

**ASSESSMENT OF CONTRIBUTIONS OF
FARMERS' COOPERATIVE SOCIETIES IN
AGRICULTURAL DEVELOPMENT IN KANO STATE,
NIGERIA.**

MOHAMMED GWADABE

(SPS/14/MEX/00008)

DATE: APRIL, 2019

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**DESERTATION SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL
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FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF
SCIENCE DEGREE IN AGRICULTURAL EXTENSION**

**SUPERVISORS:
PROF. M.I. DANEJI
DR. I. TAFIDA**

DATE: APRIL, 2019

DECLARATION

I hereby declare that this research work is the product of my efforts undertaken under the supervision of Professor M.I. Daneji and Dr. I.Tafida. It has not been presented anywhere for the award of degree certificate. All sources have been duly acknowledged.

Sign/Date
Mohammed Gwadabe
(SPS/14/MEX/00008)

CERTIFICATION

This is to certify that the research work for this dissertation was carried out under our supervision.

Professor M.I. Daneji
Supervisor

Date

Dr. I.Tafida
Internal Examiner

Date

Dr. A.Abdullahi
Head of Department

Date

APPROVAL

This dissertation ‘Assessment of Contribution of Farmers Cooperative Societies in Agricultural Development in Kano’ has been examined and approved for the award of Master in Agricultural Extension. Department of Agricultural Economics and Extension, Faculty of Agriculture, Bayero University Kano, Nigeria.

External examiner

Date

Dr. I. Tafida
(Internal Examiner)

Date

Prof. M.I.Daneji
Supervisor

Date

Dr. A. Abdullahi
Head of Department

Date

Dr. M.U. Dawaki
SPS Board Representative

Date

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DEDICATION

This dissertation work is dedicated to my lovely children; Safiyya Mohammed Gwadabe and Halima Mohammed Gwadabe.

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ABSTRACT

The study assessed the contribution of farmers cooperative societies to Agricultural development in Kano, state, Nigeria. Specifically, the study identified the socio economic status of members, benefit members derived from their society, factors influencing farmers attitudes towards cooperative society and constraints associated with the cooperatives in the study area. Data were collected with the aid of well-structured interview schedule, administered on 210 respondents, using multi stage sampling procedure. The data were analyzed with the use of SPSS 16.0 version. Descriptive statistical technique was employed and logic regression was used to measure the factors influencing farmers attitudes towards cooperative society. The study revealed that; age have means of 41.5 and this indicates that majority of the respondents fall within the age range that are economically productive, 88.6% of the respondents were male indicating the dominance of men in the societies while 11.4% were women. This may be as a result of cultural setting, societal structure and the division of labour that make it possible for the men to assigned more of their time to farming activities, whereas the women focus on domestic activities. Granting credit facilities to members, introducing new farming ideas and techniques of farming, subsidize agricultural input to members are some of the major benefit members derived from cooperative membership. However, 41 (19.5%) of the respondents have negative attitude towards cooperative society, 169 (80.5%) have shown positive attitudes towards agricultural cooperativessociety in the study area. An overall result shows that, 169 (80.5%) having positive attitudes mean that, their attitudes towards agricultural cooperatives society is favourable. Conclusively, there was significant relationship between the farmers socio-economics characteristic and farmers attitudes towards cooperative societies. It is recommended however that, Members of the societies should be highly encouraged and be more committed and fully participate for the development of the societies.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Agriculture, including farming, forestry, fisheries and livestock, is the main source of employment and income in rural areas, where the majority of the world's poor and hungry people live (food and agricultural organization (FAO, 2011). Agricultural cooperatives play an important role in supporting men and women small agricultural producers and marginalized groups by creating sustainable rural employment. Producer cooperatives offer men and women smallholders market opportunities, and provide them with services such as better training in natural resource - management, and better access to information, technologies, innovations and extension services (FAO, 2011).

Cooperatives have played a major role in the agricultural industries of all developed countries and many developing countries for well over a century. They have been important in farm supply, providing fertilizer and other inputs, and product marketing including transport, storage and processing (Yue Zhou, 2003). Different cooperatives are playing vital roles around the globe. For example, cooperatives control about 80% of dairy production, while in California most of the specialty crop producers are organized in cooperatives. In Colombia, the National Federation of Coffee Growers provides production and marketing services to 500,000 coffee growers. It contributes to the National Coffee Fund, which finances research and extension for coffee-growing communities. In 2005, the Indian Dairy Cooperatives, with 12.3 million members, accounted for 22% of the milk produced in India. 60% of members are landless or have very small plots of land. Women make up 25% of the membership. In Brazil, cooperatives are responsible for 40% of the agricultural GDP and 6% of total agribusiness exports (FAO, 2011).

In many countries, cooperatives are primarily agricultural. In Vietnam, 44% of all active cooperatives works in agricultural sector. In India, more than 50% of all cooperatives serve as primary agricultural credit societies or provide marketing, warehousing and other services to their producer members. In Kenya, 924000 farmers earn income from membership in agricultural cooperatives, (FAO, 2011). In Ethiopia 6,566, 694 households (more than 75% from rural) or 33% of the country's population is directly getting benefit from Cooperatives.

In Nigeria from 1950 to 1960 the cocoa producers cooperatives in the western region handled more than 40 percent of cocoa marketed; catered for inputs supply and distribution of cocoa, and thereby touching the lives of practically all farm families in the region. The involvement of cooperatives in palm produce processing and marketing in the eastern region was impressive, while cooperatives handled substantial proportions of groundnut and cotton in northern Nigeria (Umebali, 2006).

International cooperative alliance, ICA (1995), view cooperatives as “an autonomous associate of person united voluntarily to meet their common economic, social and cultural need and aspiration through a jointly owned and democratically controlled enterprises. Cooperatives are established by like-minded person to pursue mutually beneficial economic interest. Different type of cooperatives are in operation among which are multi-purposes cooperative, agricultural cooperative, marketing cooperative, supply cooperatives, credit cooperative, consumer cooperative, producer cooperative etc.

Tretcher (2001) stated that “cooperative organization has helped reduced cost and improve the quality for local government services while helping communities maintaining local autonomy. It also provides both purchasing and marketing functions for their affiliates local cooperatives. Cooperative organization tend to be locally owned and transfer the benefits of that ownership

to the local community, this potentially generates a greater economic impact than business that are not locally owned and which distribute the benefits of ownership outside the community where business is conducted (Crooks, 2004).

A cooperative organization reinforces the fact that they contribute to rural economy. Cooperative organizations also provide specific results that can be used to educate the public and policy makers less familiar with cooperatives about their impacts throughout the nation (Folsom, 2003). Employment opportunities are provided by cooperative organizations to the teeming population of the rural populace which helped greatly towards Socio -Economic development of both urban and rural areas (Ibrahim, 2001).

Cooperative Organizations' created returns on behalf of the members such as better prices than alternatives, valuable services access to markets otherwise not available, increased market power, valuable information.

Cooperative organizations have a unique link to member production areas and rely on areas where members are located. The necessity to remain in proximity to member makes it less likely to relocate to location that might have a cheaper raw products or labour. Such economic stability may generate a number of benefits for both members and their communities (Baarda, 2004).

International organizations such as the United Nations (UN), the World Bank and the International Labour Organization (ILO) are convinced that agricultural cooperatives can play a vital role in achieving sustainable agricultural development. UN (2008) noted that cooperatives are by nature concerned with democratic and human values, as well as caring for the environment. Successive governments in Nigeria recognize that cooperative societies are essential for the development of the agricultural sector. This laudable goal was supported by the establishment of the Agricultural Development Programmes (ADPs) and the River Basin and Rural

Development Authorities (RBRDAs). Both ADPs and RBRDAs always organize farmers under their programmes into cooperative groups for better co-ordination of the farmer's activities. Even so, cooperative has been long in existence in Nigeria since 1935 and the aim is to improve standard of living. The cooperatives approach to group action has been effectively utilized by these two programmes. Although, the primary objective of forming group farming cooperatives in ADPs and RBRDAs is to increase agricultural outputs, it has been possible to get them involved in marketing of their produce as well.

Farmers are the single largest group of users and managers of land, water, and other ecological resources throughout the world. Most small holder farmers regardless of gender require services and information obtainable through membership of agricultural cooperative. Such information includes appropriate technology and sound technical advice not only to increase their agricultural productivity and incomes but also to make farming and rural life richer and more sustainable. (Yamusa, 2014).

1.2 STATEMENT OF THE PROBLEM

Food production in Nigeria is not keeping pace with population growth. This has resulted in the upward trend in the price of food stuff. Therefore, this is creating a wide gap between the demand and supply of food. According to Ajayi (2008), the resulting effect of this imbalance between demand for and supply of food is malnutrition, poverty and deteriorating living conditions. Existence of institutions, documented evidence (IITA, 2002; Nze, 2002) showed that some agricultural technologies that are compatible with farmers' agro-climatic and socio-cultural environment have been developed and were lying in the shelves of the research institutes. Apart from the availability of new agricultural inputs, IITA, (2002) further stated that other research and development institutes in charge of agro-processing machines have developed a range of simple

and efficient small – scale processing equipment. But due to the weakness in technology transfer, the processing machines have remained largely with research institutes. Nnadozie and Nwaru (2002) also corroborated the report by adding that a number of appropriate technologies which can revolutionize rural problems in Nigeria are there in the shelves of many researchers and research institutions. In the same view Nze (2002) stated that research institutes have done well in the sourcing of agricultural technologies as well as improved agricultural inputs in all the components of agriculture. The implication of the above reports is that new agricultural technologies have been developed by research institutes and researchers but have not been effectively transferred to the farmers.

