

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Agriculture dominates the economies of most developing countries (Nigeria inclusive). It has been established that about 70 percent of Nigeria's population is engaged in agriculture (Obasi and Agu, 2000). Ninety percent of Nigeria's total food production comes from small farms, and 60 percent of the country's population earn their living from these small farms (Oluwatayo, Sakumade & Adesoji 2008 ; Izekor and Alufohai , 2010 and Awotide, Aihonsu & Adekoya,2011). Today, there is a growing advocacy for achieving sustainable food security in Nigeria and a lot of effort has been directed at finding appropriate structure for organizing millions of small-scale farmers towards achieving food security. Agricultural cooperative societies have been touted as the appropriate vehicle for harnessing and pulling the resources of millions of smallholder farmer producers together to enjoy the benefit of large- scale production. (Onugu & Abdulahi, 2012).

Many households in Nigeria's rural areas live below the poverty line. Empowering women means empowering the society at large. Rural women farmers play a vital role in food production and food security. They account for 70% of agricultural workers, 80% of food producers, and 100% of those who process basic foodstuffs. They also undertake between 60% to 90% of the marketing. Women actively take part in farming activities and in processing farm products, in addition to their domestic and reproductive responsibilities Onugu *et.al* (2012). The role women play in agriculture and the rural society is fundamental to agricultural and rural development in Nigeria.

Women empowerment can be said to be the development of mental and physical capacity, power or skills in women to enable them operate meaningfully in the social setting, hence experiencing a more favorable level of social recognition and ultimately enhance their socio-economic status (Akomolafe, 2006). The aim of women's empowerment through agricultural cooperatives activities is to enhance the socio-economic status of women by acquainting them with skills and literacy training for various economic/agricultural ventures and activities such as farm input procurement, access to credit and extension visits, as well as creation of economic culture that will address the question of technical know-how in pursuing of women's multifaceted roles (Safiya, 2011).

The term women empowerment has become popular in the development field since 1980s. It is vividly recognized that women empowerment is essential for sustainable economic growth and poverty reduction in developing countries. Kabeer (2001) sees women empowerment as the process by which women take control and ownership of their lives through the expansion of their choices. Recognizing women empowerment is very vital to the overall progress and development as it ensures that women have the ability to shape their own security and foster effective participation in socio-economic inclusion. In Nigeria, women supply most of the needed labour in agricultural activities, and this is the most important factor of production to farmers, as it is needed at the stages of agricultural production. Even women in seclusion (Purdah) generate substantial income through food crop processing (Yahaya, 2002).

Women empowerment is a necessary condition for the development process. Thus, women empowerment has three dimensions namely, the social dimension, the political dimension and the economic dimension. The Social dimension signifies respectable and non-discriminatory positioning in the society; the Political dimension signifies involvement in the governance of organization and administrative positions; and the Economic empowerment enables female members to have equal right in employment, spending, ownership of production means and sharing benefits (Prakash, 2002). The focus of this study is on the economic empowerment of rural women.

Cooperatives have a role to play in reducing different shocks, and paving the way towards recovery that is socially and economically sound and sustainable. Ultimately, cooperatives can create a safe environment where women increase their self-confidence, identify their own challenges, make decisions and manage risks. As a result, women are empowered and become active agents of change, entrepreneurs and promoters of social transformation who can improve their own lives and those of the community (Karunakaran, 2004).

Majurin (2012) also revealed that cooperatives are also effective points of entry for addressing a broad range of gender equality issues such as unpaid work, shared responsibilities and gender-based violence. However, Aregawi and Haileslaise (2013) revealed that, according to records, a number of approaches to development have been employed by government, developmental agencies and non-governmental organizations to solve the socio-economic ills of the third world. Agricultural cooperatives, therefore, have the capacity to improve the living standard of the rural people, especially women, and promote food security of the country. Cooperative

institutions, especially the agricultural cooperatives, are the agencies which hold enormous potential for the empowerment of women, and more particularly the rural women (Biru, 2014).

1.2 Statement of the Problem

Lack of women's economic empowerment has been considered the bane of the economy of many African countries, particularly Nigeria. The indispensable role of women in any development calls for eradication of barriers to women empowerment at all levels. Despite the fact that their contributions are significant, women still have limited economic advantage and access to productive resources such as credit, input, extension services (Mayoux, 2009). Lack of productive resources has been found to contribute to gender underpinning in Nigeria. The above statement infers that women, most times, lack productive resources such as capital, land, input and supplies. According to IFAD, in Onugu & Ojiagu (2009), women own less than 2% of all land, and receive only 5% of extension services worldwide. It is estimated that women in Africa receive less than 10% of all credit going to small farmers and a mere 1% of total credit going to the agricultural sector.

Regardless of the level of development achieved by the respective economies, women play a pivotal role in agriculture and in rural development in most countries of the Asia-Pacific region. Evidently, these are serious constraints which militate against the promotion of an effective role for women in development in those societies which were bound by age-old traditions and beliefs. Patriarchal modes and practices motivated by cultures and/or interpretations of religious sanctions and illiteracy hinder women's freedom to opt for various choices to assert greater mobility in social

interactions. As a result of these situations, women's contribution to agriculture and other sectors in the economy remain concealed and unaccounted for in monitoring and measuring economic performance. Consequently, they are generally invisible in plans and programmes.

Similarly, many studies (Ekesionye & Okolo, 2012; Oyeniya, 2013, Awotide, 2012) have been conducted in Nigeria on empowerment of women, but the efforts and roles of agricultural cooperative societies, for instance, in empowering rural women to the best of my knowledge has not been well researched and documented in the South-East zone of Nigeria. There is the need to conduct this study so as to ascertain the effort of agricultural cooperative on the economic empowerment of women in South-East Nigeria. Cooperatives are known to improve the income of rural dwellers through the provision of support services such as farm input, credit, marketing agricultural produce and extension visit. The major question here is, have these agricultural cooperatives through their functions and activities enhanced the income of the women or not?

1.3 Objectives of the Study

The broad objective of this study is to ascertain the role of agricultural cooperatives in economic empowerment of rural women in South -East Nigeria.

The specific objectives are to:

1. socio-economic features of members of women cooperative
2. assess the effect of farm support activities (input, credit, marketing agricultural produce and extension visit) on rural income;
3. determine the effect of farm support activities on farm output;

4. assess the effect of years of membership on profitability of farm operations;
5. determine the effect of cooperative membership on livelihood sustainability.

1.4 Research Questions

1. What is the effect of farm support activities (farm input; credit, marketing agricultural produce and extension visit) on rural income?
2. How has farm support activities (farm input; credit, marketing agricultural produce and extension visit) effected farm output of members?
3. What is the effect of years of membership on profitability of farm operations?
4. To what extent does cooperative membership influence livelihood sustainability?

1.5 Hypotheses of the Study

1. Ho: Cooperative farm support service (farm input; credit agricultural marketing and extension visits) has no significant effect on rural income.

H1: Cooperative farm support service (farm input; credit agricultural marketing and extension visits) has significant effect on rural income

2. Ho: Cooperative farm support service (farm input; credit, agricultural marketing and extension visit) has no significant effect on farm output of members.

H1: Cooperative farm support service (farm input; credit, agricultural marketing and extension visit) has significant effect on farm output of members

3. Ho: Years in agricultural cooperative service has no significant effect on profitability of farm operations of members.

H1: Years in agricultural cooperative service has significant effect on profitability of farm operations of members.

4. Ho: Agricultural Cooperative experience (membership duration) has no significant relationship with livelihood sustainability.

H1: Agricultural Cooperative experience (membership duration) has significant relationship with livelihood sustainability.

1.6 Significance of the Study

The findings of this study will be of benefit to the government, policy makers, cooperative societies and the general public. The major benefit will be to validate the importance of agricultural cooperatives in empowering rural women economically. It has made an inroad in the field of agricultural cooperatives by making bare the different agricultural cooperative services and their impacts on women farmers. There is limited research work on the use of agricultural cooperatives to empower rural women in the area.

To the policy makers and government, this study has presented empirical evidence from member's point of view on the effect of cooperative support activities on their output and income. To the academic community, this study has opened discussions on various assumptions of collective action and initiate research on why a large number of women farmers that source their farm input through agricultural cooperatives have enhanced income after joining cooperatives. This study has provided the much needed empirical data on agricultural cooperatives and its economic empowerment of rural women. This is particularly important because of the dearth of data on the subject for research in Nigeria. Moreover, this work has enabled the better understanding of Collective Action Theory. The findings of this work have also helped promoters of agricultural cooperatives to know the preferences of women farmers.

1.7 Scope of the Study

The study was aimed at understanding how Agricultural Cooperatives empowered rural women in South-East Nigeria. The focus of this study is on economic empowerment of rural women. The research was limited to members of women

agricultural cooperatives that use cooperatives services in the course of their farming activities in 2016/2017 farming season. Among the services provided by agricultural cooperatives to women farmers, the study focused on four of such services such as: credit, farm input, marketing and extension visit. The study also investigated before and after effect of agricultural cooperatives on members.

1.8 Limitations of the Study

The problems encountered in the course of the project include the challenge of identifying functional Cooperatives due to the fact that some of them were formed in order to have access to government financial support programmes, after which they wound up. Another hindrance that the researcher faced in the course of this study was the uncooperative attitudes sometimes displayed by District Cooperative Officers (DCO) in some Local Government Areas and the officers of these registered agricultural cooperatives shown especially in their failure to keep appointments as scheduled and reluctance to give out sought information. Despite the above, the result of this research can still be considered as being consistent, and therefore very reliable.

1.9: Definition of Terms

Cooperatives: are defined as “an autonomous association of persons who unite voluntarily to meet their common economic and social needs and aspirations through a jointly -owned and democratically -controlled enterprise.

Agricultural Cooperatives: Agricultural Cooperative is a type Cooperative that organize small farmers into producer organizations to increase their bargaining power vis-a- vis other actors in the value chain.

Empowerment: Empowerment is a construct shared by many disciplines and arenas; community development, psychology, education, economics, and studies of social movement, and organizations, among others. How empowerment is understood varies among these perspectives. In recent empowerment literature, the meaning of the term empowerment is often assumed rather than explained or defined.

Economic Empowerment: Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways which recognise the value of their contributions, respect their dignity and make it possible for them to negotiate a fairer distribution of the benefits of growth.

Women Empowerment: Women empowerment is defined differently by different scholars. Women empowerment is a mechanism where women become strong by increasing their confidence to make appropriate choices and control over resources

Cooperative Membership: Cooperative membership is voluntarily coming together of persons, registered /payment of necessary dues in Cooperative

Cooperative Services: Cooperative services are those support activities provided by Cooperatives that enhance agricultural development. Regular and optimal performance of these services will accelerate the transformation of agriculture and rural economic development.

Livelihood Sustainability: Livelihood is defined as having means to earn and procure adequate stock and flow of food and cash for an individual or a family to meet their basic needs. A livelihood comprises the capabilities, assets and activities required to sustain a means of making/earning a living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance

its capabilities and assets both now and in the future, while not undermining the natural resource base.

Concept of Profitability: Profitability is the primary goal of all business ventures. Profitability can be defined as the ability of given investment to earn a return from its use. Without profitability, the business will not survive in the long run. Profitability is measured by deducting expenses from income. Income is money generated from the activities of the business.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Review of related literature is discussed under the following sub-headings: The Concept of Empowerment, The rationale for Empowerment, Concepts of Women Empowerment, Agricultural Cooperative, Economic Empowerment of Women through Agricultural Cooperatives, Cooperative Membership, Cooperative Services, Livelihood Sustainability, Concept of Profitability, Empirical Review and Theoretical Framework.

2.1: Conceptual Review

2.1.1: Agricultural Cooperative

Agricultural Cooperatives have been known for organizing small farmers into producer organizations to increase their bargaining power vis-a- vis other actors in the value chain (Roldan and Ellen, 2009). They emphasized that agricultural cooperative offers such a possibility by means of organizing and empowering individual small producers through provision of farm input and credit. Nevertheless, new challenges associated with emerging consumer demands, global standardization processes, market requirements and price instability require different roles and capacities from agricultural cooperative operating in agro-food value chains worldwide. Agricultural Cooperatives are now challenged to take on a more pro-active approach in marketing, updating their organizational structure and engaging in value chain integration.

Adefila (2011) noted that the history and importance of agricultural cooperative organizations in Nigeria is a long- standing one. Before the enactment of the Cooperative Society Law in 1935, there had been indigenous attempts to form

associations such as Cocoa Farmer's Society and KolaNut planters Union. These associations were formed in major cocoa producing areas and they were independent of government support (Adefila, 2011). Cooperative organizations have undergone changes over the years from traditional, informal to modern and formal institution. (Harris *et al*, 2005). Cooperatives were competing favourably with private individuals, including multinational companies amidst various challenges such as price fluctuations, legislation controls and low capital accumulation. They embarked on many agricultural development strategies such as input subsidization, market boards and institutional reforms geared towards improvement of agricultural production. (Adefila, 2011).

Mainly, agricultural cooperative societies engage in the production, processing, marketing and distribution of agricultural products. (Adefila, 2011). An important form of agricultural cooperatives in Nigeria is the Group Farming Societies (GFS). Members of these societies engage in the production of a variety of crops, while they also arrange for the marketing of the products. Some other agricultural cooperatives are devoted to the cultivation of single crops and such societies are named after the crops such as Tobacco Growers Cooperatives (TGC), Cooperative Credit and Marketing Societies (CCMS) etc. Modern agricultural processing cooperatives for crops such as Oil Seed and Farmer's Cooperatives have played far reaching roles in agricultural development. (Adefila, 2011).

Farmer's cooperatives are viewed as mechanisms to help improve the marketing environment for poor rural farmers faced with limited and uncertain consumer demand for the goods they produce. Agricultural Cooperatives can help reduce

production cost by organizing bulk input purchase for their members. (Olabisi, 2010). Cooperatives are useful in overcoming barriers to assets information, services, and markets for high- value product and they also assist some Nigerian small-scale farmers in solving land, labour, and capital problems. (Holloway, Nicholson, Delgado, Staal and Ehui, 2000). Reardon and Barnett (2000) believe that the increasing importance and changing nature of food grades and standards are reasons for the rise of Agricultural cooperatives. Other roles of agricultural cooperatives identified in the literature include

- i) Promoting self-help by imparting better business management skills to members.
- ii) Solving market failure by providing and coordinating missing services (e.g. Input and / or product marketing).
- iii) Enhancing bargaining strength and reducing transaction costs with input suppliers and farm product buyers.
- iv) Monitoring costs (thereby ensuring normal return for capital invested)
- v) Reducing opportunistic behaviour by potential competitors.
- vi) Providing economies of large scale.
- vii) Promoting community development and public support to farmers.
- viii) Influencing the terms of trade for their members.
- ix) Influencing public policy making. (Reardon and Barrett, 2000).

Membership of agricultural cooperative societies is very instrumental to the empowerment of women farmers towards agricultural production hence should be encouraged as a strategy for improving the agricultural productivity and livelihoods of

the women farmers which is crucial to their empowerment and achievement of sustainable rural development in Nigeria (Deji, 2005).

Furthermore, Agricultural cooperatives enable small farmers to take collective action to reduce input cost and marketing risks. Through cooperatives, farmers can do collective bargaining or purchasing to get the best deals on seeds, supplies and equipment on their own (Saikon and Hung, 2008). According to Saikon and Hung, (2008) through cooperatives, the members can purchase the equipment jointly and/ or lease them from the cooperatives. Agricultural cooperatives may also integrate an information centre or include an extension agency involved in the work to stimulate new crops and farming techniques. Some of them are also active in community development and education in areas of farming as well as primary level business management and government lobbying.

Also, agro and food processing cooperatives are engage in value-added activities from primary agricultural products. Cooperatives make possible the joint purchase of expensive agro-food processing equipment and machineries which normally would not be affordable for small- scale agricultural producers. They offer the benefit of enabling the small producer to enter substantially more lucrative and profit- making areas. This is because business in processed products is substantially more lucrative than business in primary goods.

Further study revealed that while prices of primary products such as coffee, cocoa and sugar dropped from 200 to 400% the value of processed goods such as instant coffee, chocolate bars and cornflakes increased more than 200 percent from 1980 to

2000. Another study in Mexico noted that value-adding activities accounted for a 350% increase farmer's income.

Agricultural cooperatives supply agricultural inputs to their members, jointly produce and market their produce. Input supply includes the distribution of seeds and fertilizers to farmers. Cooperatives in joint agricultural production assume that members operate the co-operative on jointly owned agricultural plots and also jointly market agricultural of producer crops (Chambo, 2009). It must also be recognised that the incidence of agricultural cooperatives in Africa is not accidental. Most developing countries, including those in Africa, depend on agricultural production for their livelihoods. The statistics indicate that 84% of the population in African countries depends on agriculture as source of food, income and employment. (Chambo, 2009). Agricultural cooperatives, therefore, have the capacity to empower and improve the living standard of the rural people, especially women through the provision of agricultural inputs and technology, processing and storage, extension, financial services, land and tenure security, and market access (Cheryl, Zoe & Shereen, 2012).

2.2 Empowerment

Empowerment is a construct shared by many disciplines and arenas; community development, psychology, education, economics, and studies of social movement, and organizations, among others. How empowerment is understood varies among these perspectives. In recent empowerment literature, the meaning of the term empowerment is often assumed rather than explained or defined. Empowerment is better known and understood when we see it in people with whom we are working and for programme of evaluation. Cheryl (1999) noted that the term empowerment has no

clear definition especially one that could use a cross- disciplinary line. He sees empowerment as a multi-dimensional social process that helps people gain control over their own lives. Empowerment is a process that challenges our assumptions about the way a thing is and can be. It challenges our basic assumptions about power, helping, achieving, and succeeding. To begin to clarify the concept of empowerment, we need to understand the concept broadly in order to be clear about how and why we need to narrow our focus to women empowerment through cooperatives.

