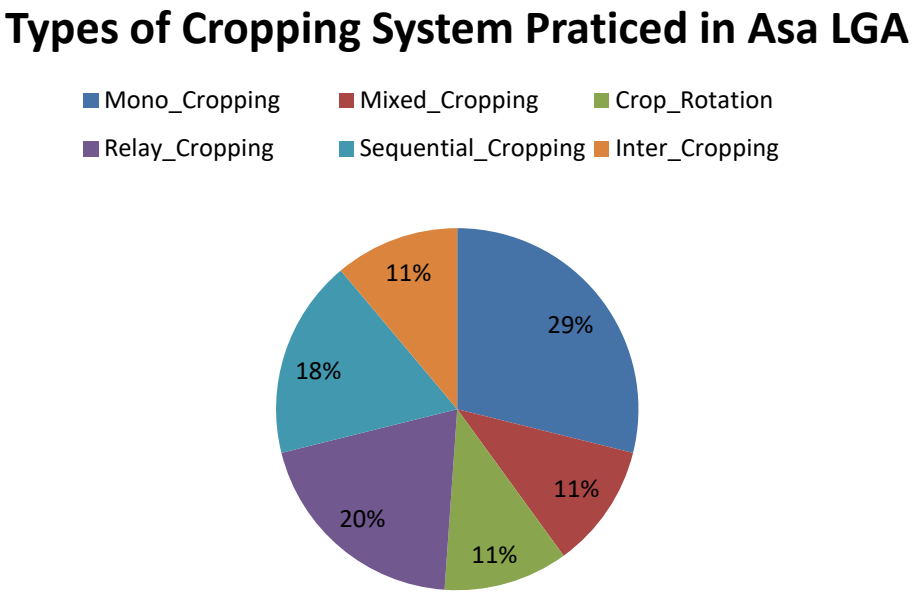

Figure 4.2: Type of Cropping System Practiced in Asa LGA

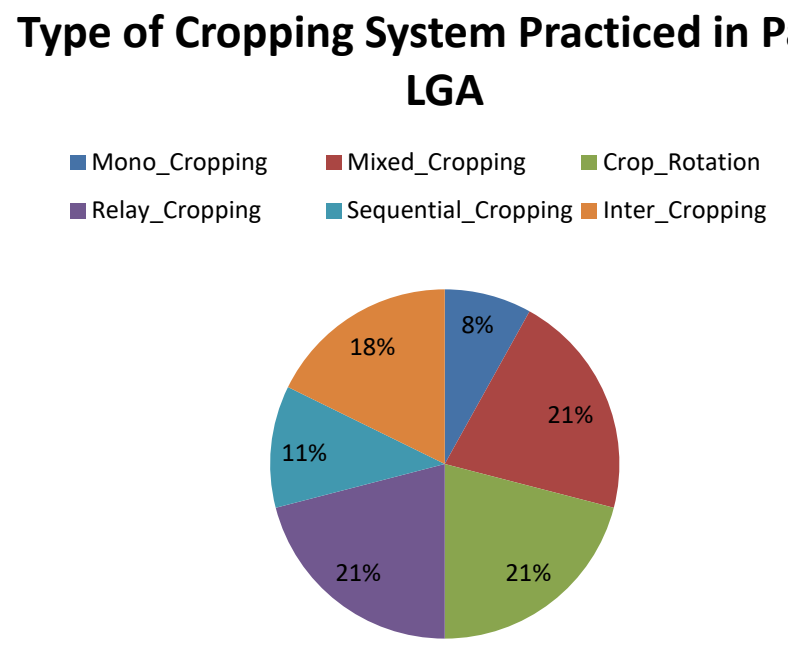

Figure 4.3: Type of Cropping System Practiced in Patigi LGA

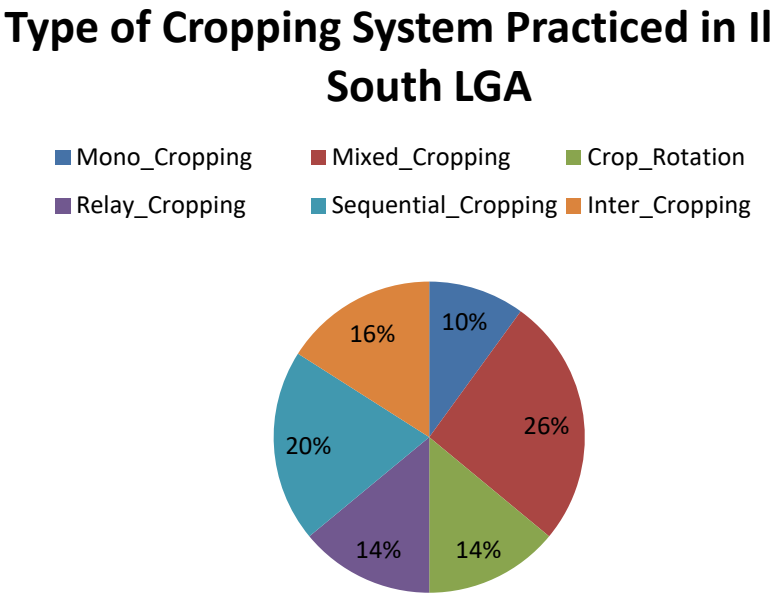

Figure 4.4: Type of Cropping System Practiced in Ilorin South LGA

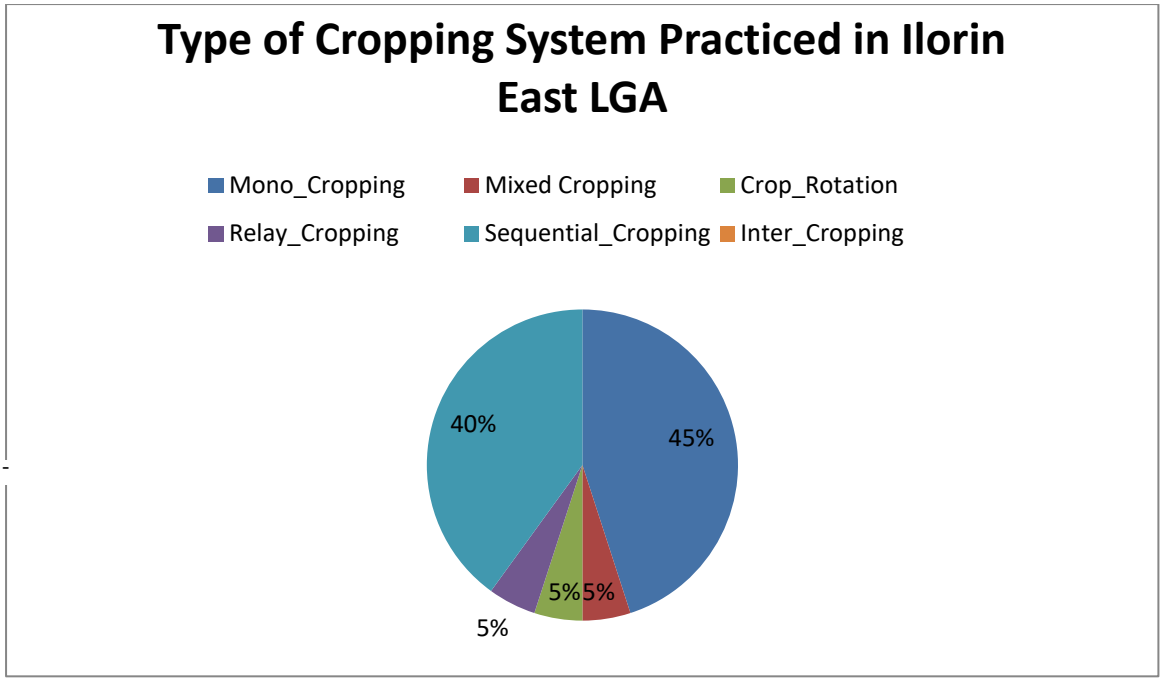