Since the inception of the research institutes, colleges and university faculties of agriculture and veterinary medicine, Nigeria has been in search for effective strategies for transferring the available farmer technologies from their sources to the ultimate users – the farmers. The search resulted in the establishment of Agricultural Development Programme (ADP) by the Federal Government of Nigeria in 1975 (Oladele, 2004). The first generation ADPs started as enclave projects in Funtua, Gusau and Gombe in the then Kaduna, Sokoto and Bauchi States, respectively. The achievements by the enclave ADPs at Ayangba, Lafia, Bida, Illorin, Ekiti-Akoko and Oyo North between 1979 and 1982 (Oladele, 2004; Akpobo, 2007). Presently, all the states in Nigeria have established ADPs for agricultural extension purposes. To effectively transfer, agricultural technology to over 70% of her population who are farmer, training and visit ExtensionSystem which was based on diffusion model, was adopted (Benor and Baxter, 1984). The main aim of ADP is to ensure that information on new agricultural technologies reach the farmers – male or female. This role is very vital because farmers cannot successfully adopt a new technology unless they are aware of it and learn how to incorporate it into their farming business.

When one observe the existence of ADPs in all the states of the federation, the research institutions and the colleges and faculties of agriculture in Nigeria, one is left with no option than to conclude that government has tried. But ironically, reports have indicated that agricultural technologies have not made much impact in agricultural development (Yahaya, 2003).

In a study conducted by Agwu and Agada (2010) in Benue State, Nigeria, the authors reported that majority (73.3%) of the participants had no contact with the extension agents within one year. Only 16.7% had between one and three contacts with extension agents while 10.0% had between four and six visits within one year. This implies that most farmers in that state did not receive the necessary attention and support from the extension organization/agents.

This confirmed the observation made by Ladele and Ayoola (2011) that the effects of various extension approaches adopted in Nigeria has not significantly transformed the agricultural and rural landscape. The authors further added that there are poor linkages and interaction in the entire research-extension-farmers systems which often resulted in the delivery of inappropriate technologies and subsequent low adoption by farmers. Similarly, the agricultural cooperatives have been there over the years to play this role of technology transfer to farmers toward achieving food security and also the socio economic upliftment of the farmers.

Oyido (1997) has noted that, virtually all the programmes and policies on cooperative were beautiful and fulfilling, but they could not achieve their set objectives because of over dependence on government. FMARD (2001) noted that, ninety six percent of cooperative societies in the country are designed basically to serve the needs of agriculture. Even the four percent constitute nonagricultural cooperative societies have great relevance for agriculture and use agricultural product and by-products. Consequently, one of the possible ways of redressing these constraints is to mobilize the desperate small holder farmer form groups and agricultural cooperative is a

veritable platform for this exercise. The challenge in this work is to assess the contributions of cooperative societies to agricultural development in Kano State.

The study intends to find answers to the following research questions;

- i. What are the socio economic characteristics of the farmers in the study area?
- ii. What are the benefits derived by the farmers from cooperative membership?
- iii. What are the factors influencing farmers attitudes towards cooperative membership? and
- v. What are the constraints affecting the sustainability of farmers cooperative societies?

1.3 OBJECTIVE OF THE STUDY

The broad objectives of the study is to assess the contribution of farmers cooperative societies to Agricultural development. However, the specific objectives of the study are to:

- i. describe the socio economic characteristic of the farmers in the study area;
- ii. identify the benefits derived by the farmers from the cooperative membership;
- iv. determine the factors influencing farmers attitudes towards cooperative society; and
- v. describe the constraints affecting the sustainability of farmers cooperative societies in the study area.

1.3.1 Hypothesis

H_0 = There is no significant relationship between the farmers socio- economic characteristic and farmers attitude towards cooperative society in the study area.

1.4 JUSTIFICATION TO THE STUDY

Today in an era where many people (especially small holder farmers) feel powerless to change their lives, cooperatives can serve as a strong, vibrant and viable economic alternative. It is based on the powerful idea that a group of people can achieve goals that none of them can achieve alone. It has been considered as a third force, an alternative and countervailing power to both big business and big government (ICA, 1995). The study therefore intends to draw attention of the farmers and other stakeholders to consider the roles played by cooperative societies in improving farmer's production.

It will help to identify the challenges faced by agricultural cooperative societies in the study area, and offer possible solutions to the problems toward ensuring viable and developmental delivery of agricultural cooperative services in the study area. It seeks to contribute to the emerging body of knowledge on how best to make rural farmers' cooperatives to be more productive. It will deepen the understanding of the values and principles of cooperatives, incorporating them into competitive strategies, relying on cooperation, trust, loyalty as coordinating forces of economic activities and as sources of competitive difference in agricultural system (Yamusa, 2014).

CHAPTER TWO

LITERATURE REVIEW

2.1 CONCEPTUAL DEFINITIONS OF COOPERATIVE

The idea of people working together is the basis for the formation of cooperatives. The International Cooperative Alliance (ICA) viewed cooperative as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise. This definition emphasizes that cooperatives are based on the values of self-help, self-responsibility, democracy and equality (ICA, 2007).

Cooperative societies are community based, self-controlled and self-funded microfinance institutions (Simkhada, 2004) because they are meant to operate at the micro level in most cases to serve the low level strata of the economy, to people who in most cases lack access to formal banking system.

Cooperatives are financial organizations that are owned and controlled by the members and they provide savings and credit services to their members in the community (Sharma, 2005).

Cooperatives are a form of microfinance institutions owned by group of people who are the members and they provide small scale financial services – majorly savings and loans – just like any other microfinance institutions to their members. This is different from the formal microfinance institutions such as the microfinance banks (MFBs) in Nigeria which are meant to serve the general public. Cooperative are voluntary association that are members owned, self-managed and democratically controlled within a specific location (Adebayo & Yusuf, 2004). The existence of cooperative in a community suggests that they may be location bound or restricted which also apply to some formal microfinance institutions especially the MFBs in Nigeria with

the microfinance policy delineating the operational locations of MFB (CBN, 2005) either as a unit MFB or a state-wide MFB.

Cooperatives are independent association of people who voluntarily unite to form a jointly owned and democratically controlled enterprise called cooperative, to meet members' economic social and cultural needs (Henry & Schimmel, 2011). Cooperative can be seen as an arrangement designed to improve the lot of individuals and enhance micro and small scale entrepreneurs both in the rural and urban areas in mobilising savings and accessing fund as loan as at when needed from the scheme. Cooperative societies are privately organized association of individuals of like minds who come together to operate a savings and loan program among themselves (Oluyombo, 2010).

Cooperative are therefore owned and controlled by the members who voluntarily come together based on share value to meet members' needs. Cooperative is an association of individuals who voluntarily pool their resources together in their quest for the economic benefits of the members (Lohlein & Wehrheim, 2003). Cooperative can be an intervention based on social intermediation in which poor people can mobilize their savings, link them with credit and finally become self-employed (Singh, 2004). The social intermediation in cooperative societies includes training of members on different areas of vocations, health literacy, business record keeping and management skills as found necessary. Social intermediation also include support for members in trouble such as sickness and those having essential social function to perform such as burials and weddings.

Cooperative is one of a range of financial arrangement designed to attract the poor as either borrowers and/or savers (Montgomery & Weiss, 2005). Cooperative is a microfinance arrangement to help the low income earners with financial services that will enable them to create

wealth any discrepancy as to the gender of such persons. Cooperative enables low income people to access financial and non-financial services that are packaged in a manner that enable those who are unable to access formal financial services to access comparatively small loans, saving, schemes and other services for working capital and income generation (Nathan, 2004).

Cooperative are privately organized institutions that are owned and controlled by their members (Branch, 2004). One person, one vote is therefore applicable to cooperative societies because the association is jointly owned by the members. There is uniformity in membership class of cooperative members, unlike ownership of a limited company that can comprise of ordinary shareholders and preference shareholders. Cooperative is a voluntary group of people that work to meet member's common economic, cultural and social needs, using a jointly owned and controlled enterprises (Allahdadi, 2011). "They appear to be the most standardised informal financial institutions with well-organized savings mobilization strategy in the informal market" (Oloyede, 2008).

Cooperative societies, also known as credit cooperatives, credit unions, financial cooperatives, and savings and credit cooperative could be government sponsored, members sponsored or program sponsored (Ghosh&Maharjan, 2001; Simkhada, 2004). The government sponsored cooperatives are cooperatives established, owned and funded by the government to accomplish its economic objectives. Cooperatives that are established and owned by the individual members of the cooperatives are regarded as members sponsored cooperatives. Program sponsored cooperatives are established and owned by an existing organization which may be an NGO, bank, donor etc. with specific purpose of poverty eradication, targeted towards a particular group of people in a specific location.

Governments of different nations define and promote cooperatives according to their own social, cultural and economic conditions. In America, a cooperative is a business owned and democratically controlled by the people who use its services and whose benefits are derived and distributed equitably on the basis of use (ICA, 2007). In New Zealand, Cooperative Companies Act (1996) define cooperative as an organization in which those who transact with the organization also own and formally control the organization, and derive significant benefits from those transactions over and above any financial returns they derive from their investment in the organization (Evans & Meade, 2006). In China however, the newly enacted farmers' cooperatives law defined cooperative as a self-help organization which associated voluntarily and controlled by producers of the same agricultural products or service providers and users of the same agricultural business operations (Zhang, 1999).