Cheryl (1999) further said that the core of the concept of empowerment is the idea of power. The possibility of empowerment depends on two things. First, empowerment requires that power can change; and if power cannot change, or is inherent in position or people, then empowerment is not possible, nor is empowerment conceivable in any meaningful way. In other words, if power can change, then empowerment is possible. Second, the concept of empowerment depends upon the idea that power can expand. This second point reflects our common experiences of power rather than how we think about power. Sociological empowerment often addresses members of social groups that social discrimination processes have excluded from decision-making processes through, for example, discrimination based on disability, race, ethnicity, religion or gender. Empowerment in this study as a methodology is associated with feminism. Empowerment for the purpose of this study, therefore, refers to the process of enhancing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. The empowerment of rural women is about expanding women's assets and capabilities to participate in, negotiate with,

influence, control and hold accountable the institutions that affect their lives (FAO, 2015).

Most often the term “empowerment” is directly related to the development of vulnerable and weaker segment of society, particularly women and is used in different expressions in different contexts. They include gender equality, development, freedom, women’s autonomy, gender integration, social inclusion, financial inclusion, self-reliance, status and wellbeing. The galaxy of literature on women empowerment encompasses process of empowerment, provision of enabling conditions, strategies, techniques and proliferations of outcomes rather than the crux of the empowerment. Hence, there is the need to have a conceptual clarity of this ideology as critiqued by the advocates of women empowerment. (Sudha, 2015)

Nevertheless, Abdalla (1999) is of the opinion that empowerment is a complex and often misunderstood concept. It is located within the discourse of community development and is connected to the concepts of self-help participation, networking and equity. While it has acquired a considerable aura of “respectability”, even “social status” within the vocabulary of development, it has not yet acquired a socially agreed content. It is also one of those concepts whose full implications people do not realize when they use it.

Abdalla (1999) further said that empowerment has evolved within the development discourse. It has dethroned the term “participation”, which lost some of its currency since the 1980’s. Empowerment came into vogue in response to the situation where people could “participate” in a project without having the power to decide on the critical issues to the project. However, empowerment appears to mean different things

to different people. He noted that empowerment is supposed to bring closer those who hold power and those who are powerless. Empowerment moves the powerless into positions of power and makes those at the higher levels of power accept sharing power with them.

More so, he said that empowerment generally means engaging the relevant stakeholders in a given process by applying the principles of inclusiveness, transparency and accountability. As such, the empowerment concept goes beyond the notions of democracy, human rights and participation to include enabling people to understand the reality of their environment (social, economic, political, ecological and cultural) and to take the necessary actions to improve their well-being.

The fundamental goal of empowerment is to help individuals within the society to improve the quality of their own lives and share equality in the benefits of economic growth. Growth that depends on constant infusions of grants or subsidized financing from government or other donors is inherently unsustainable. Empowerment is about helping people unleash their creative and productive energies to achieve sustainable growth and continuous improvement of their living standards.

As indicated above, the concept of empowerment goes one step further than participation because people can participate in a given process without having the power to make critical decisions related to the activity or process they are involved in. What remains ambiguous in most discussions of empowerment is the question of self-reliance.

In terms of the steps required to achieve a personal goal, empowerment might mean consultation with the person or the community in the identification of needs and the

choice of options. Everything else is done on behalf of the empowered person by other professional persons. This kind of approach to empowerment attracts the critique of tokenism. Such an approach fails to recognize that as long as others who have access to resources control the process, then the process is actually disempowered.

Economic empowerment means that disempowered people take responsibility for their own material gain in an ongoing basis and become managers of their own development. As citizens gain awareness and self-confidence, they realize that they can be self-reliant in pursuing their own economic dreams. Empowerment is a process of validation and encouragement. This means providing incentives and opportunities for participation in business. It does not mean, however, that people should be shielded from the consequences of making economic decisions. Nor should it create price distortions and increase inefficiency in the economy.

For the purpose of this paper, our focus is on economic empowerment of women through cooperative societies. In this regard, economic empowerment strategies include six main categories:

- 1) Financial intervention – to assist local business activities (increased access to credit).
- 2) Enterprise development – increased access to extension, business and management training and improved production technologies.
- 3) Marketing strategies for locally produced goods/ services (increased access to markets).
- 4) Bargaining strategies – for higher wages, better working conditions etc for the women.

- 5) Job creation – promotion of labour intensive projects; and
- 6) Training and education that is responsive to skill requirements in the economy.(Abdalla, 1999).

2.2.1 Economic Empowerment

Economic empowerment has been defined in several ways by various researchers and organizations. In simple terms, economic empowerment combines the concepts of empowerment and economic advancement. Approaches to economic empowerment concentrate on factors that help women succeed and advance in the market place. This includes increasing skills and access to productive resources, improving the enabling and institutional environments, and assisting women in their ability to make and act on decisions in order to benefit from economic growth and development. Economic empowerment is intertwined with social and political empowerment. (DFATD, 2013)

Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways which recognise the value of their contributions, respect their dignity and make it possible for them to negotiate a fairer distribution of the benefits of growth (Eyben, Kabeer, and Cornwall, 2008).

Economic empowerment increases women's access to economic resources and opportunities, including jobs, financial services, property and other productive assets, skills development and market information. Eyben (2011) noted that economic empowerment is women's capacity to contribute to and benefit from economic activities on terms which recognise the value of their contribution, respect their dignity and make it possible for them to negotiate a fairer distribution of returns.

Economic empowerment means people thinking beyond immediate survival needs and thus being able to recognise and exercise choices.’

Moreover, economic empowerment of women is a prerequisite for sustainable development, pro-poor growth and the achievement of all the Millennium Development Goals (MDGs). Gender equality and empowered women are catalysts for multiplying development efforts. Investments in gender equality yield the highest returns of all development investments. (OECD, 2010) Women usually invest a higher proportion of their earnings in their families and communities than men. A study in Brazil showed that the likelihood of a child’s survival increased by 20% when the mother controlled household income. (World Bank, 2010).

Economic empowerment is a process that increases people’s access to and control of economic resources and opportunities, including jobs, financial services, property and other productive assets (from which one can generate an income), skills development and market information (Louise, 2014). It is also about changing institutions and norms that inhibit women’s economic participation, such as attitudes about child care or the type of work that women can do (Jethro, 2012). Economic empowerment is a situation where the ability to own and control resources exist which in turn gives rise to the ability to engage in income- generating activities that will create access to independent income. (Sabeh and Mohammad, 2007).

2.2.2 Women Empowerment

Women empowerment is defined differently by different scholars. Mayoux (2005) and Mosedale (2005) define women empowerment as a mechanism where women become strong by increasing their confidence to make appropriate choices and control over

resources. Naryaan (2002), on the other hand, define women empowerment as women increasing control and ownership of assets to influence and bargain over any decision that affects their lives. Most often, the term “empowerment” is directly related to the development of vulnerable and weaker segment of society, particularly women and is used in different expressions and in different contexts. They include gender equality, development, freedom, women’s autonomy, gender integration, social inclusion, financial inclusion, self-reliance, status and wellbeing. The galaxy of literature on women empowerment encompasses process of empowerment, provision of enabling conditions, strategies, techniques and proliferations of outcomes rather than the crux of the empowerment. Hence, there is the need to have a conceptual clarity of this ideology as critiqued by the advocates of women empowerment. (Sudha, 2015)

The concept of women’s empowerment (by some authors referred to as “gender empowerment”) has also been described differently by different authors. A key factor in all definitions, however, is that gender empowerment relates to the ability of women to manage their lives. Empowerment refers to the process of enhancing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. The empowerment of rural women is about expanding women’s assets and capabilities to participate in, negotiate with, influence, control and hold accountable the institutions that affect their lives (FAO, 2015). While empowerment has been described as both a state and a process in the literature, World Bank Institute (2007), Duflo (2005) and Kabeer (2005) in stressing that empowerment is a process, which leads towards a state in which women are empowered. That is, empowerment involves an improvement in women’s ability to manage their own lives.

This is actualized through increased access to key resources and activities, as stressed by Duflo (2005) where he noted that “gender empowerment is defined as improving the ability of women to access the constituents of development in particular such as health, education, earnings, opportunities, rights, and political participation”. This understanding of women’s empowerment gives a direct link between empowerment and equality of opportunities. The process of empowering women improves their ability to manage their lives. It improves their access to education, formal sector employment, entrepreneurship, finance, control over fertility etc. This improved ability to manage their own lives entails an expansion of women’s opportunities in the direction of equal opportunities in comparison with men.

Kabeer (1999) defines empowerment as the “processes by which those who have been denied the ability to make choices acquire such ability”. In her opinion, the ability to exercise choice incorporates three inter-related dimensions, namely, resources which include not only access, but also future claims, to material, human and social resources acquired through a variety of social relationships (Power to); agency which entails the ability to define one’s goals and act upon them that may take the form of decision making, negotiation and bargaining (Power within); and achievements (well-being and outcomes) (Kabeer, 1999). She calls women to come together collectively to tackle injustices, “a challenge beyond the capacity of uncoordinated individual action” (the power with) (Kabeer, 2012). Though resources and agency in different forms in terms of control, awareness, voice and power are the most common components of empowerment in the various literature, the term ‘agency’ that “encompasses the ability to formulate strategic choices and to control resources and

decisions that affect important life outcomes” is at the heart of conceptualizations of empowerment (Malhotra *et al*, 2002). Some studies have uncovered that women through the cooperatives, have secured social inclusion and acquired social skills and ability to influence the decision making roles in their homes and patriarchal structures that have subordinated them (Dash, 2011; Datta and Gailey, 2012; Gebremichael, 2013; ILO, 2012; Sudha, 2013). Besides, they also enjoy the access to an array of services that include financial, health, childcare, micro credit, insurance, legal, vocational and education.

Most women in developing countries do not have access to education, productive resources and other services. In order to solve the problem, women empowerment has become a global agenda. The term ‘women empowerment’ has become popular in the development field since 1980’s. It is vividly recognized that women empowerment is essential for sustainable economic growth and poverty reduction in developing countries. Although women empowerment is not a sufficient condition, it is still a necessary condition for development process. Thus, women empowerment has three dimensions. The social dimension aims for respectable and non-discriminatory positioning of women in the society. The political dimension promotes their involvement in the governance of organizations and inclusion in administrative positions, and economic empowerment involves enabling women members to have equal opportunities with/men in employment, spending, ownership of production means and sharing benefits (Prakash, 2002).

Cooperatives have been successful in not only increasing social participation of women but also in developing drives, initiatives and leadership qualities. However, to

date, women's active involvement and leadership in agricultural cooperatives continue to be rather low (USAID, 2005).

2.2.3 Economic Empowerment of Women through Agricultural Cooperatives

Empowering women through cooperatives, according to Kokanova (2009), is to improve the socio-economic conditions of rural women and their families. Empowerment of women through cooperatives is crucial to poverty reduction and human development leading to the enhanced productivity and higher growth trajectory. (Sudha,2015). Government has made efforts to empower women's cooperative members by training cooperative members on micro credit financing, as well as on how to boost agricultural production and their access to local market. The aim of empowering women through cooperatives is to increase the capacity of the cooperatives to achieve a higher and more sustainable income. The government will work closely with women's cooperatives, specifically identified as dynamic but with vulnerable members (Kokanova, 2009).

Sourbani (2009) suggests that in order to integrate the vast majority of poor women into the main stream of the society, government has introduced measures to create social and economic awareness among the woman. Certainly, such measures have improved their standard of living. Cooperatives, which are social and economic in character have been recognized as the most suitable institutions to undertake such tasks for the women. She also said that after rapid industrialization of their country India, women are presently actively participating in economic activities and are not mere "house wives" looking after household responsibilities. As cooperative members, the women have a new sense of direction, hope and empowerment, because

they are in control of their lives and are able to contribute to their family's needs and the economic growth of their communities.

Cooperatives have the advantage of bettering their lifestyle and eradicating diseases, which has direct effect on their living standards and gives them better chances of performance in agricultural production. (Claxton, 2000). Involvement of women in cooperatives are practical programmes/ means for raising the status of women in the society on a very large -scale especially in those echelons of our society where their help and assistance are needed most.

Yaye (2010) argues that if the women cooperative members are empowered and encouraged to embark on agricultural production, processing and marketing, the cooperative in so doing enables the women to be active in community development, participate in decision-making and improve their living standards. Vulnerable women are encouraged to create and join cooperatives to increase their income. As they become economically empowered within the household, they are also less likely to suffer domestic violence.

As cooperative members, the women have a new sense of direction; hope and empowerment because they are in control of their lives and are able to contribute to their family's needs and the economic growth of the community. (Claxton, 2000).

Moreover, Bidisha (2008) opined that women empowerment is a change in the context of a women's life, which enables her increase capacity for leading a fulfilled human life. Women empowerment is one of the essential factors that promote human development. In fact, empowered women can contribute to human development through household and community activities and at the same time progress in human

development is expected to promote women empowerment through improved health, nutrition, education, social security, political freedom, availability of employment and decent standards of living for women. He also noted that women education has important bearings on children's health and survival. A study in Ivory Coast reveals that an increase in women's share of household income leads to increased spending on human development items like food, health care etc. Blumberg (2005) opined that economic empowerment of women is the key to achieve gender equality as well as improve the wealth and well-being of a nation. Almaz (2006) argued that an increase of the income controlled by women gives them confidence which helps them obtain a voice and vote in:

- i) Household decisions such as domestic well – being decisions. For instance, women tend to use their income clout for more support of equitable decisions about children's diet, education and health.
- ii) Economic decisions: like acquiring, allocating and selling assets.
- iii) Fertility decisions which have proven that economically -empowered women tend to have fewer children.
- iv) Land use and conservation decisions that show rural women tend to favour sustainable environment practices since they are usually the ones that collect the families' natural resources, such as water and firewood.

She noted that women's economic power also enhances the "wealth and well-being of nations. Again, women who control their own income tend to have fewer children, and fertility rates have been shown to be inversely related to national income growth.

Furthermore, women are also generally more willing than their male counterparts to send daughters, as well as sons to school, even when they earn less than men.

Since women represent half of the world's population, and gender inequality exists in every nation on the planet, to discriminate and prevent half of humanity from reaching their full potentials is economic folly. Denying women and girls equality and fairness not only hurts them, but also hinder the rest of the society. (Almaz ,2006).

2.3 Cooperative membership.

People who organize and belong to cooperatives do so for a variety of economic, social and even political reasons. Cooperating with others has often proven to be a satisfactory way of achieving one's own objectives, while at the same time assisting others in achieving theirs. Cooperatives are defined as "an autonomous association of persons who unite voluntarily to meet their common economic and social needs and aspirations through a jointly -owned and democratically -controlled enterprise (ICA, 1995). Cooperatives are established by like-minded persons to pursue mutually beneficial economic interests. Comprehensively, a co-operative is a voluntary association of people, engaging in a democratically- controlled business organization, operating at cost which is owned, capitalized and controlled by member patrons as users, sharing risks and benefits in proportion to their participation to achieve a common economic goal. Member owners often capitalize, finance, supervise, control and direct the policy of the organization. In this regard, members usually pool their resources together for their common socio-economic interest. The United Nations Research in Social Development (1999) said that co-operative societies are all

organizations legally organized as such, which are subject to organized supervisions which follow co-operative principles.

After completing the registration formalities, a Certificate of Incorporation is issued to the society, as well as bye-laws which guide the society to draft its constitution. Having fulfilled these guidelines, people can then be registered to form the membership of the society. Subsequently, any surpluses arising from business carried out with member's funds will be shared accordingly to all shareholders of the society (Godwin, 2011). Since its inception, cooperatives in Nigeria have been viewed as veritable tools for national development, particularly in the area of socio-economic development of rural areas. A cooperative can, therefore, provide a hub for organizing particular local economic interests and/or for protecting common pool resources (Simmons & Birchall, 2008a). This suggests that rural cooperatives are, first and foremost, voluntary business associations formed by people of limited means through contribution of share capital that forms the basis of sharing out the profits that accrue from the business (Wanyama, Develtene & 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 means to resolve socio-economic problems (Tanzanian Federation of Cooperatives, 2006).

2.4 Cooperative Services

Cooperative societies play significant roles in the provision of services that enhance agricultural development. Regular and optimal performance of these roles will accelerate the transformation of agriculture and rural economic development. Cooperatives play important roles in the development of agriculture in many countries as suppliers of farm produce, marketers of agricultural commodities, and providers of services such as storage and transport (Ortmann and King, 2007). Cooperatives account for over 50% of the supply of agricultural inputs, and over 60% of collection, processing and marketing of agricultural products (COGECA 2012b). Agricultural cooperatives are created by farmers to pool their means and increase their negotiating power on the market (Fulton and Hueth, 2009). By definition, they are controlled by their members (Siebert and Park, 2010).

The cooperative that embraces all type of Ofarmers and is well-organized and supportive is a pillar of strength for agriculture in Nigeria. Co-operatives vary in meaning for different purposes and with the profession of the people. Agricultural cooperative create farm supply and marketing services for their members to help them maximize their net profits. This requires both effective marketing of their products for better prices, as well as keeping input cost as low as possible. Cooperative societies are organized or formed to accomplish one or more functions, including production, purchasing, supplying, marketing and provision of financial services to the members, among others. It is, therefore, not surprising that so much emphasis is being placed on the efficacy of cooperatives as a welfare intervention tool. The vision of the cooperative development policy of the government, as expressed by the Federal

Ministry of Agriculture and Rural Development (FMARD, 2002), is to promote member's entrepreneurial capacities so that they can generate adequate surpluses for themselves and create opportunities for economic progress for the public.

For majority of the farmers that face obstacles and have limited means, joining cooperatives provides for them the best avenue for mobilizing their resources for enhanced agricultural production (Omotesho, Joseph, and Muhammad, no date). Farmer's cooperatives focus essentially on production, processing and marketing of crop and livestock products. Consequently, cooperative protects its members from exploitation by middle men through cooperative marketing of agricultural produce.