Figure 4.5: Type of Cropping System Practiced in Ilorin East LGA

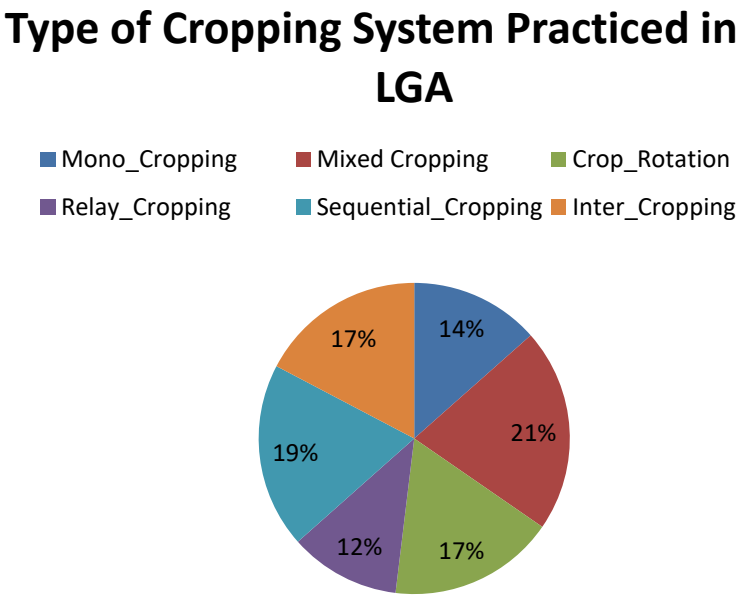

Figure 4.8: Type of Cropping System Practiced in Edu LGA

4.3 Determination of Level of mechanization used to practice Farming and Cropping Systems in the Study Area

Table 4.3: Level of Mechanization used to practice Farming and Cropping System in the Study Area