The definition of cooperatives is built on four major words; first, they are formed by groups of people, who have a specified need or problem. Second, the organization is formed freely by members after contributing to its assets. Thirdly, the organization formed, is governed democratically in order to achieve desired objectives on equitable norms, and fourth, it is an independent enterprise promoted, owned and controlled by people to meet their needs (ICA, 2007). It is about people's organization to capture different opportunities in the economy where they can address their economic needs and aspirations. A cooperative can therefore provide a hub for organizing particular local economic interests and/or for protecting common pool resources (Simmons & Birchall, 2008).

Farmers' cooperative can therefore be defined as voluntary business associations formed by people (mostly farmers) of limited means through contribution of share capital that forms the basis of sharing out the profits that accrue from the business (Wanyama, Develtere & Pollet, 2008).

In developed countries, rural cooperatives have significantly contributed to the mobilization and distribution of financial capital, created employment, and constituted a forum for education and training, social welfare and poverty alleviation, and other socio-economic problems (Yamusa, 2004). Farmers' cooperatives offer new opportunities for farmers to expand and strengthen their own organizations to reach their full economic and social potential. It is an organization created by people to common felt need and means to help their members both from a business point of view, as they enable private farmers to benefit from economies of scale and stimulate competition, and from a social point of view, since they encourage cohesion and cooperation at the community level.

2.2 AGRICULTURAL COOPERATIVE SOCIETY

Agricultural cooperative are cooperative societies that specialize in the production, processing, marketing and distribution of the agricultural products of their members. These types of cooperative societies cover such cooperatives that engage in the agricultural sector of our economy. Some agricultural cooperatives in the country engage in group farming, while members of these societies engage in the production of a variety of crops and they also arrange for the marketing of such crops. Some agricultural cooperative engage in cultivation of single crops and such societies are named after the crops (e.g) cassava grower cooperatives. There are also some types of cooperatives that specialized in marketing agricultural commodities.

2.2.1 Roles of Agricultural Cooperative in Economic Development

The initial attempt at introducing modern cooperatives in the country originated in the agriculture sector. Then the cocoa farmers were the pioneers of modern cooperatives in Nigeria. Agricultural cooperatives are the types organized by farmers in order to promote their economic interest by

helping themselves to solve their economic problems collectively. The following roles are performed by agricultural cooperatives:-

- It helps the members of the society to mobilized resources among themselves for their operation and also to obtain credits from financial institutions. An agricultural cooperative usually provides joint collateral for loans from banks (e.g) certificate o registration, such loans are usually distributed to the members to help them in production and marketing of their agricultural produce. The members cannot provide such required collateral security individually.
- Agricultural cooperatives help the members to enjoy the economies of large scale in production, processing and marketing of their products. Such economic advantages as bulk purchase of farm inputs, mechanized farming, group and large scale farming are economics of scale which are enjoyed by members of agricultural cooperatives which they cannot ordinarily enjoy as individual farmers.
- Agricultural cooperatives usually engage in direct marketing of their agricultural produce. When this is done, the middlemen are usually by –passed. This enables the agricultural cooperatives to protect the members from exploitation by such middlemen.
- Agricultural cooperative societies help members in acquisition of farm inputs, such as seedlings, machinery etc. these farm inputs are usually purchased jointly through the society thereby reducing the high units cost which members should have incurred should they have purchased such inputs individually.
- One of the most important role of every cooperative is to provide education training and information to both members and the general public. Agricultural cooperative provide education and training to its members in modern agricultural practice, and techniques. They

also help in disseminating information during meetings etc. they can also do that through demonstration farms. Agricultural cooperatives help agricultural extension worker to easily make contact with farmer in groups than individually.

- Agricultural cooperative provide employment in rural areas. This is because it encourages youth to be involved in large scale/groups mechanized farming.
- An agricultural cooperative that engage in multi-purpose activities helps in providing other essential services and goods for the farmers in the rural areas.

2.2.2 Type of Agricultural Cooperatives

There are four main type of agricultural cooperative and these are produce farming, marketing, supply and credit. Agricultural cooperatives can also combine two or more of these functions to have a multipurpose cooperative society.

2.2.3 Agricultural Producer Cooperatives

The agricultural producer cooperatives are mainly for cultivation of agricultural crops ranging from cash to food crops. This can be in various forms. It can be through the joint ownership of farm, that is group farming to produce various types of crops. The society may as well engage in the marketing of their produce. Another form of agricultural producer cooperatives is the type that specializes in the production of single crops (e.g) cashew producer cooperatives. The members may have joint farm or individual farms.

2.2.4 Agricultural Marketing Cooperative

This type is involved in collecting cooperative farmer produce or agro-related products for sale for the members with the intention to market these products at the best advantageous price for the farmer-members. They also help to by-pass the middlemen thereby making the members enjoy such profits that could have otherwise gone to the middlemen. During the early stage of

cooperative development in the country, the societies were involved only in the marketing of export crops such as cocoa, palm produce, etc. presently they are involved in marketing of food crops.

2.2.5 Agricultural Supply Cooperatives

This is the type of agricultural cooperatives that specializes in the supply of agricultural inputs to the members. Here, the members usually purchases the required inputs jointly as a cooperative and then distribute to members in cases where they have individual farms. The advantages here, is that since these inputs are jointly purchased at large scale quantities, the unit cost is reduced which also helps to reduce the cost of production thereby increasing the benefits accruable to the members.

2.2.6 Agricultural Credit Cooperatives

This type is concerned with mobilization of credit facilities and making them available to members at a low cost for their economic activities. This type is similar to the normal thrift and credit cooperatives except that their main aim is to use such fund only for agricultural purposes.

2.2.7 Agricultural Multi-Purposes Cooperatives

These societies combine two or more of the above mention function in agriculture. The agricultural multipurpose cooperatives serve their members better. A greater percentage of agricultural cooperatives in the countries engage in multi-purpose activities.

2.3 FARMER'S BENEFITS AS CO-OPERATORS

A farmer derives both social and economic gains as a member of cooperative society. By belonging to an agricultural co-operative society, he/she learns such virtues as (1) orderliness (2) foresight (3) punctuality and (4) strict respect for engagements entered into, which are not

necessarily profit-oriented. In addition, the farmers make socioeconomic gains. These include:(Aigbokhan, 2000).

- The farmer is now a part of a social gathering identified by common needs and objectives.
- There is usually a sense of belonging which makes him/her act in concert with others in matters affecting the group, in the decision making process and implementation of programmes. Thus, he/she is exposed to better opportunities for skill improvement. The farmer-member has access to the tree training and functional education facilities provided by the society.
- Economically, farming needs and problems of each member are the concern of the group e.g. he/she could hire agricultural machinery and equipment from the society more cheaply than buying these as an individual.
- Agricultural inputs (seeds, seedling, insecticides, fertilizers, fungicides etc) could easily be obtained and at cheaper prices by the farmers from the co-operative society. (Chambo, 2009).
- There is also a great opportunity for capital formation. The farmer-members pool their financial resources together with a view to providing credit to members.
- The equitable distribution of bonus to members from the society's annual surpluses is assured. Besides the share capital payable by each member is within the reach and control of members.
- The members of co-operatives have easier access to government aid schemes for improved production and income such as agricultural loan facilities.
- A member of co-operative society can also process, store and market his/her farm products more efficiently and for a lower cost through the use of joint facilities and services provided by the society (Develtere, 2009).
- Finally, there is significant increase in farmer's productivity, income and eventually increased standard of living, general welfare of the farmer and his/her family.

2.4 PROBLEMS OF AGRICULTURAL COOPERATIVES IN NIGERIA

Cooperative societies in Nigeria are known to be facing numerous problems. Most of these problems also affects agricultural cooperatives. Also some of these problems which are peculiar to agricultural cooperatives in Nigeria, can therefore be summarized as follows:

2.4.1 Lack of Capital

Most agricultural cooperative societies lack the require capital needed for the proper functioning of their societies. Agricultural cooperative societies by their nature requirement large amount of capital for procurement of farm equipment, farm inputs, hiring of labour etc. also the proper management of agricultural cooperatives require such services as cultivation, planting, harvesting, storage and processing which by their nature need large amount of capital which cannot be easily provided by the members. Also due to the long-term nature of agricultural produce especially cash crops, financial institution especially commercial banks usually find it difficult to finance agricultural cooperatives. Also the low economic background of the member usually makes it difficult for them to provide the collateral securities required by commercial banks.

2.4.2 Difficulties in Obtaining Government Facilities.

Most agricultural cooperative usually experience problems in obtaining government facilities. This makes it easier for individual farmers to have influence in obtaining such facilities as tractor hiring. Also they find it difficult to have access to the agricultural credit Guarantee loans scheme of the central banks.

2.4.3 Lack of Storage Facilities

Most agricultural cooperatives that were successful in large scale production especially those engaged in seasonal crops or perishable crops usually experience wastage as a result of lack of storage facilities. This is because farm output are usually large during harvest seasons and this

leads to fall in price at the period, thereby reducing the income due to the members. Lack of storage facilities. Makes it difficult for agricultural cooperatives to store their produce till the off-season periods when prices are expected to rise for them to make increased income.

2.4.4 Lack of Patronages

Patronages in agricultural cooperatives come in two ways. First members are expected to patronized the services of their society. They may need to deliver their reproduce to their society. In societies that engage in joint farming, members need to devote enough time from the preparation stage to harvest stage.

Secondly, the produce of the agricultural cooperatives need to be sold to customer. Here the patronages of the public/customer are needed in order for the societies to archive its objectives.