ICA & ILO (2014) have reported that about one billion people are involved in cooperatives in some way, either as members/customers, as employees/participants, or both. Cooperatives are believed to be the source of employment for at least 100 million people worldwide. According to these organizations, the livelihoods of nearly half the world's population are secured by cooperative enterprises (Thomas, Fanaye, and Waller, 2013). Rural-based cooperatives can contribute to reduced vulnerability of rural women through improving women's access to productive resources. FAO (2012) stated that cooperatives play an important role in supporting small agricultural producers and marginalized groups such as young people and women. By enabling them to access credit services, agricultural input supply and marketing services, the cooperatives enhance their productivity. Cooperatives reduce vulnerability by empowering their members economically and socially and create stable rural employment through business models that are resilient to economic and environmental shocks (ICA & ILO, 2014).

Cooperatives help create more equitable growth by making markets work better for poor people, by generating economies of scale, increasing access to information, and improving bargaining power. They also have role in tackling rural poverty by increasing the productivity and incomes of small- scale farmers by helping them collectively negotiate better prices for seeds, fertilizer, transport and storage. Cooperatives expand poor people's access to financial services, including credit savings and in some cases insurance and remittances. These services can support startup and expansion of enterprises; enable the risk taking that can lead to increased profitability; and reduce vulnerability by allowing the poor to accrue savings, build assets and consumption (Gicheru, 2012).

Recognizing women cooperatives societies seem to be the quickest way innovations could get to individual farmers and the surest way of increasing food that is available to the masses. (Emefesi, Hamidu & Haruna, 2004). In a study on women producers and the benefits of collective form of enterprise, Jones, Smith and Wills(nd) found that organizing into collective enterprise, such as cooperatives, enables women to unite in solidarity and provide a network of mutual support to pursue commercial or economic activities. Similar case studies of women's cooperatives in rural Nigeria and rural India indicated that compared to non -cooperative member's, women engaged in cooperative activities were better off in terms of productivity and economic well-being .(Emefesi *et.al* 2004).

Furthermore, through cooperative organization, women have also been able to effect positive change in the social and physical well-being of their families, communities, and nation. (Chambo,2009) opined that cooperatives have had an impact in the

generality of rural development defined in terms of availability and access to amenities that improved the basic conditions of life for the rural people. These include employment creation, rural market development, and enhancement of rural incomes and the improvement of access to social services.

2.5: Livelihood Sustainability

Livelihood is defined as having means to earn and procure adequate stock and flow of food and cash for an individual or a family to meet their basic needs. Livelihood security then means secured ownership of, or access to, resources and income-earning activities, including reserves and assets to offset risks, ease shocks and meet contingencies. (Acharya, 2006) .There are four principal ways of acquiring livelihood by rural households. First is production-based livelihood. A large proportion of the small and marginal farmers gain livelihoods through production on small pieces of land. For these households, availability or access to inputs and improved methods of production are quite critical to their livelihoods. Second is labour-based livelihood. Most of the small landholders and landless rural households derive livelihoods by selling their labour. For their livelihoods, demand for labour, wage rates and prices of food are the critical factors. Third is exchange or market- based livelihood. Those rural households which produce surplus food and non-food agricultural products or non-farm goods earn their livelihoods by selling these surpluses in the market. (Acharya, 2006)

A livelihood comprises the capabilities, assets and activities required to sustain a means of making/earning a living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and

assets both now and in the future, while not undermining the natural resource base. (DFID,2000). The concept of ‘Sustainable Livelihoods’ constitute the basis of different ‘Sustainable Livelihood Approaches’ (SLA) and has been adapted by different development agencies such as the British Department for International Development (DFID). The DFID has developed a ‘Sustainable Livelihood Framework’ (SLF) which is one of the most widely used livelihoods frameworks in development practice. The SLF was integrated in its program for development cooperation in 1997 (GLOPP, 2008).

The recognition of co-operatives as self-help organizations with capacity to improve peoples’ livelihoods and wellbeing is global and widespread among institutions. The United Nations, in 1994, estimated that co-operatives provide livelihood security for three billion people. In effect, “co-operatives seek to harness and exploit collective latent and potential resources available to members that would have hitherto remained unexploited and ineffective.” (Ferguson, 2012) Cooperatives have been an effective way for people to exert control over their economic livelihood and this provide opportunity to achieve one or more economic goals in an ever increasing competitive environment. Cooperative societies have become weapons that are used to lessen the effect of poverty on the populace in the developing nation like Nigeria. Successful cooperative businesses can be found in virtually every industry in Nigeria. For instance, in Lagos State alone, there are about 12,000 registered cooperative societies across the public and private sectors of the economy with 39,000 trustees managing over 2 million members in all economic and social strata of the State with an asset

base of over N40 billion landed properties as part of the assets base. (Lagos State Ministry of Agriculture and Cooperatives, 2013).

According to Aduse-Poku, Nyantakyi, Atiase, Mensah, Nyantakyi, Owusu, Agyenim-Boateng. (2003), the concept of livelihood has remained a subject of utmost importance due to its inevitable role to human existence. A livelihood is much more than a job as it covers a whole range of things people do to make a living. Increase in population and technology have also brought about more variations in livelihood activities thereby further broadening the concept of livelihood. Most people, especially in the rural areas, obtain their means of livelihood from their immediate environment. Other researchers such as Donald, Barbara and Juliet. (2005) have also noted that the livelihoods of poor rural households are diverse across regions and countries, and within countries. While some rural households rely primarily on one type of activity, most people now seek to diversify their sources of livelihood as a way to reduce risk. In most developing countries, it is the small-holder farmers who produce greater proportions of staples but mostly at the peasant levels.

2.6: The Concept of Profitability

Profitability is the primary goal of all business ventures. Without profitability, the business will not survive in the long run. So, measuring current and past profitability and projecting future profitability is very important in every enterprise. Profitability is measured by deducting expenses from income. Income is money generated from the activities of the business. For example, if crops and livestock are produced and sold, income is generated from the price for which they were sold. However, money coming into the business from activities like borrowing money does not create

income. This is simply a financial transaction between the business and the lender to generate capital for operating the business or buying assets. Expenses are the cost of resources used or consumed in the course of running the business. For example, the purchase of corn seeds is an expense of a farm business because it is used up in the production process. Repayment of a loan is not an expense; but a financial transaction between the business and the lender, though interest on all loans are expenses.

Profit and profitability are two different terms. Profit means an absolute measure of earning capacity, while profitability is relative measure of earning capacity. (Nimalathan, 2009). The word profitability comprise of two words profit and ability. The word profit has already been defined but its meaning differs according to the use and purpose of the enterprise to earn the profits. Thus, the word profitability may be defined as the ability of given investment to earn a return from its use. Profitability ratios measure a firm's ability to generate profits and central investment in relation to security analysis, shareholders, and investors. Profitability is the primary measure of the overall success of any enterprise. The analysis of profitability ratios in a business is important for the shareholders, creditors, prospective investors, bankers and government alike. Nimalathan (2009) mentioned that the profit is the primary objective of a business, and measures not only the success of a product, but also of the development of the market for it. Further, profit is the report card of the past, as well as the inventive gold star for the future.

CONCEPTUAL FRAMEWORK

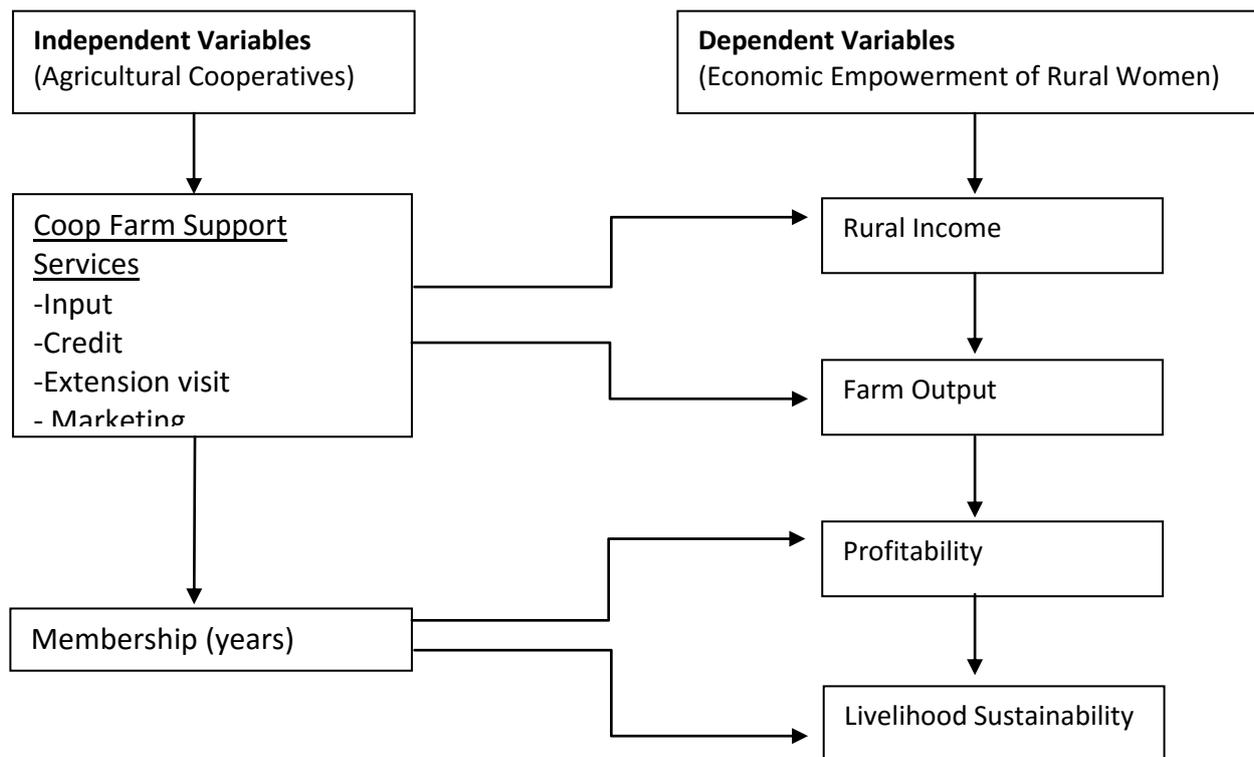


Figure 1

Source: Authors' Conceptualization

To analyze the effect of agricultural cooperatives on women's empowerment, this study has devised five support activities through which agricultural cooperatives empower rural women economically; which are input; credit, marketing, and extension visits by the agricultural Extension Officers. Agricultural Cooperative through adequate performance of these services will enhance the output of their members thereby increasing their income. Adequate provision of farm input and credit when needed will boost their member's agricultural production. However, through their extension visit, members will learn new agricultural technologies and other off-farm activities that will sustain them in the case of natural disaster. More so agricultural cooperatives through value chain will assist members in marketing their

agricultural produce at a higher price instead of the farmer selling their produce at a giveaway price. This will also curb the activities of middlemen. These cooperative services geared towards achieving enhanced income which is proxy for empowerment in this study. Women empowerment is a process of moving women from the state of marginalization to the mainstream within the household and the community as well.

2.7 Review of Empirical Studies

Ekesionye & Okolo (2012) in their study on women empowerment and participation in economic activities described both as indispensable tools for self-reliance and development of Nigerian society. The objective of their study was to examine women empowerment and participation in economic activities as tools for self-reliance and development of the Nigerian society. Research questions and hypothesis were used to guide the study. A structured questionnaire was used as the major instrument for data collection. Copies of the questionnaires were administered to 402 women, randomly selected, from 6 out of the 21 Local Government Areas of Anambra State. Three hundred fifty one copies of the questionnaire returned were analyzed using mean to answer the research questions and t-test statistic to draw inferences in relation to the hypothesis. The results showed that farming, trading, crafts, food processing, hair dressing, poultry and the likes were the major economic activities engaged in by women in Anambra State. Personal savings, family assistance, philanthropist's assistance, loans and credits, cooperative society's assistance and group contributions, were the sources of funds for the women for their economic activities. Education and health promotion, food supply and distribution, were some of the services rendered by the women that bring about societal development. Inability of government to provide

adequate support, corruption on the part of policy implementers, family challenge, cultural restrictions, husbands influence and illiteracy were the obstacles women encounter in the course of carrying out their economic activities. Provision of sustainable land tenure system, provision of soft loans and credits, training programmes, funding and the establishment of more cooperative societies, were some of the strategies proffered to enhance women participation in economic activities.

Ajuzie, Okoye & Mohammed (2012) in their study on *Assessment of the Influence of Education on Women Empowerment: Implications for National Development* observed that the documented empirical finding on the extent to which women's education has influenced national development seems to be inconclusive. The purpose of the study was to find out the extent to which women education has led to women empowerment. The study was guided by research questions and hypothesis. Data were collected using a structured questionnaire. Mean and standard deviation were used to measure the frequency of the answer to the research questions, while the t-test statistics was used to test their significance to formulated hypothesis. This study adopted *ex-post facto* research design, while the area of this study is Umuahia Educational Zone of Abia State, Nigeria. The population for the study was 3,340. Simple Random Sampling technique was used to select 536 respondents that consisted of 300 female teachers in primary schools and 236 female teachers in secondary schools. The findings of the study indicated that education empowers women to a great extent. Based on the findings, the study concludes that women empowerment aids national development. The educational implications of the findings of the study were also discussed and recommendations made.

Alade (2012) in his study on Gender Stereotyping and Empowerment in Nigerian Society: Implications for Women Repositioning in Curriculum Delivery posits that inequality is one of the contemporary issues which have featured prominently in both national and international debates for quite some time now in both developed and developing countries of the world. This has obviously thwarted women status in curriculum implementation in Nigerian education. This observation prompted the author to examine gender stereotyping and empowerment in Nigerian society with implications for women repositioning in curriculum delivery. The overview of religious records and gender position at creation of the nation were discussed. Likewise, the available reports of some studies in Africa in respect to disparity in gender enrolment, academic achievement as determined by gender and status were enumerated along with gender spread in commonwealth universities and some parliamentary seats worldwide. Human rights versus gender stereotyping were also discussed vis-a-vis women empowerment. Thereafter, the implications of gender stereotyping for women re-positioning in curriculum delivery was logically dealt with. The paper recommends, among other things, that the National Human Rights Commission (NHRC) should be reinforced to carry out its duties more effectively so as to enhance the promotion and protection of human rights all the time, especially in respect to gender issues, and that women in both administrative and academic positions should be given adequate support by their male counterparts to compensate for their weaknesses.

Mehrdad and Zinab (2013) in their study on The Factor Analysis Components Related to Obstacles to Member's Empowerment in Women's Rural Cooperatives in Ilam

authors identified the obstacles of members' empowerment in women's rural cooperatives by employing descriptive and correlation methods. The study population of their research was 1242 members of women cooperatives at Ilam province which among them 128 members have been chosen by means of simple random sampling method. The instrument for collecting data was a structured questionnaire which its validity was confirmed by jury of experts and its reliability established through calculation of the Cronbach Alpha Coefficient, as estimated to be 0.93. Based on results obtained, variables related to the obstacles to women's empowerment with regard to their nature were summarized in six factors namely: internal behavioral, socio-cultural, educational, participatory, infrastructural managing and external organizational factors. The result of the research showed that these six factors explained 60% of the total variance of the variable.

Biru (2014) in his study conducted in the Eastern Zone of Tigray Regional State, Ethiopia, assessed The Meaningful Contribution of Agricultural Cooperatives in Promoting Food Security and Women's Empowerment. The study adopted purposive sampling for the selection of the target population and the multi-stage random sampling method was used for the selection of multipurpose cooperatives and respondents. The data analysis employed various statistical tools like percentage, mean, standard deviation and regression analysis. The result indicated that cooperatives serve the rural community in general; and also contribute a lot in improving the standards of living of their individual members residing in rural areas. They undertake various economic activities which help the members achieve food security and gender equality. However, because of poor implementation capacity and

low managerial, financial and operational competence, multipurpose cooperatives have not been able to strengthen and expand their business operations as per the expectations. The study recommended that concerted efforts are needed to organize seminars and campaigns to create awareness about cooperatives.

Aregawi and Haileslasie (2013) in their study on *The Role of Cooperatives in Promoting Socio-Economic Empowerment of Women*, worked with data from multipurpose cooperative societies in South- Eastern Zone of Tigray, Ethiopia. Both primary and secondary data were used. Out of the target group of 75 multipurpose cooperative societies (MPC's), the researchers purposely selected MPC's established before 2005. Out of the selected target group of MPC's, 25% were randomly selected and 30% of women members were also selected randomly. The data collected were then analyzed using descriptive statistics. The results of the study indicated that women participation in cooperatives was very limited in that part of Africa. More than 80% of the respondents were involved in farm activity and only 5% are engaged in paid work. Ninety percent of the respondents have joined their cooperatives to access financial resources and improve their bargaining power. The results revealed that women members have improved their income, livestock holdings, autonomous decision making and spending power after joining cooperatives. They also found that the female memberships in cooperatives were severely limited and hence governmental and non-governmental organizations need to consider gender equality in their cooperative member's capacity building programmes.

Fatemeh (2011) in his study on *Women's Empowerment for Rural Development*, provides strategy for women's empowerment for rural development. He emphasized

that empowerment can enable women to participate, as equal citizens, in the economic, political and social sustainable development of the rural communities. The findings outlined in this paper suggest that, designed and implemented in ways that meet rural women's diverse needs, community participation processes can be important to facilitate social, technological, political and psychological empowerment of women in terms of rural development. The findings of this investigation can assist rural development by the implementation of community development strategies that promote women's empowerment.

Abdulahi, Udunze and Agbasi (2015) in their study on Effect of Cooperative Membership on the Economic Empowerment of Women in Osun State of Nigeria observed that cooperative societies are organizations that have the primary aim of providing the needs of their members and enhancing the quality of their member's livelihood. The study then examined the effect of cooperative membership on the economic empowerment of women in Osun State of Nigeria. Data were obtained from 375 women cooperative members across two senatorial zones of Osun State. Data obtained were analyzed with both descriptive statistics and inferential model of regression, T-test, ANOVA non-parametric correlation test, as well as the post-hoc test. Evidence from the study revealed that socio-economic variables of the respondents were determinant factors for their membership in cooperative societies. It was also revealed that women cooperative societies in Osun State were involved in different economic empowerment activities that were accessible and capable of empowering them. Findings further revealed that economic empowerment activities of

women cooperatives gave rise to the level of entrepreneurial skills acquired by the women cooperative members in Osun State.