LGA	Types of Responses	Number of Response	Percentage (%)
Offa	Yes	2	10.8%
	No	18	83.8%
	Total	13	100%
Asa	Yes	13	72.2%
	160	5	27.8%
	Total	18	100%
Patigi	Yes	3	15.7%
	No	15	83.3%
	Total	18	100%
Ilorin South	Yes	3	16.7%
	No	15	83.3%
	Total	18	100%
Ilorin East	Yes	9	50.0%
	No	9	50.0%
	Total	18	100%
Ifelodun	Yes	9	50.0%
	No	9	50.0%
	Total	18	100%
Moro	Yes	11	61.196
	No	7	38.9%
	Total	18	100%
Edu	Yes	12	66.7%
	No	6	33.3%
	Total	18	100%
Oyun	YES	2	11.1%
	No	16	E3.9%
	Total	13	100%
Irepodun	Yes	16	38.9%
	No	2	11.1%
	Total	18	100%

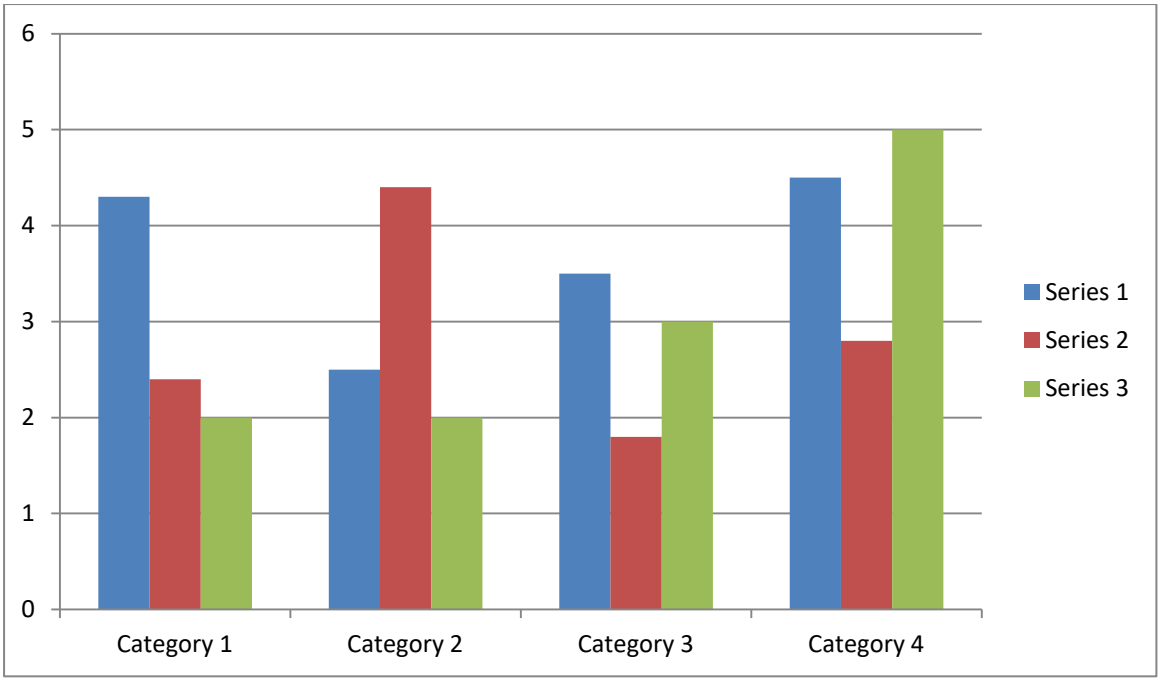

Figure 4.11: Level of Mechanization used to practice Farming and Cropping System in the Study Area

4.4 Factors Responsible for Farming and Cropping Practiced in the Study Area

LGA	Factors	Number of Response	Percentage (%)
Offa	Poor market value of the produce	4	22.2
	Small scale nature of the farming and cropping	14	77.8
	system practice		
	Total	18	100%
Asa	Poor market value of the produce	5	27.8%
	Small scale nature of the farming and cropping system practice	13	72.2%
	Total	18	100%
Patigi	Poor market value of the produce	5	27.8
	Small scale nature of the farming and cropping system practice	13	72.2
	Total	18	100%
Ilorin South	Poor market value of the produce	7	38.9
	Small scale nature of the farming andcropping system practice	11	611
	Total	18	100%
Ilorin East	Poor market value of the produce	4	22.2
	Small scale nature of the farming and cropping system practice	14	778
	Total	18	100%
Ifelodon	Poor market value of the produce	6	33.3
	Small scale nature of the farming and cropping system practice	12	66.7
	Total	18	100%
Moro	Poor market value of the produce	8	44.4
	Small scale nature of the farming and cropping system practice	10	55.6
	Total	18	100%
Edu	Poor market value of the produce	6	333
	Small scale nature of the farming and cropping system practice	12	667
	Total	18	100%
Oyun	Poor market value of the produce	1	5.6
	Small scale nature of the farming and cropping system practice	17	94.4
	Total	18	100%
Irepodun	Poor market value of the produce	4	22.2
	SmaIl scale nature of the farming and cropping system practice	14	778
	Total	18	100%