2.4.5 Inadequate Marketing Outlets

Most agricultural cooperatives are based in the rural areas while their produce are mainly needed in the urban areas. To bridge this gap, agricultural cooperatives require marketing outlets in the urban area. They usually experience difficulty in establishing such outlets due to poor infrastructural facilities like road, water ways warehouses, organized produce markets etc.

2.4.6 Lack of Processing Facilities

In order to avoid the wastage assaulted with seasonal produce, adequate processing facilities are required, but due to the large capital requirement for the establishment of such facilities, it is usually lacking. Also few agricultural societies have access to some processing facilities in the urban area.

2.4.7 High Labour Cost

Agricultural cooperatives are labour intensive compared to other types of cooperatives. Also based on the fact that most agricultural societies does not practices mechanized farming, the labour requirement.

Also due to higher attractive remuneration enjoy other occupation, people use to avoid agricultural cooperatives.

2.4.8 Technological Constraints

Most agricultural cooperatives in existence still use traditional farming methods and implements. This is usually as a result of high cost associated with acquiring modern farming equipment.

2.4.9 Environmental Constraint

Natural hazard and diseases such as pest usually affect the agricultural output of such societies. Bad weather also discourage people from engaging in agriculture.

2.4.10 Institutional Constraint

Inconsistency associated with government policies and programmes on agriculture have contributed highly to the problems of agricultural cooperatives. The agricultural extension and research service provided by the government is very weak. The lack of adequate extension services have contributed in widening the gap between the rural farmers, policy makers and government agents,

2.4.11 Traditional Attitude to Land Ownership

The traditional system of land ownership and communal ownership of land affects the possibility of acquiring the required size of land needed for cooperative farming. Most viable agricultural cooperatives found it difficult to acquire enough land for mechanized farming.

2.4.12 Inadequate Trained Personnel and Poor Management

Most agricultural cooperatives lack train personnel to run their cooperatives. Also, this usually leads to poor management thereby giving room for misappropriation of the societies fund.

2.5 AGRICULTURAL DEVELOPMENT

Agricultural development is an integral part of national development. It is that aspect of development that is related to agrarian reforms. Considering the contribution of agriculture to the socio-economic development of many countries, several scholars have postulated theories linking agriculture with national development. Agricultural development is defined as the process that creates the conditions for the fulfillment of agricultural potential. Those conditions include the accumulation of knowledge and availability of technology as well as the allocation of inputs and output. Therefore, agricultural development can be viewed as another area of development, which connotes improvement in the principles, and practice of agriculture given both human and material resources that will result in maximum output from a combination of minimum inputs (Merrett and Walzer, 2004).

Agricultural development in Nigeria faces several constraints; the most critical of these includes lack of appropriate technology, land tenure system, inputs problems, under developed marketing system, lack of finance and lack of coherent national policy framework.

While most of these problems have generated a lot of interest and debate among academics and policy makers in Nigeria, much still needs to be done by the government in establishing tentative

development projects and programmes for the achievement of national objectives. Again the most crucial, is provision of deliberate frame work for policy consistency in the execution of such agricultural development programmes (Nkang et al, 2019).

Today, when population is increasing so fast, there is the need to think more seriously about the improvement of farming methods in order to get increasing yield of food and raw materials to the society and industries. Merrett and Walzer (2004) had remarked that agricultural development basically means getting more out of the soil in the farm of crops and breeding more live stock in order to meet the world's increasing needs.

However, Todaro (2009) viewed agricultural development as the transformation of agricultural sectors through three stages of agricultural production. The first is the low productivity, mostly subsistence pattern of production characterized by peasant farmers still prevalent in Africa. The second stage is diversified or mixed family agriculture, where a small part of the produce is grown for domestic consumption and a significant part for sale to the commercial sector as food in parts of Asia. The third stage represents the modern farm, with high productivity engaging in specialized agriculture geared to the commercial sector as obtained in many developed countries. Therefore, agricultural development can be described in terms of gradual but sustained transition from subsistence to diversified and specialized production.

Again, agricultural development was recognized as agricultural modernization as you have in irrigation schemes employing innovative ideas, modern techniques that dramatically reduces hunger and poverty and diversified the economy (Develtere, 2009).

In the context of Nigeria, agricultural development can be expressed as a gradual transformation from subsistence farming culture to commercial farming, from the use of inefficient farming methods to the use of more efficient farming methods and techniques. The process will involve

the gradual substitution of local implements with improved or modern ones and local species with improved ones. Agricultural development promotes the proper conditions for farming so that planting, harvesting and processing of crops can be done effectively, which ultimately can empower small holders and reduce poverty (World Bank, 2004).

These continuous efforts may affect peasant farmers and subsequently their goals. If this plan is successful, peasants may change their cropping patterns in favour of crops which proved more profitable (Birchall, 2004).

A change in land tenure affects in turn the power structure and may change the goal-setters in the society and thus, the relevant goals (Serag, 1995). This however, must not prevent understanding development as a system of interrelated changes which requires integrated instead of isolated measures. Development is one of the main goals that all communities try to achieve in order to improve the living standards of individuals in those communities (Mohamed, 2004).

Farmers' cooperatives have played an important role in rural development through development of agriculture. The agricultural cooperatives are considered to be the most important organizations that pay attention and try to support rural development in general and the agricultural development in particular through the activities and services achieved for the sake of farmers (Mohamed, 2004).

Levin (2002) remarked that although cooperatives are economic organizations in the first place, they also have social aims in addition to the economic ones they seek. They aim at developing the agricultural processes with its various fields as well as participating in achieving the rural development in villages.

The role of the cooperative is not only confined to providing farm inputs such as fertilizers, seedlings and chemical materials, but also engaged in organizing training for the farmers to

acquire necessary knowledge and skills on new technology that aims at increasing agricultural production and promoting rural welfare. The cooperatives also seek to urge members to participate in social activities (UN, 2008).

2.6 THEORETICAL FRAMEWORK ON SOCIAL CAPITAL THEORY

Relationship between members and the cooperatives can be characterized by information asymmetry since members usually have small amount of equity investment and are not obliged to use any or all of the cooperatives' business. Social capital provide the base of a definition adapted here for agricultural cooperatives and used throughout this research: the set of resources, tangible or intangible, that build over time to cooperative constituents through their social relationships, facilitating the attainment of goals. Here, cooperative constituents refer to the cooperative, its members, employees, and management. Analysts in previous studies categorize social capital into bonding and bridging. These distinctions not only help clarify the concept of social capital but also help suggest metrics for the measurement of social capital. However, in practice the categories are interrelated and not mutually exclusive.

Musa, (2001) originally suggested the distinction of bonding and bridging social capital. The categories help define the coverage and functions of social capital. Bonding social capital describes the links between individuals or groups with similar goals within the network. It is a form of social capital that results in tightening the internal relationships, which reinforce identities and maintain homogeneity. It refers to trust and reciprocity in dense, closed and homogenous networks. Bridging social capital describes the capacity of individuals or groups to make links with others outside their organization, particularly across social networks. It is a form of social capital that results in connecting external resources horizontally and brings together less homogeneous people across diverse social divisions. This facilitates the process of 'getting

ahead', which involves overlapping networks, possibly making accessible the resources and opportunities of one network available to members of another. Heterogeneity or diversity of network members is argued to enhance the bridging capabilities of social capital.

From a different vantage point, Ibrahim (2001) distinguish the concept of social capital into structural and cognitive components where the proxies of social capital reside. The structural dimension describes the networks in which people or organizations retain their relationships. Structural social capital facilitates collective actions through roles, rules, procedures, and precedents. The cognitive dimension delineates norms, values, attitudes, and beliefs, where the proxies reside in agents' perception. Cognitive social capital predisposes people toward collective actions. Structural social capital refers to relationships, networks and associations while cognitive social capital refers to norms and values as the driving force behind these visible forms of structural social capital. It is usually interpreted as the density or strength of the structural dimension.

2.6.1 Why social capital matters in the agricultural cooperative?

Formal organizations are designed explicitly to bring members together to undertake a primary task, to coordinate resources and to supervise activities. By design, they rely on social capital as well as generate it. The agricultural cooperative system is designed to be the network structure. Member farmers running their farms independently for their own benefits are banded together voluntarily as one entity. In doing so, they make commitments to marketing their products and purchasing their raw materials through their cooperative. These commitments are based on the expectation that they can take advantage of collective actions, in which other members also are expected to participate. Without trust and reciprocity among members, these commitments are futile.

Based on these arguments, Masterson (2007) claims that the agricultural cooperative is the most social capital dependent organization. The cooperative spirit is widely accepted as the main force of the cooperative (Sexton & Iskow, 2005).

This can be interpreted as cooperative's social capital. The strength of a cooperative lies in its ability to cultivate a feeling of trust and confidence among its members and in a strong commitment. This is cooperative spirit. Looking back to the birth of the cooperative, early cooperatives designed the cooperative system based on the power of collective actions of the economically weak. They operated under the Cooperative Principles of trust and reciprocity among members to maintain collective actions. Although, they might have not known the concept of social capital, they used a similar concept. From the days of the Rochdale Equitable Pioneers Society, they had tried to enhance the cooperative spirit among members through education and training. Member education is one of the principles from Rochdale. To examine how social capital works latently in the agricultural cooperatives, the cooperatives' success factors are explored by the roles of social capital with the view of Sexton and Iskow (2005).