Therefore, in a bid to strengthen the economic empowerment efforts of women cooperatives, the following recommendations were made: that cooperatives incorporate adult education as part of their empowerment programme, cooperative should seek to introduce innovative skills and programmes that will boost economic status of the women. Since cooperative membership increases the effect on income level of women, they should be encouraged to join cooperative societies in order to improve their livelihood; and extension services should be provided for cooperatives with competent facilitators.

Abiyot (2010) in his study on the Potential of Cooperatives in Empowering The rural Women noted that women empowerment, as a policy approach, uses different mechanisms to empower women; and organizing them into cooperatives as one of these has attracted the attention of many organizations. The study, therefore, aimed at investigating the roles of cooperatives in empowering women. For the study, four primary societies from the members of Challela Rural Savings and Credit Cooperative Union were selected. Among these, 10% of the households were selected for the survey. In addition, FGD's and key informant interviews were also used to collect the necessary data. The findings of the study indicated that cooperatives provide saving and credit services that enable the women to start income- generating enterprises. As a result, the women's average yearly income increased. Moreover, they could then own different assets like houses, grain mills, farm equipments and different types of livestock. In addition, their access to information, food, health and education also

improved. However, low participation of women, lack of proper coordination and training were the major challenges in the cooperatives.

Ellen & Miet (2013) in their study on Cooperative Membership and Agricultural Performance Evidence in Rwanda, noted that agricultural policies in Rwanda focus on agricultural intensification and increased market orientation of the smallholder farm sector. Cooperatives are seen as key vehicles in this but little is known about their effectiveness to achieve these goals. In the study, they analyzed the impact of cooperative membership on agricultural performance for rural households in Rwanda. Cross-sectional household data, collected in 2012, were used to analyze the impact of cooperative membership on different agricultural performance indicators. They specifically looked at the diversity in cooperatives and distinguished different types of cooperatives in several ways. They used several econometric techniques to deal with potential selection bias in estimating the impact of cooperative membership, including a proxy variable method. It was found that cooperative membership in general had a positive impact on different farm performance indicators but that these effects are driven by specific types of cooperatives

Masabo (2015) *in* her study on Women`s Empowerment through Cooperatives- A Study from Women`s Perspectives, opined that the story of women in Rwanda is a testimony of a subordinate group, who have made important strives for their equality after conflict mixed up gender roles and relations in Rwanda. Women played a major role in the reconstruction and reconciliation process of the country and hence contributed to the national economy and welfare. Nevertheless, Rwanda is a society still characterized by a patriarchal social structure that subordinates women

economically, socially, culturally and politically to men. Cooperatives have been acknowledged as valuable tools to effect changes in the socio-economic roles of women and foster their economic position and in so doing, advance the women's empowerment process.

The paper puts forward how cooperatives received extensive recognition as institutional mechanisms to empower women. It further explored the role of cooperatives in the Rwandan context in order to identify their potential as economic agents of change that lead to economic independence of women, promote their social inclusion, and ultimately contribute to their empowerment by giving them the ability to make strategic choices that significantly affect their lives. In order to gather relevant data, a survey among 18 women in Rwanda was conducted to answer how cooperatives facilitate the process of empowerment for their women members. In addition, supportive sub-questions helped to relate contextual factors such as the development discourse, specifics about cooperatives and specifics about the Rwandan environment in relation to women empowerment. To employ an academic and theoretical lens, Kabeer's concept of women empowerment and Moser's Gender Needs Theory are combined to create a unique analytical framework giving space to women's voices. As part of the methodological framework, an interpretive approach inspired by a social constructivist ontology were combined with different research techniques to capture and analyse women empowerment through cooperatives in Rwanda. From a social constructionist perspective, the main interest was to investigate the underlying structures in society that impact it and the way cooperatives also affect/impact the mechanism of the women empowerment processes. Beside

social constructionism, feminist research principles inspired not only the theoretical but also the methodological foundation of the study. Feminist principles are embodied in a strong concern and interest for women representation which necessitates using them as valid sources of information.

Crig (nd) in her study on Empowering Women Economically through Microcredit: Prospect and Challenges :(The Case of Some Selected Credit Schemes in the Eastern Region of Ghana) noted that the terms ‘empowerment’ and ‘micro-credit (or microfinance)’ have become common household words in recent years. Empowerment is used to describe a wide range of concepts and outcomes and to advocate for certain types of policies and intervention strategies to favour perceived disadvantage groups like women. Micro-credit (or microfinance) refers to a wide range of organizations and financial services that provide small- scale financial assistance. The main objective of this study was to explore the relationship between micro-credit and women economic empowerment. The study also sought to identify some of the challenges faced in implementing micro-credit schemes. It was carried out in the eastern region of Ghana and employed the survey method that used structured and semi-structured interview guides. It also used Focus Group Discussions, case studies and literature review for data collection. Of the 266 participants, 180 (women participants) were formally interviewed using questionnaires. The rest (86) were engaged in semi/informal and key informant interviews, as well as group discussions. The results indicated that the design used by the micro-credit schemes suited the characteristics of the poor and significantly empowered the women both economically and socially. Economically, the working capital, turnover, profit/incomes and the

savings of participants in micro-credit schemes significantly improved. Socially, participants were able to finance their basic needs and by implication, this increased their self-confidence to participate in intra-household decisions on investment. The micro-credit schemes provided easy access to credit using social collateral in the form of peer/group support and pressure. They also encouraged a culture of savings and repayment habits. A major challenge faced by the credit scheme was how to increase operations to meet larger demands in an effort to match outreach with sustainability, and the many other logistical constraints faced by most of the credit schemes.

Iheanacho, Chikaire, Ejiogu-Okereke, Oguegbuchulam, Osuagwu, & Obi (2012) in their study on Empowerment Strategies of Cooperative Societies for Poverty Reduction Among Members in Aboh Mbaise Area of Imo State, Nigeria, observed that Poverty has become a growing concern to both government and non-governmental agencies the world over because of the daily increase in the number of people affected despite measures taken to reduce or even alleviate it. Various programmes put in place have not adequately addressed poverty concerns as they failed or were abandoned by successive governments. One important avenue believed to be effective in poverty alleviation is the use and formation of cooperative societies. The study, therefore, sought to discover the empowerment strategies used by cooperatives to reduce poverty among members and the barriers to the improvement of the socio-economic status of individual members. The study reveals that cooperatives are veritable tools for poverty reduction considering the services they render to people. Cooperatives empower people by creating employment for members, facilitating financial services, and the provision of educational support, social

protection, marketing services, mutual aids and labour exchange. Cooperatives also ensure that produce are properly stored for use during hard times to ensure food security. But Cooperatives face problems, such as unfavourable land tenure law, low literacy rates, poor management/leadership and the lack of micro credit facilities. In recognition of the roles of cooperatives, a policy thrust is needed to finance the formation of agricultural cooperatives so that resource-poor farmers can access whatever services they render.

Dohmwirth (2014) in her study on *The Impact of Dairy Cooperatives on the Economic Empowerment of Rural Women in Karnataka, India* noted that women who play an important role in the economic and social development of societies are often denied equal opportunities because of socially embedded gender inequalities. The research looked at the potential of dairy cooperatives to the women empowerment in South India. Dairy production is of great importance for rural economy in India, and women contribute significantly in this activity. The Women Empowerment in Agriculture Index developed by the International Food Policy Research Institute was adopted and applied as a research tool. Using a snowball sampling technique, structured interviews were conducted with women involved in four different dairy cooperatives (29) and women selling at the private market (29). The results of the study indicate that there were economic benefits for women participating in dairy cooperatives. However, the outcomes for women empowerment were ambiguous. Only in some domains did women in dairy cooperatives rank their empowerment status higher compared to non-members. The results point to the fact that economic gains provided by cooperatives may not always lead to greater empowerment for

women. Moreover, the analysis indicated that women in mixed-gender cooperatives experienced greater decision-making power compared to women in single-gender cooperatives. This study suggests that additional measures supporting women's role in dairy cooperatives and a more participatory management were required in order to enhance gender equality.

Ojiagu, & Onugu (2015) in their study that examined The Effect of Membership of Cooperative Societies on The Economic Activities of Farmers, as well as the determinants of their income in rural Nigeria, focusing on Anambra State collated data from 2,506 members, selected through multi-stage, stratified random sampling and analyzed the information. The study found that members' incomes were dependent upon their socio-economic profiles such as age, marital status, membership or otherwise in cooperative societies, education, cooperative marketing, credit, gender and business expertise. Also, respondents depended largely on farming-related activities for the generation of their incomes in the study area. Furthermore, it was found that the major challenges of the farmer-members were inadequate funds, poor education, illiteracy, and conflict among members and lack of access to farm input. The Nigerian government was advised to formulate policies that will incorporate information from the local level that can support planning, implementation and evaluation of programmes that can enhance farmer's income and this will positively influence the pattern of agricultural growth in ways that can enable the income level of rural farmers to grow fast. The study recommended that cooperatives intensify their education of members to gain more benefits, and that government, non-governmental

organizations and international development agencies should supervise and provide development support to farmers cooperative societies in rural Nigeria.

Mgbakor, Uzendu & Onwubiko (2014) analyzed The Economic Empowerment of Women in Agriculture Through a Microfinance Bank in Awgu Local Government Area of Enugu State, with the view of ensuring women in the area were economically empowered for greater production efficiency. Data were collected from 80 women farmers who were beneficiaries of the microfinance loans from the urban and rural areas of the Local Government, through a well-structured questionnaire.

The data was interpreted using descriptive statistical table and Chi-square statistical techniques methods. The result of the findings showed that 82.5% of the women were into crop production, while 17.5% were into animal production. The analysis revealed that the impact of the microfinance loans were moderately high on the women practicing agriculture in the area. It also showed that the problems women had in securing and the use of microfinance facilities in the area for agricultural production was high. The positive impact of this empowerment through microfinance banks ensured that the women of the area became self –reliant, economically empowered, enjoyed improved living standards and households in general. However, the study revealed that much still needed to be done as the women were yet to be fully empowered. The problems that hindered effective achievement of set objectives were lack of collateral and savings, poor technical knowledge and poor infrastructure. It was recommended that full empowerment facilities should be made available to rural women to create an enabling environment for them to achieve their best, and that

government should employ more extension worker, especially females, to guide and motivate the women for better productivity.

Sarumathi and Mohan (2011) in their study opined that micro finance and Self Help Groups (SHGs) were effective in reducing poverty, empowering women and creating awareness which finally results in the sustainable development of the nation. One of the main aims of microfinance is to empower women. In this paper, the roles played by microfinance in women empowerment were classified into three dimensions, namely, psychological, social and economical. The study was undertaken in rural areas of Pondicherry region. Both primary and secondary data were used. Primary data were obtained from a field survey in the study region, while secondary data were collected from NGO's reports and other documents. The researcher used the percentage method, simple correlation coefficient, paired t- test and cross tabulation for the purpose of analysis. Analysis showed that there was a gradual increase in all the three ways microfinance affected empowerment among rural women. From the interaction among the respondents, it was noticed that some members were expecting the NGO to come up with more training sessions on income- generating activities. All they needed was a way to develop their skills and talents by participating in various training programs. There was a definite improvement in the psychological well being and social empowerment among rural women as a result of participating in micro finance and SHG programmes.

Ashwin, Modi, Kiran and Kundan (2014) in their study analyzed the impact of microfinance services in empowering the rural women. The study also tried to obtain insights into which factors empowering rural women through microfinance services

influenced them the most and to what extent. For that, 205 women responded out of 248 distributed questionnaire yielding a response rate of 82.66% residing in rural areas of North Gujarat Region, Gujarat State who were approached with structured questionnaire. After computing the reliability of scales, correlation and multiple regressions were used to test the hypotheses through SPSS version 16. The results indicate that four of the five factors (i.e. socio-economic status upgrading, autonomy for life choices, women position in the family/society and positive approach towards child development) had significant impact on rural women empowerment. The findings of the study are likely to be important to microfinance institutions, government, and NGOs in designing policy to empower rural women socially and economically. This study makes the valuable contribution of providing a base for the microfinance institutions to enable their strengthening and expanding of support to rural poor women.

Shelly (2011) in her study on Empirical Examination of Women's Empowerment and Transformative Change in the Context of International Development used liberation psychology framework that took into account the effects of globalization, human rights discourse, and women's activism within social movements to identify how structural inequities may be related to empowerment. Surveys conducted in rural Nicaragua revealed that land ownership and organizational participation among women showed a more progressive gender ideology, which in turn, improved women's power and control within the marital relationship, individual levels of agency, and subjective well-being. The findings have important implications that lead to strategies and interventions that can improve conditions for women and contribute

to the achievement of the aims of social justice articulated in the Beijing Platform for Action.

ASHA (2015) in his study on Agricultural Services Support Programme and Socio-Economic Empowerment of Rural Women in Zanzibar, Tanzania compared empowerment levels between programme and non-programme members. Primary data were collected from 200 women in ten Sheshia of Mkoani District, Zanzibar using a structured questionnaire. Women empowerment levels were measured using a Women Empowerment Index (WEI). The hypothesis to demonstrate the differences of empowerment between programme and non-programme members was tested using Mann-Whitney U-test. The results showed high level of women participation in study visits, training and regular meetings, but moderate participation were noted in Participatory Action Research (PAR) and Participatory Rural Appraisal (PRA). Women benefited socially and economically due to their participation in ASSP. The results showed a high level of empowerment for women in the ASSP. This was confirmed by Mann-Whitney U-test, which revealed increase in women decision making on production resources, income and contribution to household expenses. However, mobility decisions and asset ownership did not differ among ASSP and non-ASSP members due to the Islamic socialization culture prevalent there. Women's attitude towards ASSP was positive, indicating that strategies used to empower women were appropriate, but lack of investment capital and time constraints hampered their participation in the programme. Based on these findings, it was concluded that the initiative taken by the government to initiate ASSP led to a significant positive change in rural women's socio-economic status in Mkoani district

in Zanzibar, Tanzania. Provision of financial support for the women was among measures recommended for upcoming women empowerment programmes.

Onyishi (2011) in her study investigated the level of women empowerment and participation in development processes in Nsukka, Enugu State, Nigeria. A sample of 540 respondents who were adult males and females from the age of 18 years and above participated in the study. The study covered the three autonomous communities in Nsukka which are Nkpunanor, Ihe/Owerre and Nru. Five hundred and ten (510) copies of the questionnaire were administered to the female respondents who were randomly selected from the three autonomous communities.

Indepth interviews were used to study another 15 men and 15 women who were purposively selected. The findings show that some factors such as restriction of women by their husbands, ignorance of the existence of empowerment initiatives and lack of interest among women have hindered women from taking advantage of existing empowerment initiatives. It was found that Nsukka women participate in some development processes especially in agricultural production activities, voting in elections and membership/participation in women organizations. It was also discovered following the testing of the hypotheses that the higher the income and educational level of women, the higher their participation in development processes. It also revealed that lack of time due to the domestic and reproductive roles of women, poor economic base, illiteracy and the discriminatory attitude of males restricted women participation in development processes. Based on the results of the study, it was recommended that programmes for women upliftment must integrate the vital dimensions of empowerment such as formation of social capital, provision of financial

and credit support systems/ enterprises and facilitation of need-based skill development through training. It was also recommended that there should be reorientation of the men on women empowerment and participation in development processes, need for abolition of traditional and religious practices that adversely affect women and girls, and need to provide adequate access to education and media to women and girls.

Vivek, Jeemol, Pratik and Shruti (nd) studied the Role of Indian Dairy Cooperatives in Empowering Women and Improving Gender Parity. The propensity score matching method was adopted to study the impact of The National Dairy Plan- I5 (NDP) as it relates to the various dimensions of women empowerment. The econometric results indicate that the NDP had a positive impact on women participation in decisions related to selling milk. However, the program did not significantly influence women's participation in the use of dairy income as compared to women located in non-NDP areas. The most significant change was observed in the area of leadership. The program revealed that village women were found to be five per cent more likely to participate in village level infrastructure discussions. The study showed that a typical woman in an NDP household was six per cent more likely to demand fair wages for public works and protest misbehavior by authorities and elected representatives. It is interesting to note that the program had the potential to indirectly influence the efficacy of rights- based programs. These results were in line with the targets of Goal 5 of the Gender Equality 2030 Agenda for Sustainable Development, which were adopted by world leaders at the United Nations Sustainable Development Summit in 2015. This program, through cooperatives, ensured that women had improved and

effective participation and equal opportunities in leadership at various levels of decision making in the political, economic and public arena.

Shahnaj and Ingrid-Ute (2004) in their study opined that although women constitute about half of the population of Bangladesh, their social status especially in rural areas remains very low. The methodology of this study was an integration of quantitative and qualitative methods based on data collected from three villages of Mymensingh District Bangladesh. Six key indicators of empowerment covering three dimensions were chosen for the purpose of analysis. Data were collected from 156 respondents between January and April 2003 by stratified random sampling. Finally, a cumulative empowerment index (CEI) was developed adding the obtained scores of six empowerment indicators. The distribution of empowerment indicators show that 83% of the women had very low, to low economic contribution, 44% had very low, to low access to resources, 93% had very poor, to poor asset ownership, 73% had moderate, to high participation in household decision-making, 43% had highly unfavourable, to unfavourable perception on gender awareness and 72% had moderate, to high coping capacity to household shocks.

The distribution of CEI showed that the majority of rural women had very low to moderate (82%) level of empowerment. The multiple regression analysis indicated that there were strong positive effects of formal and non-formal education, information media exposure and spatial mobility on women's CEI, while traditional socio-cultural norms had strong negative effect. The study concludes that education, training and exposure to information media have the potential to increase women empowerment. Therefore, effective initiatives undertaken by the concerned agencies

to improve women`s education, skill acquisition training and access to information could enhance women empowerment in order to achieve gender equality and development at all levels in the rural society of Bangladesh.