4.4 Discussion

Table 4.1 shows types of farming system practiced in the study sreawhich covers Offa, Asa, Patigi, Ilorin-South, Ilorin-East, Ifelodun, Moro,Edu,Oyun and Irepodun Local Government Area of Kwara State.

In Offa, about 94.4% of the respondents were mainly practicing extensive farming system, irrigated farming system, large scale farming system and rotational fallow long farming system. In Asa, about 77.8% of the respondents were mainly practicing subsistence farming system. In Patigi, about 94.4% close to 100% of the respondent were mainly practicing extensive farming, subsistence farming and livestock farming system. In Ilorin-South about 94.4% of the respondent were mainly practicing subsistence farming and rainfed farming system. In Ilorin-East about 100% of the respondent were mainly practicing subsistence farming. In Ifelodun 72.2% of the respondent were mainly practicing subsistence farming and rotational fallow long farming system. In Moro, 94.4% of the respondent were mainly practicing rotational fallow long farming system. In Edu 100% of the respondent were mainly engaged in subsistence farming, rotational fallow short farming and crop rotation farming system. In Oyun, 94.4% of the respondent were mainly practicing subsistence farming, rotationa fallow long farming and rainfed farming system. In Irepodun,83.3% of the respondent were mainly practicing extensive and large scale farming system.

Table 4.2 shows cropping system practiced in the study areawhich covers Offa, Asa, Patigi, Ilorin-South, Ilorin-East, Ifelodun, Moro, Edu, Oyun and Irepodun Local Government Area of Kwara State. In Offa majority of the respondent were practicing mixed cropping which covers 100%, in Asa majority of the respondent were practicing mixed cropping system which covers 72.2%, in Patigi majority of the respondent were practicing mixed cropping, crop rotation and relay cropping system which covers 72.2% each, in Ilorin-South majority of the respondent were practicing mixed cropping system which covers 72.2%, in

Ilorin-East and ifelodun majority of the respondent were practicing mixed cropping system which covers 100%, in Moro majority of the respondent were practicing inter cropping system which covers 72.2%, in Oyun majority of the respondent were practicing crop rotation system which covers 83.3%, in Irepodun majority of the respondent were practicing mixed cropping system which covers 77.8% and-in Edu majority of the respondent were practicing mixed cropping which covers 61.1% respectively.

Table 4.3 shows the level of mechanization used to practice farming and cropping system in the study areawhich covers Offa, Asa, Patigi, Ilorin-South, Ilorin-East, Ifelodun, Moro, Edu, Oyun and Irepodun Local Government Area of Kwara State. In Offa 88.9%,Patigi 83.3%, Ilorin-South and Ifelodun 50%,Oyun 88.9%,Moro 38.9%,Edu 33.3%,Asa 27.8% and Irepodun 11.1% of the respondent answered NO that they don't use modern equipment to practice farming and cropping system in their areas while in Offa In Offa 11.1%,Patigi 16.7%,Ilorin-South 16.17%, Ilorin-East 16.7%, Ifelodun 50%, Oyun 11.1%,Moro 61.1%,Edu 66.7%,Asa 72.2% and Irepodun 88.9% of the respondent answered YES that they are using modern equipment for their farming and cropping system.

Table 4.4 shows factor responsible for farming and cropping system practiced in the study area which covers Offa, Asa, Patigi, Ilorin-South, Ilorin-East, Ifelodun, Moro, Edu, Oyun and Irepodun Local Government Area of Kwara State.

In Offa, 77.8%, Asa and Patigi 72.2%, Ilorin-South 61.1%,Ilorin-East 77.8%,Ifelodun 66.7%, Moro 55.6%, Edu 66.7%, Oyun 94,4% and Irepodun 77.8% of the respondent small scale nature of their farming and cropping system has been major factors responsible for short supply of farm produce in their areas and in Offa, 22.2%, Asa and Patigi 27.8%,Ilorin-South 38.9%, Ilorin-East 22.2%,Ifelodun and Edu 33.3%,Moro 44.4%,Oyun.

Table 4.4 shows factor responsible for farming and cropping system practiced in the study area which covers Offa, Asa, Patigi, Ilorin-South, Ilorin-East, Ifelodun, Moro, Edu, Oyun and Irepodun Local Government Area of Kwara State.