However, the incentives to join the agricultural cooperative are farmers' economic needs and expectation in terms of improving their economic situation. Collective action can represent a form of integration for members' businesses, especially important where market failure is occurring and to reduce transaction costs. By exploiting market failure a successful cooperative can provide its members with appropriate profit. In other viewpoints, social capital enhances the flow of information inside the agricultural cooperative and help cooperative's decision-making with members' voting by efficient collective actions. If the cooperative leadership and management maintain members' trust and loyalty, it is easy to reach decisions despite many voices of equal voting power. Since the agricultural cooperative is operated in terms of long-run

perspectives, trust on management is a very important social capital. Additionally loyalty to the cooperative helps members to overcome the short-run loss and to sustain their commitment without explicit contracts. Second, Financial keys to success. The free-rider problem in equity issues is a very serious chronic problem experienced by cooperatives. Capital gains of the equity investments from the stocks of investor-owned firms (IOFs) are not usually available for members of the cooperative. These factors reduce the incentive to invest equity in the agricultural cooperative. The frequent contacts, widespread existence of reciprocity and rich social environment of participation, which nurture social capital are claimed to reduce the tendencies to free-ride and default for personal advantage (Paldam&Svendsen, 2000).

However, cooperatives actively control members' output to gain bargaining power in the market. Without this policy, it is not easy for cooperatives just to rely on market situations and consequent economic gains which cannot be guaranteed. To lead members and to make them follow output control policy, cooperatives should acquire and keep loyalty and trust from members. In the quality control, social capital can help improve the quality of the product by encouraging member to disseminate the information on farming technologies, enhancing the trust on the decision of the product quality. This is one of the organizational advantages of cooperatives with the superior communication and information flow. It is generally accepted that social capital can contribute to the economic performance and growth. As they are an efficient factor in business activities and a critical source for the success of the cooperatives, management should focus on developing and maintaining social capital.

As discussed in the operational aspects, social capital can be a good barometer to evaluate the unrealized long-term performance. It helps transition from the short-term goals of the cooperative business of the cooperation to pursue the longer-term goals of trust and reciprocity among

cooperative players. Although management can produce favorable results in business, it is almost impossible to sustain the success without the participation of members in the cooperative system. Therefore, management should encourage its members to participate in the cooperative business. Under these processes, the relationship between members and management is promoted and social capital results. From this viewpoint, social capital can be used to evaluate the performance of the management.

Consequently the level of social capital in the cooperative conceptually can be used as a long-term evaluation tool for the management. Since well-being of members should be evaluated from a long-term perspective, social capital is a legitimate criterion for evaluation of management from the long-term perspective of the cooperative. If agricultural cooperatives have an adequate amount of social capital, it can be presumed that collective actions are made easily and businesses are operated harmoniously in and out of the organization. Then it is possible to predict the success of agricultural cooperatives. It is reasonable to assume that organizations with relatively high social capital will be more effective and efficient than those with low social capital (Gilson, 2003).

2.6.2 The Cooperative Model and Agricultural Development

Bijman (2003) identified three main factors that determine the success of cooperatives in agricultural development. These factors relate to (a) position in the food supply chain, (b) internal governance, and (c) the institutional environment. These three factors (Figure 1) constitute the three building blocks of the analytical framework adopted in this study in order to explain the impact the cooperative model could have in agricultural development.

The position of cooperatives in the food supply chain refers to the competitiveness of cooperatives vis-à-vis its partners, such as processors, wholesalers and retailers. It also refers to

the strategy that the cooperative follows in choosing a particular position in the food chain. Internal governance refers to the decision-making processes adopted, the role of the different governing bodies, and the allocation of control rights to members and professional management (Cook, 2012).

Further, the internal governance refers to issues such as the organizational structure of the cooperative enterprise (e.g. the formation of holding and daughter companies).

Figure 1 Factors affecting cooperative performance and competitiveness

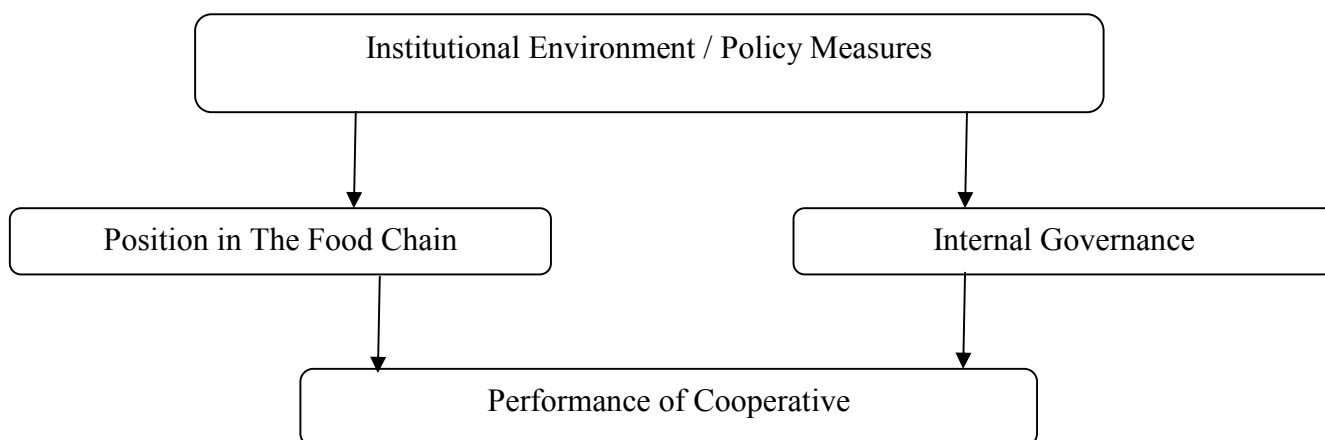


Figure 1. Adapted from Bijman, 2003

The institutional environment refers to the social, cultural, political and legal context in which cooperative operates, and which may have a supporting or constraining effect on the cooperatives’ performance. History is an important ingredient of the institutional environment. For example, positive past experiences of cooperative development usually have resulted in the generation of trust and has boosted social capital –both necessary for efficient operation of the cooperative as well as for establishing new cooperatives. Legal aspects of the institutional environment, such as taxation and competition laws, are equally crucial in fostering or deterring cooperative development (Bijman, 2003).

Potential benefits from the cooperative model include: allows like-minded people to provide themselves with desired goods and services at a reasonable cost. The traditional democratic

control model of "one-man-one vote" means decisions are made by all members, and prevents one person or a small group of people from getting control. Income generated by the cooperatives remains in the community. Profits not reinvested in the cooperatives are Institutional Environment/Policy measures Position in the food chain Internal governance Performance of Cooperative allocated proportionally and paid back to members based on their volume of business.

Limited liability of members, that is, members/owners liability is limited to the amount of the value of their shares plus any shares that have been purchased but are unpaid. Permanence - A cooperatives enterprise continues even if members/owners leave. The cooperative movement provides educational and networking opportunities at a local, regional and international level (ICA, 2007).

2.7 EMPIRICAL STUDIES ON COOPERATIVE SOCIETIES IN AGRICULTURAL DEVELOPMENT.

Small-holder farmers remain the bedrock of agricultural production especially in the developing countries including Nigeria. Mohammed (2004) remarked that farmers are burdened with high prices of farm inputs, inefficiency of farming techniques, inadequate production infrastructure, poor market and heavy constraints in obtaining credits facilities. The ugly situation is further compounded by the general economic downturn and government drives to remove all subsidies on farm inputs such as chemical fertilizers, and agro-chemicals. The co-operative option comes into focus as a viable way to effectively mobilize farmers to form groups and pool resources so as to become more effective in agricultural production (Agenyour, 2014).

In addition to the values and principles of cooperatives, studies have been conducted on wide varieties of issues relating to the importance of cooperative societies. Veerakumran(2005)

explained that cooperatives serve as fundamental tool for achieving food security at household level. Co-operatives are the best institutional intervention for attaining food security in any country. The developed nations like United States of America, Canada, Australia, almost all European countries and Socialist country like China have attained food self-sufficiency through cooperatives (Chambo, 2009).

Gertler (2001) adopted probit model to explain cooperatives as a practical tool for collaboration, collective action and they build and reinforce community, stabilize regional economies and provide a favorable climate for further investigation. Co-operatives is capable of reducing spatial inequality and promote equitable sharing of the cost and benefits of development. It can promote economic democracy and the empowerment of marginalized groups- a hallmark to sustainable development and a precondition for shared responsibility (Agenyour, 2014).

Ojiako and Ogbukwa (2012) examined loan repayment capacity of small – holder cooperative farmers in Yewa North Area of Ogun State, Nigeria using correlation and regression techniques. The study showed that farm credits played vital roles in the socio-economic transformation of the rural economies. However, loan acquisition and repayment were characterized by numerous challenges including high levels of default among beneficiaries. The study concludes that promoting small-holder cooperative farmers' loan repayment capacity would require conscious use of policies directed at increasing loan size and farmers' farm holdings or reducing household size.

Similarly, Ofuoku and Urang (2009) assessed the effect of cohesion of farmer co-operative societies on loan repayment among members in Delta State, Nigeria using Spearman's rank order correlation analysis. The study observed that there was almost perfect positive relationship between rates of loan repayment perception and cohesion. Consequently, they recommended that

extension agents should take advantage of the effect of cohesion on loan repayment to promote cohesion in upcoming co-operative societies.

Aigbokhan (2000) in a research carried out found out that an increasing number of Nigerians were living in absolute poverty between 1985 and 1996. It was 38% in 1985 in 1992 and 47% in 1996. Poverty is higher in rural areas than in urban areas”. Also it has been shown that there are major gains to be made in reducing poverty by focusing on development programs such as cooperative organization.