Badran (2014) noted that it is an established fact that one of the UN Millennium Development Goals is gender equality and the empowerment of women. Information and Communication Technology (ICT) can be the vehicle to achieve this goal. This study applies econometric techniques to shed some light on the impact of ICT ownership on the gender divide, and how ICT can play an effective role in empowering women in Egypt. Furthermore, the effect of ICT on women`s lives in relation to other relevant factors such as education, income and geographic location were also investigated. Finally, recommendations were made to policy makers to enhance gender equality in Egypt through the increase of the role of ICT in empowering women. The contribution of this paper was the introduction of an ICT ownership index from the sample data ELMPS06, as well as the introduction of a women`s empowerment index. Results reveal that the ICT ownership index was largely influenced by education and gender and has a significant impact on women empowerment in Egypt. However from the obtained results, in comparison to other characteristics like women`s occupation and economic activity, the ICT ownership index becomes statistically insignificant.

Jill (2005) in his study developed a new method for constructing measures of gender and women empowerment with cross-sectional survey data. It re-conceptualized gender and women empowerment for measurement purposes and argued that gender and women empowerment were best measured as a system of interrelated dimensions

derived from context-specific gender norms. Qualitative research on women empowerment were used to guide the development of a theoretical model of women empowerment in rural Bangladesh which were then tested using confirmatory factor analysis of data from the 1996 Matlab Health and Socio-economic Survey (MHSS). The results of the confirmatory factor analysis were then used to construct weighted measures of women's empowerment that was compared to simple scale measures. This analysis advances the research on women empowerment by testing many of the theoretical assumptions found in demographic research on the subject and, most importantly, makes sophisticated measures of gender and women empowerment accessible to demographers.

Poonam and Gulnar (nd) noted that empowering women politically, educationally, economically and legally has been a major objective of the government of India. In the 11th National Five Year Plan (2007-2012), for the first time in the history of Indian planning, focus shifted from 'mere empowerment of women to recognize women as agents of sustained socio-economic growth and change'. Self-help groups and cooperatives are two organizational avenues often leveraged by underprivileged women to generate income. Through these structures, women gain access to services such as credit and training, send representatives to bodies that affect their work, and also gain a voice in political processes. Co-operatives are particularly suited to the needs of many women who desire mutual support without the formality of bureaucratic and hierarchical structures. Women have responded to lack of organization and to their exclusion from resources and services, by organizing themselves in less structured and formal networks. This research analyzes how

participation in cooperatives allows them to exercise their choices and prioritize their needs. The paper was based on the research that included 1098 working women who were members of women cooperatives, as well as women employed in the unorganized sector, from four states of North West India, namely, Uttarakhand, Rajasthan, Gujarat and Maharashtra. The objective was to study and compare the degree of social empowerment of women employed in cooperatives with women employed in the unorganized sector. Cooperatives were discovered to have been successful in not only increasing social participation of women but also in developing their drives, initiatives and leadership qualities.

Devi and Narasaiah (2017) opined that the intervention of micro finance has brought tremendous changes in the life of women at the grassroot level. The Self Help Groups (SHGs) were instrumental in empowering rural women by providing affordable banking, insurance and entrepreneurial approaches. The SHG's have greater vision for the well-being and empowerment of women towards overall human development because they comprise half of the world's population, perform two-thirds of the world's work, receive one-tenth of the income and own less than one-hundredth of the world's property. Women participation in Self Help Groups have obviously created tremendous impact in the life pattern and style of poor women and empowered them at various levels, not only as individuals, but also as members of the family, the community and the society as whole. They come together in the forum for the purpose of solving their common problems through self and mutual help. Self Help Groups are more attractive because they require less effort. It is a tool to reduce poverty and improve women entrepreneurship and financial support in India. The study focused on

the socio-economic conditions of SHG's members and impact of Self-Help Groups on women empowerment in Kurnool District of Andhra Pradesh, India. The two research hypotheses were: (1) Micro Finance creates Women Empowerment and (2) The SHG's are the best econometric tools for poverty alleviation and employment generation. Based on the analysis of women empowerment through Self-Help Groups in Kurnool district, the major findings of this study were that there was a positive impact of Self Help Groups on women empowerment in Kurnool District of Andhra Pradesh, India.

Johanna (2013) in his study on Women Empowerment through Micro Finance used cross-sectional data from the UNDP/PACT study on Myanmar's "Outcome/Impact Assessment from Microfinance Project 2011". The purpose of the study was to ascertain if women who were members of a microfinance program were more empowered than non-members. The study also attempts to find the factors that were important for women empowerment. To create a measurement of empowerment, an index-based approach was used. The index consists of six questions related to women's household decision making power. The explanatory variables were of demographic, economic, activity and geographic characteristics. Also considered was the fact that length of participation in the microfinance program had an effect on women empowerment. The key findings of the study indicate that women who were members of the microfinance program were more empowered than non-members. Further, age seemingly had a positive effect on the empowerment of women. However, eventually, this age-effect on empowerment diminishes. The results of the study contradict previous research that claimed the amount of the loan had a positive

effect on empowerment. The only significant relation found between loan amount and empowerment instead had negative significance. The absence of the expected positive correlation between loan amount and empowerment might be an indicator of the possibility that access to credit is the important factor. It is also suggested that other aspects of the microfinance program, such as the social networking effects, might be empowering. Moreover, the results of the study make it difficult to ascertain whether the period of membership in the microfinance was of importance for empowerment.

Masrukin, Toto, Bambang, and Adhi Iman (2016) in their study intended to set up community empowerment model for the villages most severely affected after the eruption of Mount Merapi. Among them were Tlogolele Village of Selo District in Boyolali Regency and Balerante Village of Kemalang District in Klaten Regency of Central Java Province. The method used was cooperative inquiry as a form of action research. Data were collected through interview, observation, documentation analysis and Focus Group Discussions (FGD). Informants were selected using purposive sampling. For each village, 20 informants chosen consisted of economics and business group stakeholders at the village level. The results showed that currently sand mining was the source of income which though convenient and practical for profit was unsustainable and non renewable. Meanwhile, community business after the eruption of Merapi was not well developed and thus required the implementation of empowerment programs and continuous assistance. The community needed an economic institution as a holding company to develop and promote all types of community business. This study resulted in the development of a community

empowerment model through the formation of cooperatives to strengthen local economies.

Okon and Okon (2015) noted that Women Empowerment Programme (WEP) is generally built upon the notion that though women represent a greater percentage of the continent's population, yet, they constitute an endangered group challenged by illiteracy, discrimination, and poverty which are hidden under the web of obnoxious cultural practices. Data from the study show that efforts to get the women out of the web of poverty and discrimination continued to be hindered by negative socio-cultural practices such as their exclusion from sharing in family assets, restriction from acquiring landed properties in their father's or husband's homeland and the submission of whatever property acquired to the control of the husband or male member of the family, etc. The study recommends, among, others, that governments and donor agencies should encourage the formation of co-operative societies and also initiate programmes that should empower women through co-operative societies by eliminating the use of collateral in order to promote women's economic independence and participation in socio-economic development in their various communities.

Abdul and Zainab (2011), in their study, assessed the effects of a government -run participatory development project on the social and economic empowerment of women and its implications for poverty alleviation in Nasirabad area of Balochistan (a province of Pakistan). The need to evaluate the project's effect in terms of empowerment arose from the perception that interventions in the form of programs and projects have little effects on women development in the province due to institutional and cultural factors. To test the validity of this proposition, a case study

of the Pat Feeder Command Area Development project which was the largest community-based development project of the government was taken for analysis. The project was evaluated in terms of participation, access, and sustainability. The project provided useful insight into the issue of women empowerment. The findings show qualitative improvements in the indicators such as capacity building, access to micro credit, involvement in economic activities and reduction in the workload. The study suggests considering the viability of these group's future follow up/new development projects.

From the empirical literature reviewed, a myriad of factors have been identified that influence the empowerment of rural women. The role of agricultural cooperatives in empowering rural women hitherto has not been well researched and documented in Nigeria, especially in the South-East Zone. Most of the studies reviewed were conducted in different socio-economic, cultural and geographical settings which arguably can relate to the performance of agricultural cooperatives. However, considering the socio-economic and environmental differences across regions, it is necessary to carry out a thorough investigation of the various aspects through which agricultural cooperatives could empower rural women farmers, because of the importance of this information to farmers and policy makers. Hence, the major concern of this study in supplementing previous research and bridging the knowledge gap is to focus on, study and analyse the unique population in the South-East zone of Nigeria in order to identify the major socio-economic and institutional factors that can enhance the capacity of agricultural cooperatives in empowering rural women. According to Karubi (2006), economic empowerment of rural women is the increased

wellbeing, community development, self-sufficiency, expansion of individual choices and capacities for self-reliance in relation to women.

2.8 Theoretical Framework

The present work is anchored on collective action theory.

1. Collective action refers to action taken together by a group of people whose goal is to enhance their status and achieve a common objective.
2. It is enacted by a representative of the group.
3. It is a term that has formulations and theories in many areas of the social sciences, including psychology, sociology, anthropology, political science and economics.
4. for collective action to take place, there must be joint action for the same goal and actions to achieve a common objective, when the outcome depends on interdependence of members.

Theories of collective action have been in use for centuries. Aristotle himself highlighted the famous ‘Tragedy of the Commons’ when he observed, ‘what is common to the greatest number has the least care bestowed on it’ (Gillinson, 2004) Today, it is sociologists and economists who have adopted the subject as their own. In sociology, it was the ‘Group Theorists’ led by Arthur Bentley, who dominated the field at the beginning of the 20th Century (Richardson, 1993). Group Theory asserts that where individuals have a common purpose and will benefit from cooperation, a group will form to cooperate for the common good. In the 1960s, this was turned on

by Olson (1965) in his model of the 'rational' individual where he calls into question our willingness to cooperate.

Ruth, Monica & Nancy (2004) have defined collective action as an "action" taken by a group (either directly or on its behalf through an organization) in pursuit of member's perceived shared interest. For collective action to take place, there must be joint action for the same goal and actions to achieve a common objective, when the outcome depends on interdependence of members. However, what most definitions have in common is that collective action requires the involvement of a group of people, a shared interest within the group and some kind of common action which works in pursuit of that shared interest.

It is important to distinguish between organization and collective action. Collective action can manifest itself and can be understood as an event, as an institution or as a process. When farmers act collectively on a regular and structured basis, they do so through group organizations, such as informal clubs, associations and cooperatives (Tiago & Ngo, 2006). When farmers decide to cooperate, they do so in the expectation that they will obtain benefit which would not be possible to achieve when working alone.

Even though in our lives we constantly engage in collective action, that is, every day we collectively produce and consume goods, our understanding of how people organize to produce such goods is far from complete. On the surface, this might seem trivial; after all, we have been working in groups to provide such goods from the dawn of mankind. Collective action plays a vital role in many people's lives, in such areas as income generation and cost reduction. Integrating women farmer's to achieve

collective action can lead to greater group effectiveness. In many instances, the gender composition of groups is an important determinant of effective collective action, especially for farm input, credit procurement and extension visits. Specific measures of effectiveness might include tangible indicators such as economic returns to group members, compliance with rules, transparency and accountability in managing funds, as well as less tangible indicators, such as members' satisfaction with the group (Pandolfelli, Meinzen-Dick, and Dohrn, 2007). This conforms to the co-operative principles of open membership and gender equality.

2.8.1 Relevance of the Theory to the Study

Based on the premise above, the theory of collective action is apt for this work especially in regard to how agricultural cooperative groups are organized and incorporated. This is buttressed more by Chavez (2003) who opined that the collective theory definition, principles and practice directly or indirectly relate to internationally recognized principles of voluntary and open membership, member's economic participation, co-operation among co-operatives, concern for community etc. According to Dick, and McCarthy (2004) collective action theory is a theory that is very useful in agriculture, rural resource management, and rural development programmes.

Collective action theory enables us to understand the reason and rationale that make women farmers join cooperatives in their bid to find solutions to the various challenges affecting agricultural production in their areas. Cooperatives being organizations which activities center on group or collective action are veritable tools

which could be used to achieve goals which could not be achieved on individual basis.

Hence, through collective action sustainable rural empowerment could be achieved.

CHAPTER THREE

RESEARCH METHODOLOGY

Under this chapter, the research methods that were used for the study are discussed under the following sub-headings: Research Design, Area of the Study, Population of the Study, Sources of Data, Sample Size Determination and Sampling Technique, Instrument for Data Collection, Validity of the Research Instrument, Reliability of Research instrument, and Method of Data Analysis.

3.1 Research Design

Survey and descriptive research design is chosen for the study. Survey research design was chosen because of its relatively low cost considering the need to collect information from a large number of people this study as the representative sample. It is easy to generalize the findings to large population once the sample has been proven to be all inclusive. The flexibility of surveys mean that a variety of data collection instruments – observations, interviews, and questionnaire can be used. It also allows one instrument to serve as a check on the other. (Ezejelue, Ogwo and Nkamnebe, 2008)

3.2 Area of the Study

The South- East of Nigeria is one of the zones of the country, consisting of the following States: Abia, Anambra, Ebonyi, Enugu and Imo. The South-East of Nigeria shares boundaries in the north with Benue and Kogi States; and in the east with Cross-River and Akwa-Ibom States; in the south with Rivers State and in west with Delta State. The people of the zone are predominantly Igbo indigenes and they speak the Igbo language. The South-east zone has a population of approximately

15,830,919(NPC, 2006).The people of the zone are endowed with both human and natural resources such as crude oil, coal, etc The area is a predominantly agrarian zone. The zone is home to so many Federal institutions and parastatals such as the University of Nigeria Nsukka, Nnamdi Azikiwe University Awka, and Michael Okpara University of Agriculture, Umudike etc. The largest market in Africa (Onitsha Main Market) is also in the area. The people of the area have so many cultural festivals like new yam festival.

3.3 Population of the Study

The South- East in it's entirety is too large to cover so the researcher therefore took three States as a study area to limit time and resources. The population of this study includes all registered women farmer's cooperatives societies and their members in Anambra, Enugu and Imo states, which was five hundred and seventy (570) in number. These women agricultural cooperatives had a total of 4,921 members (State Cooperative Office, 2016). Therefore the 570 women agricultural cooperatives and their membership of 4,921 constituted the population of this study.

3.4.1 Sample Size Determination and Sampling Technique

The number of women farmer's cooperatives in the three (3) selected States of South-East Zone was five hundred and seventy (570) with the total membership strength four thousand, nine hundred and twenty-one (4,921). To get the sample size, the researcher used a Taro Yamane formula of

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size

N = population of the study

e = error of margin taking at 5% level.

$$\begin{aligned}
 n &= \frac{4921}{1+4921(5\%)^2} \\
 &= \frac{4921}{1+4921(0.5)^2} \\
 &= \frac{4921}{1+4921(0.0025)} \\
 &= \frac{4921}{1+12.3025} \\
 &= \frac{4921}{13.3025} \\
 n &= 369.860 \\
 n &= 370
 \end{aligned}$$

3.4.2 Sampling Technique

Available records in these States Cooperative offices show that all the women farmer's cooperative in the selected states do not have equal membership strength. The sampling strategy that was used in this study was the multistage and proportional sampling technique. Multistage sampling refers to a sampling method where the sampling is carried out in stages using smaller sampling units at each stage

Proportional sampling technique is a method where the samples are a proportional distribution across all units. Stage one: Agricultural cooperative were randomly selected from the three States (Anambra, Enugu and Imo State) which have membership strength of 4921. Stage two: Members of cooperatives were selected from each State through proportional sampling. In Anambra State 152 members were selected. In Enugu State 113 members were selected, and in Imo State 105 members were selected. Then stage 3: The respondents were randomly selected from two Local Government Areas in each State. This is shown in table 3.1.

Table 3.1: Distribution of cooperative members selected from each state in South-east Geo-political Zone.

S/N	Name of State	Total no for each State	No selected
1	Anambra State	2020	152
2	Enugu State	1500	113
3	Imo State	1401	105
Total		4921	370

Source: Researcher conceptualization, 2017

3.5 Sources of Data

Both primary and secondary sources of data were used in the study. Primary data were mainly obtained through structured questionnaire. Secondary information were sourced from published and unpublished materials, journals, books, monographs. Information from libraries and the internet were also extensively explored.

3.6 Instrument for Data Collection

The major research instrument that was used in the study is the questionnaire. Three hundred and seventy (370) questionnaire were structured and administered, and these were divided into four (4) sections: A, B C& D. Section A was designed to obtain information about the socio-economic profile of the respondents. Sections B&C were used to investigate the agricultural services rendered by cooperatives to their member's and the effects of those services on the member's income which was used as proxy for empowerment. Section D was designed to ascertain the off-farm activities of the members. The Questionnaire were administered by the researcher and 7 research assistants co-opted for the purpose. The questions were designed in such a

way that it would easily elicit information from respondents irrespective of their educational background. Three hundred and seventy (370) questionnaire were administered to respondents, but three hundred and forty (340) questionnaire were filled and returned. The return rate of the questionnaire was 92% which is perceived as high and satisfactory.

3.7 Validity of the Research Instrument

To ensure the validity of the instrument, copies of questionnaire were given to experts and research specialists for scale measurement in the Faculty of Management Sciences, and cooperative experts in the Department of Cooperative Economics and Management both in Nnamdi Azikiwe University, Awka Anambra State to obtain their opinion and evaluation of face and content validity of the instrument. The opinion of these experts enabled the researcher to restructure and / or modify the instrument to suit the research objectives.

3.8 Reliability of Research Instrument

The reliability of the instrument was verified through administration of the questionnaire to twenty members of women cooperatives in Anambra State who were not part of the sample population. The purpose of this was to find out whether items in the questionnaire meant the same thing to all the respondents, as well as to ascertain the level of clarity of the questions to the respondents.

The Pearsons Correlation Coefficient Reliability Test gave the questionnaire a value of 0.985 (table 3.2) which is above the acceptable theoretical benchmark value of 0.6, thereby indicating that the instrument passed the reliability test.