In Offa, 77.8%,Asa and Patigi 72.2%,Ilorin-South 61.1%,Ilorin-East 77.8%,Ifelodun 66.7%,Moro 55.6%,Edu 66.7%,Oyun 94,4% and Irepodun 77.8% of the respondent small scale uature of their farming and cropping system has been major factors responsible for short supply of farm produce in their areas and in Offa, 22.2%, Asa and Patigi 27.8%,Ilorin-South 38.9%,Ilorin-East 22.2%,Ifelodun and Edu 33.3%,Moro 44.4%,Oyun 5.6% and Irepodun 22.2% of the respondent says poor market value of the produce is another factor that is responsible for short supply of farm produce in their areas

Plate 2: Showing Mono cropping

Plate 3: Showing mix cropping maize and cassava

affordable, efficient and accessible to smallholders farmers.

iii. Access to Finance: Farmers often face challenges in accessing credit and loans to invest in modern farming inputs and equipment. Governments and financial institutions should

develop farmer-friendly loan programs with reasonable interest rates and flexible repayment terms to encourage agricultural investments.

iv. Climate Smart Agriculture: Promote the adoption of climate-smart agricultural practices, including crop rotation, agroforestry, and conservation agriculture, which can enhance resilience to climate change and reduce the environmental impact of farming.

v. **Market** Linkages: Facilitate better market linkages for farmers to ensure fair prices and reduce post-harvest losses. Establishing farmer cooperatives and strengthening the value chain from production to market can lead to improved income and livelihoods for farmers.

vi. Research and Development: Encourage research and development in agriculture to address region-specific challenges and discover innovative solutions. Investing in agricultural research can lead to the development of improved crop varieties, pest-resistant seeds, and sustainable farming techniques.

vii. Land **Tenure Security**: Address land tenure issues to provide farmers with secure land rights, encouraging long-term investments in agriculture and preventing conflicts over land.

viii. Youth Engagement: Encourage and support the involvement of young people in agriculture by providing training, incentives, and access to resources. Engaging youth in farming can bring new ideas and energy to the sector and ensure its continuity.

ix. Public-Private Partnerships: Foster collaborations between the government, private sector, and non-governmental organizations to pool resources and expertise for the development of the agricultural sector in Kwara State. By implementing the above recommendations, Kwara State can unlock its agricultural potential, promote sustainable farming practices, and improve the overall well-being of its farming communities.

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Appendix

Asa

$Farming Frequencies				
		Responses		
		N	Percent	Percent of Cases
TypeofFarmingSystema	Extensive	9	9.3%	50.0%
	Intensive	9	9.3%	50.0%
	Small_scale	6	6.2%	33.3%
	Large_scale	12		66.7%
	Crop	10	10.3%	55.6%
	Livestock	8	8.2%	44.4%
	Irrigated	2	2.1%	11.1%
	Rainfed	5	5.2%	27.8%
Total		97	100.0%	538.9%
a.Dichotomygrouptabulatedatvalue1				

Patigi

$FarmingFrequencies				
		Responses		PercentofCases
		N	Percent	
TypeofFarmingSystem	Extensive	17	15.9%	94.4%
	Intensive	1	0.9%	5.6%
	Small_scale	8	7.5%	44.4%
	Large_scale	10	9.3%	55.6%
	Crop	2	1.9%	11.1%
	Livestock	16	15.0%	88.9%
	Irrigated	12	11.2%	66.7%
	Rainfed	6	5.6%	33.3%
Total		107	100.0%	594.4%
a.Dichotomygrouptabulatedatvalue1				

ILRNS

$FarmingFrequencies				
		Responses		
		N	Percent	PercentofCases
TypeofFarmingSystem	Extensive	11	10.2%	61.1%
	Intensive	7	6.5%	38.9%
	Small_scale	14	13.0%	77.8%
	Large_scale	4	3.7%	22.2%

	Crop	14	13.0%	77.8%
	Livestock	4	3.7%	22.2%
	Rainfed	18	16.7%	100.0%
Total		108	100.0%	600.0%
a.Dichotomygrouptabulatedatvalue1.				

ILRNE

$FarmingFrequencies				
		Responses		PercentofCases
		N	Percent	
Typeoffarmingsystem	Extensive	14	13.0%	77.8%
	Intensive	4	3.7%	22.2%
	Small_scale	6	5.6%	33.3%
	Large_scale	12	11.1%	66.7%
	Crop	· 7	6.5%	38.9%
	Livestock	11	10.2%	61.1%
	Irrigated	13	12.0%	72.2%
	Rainfed	5	4.6%	27.8%
Total		108	100.0%	600.0%
a.Dichotomygrouptabulatedatvalue1.				