Aniebonam, (2012) in a research which he carried out on the role of cooperative organization in development of secondary school in Kano state by using descriptive survey research design and a population of hundred and forty two head teachers in Kano state, discovered that cooperative organization has a great role to play in the development of secondary schools in Kano state.

Geotz(2003) in a study of the human resources capacities of agricultural cooperatives wrote that cooperatives are the best suited institution for economic and rural development.

Babalola and Ayemi (2009) in a research title “Educational management theories and task” establish that since no government can solely solve the financial problems of the educational sector, other philanthropist private sector, such as cooperative organization.

University of Wisconsin centre for cooperatives in (2002) carried out a research on economic impact of cooperatives in the state of Wisconsin and found out that cooperatives are responsible for the most significant economic boom in the state. FAO (2012) in the year for cooperatives established the importance of agricultural cooperatives, by recognizing it was the pillar for agricultural development and food security in rural areas.

Cooperatives play a major self-help role in rural areas, particularly where private businesses hesitate to go and public authorities do not provide basic services, they are instrumental in providing opportunities for employments as well as offering education and giving “voice” to rural groups (ILO,2002).

A cooperatives organization reinforces the fact that they contribute to rural economy. Cooperatives organizations also provide specific result that can be used to educate the public and policy makers less familiar with cooperatives about their impacts throughout the nation (Folsom, 2003). Cooperatives generally provide an economic boost to the community as well (Dogarawa, 2005).

Cooperative organizations created returns on behalf of the members such as better prices than alternatives, valuable service access to markets otherwise not a available, increased market power, valuable information. Cooperatives organization have a unique link to members production areas and relay on areas where members are located. The necessity to remain in proximity to members makes it less likely to relocated to location that might have a cheaper raw products or labour. Such economic stability may generate a number of benefits for both members and their communities (Baarda, 2004).

CHAPTER THREE

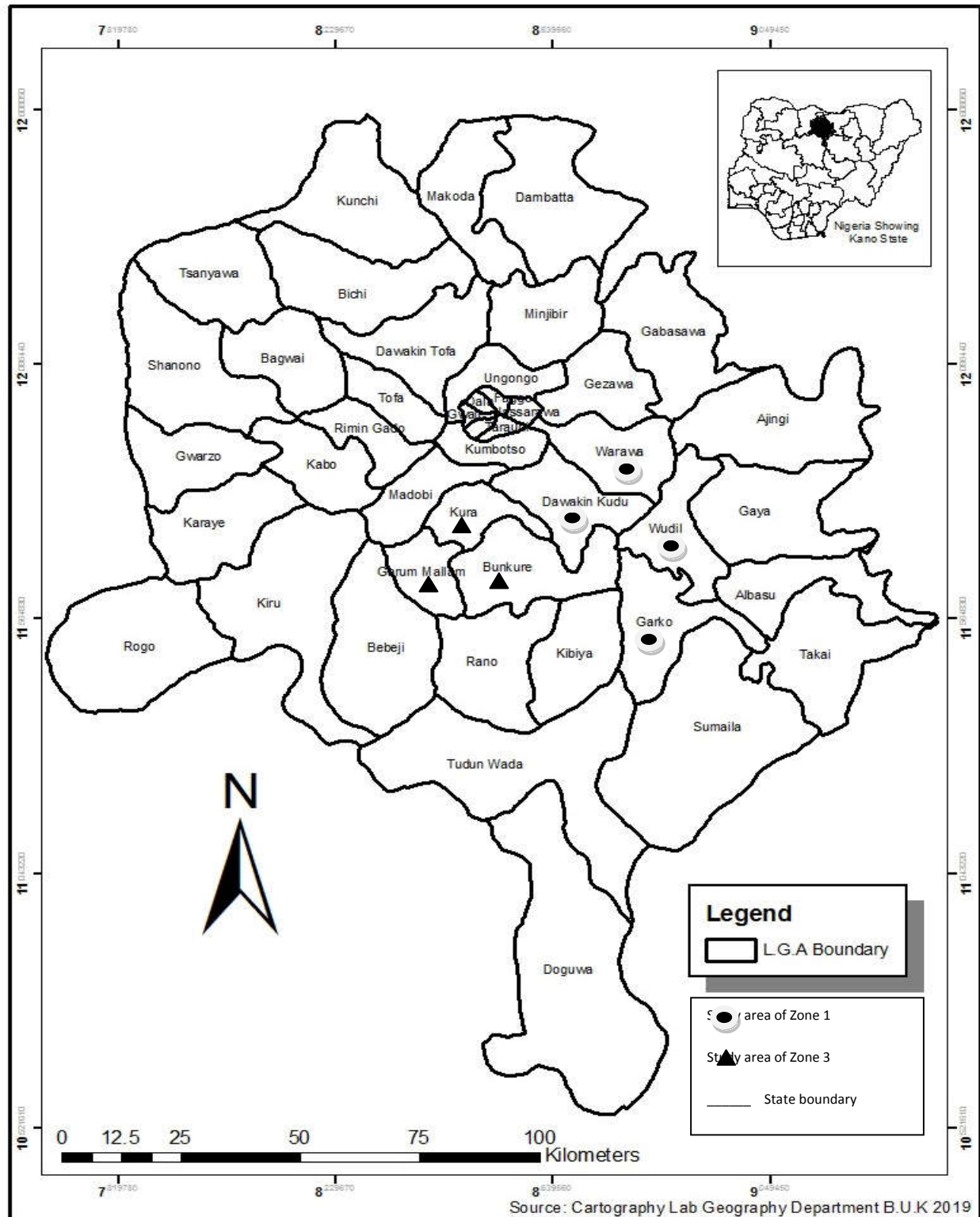
METHODOLOGY

3.1 THE STUDY AREA

Kano State was created in 1967. The state is situated in the Sudan Savannah agro ecological zone of Nigeria along Latitude 11°30"N and Longitudes 8°30"E (NPC, 2006). It has a total land area of about 20,131Km square (Nigeria, 2014), arable land of about 90% (Sani&Sulaiman, 2010) and an average rainfall ranging from 1000 mm to the south, 800 mm within the metropolis and 600 mm to the Northeast. The state is one of the most populated in Nigeria and had a population of about 9,383,682 people (NPC, 2006) and its population growth rate is estimated at 3.5% per annum (GEMS, 2013).Based upon this, estimate of the state stands at 14,518,970 in 2018. Kano state has 44 Local Government Areas (LGAs) and is classified into three administration zones by the state ADP, i.e Kano State Agricultural and Rural Development Authority (KNARDA, 1995). The people of Kano state engage in agriculture as means of sustenance and commercial purposes. However, they also engaged in other activities such as civil service, petty trading, carpentry, auto mobile works and other vocational business activities. Availability of many earth dams in the state makes it possible for irrigation farming and perhaps all year round farming activities.

Essentially, Agriculture in the State is characterized by:-Rainfed Agricultural production is supported with irrigated production widely practiced in fadama areas, small and large irrigation schemes. Crop production is undertaken widely by almost every household level.

- Dominant crop produced include - cereals such as sorghum, millet, maize and rice. Legumes include groundnut, cowpea and soya beans. While vegetables include tomatoes, peppers and onions.
- Livestock production is predominantly pastoral cattle, mainly owned and reared by nomadic Fulani, with modern poultry gaining prominence among household in the state.



Source: cartography laboratory, department of geography, bukKano.
 Figure 3.1:A map of Kano StateShowing the study areas.

3.2 SAMPLING PROCEDURE

Multistage sampling technique was used in the study. Agricultural development programmes administrative zones in Kano State was also used. These are zone 1, zone 2 and zone 3 with their respective local government areas.

Zone 1: Rano, Tudunwada, Doguwa, Bebeji, Kiru, Garunmalam, Kura, Kumbotso, Madobi, Gwarzo, Karaye, Kibiya, Rogo, and Bunkure.

Zone 2: Danbatta, Bichi, Bagwai, Shanono, Tsanyawa, Kunchi, Kabo, Rimingado, Tofa, Dawakintofa, Makoda, Minjibir, and Ungogo.

Zone 3: Gaya, Ajingi, Wudil, Albasu, Takai, Sumaila, Garko, Dawakin kudu, Warawa, Gezewa, Gabasawa, Kano municipal, Tarauni, Dala, Gwale, Fagge and Nassarawa.

First stage is purposive selection of zone 1 and zone 3 based on the number of farmers cooperative societies in the areas. Stage two involves purposive selection of the following local government areas (LGAs) base on the intensive involvement of people into farmers cooperative societies. Kura, Garinmalam, and Bunkure were selected from zone 1, while Wudil, Garko, Warawa and Dawakin kudu were selected from zone 3. Stage three involves random selection of 30% of the ward from each local government making a total of 27 wards. The fourth stage also involves selection of 20% from the numbers of cooperative societies of each ward. In the last stage, simple random sampling technique was used to select a total of three (3) respondents from each cooperative societies giving a total number of 210 respondents.

Table 1: sampling frame and sample size.