Table 3.2: Correlation Coefficient for Reliability TestCorrelations

		Response mean A	Response mean B
	Pearson's Correlation	1	0.985
Response: mean A	Sig. (2-tailed)		0.000
	N	20	20
	Pearson's Correlation	0.985	1
Response: mean B	Sig. (2-tailed)	0.000	
	N	20	20

** Correlation is significant at 0.01 level (2- tailed).

3.9 Method of Data Analysis

Descriptive statistics, including mean, frequency distribution etc. were used to present and analyze data. In analyzing the socio –economic characteristics of members, agricultural activities and the effect on their income level, frequency model was used. Frequency distribution by number and percentage of respondents were also used to turn the qualitative characteristic into numerical forms.

Four functional forms of the regression model were tried, namely: linear, exponential, semi-log, and double-log. Output of the form with the highest value of coefficient of multiple determinations (R^2), highest number of significant variables and F-statistics value were selected as the lead equation. The explicit versions of the four functional forms are as follows:

$$1. \text{RUINC} = f(\text{FINPU}, \text{CRDT}, \text{AMKT}, \text{EXT}) \quad (1)$$

Where RUINC = Rural income

FINPU = Farm input,

CRDT = Credit,

AMKT = Agricultural marketing,

EXT = Extension Visit.

The model is further explicitly specified as follows:

$$RUINC = \alpha + \beta_1 FINPU + \beta_2 CRDT + \beta_3 AMKT + \beta_4 EXT + \varepsilon_i \quad (2)$$

2. $OUTMEM = f(FINPU, CRDT, EXT)$
(1)

Where OUTMEM = Members output (quantity)

FINPU = Farm input,

CRDT = Credit,

EXT = Extension Visit.

The model is further explicitly specified as follows:

$$OUTMEM = \alpha + \beta_1 FINPU + \beta_2 CRDT + \beta_3 EXT + \varepsilon_i \quad (2)$$

3. $MEMEXP = f(MPROFIT)$
(1)

Where MEMEXP = Members' Years in agricultural cooperatives.

MPROFIT = Members' farm profitability

The model is further explicitly specified as follows:

$$MEMEXP = \alpha + \beta_1 MPROFIT + \varepsilon_i \quad (2)$$

4. $MEMEXP = f(LIVSUS)$ (1)

Where MEMEXP = Members' Years OF experience in agricultural cooperatives.

LIVSUS = Members' livelihood sustainability

The model is further explicitly specified as follows:

$$MEMEXP = \alpha + \beta_1 LIVSUS + \varepsilon_i$$

(2)

Source: (Okechukwu, (2015)

To accomplish this, a multiple regression analysis was employed. The chosen model is linear and of the Ordinary Least Square (OLS) type the specification of this model is as follows:

$$Y = B_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + e_i$$

Where Y = total income of the members after joining cooperatives in naira.

X1= membership duration (in years)

X2= amount of input purchased through women agricultural cooperative in 2016(in naira).

X3= total amount of money obtained as loan through women agricultural cooperative in 2016.

X4= Extension visit (no of times)

X5= total value of agricultural produce marketed through cooperative in 2016 (in Naira)

X6 = other off-farm activities undertaken by women cooperative members that enhanced their income in 2016

B₀= intercept

E_i= error term.

Source: Researchers conceptualization, 2017

The effect of agricultural cooperatives on economic empowerment was measured by agricultural services available to cooperative farmers. The test of significance of the variables and the test of hypotheses (2) were determined through an examination of t statistics and f statistics.

For the test of hypotheses (1), Pearson Correlation was used while in hypothesis (2) Analysis of Variance (ANOVA) statistics from the Multiple Regression Analysis was used as the bases to assess and/or decide to accept or reject them. The focus of the test was to determine whether cooperative membership duration, farm input, credit and

extension visits have effect on the income of the women in the area. Simple regression analysis was used to test hypotheses (3) and (4)

All calculations and estimates were obtained through the use of version 22 of the SPSS package.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

In this section the presentation and analysis of data collected from the field were undertaken and results were explained with the relevant tables.

The socio-economic profile of women members were ascertained and analysed to understand the characteristics of the members in the area.

Table 4.1.1 Socio-Economic Profile of Members of the Cooperatives

Variable	Frequency	Percent (%)	Cumulative (&)
Age			
20-29	28	8.2	8.2
30-39	81	23.8	32.1
40-49	107	31.5	63.5
50-59	37	10.9	74.4
60 and above	87	25.6	100.0
Total	340	100.0	
Education			
Primary	138	40.6	40.6
Secondary	64	18.8	59.4
Tertiary	138	40.6	100.0
Total	340	100.0	
Occupation			
Farming	154	45.3	45.3
Trading	60	17.6	62.9
Civil servant	126	37.1	100.0
Total	340	100.0	
Marital Status			
Single	26	7.6	7.6
Married	299	87.9	95.6
Widow	15	4.4	100.0
Total	340	100.0	
Family Size			
Three	21	6.2	6.2
Four	9	2.6	8.8
Five	60	17.6	26.5
Six and above	73	21.5	47.9
Total	340	100.0	
Cooperative Experience			
One year	52	15.2	15.3
Two years	72	21.2	36.5

Three years	66	19.4	55.9
Four years and above	150	44.1	100.0
Total	340	100.0	

Source: Field Survey, 2017.

In Table 4.1.1, it was revealed that majority of the members were in the age range of 40-49, 60 and above which represent 31.5% and 25.6% of the population respectively. Twenty three percent of the members were in the age range of 30-39. This implies that majority of them were in their productive age and any cooperative with members in such age range will have high rate of productivity because their members are still physically strong.

From Table 4.1.1, all the respondents had formal education. Forty one percent of the respondents had primary education, 18.8% had secondary education, while 40.6% had tertiary education. This implies that the members of cooperatives in the area had formal education and could easily understand and imbibe cooperative values and principles

It was observed in Table 4.1.1 that majority of members of cooperatives in the area are farmers, while some are traders and civil servants, representing 53.1%, 25.5% and 21.3% respectively. This indicates that since members have additional means of livelihood to their farming activities, being active in cooperatives will enhance their income level and increase their standard of living.

From Table 4.1.1, 87.9% of the respondents are married. 7.6% are single. While four percent are widows.

Table 4.1.1 also reveals that twenty one percent of the respondents had family sizes of six and above, 52.1% had a family size of six, while others had family sizes of five,

four and three representing 17.6%, 2.6% and 6.2% of respectively. This indicates that most members' have large family sizes and, therefore, have enough labour force that would be useful in their farms. On the other hand, members' with small family size would need to hire labour in the course of their farming activities thereby incurring more expenses.

More so, Table 4.1.1 reveals that majority of the members had cooperative experience of four years and above representing 44.1%. Others have had 3 years, 2 years and one year experience representing 19.4%, 21.2% and 15.2% of respondents respectively. Members with long years of experience in cooperatives will have high level of understanding and competence in cooperative activities.

4.2.1:- Analysis of response relating to Cooperative Support activities that promotes rural income. (Input, credit, marketing agricultural produce and extension visit)

As shown on Table 4.2.1, the respondents agreed to items 1-4, 9, 10, 11 and 12 as being the services their cooperatives rendered to them. However, they disagreed that items 5- 8 were part of the services rendered by their cooperatives. This implies that cooperatives have indeed assisted their members significantly in the course of agricultural production and has invariably enhanced their income.

Table: 4.2.1- Analysis of response relating to Cooperative support activities that promote rural income (input, credit, marketing agricultural produce and extension visit)

Statement	SA	A	UN	D	SD	MEA N	STD
1. Cooperative assists members in processing and preparation of their produce for the market.	85	17	187	50	1	3.40	1.027 **
2. Cooperative collects and market agricultural produce.	153	95	82	10	0	4.15	0.888 **
3. Crops and other farm produce are marketed at competitive prices.	153	90	53	44	0	4.04	1.061 **
4.Reduction in crops wastage and pilferage	153	7	106	74	0	3.70	1.244 **
5.Provision of storage facilities	0	33	115	192	0	2.53	0.667 *
6.Transportation is provided to convey produce to the market and \ or processing centre	0	0	110	230	0	2.32	0.469 *
7.Income and standard of living increase	0	66	133	141	0	2.78	0.750 *
8.Better farming practice was introduced	0	94	115	131	0	2.89	0.807 *
9.Increase in employment in the community	202	138	0	0	0	4.59	0.492 **
10.Poverty level has reduced	100	33	133	74	0	3.47	1.130 **
11.Better quality of output	0	152	85	103	0	3.14	0.855 **
12.There are now more varieties of crops	0	153	171	16	0	3.40	0.579 **
13.Total output has increased	0	180	74	86	0	3.28	0.841 **

N=340, Agreed = **, Disagreed *

Source: *Field Data*, 2017.

4.2.2: - Analysis of response relating to cooperative support activities that promote farm productivity

The total agricultural income in various crops cultivated by the cooperative farmers in 2016 is shown in Table 4.2.2. The crops are cassava, yam, vegetable, maize and cocoyam with the mean value of N259,986.67, N165,005.56, N60,065.556, N176,988.89 and N58,004.444 respectively. Surprisingly, vegetables have the highest mean value of N60, 065.556. This could be that cooperatives in the area promote the production of vegetables more than others since it has the shortest maturity date than other crops and also has a high demand. Oral interviews with some of the respondents reveal that vegetable production has high rate of return on investment.

Table 4.2.2– Means and standard deviations of the responses showing cooperative farm activities that promote farm productivity

CROPS	MINIMUM (NAIRA)	MAXIMUM (NAIRA)	MEAN (NAIRA)	STANDARD DEVIATION
Cassava	0.00	967,000.00	259,986.67	235,332.98088
Yam	0.00	964,000.00	165,005.56	211,486.21459
Vegetable	0.00	675,000.00	60,065.556	110,117.69596
Maize	0.00	960,000.00	176,988.89	167,178.10925
Cocoyam	0.00	200,000.00	58,004.444	67,235.57586

(n=340)

Source: Field Survey, 2017

4.2.3: - Analysis of response relating to cooperative support activities that promote farm output.

From Table 4.2.3, the respondents agreed that items 1 to 4, 7,9,10,11,12,13 are part of cooperative farm support activities which increase their output. However, they disagreed that item 5, 6 and 8 were included in the farm support activities by their

cooperatives. This implies that cooperatives have done significantly to provide much farm support activities that promoted farm output.

Table 4.2.3 - Analysis of response relating to Cooperative support activities that promotes farm output.

Statement	SA	A	UN	D	SD	MEAN	STD
1.Better quality of output	0	10	315	15	0	3.40	1.027**
2. There are now more varieties of crops.	0	0	113	227	0	4.15	0.888**
3. Total output has increased.	0	0	17	321	2	4.04	1.061**
4.Increase per hectare output	1	185	152	2	0	3.70	1.244**
5.Crop quality has increased	1	217	108	14	0	2.53	0.667*
6.Crop output has met local demand	0	87	237	16	0	2.32	0.469*
7.Improved Varieties of seedlings are supplied	1	34	287	18	0	3.05	0.403**
8.Farmers are taught how to apply fertilizer and chemicals	0	51	179	102	8	2.80	0.712*
9.Credits are obtained at the time they are needed	0	105	145	90	0	3.04	0.757 **
10.Farm chemical and fertilizer are supplied at reasonable prices	0	128	104	99	9	3.03	0.880 **
11.Availability of herbicides for clearing of grasses	153	95	82	10	0	4.15	0.888 **
12Availability of seed treatment chemical	85	17	187	50	1	3.40	1.027 **

13.Improved seedlings are supplied at cheaper prices	153	90	53	44	0	4.04	1.061
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N=340, Agreed = **, Disagreed *

Source: Field Data, 2017.

4.2.4: - Analysis of response relating to cooperative support activities that promotes livelihood sustainability.

As shown on Table 4.2.5, all the respondents engage in off-farm activities that helped to sustain them and their households. Thirty three percent of the respondents engage in the Tapioca production, 22.9% rear goat, 18.2% engage in Zobo making and 9.1% processes cassava flour and garri. This implies that in case of the occurrence of natural disaster / climate change they would have other means of livelihood that would sustain them so that the impact will not be severely felt.

Table 4.2.4- Analysis of response relating to Cooperative support activities that promote livelihood sustainability.

I engage in off- farm activities such as	Frequency	Percent	Valid Percent	Cumulative Percent
Processing cassava tubers into cassva flour and garri	31	9.1	9.1	9.1
Tapioca production	113	33.2	33.2	42.4
Zobo making	62	18.2	18.2	60.6
Goat rearing	78	22.9	22.9	83.5
Poultry production	17	5.0	5.0	88.5
Soya milk making	19	5.6	5.6	94.1
Provision shop	20	5.9	5.9	100.0
Total	340	100.0	100.0	

Source: Field Data, 2017

4.3.1: TEST OF HYPOTHESIS

Test of hypothesis I (Pearson's correlation)

Ho: Cooperative support (farm input; credit agricultural marketing and extension visit) have no significant influence on rural income.

Table 4.3.1: Effect of Cooperative support activities on rural income

Correlations			
		Profit margin	FARMINPUT
Profit margin	Pearson's Correlation	1	.098*
	Sig. (1-tailed)		.036
	N	340	340
Cooperative Support	Pearson's Correlation	.098*	1
	Sig. (1-tailed)	.036	
	N	340	340

*. Correlation is significant at the 0.05 level (1-tailed).

Source: Field Data, 2017

Decision

The correlation estimates in Table 4.3.1 shows that the Pearson's correlation of 0.098 was significant at 0.05 levels. Cooperative activities, therefore, significantly improved rural income. Thus, the null hypothesis is rejected and the alternate accepted, hence the conclusion that there is indeed a significant relationship between cooperative support and rural income.

Test of hypothesis II (Analysis of Variance (ANOVA) statistics from the Multiple Regression Analysis)

Ho: Cooperative support (farm input; credit agricultural marketing and extension visits) have no significant effect on farm output of members.

Table 4.3.2 -Regression Estimates of Cooperative support activities on financial farm output of members.

Model	Coefficient	T - Value	Significance
Estimates			
(CONSTANT)	-107218.632	-4.214	.000
FARMINPUT	51349.696	9.542	.000
Credit is obtained at the time it is needed	31775.079	5.084	.000
How regular is extension visits	9830.452	2.133	.034
R ²	0.319		
Adj R ²	0.313		
F	52.417	(Sig. @ 0.005)	

Source: Researchers computation, 2017

The estimates of R² and Adj. R² suggest that three variables in the model collectively accounted for over 31% of the variations in Farm outputs as reported by the various cooperatives. F ratio was significant at 5% level. Two variables are significant at 5% levels respectively. Farm input has a positive sign suggesting that the more the farm input the better the performance in terms of farm output. Credit obtained has a positive sign and this suggests that more credits obtained at the time they were needed increased farm output. Extension visits were not significant with a p value above .034 significant level.

Decision

The regression analysis shows that the F ratio which measures the strength of the independent variables in explaining variations in the dependent variable was 52.417 which is significant at 0.05 levels. Thus, hypothesis two is rejected and we conclude that cooperative support (farm input; credit and extension visits) have significant effect on the farm output of members.

4.3.3: Test of hypothesis III

Ho: Years of membership/participation in agricultural cooperatives has no significant effect on profitability of farm operations of members.

Table 4.3.3 -Model Summary of regression showing the effect of cooperative membership on profitability of farm operation.

R	R ²	Adj. R ²	Std error	Summary of squares	Df	Mean Square	F	Significance
.128	.016	.013	.117	428.012	338	6.966	5.592	.019 ^b
			.000		339	1.246		

Dependent Variable: Profit margin

Field summary, 2017.

From the regression results (Table 4.3.3), the coefficient of multiple determination $R^2 = 0.016$, describes the extent to which the dependent variable (Farm profit margin) is being explained by independent variables (member's years in cooperatives). This implied that 1.6% of variations in profit margin are caused by the variable analyzed. Also, the adjusted R^2 was 0.013; showing 1.3% of variation in profit margin was explained by changes in the variables analyzed.

Decision

The regression analysis shows that the F ratio which measures the strength of the independent variables in explaining variations in the dependent variable was 5.592 which is significant at 0.019 levels. Thus, null hypothesis three is rejected, and we therefore conclude that years of membership/participation in agricultural cooperatives has significant effect on profitability of farm operations of members.

4.3.4: Test of hypothesis IV (simple regression analysis)

Ho: Cooperative experience (membership duration) in agricultural cooperatives has no significant relationship with and/effect on livelihood sustainability.

Table 4.3.4: Model Summary of regression showing the effect of Cooperative membership on livelihood sustainability

R	R ²	Adj. R ²	Std error	Summary of squares	Df	Mean Square	F	Significance
.134 ^a	.018	.015	1.115	428.012	338	7.712	6.202	.013
					339	1.243		

Dependent Variable: Livelihood sustainability
Field summary, 2017.

From the regression results (Table 4.3.4), the coefficient to multiple determination $R^2 = 0.018$, describes the extent to which the dependent variable (livelihood sustainability activities) is being explained by independent variables (members experience in cooperative). This implied that 1.8% of variations in livelihood sustainability activities are caused by the variable analyzed. Also, the adjusted R^2 was 0.015; showing 1.5% of variation in livelihood sustainability activities was explained by changes in the variables analyzed.

Decision

The regression analysis shows that the F ratio which measures the strength of the independent variables in explaining variations in the dependent variable was 6.202 which is significant at 0.013 levels. Thus, null hypothesis four is rejected and we therefore conclude that, cooperative experience (membership duration) in agricultural cooperatives has significant effect on livelihood sustainability.

4.4: Discussion of Test Results

Findings from the study shows that Improved Varieties of seedlings are supplied by cooperatives, credits are obtained when needed, farm chemicals and fertilizers were supplied at affordable, prices, there was availability of herbicides for clearing of grasses as well as seed treatment chemicals and improved seedlings were supplied at cheaper prices. Cooperatives assist members in processing and preparation of their produce for the market collects and markets agricultural produce, Crops and other farm produce at competitive prices. All these imply that cooperatives have indeed assisted their members in the course of agricultural production which invariably enhanced their income. This is in line with Ortmann and King 2007, who opined that Cooperative societies play significant roles in the provision of services that enhance agricultural development. Regular and optimal performance of these roles will accelerate the transformation of agriculture and rural economic development. Cooperatives play an important role in the development of agriculture in many countries as suppliers of farm produce, marketers of agricultural commodities, and providers of services such as storage and transport. The findings of this work was also in agreement with Cogeca (2012b) who observed that cooperatives account for over 50% of the supply of agricultural inputs and over 60% of collection, processing and marketing of agricultural products.