Oyun

IFLD

$FarmingFrequencies				
		Responses		
		N	Percent	PercentofCases
TypeofFarmingSystema	Extensive	10	9.3%	55.6%
	Intensive	8	7.5%	44.4%
	Small_scale	8	7.5%	44.4%
	Large_scale	10	9.3%	55.6%
	Crop	10	9.3%	55.6%
	Livestock	8	7.5%	44.4%
	Irrigated	2	1.9%	11.1%
	Rainfed	16	15.0%	88.9%
Total		107	100.0%	594.4%
a.Dichotomygrouptabulatedatvalue1.				

Moro

$FarmingFrequencies			
	· Responses		PercentofCases
	N	Percent	

TypeofFarmingSystema	Extensive	17	15.3%	94.4%
	Intensive	2	1.8%	11.1%
	Small_scale	10	9.0%	55.6%
	Large_scale	8	7.2%	44.4%
	Crop	16	14.4%	88.9%
	Livestock	3	2.7%	16.7%
	Irrigated	11	9.9%	61.1%
	Rainfed	8	7.2%	44.4%
Total		111	100.0%	616.7%
a.Dichotomygrouptabulatedatvalue1.				

$Farming Frequencies				
		Responses		Percent of Cases
		N	Percent	
TypeofFarmingSystem	Extensive	18	16.8%	100.0%
	Small_scale	11	10.3%	61.1%
	Large_scale	6	5.6%	33.3%
	Crop	18	16.8%	100.0%
	Irrigated	7	6.5%	38.9%
	Rainfed	11	10.3%	61.1%
Total		107	100.0%	594.4%
a.Dichotomygrouptabulatedatvalue1.				

$FarmingFrequencies				
		Responses		PercentofCases
		N	Percent	
TypeofFarmingSystem	Extensive	16	15.1%	88.9%
	Intensive	1	0.9%	5.6%
	Small_scale	2	1.9%	11.1%
	Large_scale	16	15.1%	88.9%
	RFLong	17	16.0%	94.4%
	Crop	6	5.7%	33.3%
	Livestock	12	11.3%	66.7%
	Rainfed	18	17.0%	100.0%
Total		106	100.0%	588.9%

$Farming Frequencies				
		Responses		
		N	Percent	Percent of Cases
TypeofFarmingSystema	Extensive	15	13.9%	83.3%
	Intensive	3	2.8%	16.7%
	Small_scale	3	2.8%	16.7%
	Large_scale	15	13.9%	83.3%
	Crop	11	10.2%	61.1%
	Livestock	7	6.5%	38.9%
	Irrigated	12	11.1%	66.7%
	Rainfed	6	5.6%	33.3%
Total		108	100.0%	600.0%
a.Dichotomygrouptabulatedatvalue1.				

PTG

	Sequential_Cropping	6	11.1%	[illegible]
	Inter_Cropping	12	22.2%	66.7%
Total		54	100.0%	300.0%
a.Dichotomygrouptabulatedatvalue1.				

Asa

SCrop Frequencles				
		Responses		PercentofCases
		N	Percent	
TypeofCroppingSystem	Mono_Cropping	5	11.1%	27.8%
	Mixed_Cropping	13	28.9%	72.2%
	Crop_Rotation	5	11.1%	27.8%
	Relay_Cropping	5	11.1%	27.8%
	Sequential_Cropping	9	20.0%	50.0%
	Inter_Cropping	8	17.8%	44.4%
Total		45	100.0%	250.0%
a.Dichotomygrouptabulatedatvalue1.				

$CropFrequencies			
	Responses		PercentofCases
	N	Percent	

TypeofCroppingSystema	Mono_Cropping	5	8.1%	27.8%
	Mixed_Cropping	13	21.0%	72.2%
	Crop_Rotation	13	21.0%	72.2%
	Relay_Cropping	13	21.0%	72.2%
	Sequential_Cropping	7	11.3%	38.9%
	Inter_Cropping	11	17.7%	61.1%
Total		62	100.0%	344.4%
a.Dichotomygrouptabulatedatvalue1.				

ILRNS

$CropFrequencies				
		Responses		PercentofCases
		N	Percent	
TypeofCroppingSystem	Mono_Cropping	5	10.0%	27.8%
	Mixed_Cropping	13	26.0%	72.2%
	Crop_Rotation	7	14.0%	38.9%
	Relay_Cropping	7	14.0%	38.9%
	Sequential_Cropping	10	20.0%	55.6%
	Inter_Cropping	8	16.0%	44.4%
Total		50	100.0%	277.8%
a.Dichotomygrouptabulatedatvalue 1.				

ILRNE

$Crop Frequencies				
		Responses		PercentofCases
		N	Percent	
TypeofCroppingSystema	Mixed_Cropping	18	45.0%	100.0%
	Mono_Cropping	5	10.0%	27.8%
	Crop_Rotation	2	5.0%	11.1%
	Relay_Cropping	2	5.0%	11.1%
	Sequential_Cropping	2	5.0%	11.1%
	Inter_Cropping	16	40.0%	88.9%
Total		40	100.0%	222.2%
a.Dichotomygrouptabulatedatvalue1.				