S/N	wards	no. of sampled coop. societies	population	sample size
1	Gunduste	2	21	6
2	Kosawa	3	41	9
3	Karfi	2	27	6
4	Dakasoye	3	34	6
5	Chiromawa	3	30	9
6	Kadawa	4	4	12
7	Kunluwa	2	21	6
8	Gafan	4	41	12
9	Bunkuregari	6	66	18
10	Chirin	3	39	9
11	Barkun	2	31	11
12	Sarina	2	23	6
13	Garkogari	4	43	12
14	Raba	2	33	6
15	Katarkawa	3	47	9
16	Madarinmata	2	23	6
17	Garindau	2	20	6
18	Imawa	2	20	6
19	Gogel	2	23	6
20	Utai	2	26	6
21	Indabo	2	23	6
22	Kausani	2	31	6
23	Dawaki	3	32	6
24	Tsakuwa	2	24	6
25	Dabo	2	20	6
26	Zawakiji	2	27	6
27	Tambirawa	2	31	6
	Total	70	840	210

Source: Field survey, 2017

3.3 DATA COLLECTION

Primary source of data was used for the study. The data was collected through the use of structured Interview schedule.

3.4 ANALYTICAL TECHNIQUE.

Descriptive and inferential statistics were used to analyze the data. The descriptive statistics include; frequency tables, mean, minimum, maximum and standard deviation was used to achieve

objective 1, 2,3 & 4,while inferential statistics i.e logic regression was used to achieve some part of objective 3.

3.4.1 Model Specification.

The various analytical techniques used in this study are specified as follows;

3.4.2 Descriptive Statistic

Descriptivestatistic such as frequency and percentage, mean, minimum and maximum, and standard deviation respectively.

3.4.3 Logic Regression Model

The model was used for objective 3

Logistic regression is a regression model where the dependent variable is considered as dichotomous/binary variables coded 0 and 1(Brian & Sabine, 2004). The model uses maximum likelihood estimation (MLE) procedure. Logic regression conceptually gives maximum estimates, overcome the shortcomings associated with linear model of regression and provide estimates that are consistent and efficient (Gujrati, 2004).

This model was used to determine the socio-economic factors that influence farmers' attitudes towards cooperative society in the study area.

The general form of the model is specified as follows

$F(X_1, X_2, X_3, X_4, \dots \dots \dots X_7)$. Explicitly specified, the equation becomes;

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 \dots \dots \dots + b_7X_7 + u$$
 Where;

Y = Farmers attitudes towards cooperative society

X₁= Age (in years)

X₂= House hold size (number)

X₃=Level of education (1=formal, 0= otherwise)

X_4 = Farming experience (in years)

X_5 = Farm Size (number)

X_6 = Membership duration

X_7 = Primary occupation (Member =1, 0= otherwise)

a = constant term

U = Error term (implicit)

CHAPTER FOUR

RESULT AND DISCUSSION

4.1 SOCIO ECONOMIC CHARACTERISTICS OF THE MEMBERS OF COOPERATIVE SOCIETIES

The socio economic characteristics usually assist the researcher in getting the clear understanding of the behavior of his respondents as well as provide hint or reason towards explaining their reasoning and action that could have effect on their productivity (Mohammed, 2004). However, the characteristics considered for this study are divided into two categories: Quantitative Variables (age, household size, farming experience, membership duration in the society, farm size), Qualitative Variables (sex of the respondents, educational level, and primary occupation).

Table 2. Quantitative; Socio Economic Characteristics of the Members.

Variables	Minimum	Maximum	Mean	Sd
Age (Years)	18	60	41.5	9.88
Household size	1	25	11.03	5.54
Farming experience (Years)	1	60	20.38	9.52
Membership duration (years)	1	30	7.26	4.92
Farm size (ha)	0.40	4.00	1.25	1.02

Source: Field Survey, 2017

4.1.1 Age of the respondents

Age of the respondent is very important factor in determining the availability of labor as youth supply more labor than older people. The result on Table 2 revealed that the minimum Age of respondents was found to be 18 years, a maximum of 60 years with the mean age of 41.5 years. This implies that majority of the respondents fall within the age range that are economically

productive in a society and have the ability to make rational decisions which affect their economic activities (FAO,2011). This result also corroborates the study of FAO, (2012) which stated that this is the most active and virile category of age brackets that have very high potential for sound economic engagements.

4.1.2 Household Size of the respondents.

Table 2 shows that the minimum household size is 1, and a maximum of 25, with means of 11.03 and standard deviation of 5.54. This shows that larger Household has more advantage and the capacity to cultivate larger farm land than smaller Household; this equally revealed greater responsibility of larger household due to the need to feed larger number of people than the smaller household, thus guaranteeing greater level of commitment. This finding is in line with Agenyour (2014) who asserted that family size is an important factor in any rural development intervention. Family size can affect the outcome of any intervention.

4.1.3 Farming Experienceof the respondents

Table 2, revealed that, a significant number of rice farmers had reasonable years of experience with minimum of 1 year, and maximum of 60 years, mean of 20.38 years and standard deviation of 9.52. This means that most farmers in the study area have adequate farming experience. It is of general opinion that experienced farmers would be more efficient, will have better knowledge of climatic conditions, special production techniques and market situations, and are thus expected to run a more efficient and profitable enterprise (Chambo, 2009).

The result agree with the findings of Veerakumran (2005) who revealed farming experience is an important factor determining both the productivity and the production level in farming.

4.1.4 Farmers Membership Duration.

Table 2 revealed that, duration of membership in the society with minimum of 1year, maximum of 30 years, mean of 7.26 and Standard deviation of 4.72. This means that, farmers cooperative societies have been in existence in the area and need all the support and mobilization from stakeholders to ensure farmers understand the benefits that can accrue from group formation. Gertler (2001) found out that a positive relationship exist between years of experience in business and its performance, hence they are able to operate more economically and efficiently than the recently established ones.

4.1.5 Farm Size.

Table 2 shows that the respondents have farm sizes ranging from a minimum of 0.40 (ha), maximum of 4.00(ha), and mean of 1.25(ha).The result implies that members of cooperative society have reasonable size of land which makes them in need of cooperative society to assess services available to member of cooperative society thereby improving their productivity. The result is in line with the finding of Dogarawa (2005) who reported that farm size has direct effect on the total output.

Table 3: Qualitative: Socio Economic Characteristics of the Members.

Variables		Frequency	Percentage
Sex	Male	186	88.6
	Female	24	11.4
Level of Education	Primary	58	27.6
	Secondary	56	26.7
	Tertiary	34	16.2
	Islamic education	62	29.5
Primary occupation	Farming	199	94.7
	Artisan	11	5.3

Source: field survey, 2017

4.1.6 Sex of the respondents

Table 3 shows that 88.6% of the respondents were male indicating the dominance of men in the societies while 11.4% were women. This may be as a result of cultural setting, societal structure and the division of labour that make it possible for the men to assigned more of their time to farming activities, whereas the women focus on domestic activities. This is in conformity with the work of Geotz (2003), which stated that female are mostly left with indoor activities which make them to have more free time than their male counterpart in carrying out domestic activities at home

4.1.7 Level of Education of the respondents

Education is very importance in every aspect of life and it plays a fundamental role toward agricultural development because it enhances easy assimilation, awareness and receptiveness to innovations of agriculture practices. The result in Table 3 shows that 27.6% of the respondents have primary education, 26.7% of the respondents have secondary education, 16.2% of the

respondents have tertiary education, 29.5% of the respondents have Islamic Education. The implication is that the educational status of the farmers are expected to enhance their farming skill acquisition and rapid transfer of modern technology(Babalola, & Ayemi, 2009).

4.1.8 Primary Occupation of the respondents

Table 3 shows that majority of the respondents 94.7% are farmers. This finding agreed with that of ILO(2002) who revealed that the occupation of any population are largely influenced by the setting of their environment as well as their local economy is often the case in most rural Africa and Nigeria in particular where we have strategies usually involve mixture of activities including farm and off farm employment.

Table 4: Benefits derived from cooperative membership

Benefits	Frequency	%	Rank
Granting credit facilities to members	115	54.7	1 st
Subsidize agricultural inputs to members	90	42.8	2 nd
Introducing new ideas and techniques of farming	76	36.1	3 rd
Access to information and extension services	75	35.7	4 th
Enlightenment and educating members	74	35.2	5 th
Ensure unity and peace within the society	67	31.9	6 th
Rendering guidance and counseling services	41	19.5	7 th

Source: field survey, 2017

The responses of the farmers’ cooperatives to the expected benefits derived by farmers from Cooperative society membership in the study area were presented in Table 4.2 above. The responses were ranked according to degree of importance. Indeed, a topmost priority was given to granting of credit facilities to members 115 (54.7%) and then followed by Subsidize agricultural inputs to members 90 (42.8%), the farmers’ cooperatives were noted for buying the agricultural

inputs in bulk from the producers or the wholesalers and retail the items to members in subsidized rates. The third ranking was for introducing new ideas and techniques 76 (36.1%). The fourth in the rank concerned access to information and extension services 75 (35.7%) for agricultural products. The fifth rank was enlightenment and educating members 74 (35.2%). These contributions are been viewed to be instrumental to changing government policies that affect cooperative farmers. The sixth benefit is that, cooperatives societies ensure unity and peace within the society 67 (31.9%). The seventh benefit was, rendering guidance and counselling services to its members 41 (19.5%). Overall these results shows that, farmers benefit from their membership of farmers' cooperative societies and that, cooperative societies are indispensable to farmers and agricultural success in the study area.

The finding of this study is consistent with the findings of Ofuoku and Urang (2009) who found out that, farmers benefits from their membership of cooperative society in Sabuwa local government area Katsina State, as they obtain credit facilities, Subsidize agricultural inputs and other sustainable ideas. Aniebonam (2012) had remarked that provision of credit facilities to farmers' cooperatives was geared to helping them increase their production and obtain higher standard of living. In addition, Ojioko and Ogbuwa (2012) rightly observed that farmers' cooperative organizations also assisted in spreading new ideas, innovations and incentives to allow majority of the people to be positively involved in the development of agriculture.