The estimates of R^2 and Adj. R^2 suggest that three variables in the model collectively accounted for over 31% of the variations in farm outputs as reported by the various cooperatives. F ratio was significant at 5% level. Two variables are significant at 5%

levels respectively. Farm input has a positive sign thereby suggesting that the more the farm input the better the performance in terms of farm output. Credit obtained has a positive sign and this suggests that more credits obtained at the time they were needed will increase farm output. Extension visits were not significant with a p value above .034 significant level. This is also in line with IFAD in Onugu & Ojiagu (2009) who opined that women own less than 2% of all land and receive only 5% of extension services worldwide. It is also in agreement with FAO (2012) and (ICA & ILO, 2014) that stated that cooperatives play an important role in supporting small agricultural producers and marginalized groups such as young people and women. By enabling them to access credit service, agricultural input supply and marketing service, the cooperatives enhance their productivity. Cooperatives reduce vulnerability by empowering their members economically and socially and create stable rural employment through business models that are resilient to economic and environmental shocks.

However it was observed that all the respondents engage in off-farm activities that additionally sustained them and their households. 33.2% of the respondents engage in the Tapioca production, 22.9% rear goat, while 18.2% engage in Zobo making and 9.1% processes cassava flour and garri. This is in line with Ferguson (2012) who opined that cooperatives have been an effective way for people to exert control over their economic livelihood and this provides the opportunity to achieve one or more economic goals in an ever increasing competitive environment. From the regression analysis above, the coefficient to multiple determination $R^2 = 0.018$, describes the extent to which the dependent variable (livelihood sustainability activities) is being

explained by independent variables (members experience in cooperative). This implied that 1.8% of variations in livelihood sustainability activities are caused by the variable analyzed above. Also, the adjusted R^2 was 0.015; showing 1.5% of variation in livelihood sustainability activities was explained by changes in the variables analyzed above. Livelihood sustainability has inverse relationship to membership in cooperatives. This could be that the more people stay and participate actively in cooperatives the less time they have to attend to their other means livelihood as compared to before joining cooperatives.

Also in the regression analysis above, the coefficient to multiple determination $R^2 = 0.016$, describes the extent to which the dependent variable (Farm profit margin) is being explained by independent variables (member's year in cooperative). This implied that 1.6% of variations in profit margin are caused by the variable analyzed above. Also, the adjusted R^2 was 0.013; showing 1.3% of variation in profit margin was explained by changes in the variables analyzed above. Profitability of farm operation has inverse relationship with membership duration. This could also imply that members who have not stayed long in cooperatives would not notice the impact of cooperative in their farm operations as much as those members that have stayed long. This affirms the theory of collective action to which this work is anchored. The theory of collective action becomes apt in this work especially as agricultural cooperative groups are organized, incorporated organizations. This is buttressed more by Chavez (2003) who opined that the collective action theory definition, principles and practices directly or indirectly relate to cooperative seven internationally recognized principles. The collective action theory enables us to understand the reason and rationale that

move women farmers to join cooperatives in their bid to find solutions to the various challenges affecting agricultural production in their areas. Cooperatives being organizations that their activity center on group or collective action are also the veritable tools that could be used to achieve objectives which could not be achieved on individual basis. Hence through collective action sustainable rural economic empowerment could be achieved.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

The findings arising from the study are:

1. That Pearson correlation of 0.098 was significant at 0.05 levels which imply that there is indeed a significant relationship between cooperative support and rural income.
2. The regression analysis is significant at 0.05 level. This means that cooperative support service (farm input; credit and extension visit) has significant effects on the farm output of members.
3. That the coefficient of multiple determination $R^2 = 0.016$, describes the extent to which the dependent variable (Farm profit margin) is being explained by independent variables (years of membership/participation in cooperatives). This implied that 1.6% of variations in profit margin are caused by the variable analyzed. Also, the adjusted R^2 was 0.013; showing 1.3% of variation in profit margin was explained by changes in the variables analyzed. This could also imply that members who have not stayed long in cooperatives would not notice the impact of cooperative in their farm operations as much as those members that have stayed long.
4. That the coefficient to multiple determination $R^2 = 0.018$, describes the extent to which the dependent variable (livelihood sustainability activities) is being explained by independent variables (members experience in cooperative). This implied that 1.8% of variations in livelihood sustainability activities are caused

by the variable analyzed. Also, the adjusted R^2 was 0.015; showing 1.5% of variation in livelihood sustainability activities was explained by changes in the variables analyzed. This could be that the more people stay and participate actively in cooperatives the less time they have to attend to their other means livelihood as compared to before joining cooperatives

5.2 CONCLUSION

This study has shown that Agricultural Cooperatives have indeed performed well in the provision of farm support services such as farm input, credit and agricultural marketing. Women members of agricultural cooperatives in the area have been empowered economically through these farm support services which invariably have enhanced their income level. Findings of this work have attested that farm input has a positive sign thereby suggesting that the more the farm input the better the performance of farm output that is farm input improves/enhances output. Credit obtained has a positive sign and this suggests that more credits obtained at the time they are needed will increase farm output. Extension visits were not significant with a p value above .034 significant level. This affirms the theory of collective action to which this work is anchored. Cooperatives being organizations which activities center on group or collective action are veritable tools which could be used to achieve goals which could not be achieved on individual basis. Hence, through collective action sustainable rural empowerment could be achieved.

5.3 RECOMMENDATIONS

Based on the findings, the following recommendations are made to enhance the empowerment of rural women in South-East Nigeria.

1. Women in the area should be encouraged to form or join cooperative societies so as to enhance their income level. This will ensure improved livestock holdings, autonomous decision making, spending power and standard of living.
2. Agricultural cooperatives in the area should improve in their extension services, for it is through extension services that members will learn new agricultural technologies that will enhance their agricultural production capacity; ensure food security and strengthen their income.
3. Cooperatives in the area should empower their members through diversification into other means of livelihood other than agricultural production. They should train their members in sustainable off-farm activities that will enhance income.
4. Agricultural cooperatives in the area should do more to provide and improve support services such as credit, farm input, marketing etc to enhance the profitability of members.

5.4: Contribution to Knowledge

The major benefit of this study is to validate the importance of agricultural cooperatives in empowering rural women economically. It makes an inroad in the field of the study of agricultural cooperatives by investigating and revealing the

different agricultural cooperatives services and their impacts on women farmers. The study presents empirical evidence from member's point of view on the effect cooperative support activities on their output and income. This study will open discussions on various assumptions of collective action and initiate additional research to discover why a large number of women farmers that source their farm input through agricultural cooperatives have enhanced income unlike before they joined cooperatives. This study also provided the much needed empirical data on agricultural cooperatives and economic empowerment of rural women.

5.5 Suggestion for Further Study

The study examined agricultural cooperatives and economic empowerment of rural women with special reference to the South- East of Nigeria. It has proven that cooperative experience (membership duration) in agricultural cooperatives has no significant relationship with livelihood sustainability. There is, therefore, need for further research in the area of using agricultural cooperatives to enhance livelihood sustainability of members especially through training. Farm input has a positive effect on member's productivity thereby suggesting that the more the farm input, the better the performance in terms of farm output. Credit obtained also has a positive effect on productivity and this suggests that more credits obtained at the time they are needed increase farm output but extension visits are not significantly effective. So there is need for further research in the area of the challenges of cooperatives and extension service in the State or Nigeria.

REFERENCES

- Abadalla G. (1999): Citizen Economic Empowerment in Botswana: Concepts and Principles. Botswana Institute for Development Policy Analysis (BIDPA)
- Abdul R. & Zainab B. (2011): Women's Socio-Economic Empowerment through Participatory Approach: A Critical Assessment. *Pakistan Economic and Social Review* Volume 49, No. 1 (Summer 2011), pp. 133-148
- Abdulahi T.O., Udunze U.M. & Agbasi E.O (2015): Effect of Cooperative Membership on Economic Empowerment of Women in Osun State of Nigeria. *International Journal of Business and Economic Research*. Vol.4, No 2, 2015, pp 21-29. Doi 10.11648/j.ijber.20150402.11
- Abiyot .E. (2010): Potential of Cooperatives in Empowering the Rural Women: The Case of Chellala Rural Saving and Credit Cooperative Union, Sidama Zone, Snnpr. College of Development Studies School of Graduate Studies AdisAbaba University.
- Acharya S.S. (2006) Sustainable Agriculture and Rural Livelihoods. *Agricultural Economics Research Review* Vol. 19 July-December 2006 pp 205-217
- Aduse-Poku, K., Nyantakyi F., Atiase V.Y., Awuah R., Mensah E.O., Nyantakyi D., Owusu H.K., Agyenim-Boateng B. (2003). Improving Rural Livelihoods within the context of Sustainable Development. Case Study of Goaso District. <http://www.Tropenbos.org>, Retrieved: October, 2012, pp 1-6
- Adefila, J.O. (2011): Spatial Assessment of Farmers Cooperative Organizations Agricultural Development in Gurara Area of Niger State, *Nigeria.Journal of Ecology and natural Environment*. Vol.4 (2) pp.51-57
- Ajuzie H.D, Okoye C.A & Mohammed, D.A (2012): Assessment of the influence of Education on women Empowerment: Implications for National Development. *European Journal of Globalization and development Research*, Vol6, No 1, 2012 ISSN 2220- 7414.
- Akomolafe, B. (2006) "Open and Distance Learning as a Mechanism for Women Empowerment in Nigeria" <http://pcf4.dec.uwi/viewpaper.php?id=79&print=1>. Retrieved on June, 2016.
- Alade, I.A. (2012): Gender Stereotyping and Empowerment in Nigerian Society: Implication for women Repositioning in curriculum Delivery. *An International*

Journal of language literature and Gender Studies, Bahir Dar, Ethiopia Vol.1
(1) March, 2012: 30-43. ISSN: 2225- 8604.

- Almaz, N. (2006) Economic empowerment women; First women intellectual forum. Markkula Center for Applied Ethics. Santa Clara University the Jesuit University in Silicon Valley.
- Aregawi, T. & Haileslasie T. (2013). The Role of Cooperative in Promoting Socio-Economic Empowerment of Women: Evidence from Multipurpose Cooperative Societies in South-Eastern Zone of Tigray, Ethiopia. *International Journal of Community Development* Vo. 1, No. 1.
- ASHA O. F (2015): Agricultural Services Support Programme and Socio-Economic Empowerment of Rural Women in Zanzibar, Tanzania
- Ashwin G.M, Kiran J.P. & Kundan M.P.(2014) Impact of Microfinance service on Rural Women Empowerment: An Empirical Study. IOSR Journal of Business and Management (IOSR-JBM) e- ISSN: 2278-487 X, P- ISSN:2319-7668. Vol. 16, Issue 11.Ver III (NOV.2014), PP68-75 www.iostjournals.org
- Awotide, D. O. (2012) Assessment of Women's participation in cooperative societies and its determinants in Yewa North Local Government Area of Ogun State, Nigeria, *Asian Journal of Agriculture and Rural Development*
- Awotide, D.O, Aihonsu J.O.Y, & Adekoya A.H. (2011). Cooperative society's effectiveness in credit delivery for agricultural enterprises in North Local Government in Ogun State Nigeria. *Asian journal of Business and Management*.
- Badran, M. F. (2014) Access and use of ICT in female-owned SMEs in selected Arab Countries and Brazil: A comparative study 1 May 2014
- Bidisha, M. (2008) women empowerment in Assam "A human Development Approach. Working paper, department of Economics North Eastern hill University. Sillong.
- Birchall, J and Simmons, R (2007) "The Role and Potential of Co-operatives in the Poverty Reduction Process: A research agenda" *Journal of Co-operative Studies*, Volume 40, Number 1, April 2007, pp43-51
- Biru A.G. (2014): The Role of Agricultural Cooperatives in promoting Food Security and Rural Women's Empowerment in Eastern Tigray Region, *Ethiopia. Developing country Studies. Vol.4. No 11*

- Blumberg, R.L. (2005): “women economic empowerment as the magic portion of development. “Paper presented at the 100th annual meeting of the American sociological association, Philadelphia.
- Chambo S.A, (2009) Agricultural Cooperative: Role in Food Security and Rural Development. *Paper presented to Expert Group meeting on Cooperative Held on 28-30th April, 2009 New York.*
- Chavez, E. M. (2003). Increasing productivity of rural work. *Economic and Social Council (ECOSOC) Round Table*. New York, United Nations’ Hq.
- Cheryl .D. (1999) Empowerment: What is it? *Journal of extension* www. Joe org.
- Cheryl. D., Zoe B. & Shereen D. (2012). Women’s Empowerment in Agriculture: Supporting women Farmers. Prepared for UN Foundation.
- Claxton, A. (2000). Women and Development. In: Together. *A journal of world vision partnership*. No. 66. April-June 1.
- COGECA (2012) Position Paper on CAP Post-2013, Press Release, 17th February 2012. Accessed November, 2016 <http://www-copa-cogeca.eu/main.aspx?page=Archive&lang=en>
- Crig. M. A. (nd): Empowering Women Economically through Microcredit- Prospect and Challenges: The Case of Some Selected Credit Schemes in the Eastern Region of Ghana Box 8, New-Tafo, E/R. Email: mrcyasamoah@yahoo.com
- Dash (2011). Repositioning women through cooperatives and dynamics of social inclusion: An Indian perspective. *SAARC Journal of Human Resource Development*. 7(1), 23-34. Retrieved from <http://www.shrdc.org/doc/sjhrd/2011/2.bishnu.pdf>
- Data, P. B. and Gailey, R..(2012). Empowering women through social entrepreneurship: Case study of a women’s cooperative in India (p.569-587). *Entrepreneurship Theory and Practice: Extending women’s entrepreneurship in new directions*. 36(3). Wiley Online Library. Baylor University. Retrieved from <http://onlinelibrary.wiley.com/doi/1111/j.1540-6520.2012.00505>
- Deji O.F. (2005) Membership of Cooperative Societies and Adoption Behaviour of women farmers: Implication for Rural Development Ile-Ife Kamla – Ray.
- DFATD (2013): Women’s Economic Empowerment: guidance Note. ISBN:978-1-100-2211-5. www.international.gc.ca

- Devi K. U. & Narasaiah L. (2017): Women empowerment through self-help groups: An empirical study in Kurnool district of Andhra Pradesh *International Journal of Applied Research* 2017; 3(1): 101-105 www.allresearchjournal.com
- DFID (2000): Sustainable Livelihoods Guidance Sheets. Department for International Development. http://www.livelihoods.org/info/info_guidancesheets.html (access ed: 23.07.2008)
- Dick, G, & McCarthy (2004). Political institutions and development: Failed Expectations and renewed hopes. Massachusetts, USA Edward Elgar Publishing
- Dohmwirth, C. (2014) The Impact of Dairy Cooperatives on The Economic Empowerment of Rural Women in Karnataka Thesis submitted in partial fulfilment of the requirements for the joint academic degree of International Master of Science in Rural Development from Ghent University (Belgium), Agrocampus Ovest (France),
- Donald, L .K., Barbara N. N., Juliet W. (2007). Shocks and Rural Livelihoods in the Okavango Delta, Botswana. *Development Southern Africa* Volume 24, No. 2, pp 26-27
- Duflo E. (2005). Gender Equity in Development working paper.
- Ekesionye E. n. & Okolo A. N. (2012) Women empowerment and participation in economic activities: Indispensable tools for self-reliance and development of Nigerian Society. *Educational Research and Review* Vol.7 (1), pp. 10-18, doi: 10.5897/ERR 10.220
- Ellen .V. & Miet .M. (2013): Cooperative membership and agricultural performance: Evidence from Rwanda. Geo-Institute Celestijnenlaan 200 E – box 2411.3001 Leuven (Heverlee) University of Leuven Belgium <http://ees.kuleuven.be/bioecon/>
- Emefesi B.O, Hamidu B.M and Haruna .U. (2004): Role of Women Farmers Cooperative Societies in Agricultural Production: A study of Bauchi Local Government Area of Bauchi State.
- Eyben, R. Kabeer, N. and Cornwall, A. (2008) ‘Conceptualising Empowerment and the Implications for Pro Poor Growth’, A paper for the DAC Poverty Network. www.gsdr.org/docs/open/SE8.pdf
- Eyben, R. (2011) "Supporting pathways of women's empowerment: a brief guide for international development," Pathways Policy Paper, Brighton, UK: Pathways of Women's Empowerment Research Programme Consortium. Available online at: www.pathwaysofempowerment.org/Supporting_Pathways_of_Womens_Empowerment.pdf (accessed May 20, 2013)

- Ezejelue A.C., Ogwo E.O. and Nkamnebe A.D. (2008): Basic Principles in Managing Research Projects. Afritowers limited P.o.Box6553, Aba-Nigeria.
- FAO. (2012). *Trends and impacts of foreign Investment in developing country agriculture: evidence from case studies*, Rome.
- FAO (2015): Qualitative research on women's Economic Empowerment and social production.
- Fatemeh A. (2011). Women's Empowerment for Rural Development. *Journal of American Science 2011*. <http://www.americanscience.org>.
- Ferguson, J.A. (2012): Generating Sustainable Livelihoods; the Role of Co-Operatives Canadian Co-operative Association Presented to: Harnessing the Co-operative Advantage to Build a Better World, September 4-6, 2012
- FMARD (2002) "Agriculture in Nigeria: Policy (Before and Now) Analysis of the Existing (1988) Agricultural Policy and the Revised Policy" Federal Ministry of Agriculture and Rural development, Abuja.
- Fulton, Murray E. & Brent Hueth. (2009). Cooperative conversions, failures and restructurings: an overview. *Journal of Cooperatives 23: i-xi*.
- Gebremichael B. (2013.): The Role of Cooperatives in Empowering Women". *Journal of Business Management and Social Science Research (JBM & SSR)*. Volume 2, No.5.
- Gicheru, E. N.(2012):Engaging Co-operatives in Addressing Local and Global Challenges the Role of Co-operatives in Generating Sustainable Livelihoods" (<http://social.un.org/coopsyear/documents/GicheruRoleofCooperativesinGeneratingSustainableLivelihoods.pdf> retrieved In JANUARY 31, 2017.
- Gillinson s. (2004). Why Cooperate? A Multi-disciplinary Study of collective action. overseas Development Institute 111 Westminster Bridge Road London SE17JUK
- GLOPP, (2008) DFID's Sustainable Livelihoods Approach and its Framework
- Godwin, S. (2011). Poverty Reduction Through the Use of Cooperative Societies. Kaduna: Nuhu- Bamalli Polytechnic International Cooperative Alliance (ICA) (1995). Review of International Cooperatives, 4: 85 – 86.
- Harris A., Stefansson R. & Fulton M. (2005): New Generation Cooperative and Cooperative Theory. *Journal of cooperatives 11*, 15-28.