IFLD®

$CropFrequencies				
		Responses		PercentofCases
		N	Percent	
TypeofCroppingSystema	Mixed_Cropping	18	45.0%	100.0%
	Crop_Rotation	2	5.0%	11.1%

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	Mono_Cropping	5	10.0%	27.8%
	Relay_Cropping	2	5.0%	11.1%
	Sequential_Cropping	2	5.0%	11.1%
	Inter_Cropping	16	40.0%	88.9%
Total		40	100.0%	222.2%

a.Dichotomygrouptabulatedatvalue1.

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$CropFrequencies				
3		Responses		PercentofCases
		N	Percent	
TypeofCroppingSystem	Mono_Cropping	6	10.3%	33.3%
	Mixed_Cropping	12	20.7%	66.7%
	Crop_Rotation	11	19.0%	61.1%
	Relay_Cropping	11	19.0%	61.1%
	Sequential_Cropping	5	8.6%	27.8%
	Inter_Cropping	13	22.4%	72.2%
Total		58	100.0%	322.2%

a.Dichotomygrouptabulatedatvalue1.

IRPD

$Crop Frequencies				
		Responses		Percent of Cases
		N	Percent	
[illegible]ngSystem	Mono_Cropping	6	11.1%	33.3%
	Mixed_Cropping	12	22.2%	66.7%
	Crop_Rotation	15	27.8%	83.3%
	Relay_Cropping	3	5.6%	16.7%
	Sequential_Cropping	18	33.3%	100.0%
Total		54	100.0%	300.0%

a.Dichotomygrouptabulatedatvalue1.

Edu

$CroppingFrequencies				
		Responses		PercentofCases
		N	Percent	
TypeofCroppingSystema	Mono_Cropping	7	13.5%	38.9%
	Mixed_Cropping	11	21.2%	61.1%
	Crop_Rotation	9	17.3%	50.0%

	Relay_Cropping	6	11.5%	33.3%
	Sequential_Cropping	10	19.2%	55.6%
	Inter_Cropping	9	17.3%	50.0%
Total		52	100.0%	288.9%
a.Dichotomygrouptabulatedatvalue1.				

$CropFrequencies				
		Responses		PercentofCases
		N	Percent	
TypeofGroppingSystem	Mono_Cropping	4	7.4%	22.2%
	Mixed_Cropping	14	25.9%	77.8%
	Crop_Rotation	13	24.1%	72.2%
Patagi	Relay_Cropping	5	9.3%	27.8%
	Sequential_Cropping-	6	11.1%	33.3%
	Inter_Cropping	12	22.2%	66.7%
Total		54	100.0%	300.0%
a.Dichotomygrouptabulatedatvalue1.				

Level of Mechanization

Offa

IlorinSouth

Asa

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	13	72.2	72.2	72.2
	No	5	27.8	27.8	100.0
	Total	18	100.0	100.0	

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	3	16.7	16.7	16.7
	No	15	83.3	83.3	100.0
	Total	18	100.0	100.0	

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	3	16.7	16.7	16.7
	No	15	83.3	83.3	100.0
	Total	18	100.0	100.0	

ILRNE

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	9	50.0	50.0	50.0
	No	9	50.0	50.0	100.0
	Total	18	100.0	100.0	

Ifelodun

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	9	50.0	50.0	50.0
	No	9	50.0	50.0	100.0
	Total	18	100.0	100.0	.~

Moro

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	[illegible]	11	61.1	61.1	61.1
	[illegible]	7	38.9	38.9	100.0
	Total	18	100.0	100.0	

Edu

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	12	66.7	66.7	66.7

	No	6	33.3	33.3	100.0
	Total	18	100.0	100.0	

".

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Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Yes	2	11.1	11.1	11.1
	No	16	88.9	88.9	100.0
	Total	18	100.0	100.0	

Areyouusingmodernfarmingequipment?					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	[illegible]	16	88.9	88.9	88.9
	[illegible]	2	11.1	11.1	100.0
	Total	18	100.0	100.0	

Factors Responsible
Offa

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	4	22.2	22.2	22.2
	Smallscalenatureofthefarmin.gandcroppingsystempractice	14	77.8	77.8	100.0
	Total	18	100.0	100.0	

Asa

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	5	27.8	27.8	27.8
	Smallscalenatureofthefarmingandcroppingsystempractice	13	72.2	72.2	100.0
	Total	18	100.0	100.0	

ILRNS

IRPD

IFLD

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	5	27.8	27.8	27.8
	Smallscalenatureofthefarmingandcroppingsystempractice	13	72.2	72.2	100.0
	Total	18	100.0	100.0	