Table 5: Farmers attitudes towards agricultural cooperatives

Categories	Frequency	%
Negative attitudes	41	19.5
Positive attitudes	169	80.5
Total	210	100

Source: field survey, 2017

The results of the analysis presented on table 5 above shows that, 41(19.5%) of the respondents have negative attitude towards cooperative society, 169 (80.5%) have shown positive attitudes towards agricultural cooperativessociety in the study area. An overall result shows that, 169 (80.5%) having positive attitudes mean that, their attitudes towards agricultural cooperatives society is favourable.

Table 6: Factors influencing farmers’ attitudes towards cooperative society

Independent Variables	B	S.E.	Df	Sig.	Exp(B)
X_1 =Age	-0.609	0.837	1	0.467	0.544
X_2 =House hold size	1.571	0.993	1	0.026	4.813
X_3 =Level of education	-1.615	1.204	1	0.032	0.199
X_4 =Farming experience	1.076	0.827	1	0.028	2.933
X_5 =Farm Size	0.352	0.832	1	0.013	1.422
X_6 =Membership duration	2.087	0.945	1	0.027	8.061
X_7 =Primary occupation	-0.556	0.914	1	0.543	0.573
Constant	-2.293	0.316	1	0.000	0.101

Source: field survey, 2017

Number of observation = 210, $\chi^2 = 4.328$, $df = 6$, pseudo R2 (cox & snell) = 0.173, pseudo R2 (Nagelkerke) = 0.377, -2 log likelihoods = 50.755

Table 6 shows that about 71% of the independent explanatory variables were statistically significant at 0.05 level. The variables of House hold size (X_2), Level of education (X_3), Farming experience (X_4) Farm Size (X_5) and Membership duration (X_6) exhibited positively significant relationship with farmers’ attitudes towards cooperative society. These underscore the relevance of the variables in farmers’ attitudes and their socio-economic status in designing agricultural policies and programmes since they determine the participation of the farmers’ in cooperative society.

However, Age(X_1) and Primary occupation (X_7) do not exert significant effects on farmers' attitudes towards cooperative society and should not be considered valuable while designing intervention strategies. However, based on the result members' age variation is not a major factor to consider when taken decision on cooperative societies.

Table 7: Constraints associated with Cooperation in the Study Area.

Constraints	Frequency	Percentages	Ranks
Mode of selection of beneficiaries	110	52.4	1
Problems of leadership	70	33.3	2
Poor members commitment	60	28.5	3
Poor management of resources	55	26	4
Illiteracy	50	23.8	5
Inadequate finance from the members	50	23.8	6
Inconsistent policy from Government	35	16.6	7
Lack of cooperative education	30	14.2	8
Government intervention	20	9.5	9
Government negligence	10	4.7	10

Source: field survey, 2017

Multiple responses

Table 7 indicates poor management of resources with 26%, government negligence 4.7% and inconsistent cooperative policy 16.6% all hinder participation. Illiteracy 23.8%, lack of cooperative education 14.2%, finance 23.8% and poor leadership 33.3% are some of the reasons why people do not participate in cooperative movement.

Mode of selection of beneficiaries, poor members commitment recorded 52.4% and 28.5% respectively all hinder many from belonging to cooperatives.

Another major constraint identified is that, the motive for cooperative formation is largely influenced by extension staffs of government agencies notably state government. The result of this is that farmers' cooperatives are now heavily dependent on government support. This has further affected the level of impact of farmers' cooperatives on their farming. Aigbokhan (2000) found out that cooperative improve members' well-being and members are satisfied with the cooperative movement.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

The major aim of this study was to assess the contribution of farmers' cooperative societies to Agricultural development in Kano State. The result shows that the respondents were between the ages of 18 to 60 years; with the mean age of 41.5 years, a range that is economically productive. The study also reveals that the respondents have household size of between 1 to 25 with a mean of 11 members in a household. It was also discovered that the years of farming experience of the respondents ranges from a minimum of 1 to a maximum of 60, with a mean of 20.38. Farmers membership duration in the societies with minimum years of 1 maximum of 30, and mean of 7.26. Farm size also ranges from 0.40ha to 4.0ha with mean of 1.25ha. 88.6% of the respondents were found to be men, with about 11.4% female. This could be as a result of cultural setting, societal structure and the division of labour that make it possible for the men to assigned more of their time to farming activities, whereas the women focus on domestic activities. 70.5% of the respondents have formal education while 29.5% have Islamic education. Farming is their primary occupation (94.7%).

The study also reveals multiple responses of members on the benefit derived from cooperative membership; granting credit facilities to member shows 54.7%, subsidize agricultural input to members shows 42.8%, introducing new ideas and technologies of farming shows 36.1%.

41 (19.5%) of the respondents have negative attitude towards cooperative society, 169 (80.5%) have shown positive attitudes towards agricultural cooperativessociety in the study area. An overall result shows that, 169 (80.5%) having positive attitudes mean that, their attitudes towards agricultural cooperatives society is favourable.

The study identified poor members' commitment (28.5%) and mode of selection of beneficiaries (52.4%) and poor leadership (33.3%), as the main constraints. Finance (23.8%), lack of cooperative education (14.2%), government intervention (9.5%), inconsistent government policy (16.6%) and poor management of resources (26%) were also identified as part of the constraints to effective cooperative in the study area.

5.2 CONCLUSION

In conclusion, the variables of House hold size, Level of education, Farming experience, Farm Size and Membership duration exhibited positively significant relationship with farmers' attitudes towards cooperative society. Therefore, null hypothesis is rejected since the result shows that there was significant relationship between the farmers socio-economic characteristics and farmers' attitudes towards cooperative society in the study area. However, minority of the respondents have shown negative attitude towards cooperative society, and majority have shown positive attitudes towards agricultural cooperative society in the study area. Therefore, cooperative societies can stand as a means of improving farmers living standard and also contribute to agricultural development.

5.3 RECOMMENDATION

Based on the findings of the study, the following recommendations are made:

- i. The study discovered that cooperative societies are male dominated. It is therefore recommended that more female need to be involved in cooperative societies in the study area which will also help in improving agricultural development.
- ii. The study found out that cooperative societies heavily depend on government for support. The study recommended that government support should be minimize unless where

necessary such as subsidizing agro inputs, infrastructural facilities which will also help in improving agricultural development.

- iii. This study equally revealed that the mode of selection of beneficiaries is problematic. Therefore, it is recommended that mode of selection of beneficiaries should be applied democratically, that is base on election not selection and to also ascertain proper implementation of the intervention toward their improvement.
- iv. In this study it was found out that members are not fully committed and participating. It is therefore recommended that member of the societies should be more committed and fully participate for the development of the societies. This could be done through attending meeting, regular payment of share capital, payment of other dues etc. these will lead to the sustaining of the societies and their agricultural development.
- v. It was revealed in the study that there is inconsistent government policy which retards the development of the societies. The study recommends that government should promulgate favourable policies on agriculture that will ease the stringent condition of the cooperative societies.
- vi. It was revealed in the study that minority of the respondents have negative attitude towards cooperative society, this can be reduced by recruit/hire more extension personnel and post them to rural areas in order to disseminate information to farming families within the state.

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QUESTIONNAIRE
ASSESSMENT OF CONTRIBUTION OF FARMERS COOPERATIVE SOCIETIES
TOWARDS AGRICULTURAL DEVELOPMENT IN KANO, NIGERIA.

DEAR RESPONDENTS,

The purpose of this questionnaire is to obtain information for the above M.Sc Research works. Your responses will be treated in strict confidences.

Yours faithfully,

Mohammed Gwadabe

Department of Agricultural Economic and Extension.

Phone no.....

Section A: Socio-economic Characteristics

1. Cooperative names
2. Local Government Area.....
3. Ward
4. Sex of respondent (a) male (b) female
5. Age of the respondent
6. Educational level of respondent (a) formal [] (b) informal []
7. Household size of respondents
8. Primary occupation:.....
9. Secondary occupation (a) Trading [] (b) farming [] (c) artisan [] (d) civil servant e) others []
10. Farming experience
11. Farmers membership duration in farmers cooperative
12. What is the tenure type of your land (a) inheritance [] (b). leasehold [] (c) gift [] (d) purchase (e) rent (f). other
13. Farm size (ha).....

Section B: Benefits of Cooperative Society

Benefits	Yes	No
Cooperativesociety granting credit facilities to members		
Cooperativesociety subsidize agricultural inputs to members		
Cooperativesociety introducing new ideas and techniques of farming		
Cooperativesocieties provide access to infor. and extension services		
Cooperativesociety enlightenment and educating members		
Cooperativesociety ensure unity and peace within the society		
Cooperativesociety rendering guidance and counseling services		

Section C: Attitudes towards Cooperative Society

Statement	Yes	No
The farmers' cooperatives extend their activities to all farmers in the societies		
The farmers' cooperatives serve as sources of supplies and a market for their products.		
Some of the farmers' cooperatives activities are exclusively provided to executive members and their relatives		
Farmers' cooperatives can solve agricultural problems of farmers in suitable time		
Farmers' cooperatives exist to promote agricultural development		

Section D: Constraints to Cooperative Society membership

Constraints	YES	NO
Mode of selection of beneficiaries		
Problems of leadership		
Poor members commitment		
Poor management of resources		
Illiteracy		
Inadequate finance from the members		
Inconsistent policy from Government		
Lack of cooperative education		
Government intervention		
Government negligence		