Moro

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	7	38.9	38.9	38.9
	Smallscalenatureofthefarmingandcroppingsystempractice	11	61.1	61.1	100.0
	Total	18	100.0	100.0	

0

ILRNE

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	4	22.2	22.2	22.2
	Smallscalenatureofthefarmingandcroppingsystempractice	14	77.8	77.8	100.0
	Total	18	100.0	100.0	

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	6	33.3	33.3	33.3
	Smallscalenatureofthefarmingandcroppingsystempractice	12	66.7	66.7	100.0

	Total	18	100.0	100.0	

마전

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	8	44.4	44.4	44.4
	Smallscalenatureofthefarmingandcroppingsystempractice	10	55.6	55.6	100.0
	Total	18	100.0	100.0	

Edu

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduce	6	33.3	33.3	33.3
	Smallscalenatureofthefarmingandcroppingsystempractice	12	66.7	66.7	100.0
	Total	18	100.0	100.0	

Oyun

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduc e	1	5.6	5.6	5.6
	Smallscalenatureofthefarmingandcroppingsystempractice	17	94.4	~な	100.0
	Total	18	100.0	100	94.4

IRPD

Factors					
		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Poormarketvalueoftheproduc e	4	22.2	22.2	22.2
	Smallscalenatureofthefarmingandcroppingsystempractice	14	77.8	77.8	100.0
	Total	18	100.0	100.0	

SECTION A: PERSONAL DATA

1. Name of your town/village…….
2. L.G.A…….
3. Sex: Male ( ) Female ( )
4. Age:……
5. Level of education: Primary ( ) Secondary ( ) Tertiary ( ) Informal ( )
6. Farming experience in year:…….
7. Farm size in hectare:……
8. Land tenure arrangement: Lease ( ) Purchase ( ) Inherit ( ) Rent ( ) Pledge ( ) Communal ( )
9. Output per annum in bag or kg:……..

SECTION B: FARMING SYSTEMS N PRACTICED

10. Which of the farming system do you practiced? (a) Extensive farming ( ) (b) Intensive farming ( )
11. Which of the farming system do you practiced? (a) Small scale farming ( ) (b) Large scale farming ( )
12. Which of the farming system do you practiced? (a) Commercial farming ( ) (b) Subsistence farming ( )
13. Which of the farming system do you practiced? (a)Rotational fallow farming (long shifting fallow) ( ) (b) Rotational fallow farming (short fallow) ( )
14. Which of the farming system do you practiced? (a)Mixed farming ( ) (b) Crop farming ( ) (c) Livestock farming ( )
15. Which of the farming system do you practiced? (a) Irrigated farming ( ) (b) Rain fed crop farming ( ) (c) The two ( )
16. Are you on the use of modern farming equipment's? (a) Yes ( ) (b) No ( )

17. If No to (17) above, give reason (a) farming system practiced do not permit the use of modern farming equipment's ( ) (b) equipment's not accessible ( )

18. Do you enjoyed government policy on agriculture for farming system in practiced? (a) Yes ( ) (b) No ( )
19. Which of the government policies on Agriculture do you enjoyed? (a) Barn on the importation of agricultural materials ( ) (b) Subsidies on agricultural farming inputs ( )
20. Are you making a good income from this farming system in practice? (a) Yes ( ) (b) No ( )
21. If No to (20) above, give reason. (a) Poor market value of the produce ( ) (b) small scale nature of the farming system in practice ( )

SECTION C: CROPPING SYSTEMS IN PRACTICE

22. Which of the cropping system do you practiced? (a) Mono cropping ( ) (b) mixed cropping ( )
23. Which of the cropping system do you practiced? (a) Crop rotation ( ) (b) Relay cropping ( )
24. Which of the cropping system do you practiced? (a) Sequential cropping ( ) (b) inter cropping ( )
25. Why are you in practice of this cropping system? (a) long growing season ( ) (b) short growing season ( ) (c) for greater yield (d) for ease of mechanization ( ) (e) soil degradation ( ) (f) small size of the farm ( ) (g) in expensive labor input ( ) (h) low risk of crop failure ( ) (i) land tenure arrangement ( )
26. Do you considered this cropping system in practice favorable? (a) Yes ( ) (b) No ( )
27. If no to (26) above give reason? (a) mechanization in planting operation is not possible ( ) (b) mechanization in crop protection operation not possible ( ) (c) mechanization in harvesting is not possible ( ) (d) all of the above ( )
28. If you consider this cropping system favorable, give reason. (a) greater yield per hectare ( ) (b) greater yield per annual ( ) (c) efficient use of avaiable resources ( ) (d)

low level of risk ( ) (e) ease of mechanization ( ) (f) improving soil fertility ( )

(g) All of the Above ( )

29. Do you enjoy government policies on agriculture foryour cropping system? (a) Yes ( ) (b) No ( )