Holloway G.C. Nicholson C., Delgado S. Staal & Ehui (2000): Agri-Industrialization through Institutional Innovation: Transaction cost, Cooperatives and Milk-market Development in the East Africa highlands. *Agricultural Economics*.

ICA (1995): Review of International Cooperation. Geneva

Ihenacho, R.A., Chikaire, J.,Ejiogu-Okereke, N.Oguegbuchulam, M. N., Osuagwu, C.O. and Obi, K.U.(2012) Empowerment Strategies of Cooperative Societies for Poverty Reduction Among Members in Aboh Mbaise Area of Imo State, Nigeria

International Labor Organization (ILO). (2012): “Promising Practices: How cooperatives work for working women in Africa”. COOP AFRICA

(ICA) & (ILO). (2014): “Cooperatives and the Sustainable Development Goals: A Contribution to Post 2015 Development Debate.” A Policy Brief.

Izekor O. B. & Alufohai, G. O. (2010). Assessment of Cooperative society’s effectiveness in agricultural credit delivery in IkpobaOKha local Government Area, Edo state, Nigeria. *African Journal of General Agriculture* 6 (3): 139 - 143.

Jethro P. (2012): Empowerment and Participation bridging the gap between understanding and practice. *Institute of Development studies, Sussex, Uk.* www.ids.ac.uk

Jill W. (2005): Measuring Gender and Women’s Empowerment Using Confirmatory Factor Analysis. Research Program on Population Processes POP2005-01Population Aging Center PAC2005-01. Institute of Behavioral Science University of Colorado, Boulder

Johanna, R. (2013) Women’s Empowerment through Microfinance: A case study on Burma. Mailing address: ISSN 0283-1589Nationalekonomiska Institutionen Box 7082S-220 07 LUND Sweden

Kabeer N. (1999): Resource agency, achievements: reflections on the measurement of women’s empowerment *Development and change* vol.30 ():435-464

Kabeer N. (2001). “Conflicts over Credit: Re-evaluating the Empowerment Potential of Loans to Women in Rural Bangladesh”, *World Development*, 29(1), pp. 63-84.

Kabeer, N. (2005) Gender Equality and Women's Empowerment: a Critical Analysis of the Third Millennium Development Goal. *Gender and Development*, 13 (1): 13-24.

Kabeer N. (2012) Women,s Empowerment and inclusive growth: Labour Markets and Enterprise development centre for Development policy and Research school of oriental & African studies University of London, Uk.

Karubi, N. P. (2006). "Development, Micro-credit and Women's Empowerment: A Case Study of Market and Rural Women in Southern Nigeria", New Zealand: University of Canterbury

Karunakaran, R. (2004). An assessment of social impact of cooperative movement in Dinchigul district. Unpublished PhD thesis. Gandhigram Rural University, India

Kokanova, N. (2009); nora.kokanova@ Unifem. Org.

Lagos State Ministry of Agric & Cooperatives". *Business Today*. Retrieved 2 March (2015)

Louise D. (2014). How to Guide to managing Economic Empowerment projects. Trocaire working for a just world. Triphonie Nyinabauake,Rwanda

Majurin, E. (2012). How women fare in east African cooperatives: The case of Kenya, Tanzania and Uganda. The Cooperative Facility for Africa (CoopAfrica), International labor office-Daereselam, ILO.

Malhotra, A., Schuler R..S, and Boender, C.(2002). Measuring women's empowerment as a variable in international development. Background paper prepared for the World Bank workshop on poverty and gender: New perspectives. Retrieved from <http://reteresources.worldbank.org/intergender/MalhotraSchulerBoender.pdf>

Masabo.C.M.V. (2015): Women`s Empowerment through Cooperatives- A Study from Women`s Perspectives. *Development Studies Number of STU: 167855* 29.05.2015

Masrukin, A. S., Toto S., Bambang S., &AdhiIman S.(2016):Community Empowerment Model through Cooperative for the Villages Most Severely Affected By Eruption of Merapi. Volume 6 Number 1 (Jan. 2016)>IJSSH 2016 Vol.6 (1): 57-60 ISSN: 2010-3646 DOI: 10.7763/IJSSH.2016.V6.618

- Mayoux, L. (2005). Women's empowerment through sustainable micro-finance: Rethinking best practice. Retrieved from: <http://www.genfinance.net>.
- Mayoux, L. (2009), "Taking gender seriously: towards a gender justice protocol for financial services", paper presented for publication in Microfinance Handbook, CERMi, Brussels, 2009.
- Mehrdad, N. & Zinab, B. (2013): the Factor Analysis Components of obstacles of Member's rural cooperatives. *Middle-East Journal of Scientific Research. Idosi Publication*, 2013.
- Mgbakor .M .N.Uzendu P. O. & Onwubiko E. C. (2014): Economic Empowerment of Women in Agriculture through Micro Finance Bank in Awgu Local Government Area of Enugu State, Nigeria. *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)* e-ISSN: 2319-2380, p-ISSN: 2319-2372. Volume 7, Issue 8 Ver. I (Aug. 2014), PP 21-31 www.iosrjournals.org www.iosrjournals.org 21 | Page
- Mosedale, S.(2005). Policy arena; Assessing women's empowerment: Towards a conceptual framework. *Journal of International Development*. 17: 243-257.
- National Population Commission (NPC) (2006). "Nigeria's National Census" NPC, Abuja.
- Narayan, D. (2002). Empowerment and poverty reduction: A source book, Washington, DC. World Bank.
- Nimalathan, Balasundaram.(2009). Kepuasan kerja dan Kinerja Karyawan Kasus Bank Rakyat di Semenanjung Jaffna Sri Lanka. *Journal Ekonomi University of Jaffna*. Sirilanka
- Obasi, F.C., & Agu, S.E. (2000). Economics of Small Scale Rice Farmers under Different Production systems in South Eastern Nigeria. *Journal of Agriculture, Business and Rural Development*, 1: 2.
- OECD (Organisation for Economic Co-operation and Development)**. 2010. Working Group on Economic Aspects of Biodiversity (WGEAB). *OECD Expert Workshop on Enhancing the Cost effectiveness of Payment for Ecosystem Services (PES) Summary record*. Paris.
- Ojiagu, N. C. & Onugu, C. U. (2015): Effects of Membership of Cooperative Organisations and Determinants on Farmer-Members' Income in Rural Anambra State, Nigeria. *International Journal of Scientific & Technology Research Volume 4*, Issue 08, August 2015 ISSN 2277-8616 28 IJSTR©2015 Www.Ijstr.Org

- Okechukwu, E. O. (2015): Measuring the Effects of Public Policy on Food Production: The Case of Fadama Iii Rice Production Intervention in Anambra State, Nigeria. *International Journal of Community and Cooperative Studies Vol.3, No.2, pp.1-16, September 2015*___Published by European Centre for Research Training and Development UK (www.eajournals.org)ISSN 2057-2611(Print), ISSN 2057 262X (Online)
- Okon S. U. & Okon D. E. (2015): Deterrents to Women's Empowerment in Africa: Analysis of Some Socio-Cultural Practices in Akwa Ibom State of Nigeria. *IOSR Journal of Humanities and Social Science (IOSR-JHSS) Vol 20, Issue 11, Ver. V (Nov. 2015) PP 14-20 e-ISSN: 2279-0837, p-ISSN: 2279-0845. www.iosrjournals.org DOI: 10.9790/0837-201151420 www.iosrjournals.org 14 | Page*
- Olabisi A. I.(2010): Improving Marketing and Traceability of Agricultural Commodities. The Role of Cooperatives International Food Policy Research Institute.
- Oluwatayo, A.B. Sekumade O., & Adesoji, S.A. (2008). Resource Use Efficiency of Maize farmers in Rural Nigeria: Evidence from Ekiti State, Nigeria. *World Journal of Agricultural Science*, 4(1):91-99.
- Olson, M. (1965).The Logic of Collective Action, Cambridge MA: Harvard University Press
- Omotesho A.O Joseph J.K., Apata A. & Muhammad-Lawal, A.(no date) "[Food Security, Agricultural Production And Cooperatives In Nigeria](#)
- Onugu, C.U & Ojiagu, N.C. (2009). Genderizing Development in Rural Nigeria: Needs Challenges and Approaches. *Journal of legislative Studies*.
- Onugu C. U& Abdulahi T. O (2012): The Performance of Agricultural Cooperative Societies under the National Programme on Food Security in Enugu State, Nigeria. *Review of Public Administration and Management Vol. 1, No. 2, November 2012 ISSN: 2315-7844*.
- Ortmann, Gerald F. & Rober P. King. (2007). Agricultural cooperatives I: History, theory and problems. *Agekon* 46 (1): 40-68.
- Oyeniya, B. (2013). The Impact of Cooperative Society in Empowerment of Rural Women. Retrieved from<http://kayworld-bukkyblegspot>.

- Onyishi, C. N (2011) Empowerment and Women's Participation in Development Processes: A Study of Nsukka Community in Nsukka Local Government Area of Enugu State Department of Sociology & Anthropology University of Nigeria, Nsukka September, 2011
- Pandolfelli, L., Meizen-Dick, R., and Dohrn, S. (2007). Gender and collective action: A conceptual framework for analysis. *Collective Action Working Paper 64*: 57.
- Poonam C. & Gulnar S. (nd) Cooperatives Intervention and Social Empowerment of Indian Women: An Empirical Study. *National Monthly Refereed Journal of Research in Commerce & Management* www.abhinavjournal.com Volume No.1, Issue No.5 ISSN 2277-1166
- Prakash, R. (2002). Indian women: Rights, economic position and empowerment. A paper presented on Socio-cultural Issues related to Women and Development in India: *A Case Study of War Widows in Rajasthan*
- Reardon .T. and Barrett C.B. (2000): Agro-Industrialization, Globalization, and International Development: An Overview of Issues, patterns and determinants, *Agricultural Economics*.
- Richardson, Jeremy (ed.) (1993) *Pressure Groups*, Oxford: Oxford University Press
- Roldan M & M. Ellen (2009). The challenge of Entrepreneurship in Agricultural Cooperatives.
- Ruth.M, Monica .D. & Nancy .M. (2004): Methods for studying collective Action in Rural Development. *International Food Policy Research Institute. Washington DC*.
- Sabeh, S. and Y. A. Mohammad (2007) "Economic Empowerment of Women in Contemporary Society: An Islamic Perspective" *Issues in Economics, Vol.2, Department of Economics, UDUS*
- Safiya, D.K (2011) Skill Acquisition Capacity Building and Women Economic Empowerment: A Case Study of Women Education Center, Birnin-Kebbi. Pg 5-7.
- Saikon S.E. & Hung W. (2008) Green Cooperative: A strategy Approach Developing women's Entrepreneurship in the Asian and Pacific Region. *World Journal of Agriculture 4 (6):674-683ISSN 1817-3047 Indosi publication*.
- Sarumathi1 S. & Mohan K. (2011) Role of Micro Finance in Women's Empowerment (An Empirical study in Pondicherry region rural SHG's)*Journal of Management and Science, Vol. 1, No.1, Sep 2011, pp. 1-10*.

Shelly G. (2011) An Empirical Examination of Women's Empowerment and Transformative Change in the Context of International Development. *Am J Community Psychol* DOI 10.1007/s10464-011-9453-y_ *Society for Community Research and Action* 2011

Siebert, John W. & John L. Park. (2010). Maintaining a Healthy Equity Structure: A Policy Change at Producers Cooperative Association. *International Food and Agribusiness Management Review* 13(3): 87-96.

Shahnaj P and Ingrid-Ute .L. (2004) Empowerment of Rural Women in Bangladesh: A Household Level Analysis. Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh. Contact email: shahnaj1969@yahoo.com

Sourbani, P. (2009); the role cooperative in empowering.

State Cooperative Office (2016): Book of Records, Registered Cooperatives in Anambra State, Enugu State and Imo State.

Sudha, K.(2015). Women in leadership for effective governance- Issues and challenges. Paper to be presented in 10th ICA- Asia- Pacific Regional Research conference on Governance of co-operatives: Issues and challenges, November, 05-06, VAMNICOM, Pune, India.

Sudha,K.(2013).Social inclusion in primary cooperatives in India-Issues and challenges. Paper Presented in the 4th International Research Conference on The Social Economy on the move... at the crossroads of Structural change and regulation, October 24-26, IRCSE,Antwerp,Belgium.

Tanzania Federation of Cooperative (2006): Cooperatives and Development in Tanzania: A Simplified Guide to the Cooperative Development Policy and the Cooperative Societies Act of Tanzanian. Mainland. Daces Salamy: TFC.

Thomas W., Fanaye T.& WallerM. (2013): Women's participation in agricultural cooperatives in Ethiopia. No 57, ESSP working papers from International Food Policy Research Institute (IFPRI)

Tiago W. & Ngo K.Y. (2006): Guide to Agricultural Marketing Extension with special Reference to Vietnam. *Module 2. International Center for Tropical Agriculture.*

- .USAID, Ethiopia. (2005).Evaluation of agricultural cooperatives in Ethiopia (ACE) Programme Activities. *Prepared by Mitchell Group.INC., Washington, D.C., USA.*
- Vivek P, Jeemol. U, Pratik. M. & Shruti. S (nd): Role of Indian Dairy Cooperatives in Empowering Women and Improving Gender Parity. Institute of Rural Management, Anand (IRMA)
- Wanyania F.O. Develtene, P. Pollet. I. (2008) Encountering the Washington, D. C.*
- World Bank Institute (2007): Empowerment in practice: and Implementation- A world Bank learning Module.
- World Bank. (2010). *World Development Indicators* (available at <http://data.worldbank.org/data-catalog/world-development-indicators/> wdi-2010; accessed 5 July 2015).
- Yahaya, M.K., (2002). Gender and Communication Variables in Agricultural Information Dissemination in two Agro-ecological Zones of Nigeria. Research monograph University of Ibadan, pp: 68.
- Yaye, M. (2010); Empowering Women through Agriculture. The Gbalin Women Cooperative in Liberia.

Appendix i

QUESTIONNAIRE

Section A

Socio-economic profile of the respondents

Instruction: Tick (✓) on the appropriate option

1. What is your age range?

A. 20-29 B. 30-39 C. 40-49 D. 50-59

E. 60 years and above

2. What is your educational qualification?

A. Primary B. Secondary C. Tertiary

3. What is your occupation?

A. Farming B. Trading C. Civil servant

4. What is your marital status?

A. Single B. Married C. widow

5. What is your family size?

A. Two B. three C. four D. five E. six and

above

6. How long have you been a member of cooperative society?

A. One year B. Two years C. Three years D. Four and

above

7. What is your annual farm income before joining cooperative (in Naira)?

(a) 30,000 – 50,000

(b) 50,000 – 100,000

(c) 100,000 – 200,000

(d) 200,000 – 400,000

(e) 400,000 – 800,000

(f) 800,000 and above

What is your annual farm income after joining cooperative (in Naira)?

(a) 200,000 – 300,000

(b) 500,000 – 800,000

(c) 1,000,000 – 1,200,000

(d) 1,300,000 – 1,500,000

(e) 1,500,000 – 2,000,000

(f) 2,000,000 and above

SECTION B – EFFECT OF FARM INPUT; CREDIT, MARKETING/PROCESSING AND EXTENSION SERVICE ON RURAL INCOME.

MARKETING AND PROCESSING

1a. Types of crops marketed in 2016 -----

1b. Types of crops processed in 2016 -----

2. Assessment of the effect of marketing/processing

INSTRUCTION: Tick good (√) on the appropriate option

i) Cooperative assists members in processing and preparation of their produce for the market.

(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

ii) Cooperative collects and market agricultural produce.

(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

iii) Crops and other farm produce are marketed at competitive prices.

(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

iv) Reduction in crops wastage and pilferage.

(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

v) Provision of storage facilities.

(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

vi) Transportation is provided to convey produce to the market and \ or processing centre.

(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

INSTRUCTION: Tick good (√) on the appropriate option

- i) Income and standard of living increase
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- ii) Better farming practice was introduced.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- iii) Increase in employment in the community.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- iv) Poverty level has reduced
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- v) Better quality of output
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- vii) There are now more varieties of crops
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- viii) Total output has increased.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

SECTION C- EFFECT OF COOPERATIVE SUPPORT ON FARM OUTPUT OF WOMEN.

1. Output in the following crops in 2016 in naira

a. cassava #.....b. Yam #.....c. vegetables #.....

d. maize #.....e. cocoyam #.....

2. Assessment of effect on output.

INSTRUCTION: Tick good (√) on the appropriate option

- i) Better quality of output
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- ii) There are now more varieties of crops.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- iii) Total output has increased.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- iv) Increase per hectare output.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- v) Crop quality has increased.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- vi) Crop output has met local demand.
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

Cooperative support services (farm in put, credit and extension visit)

Farm Input		
Fertilizers		
Herbicides		
Cassava cutting		
Improved Seedlings		
Credit		
Loan from Cooperative society		
Loan from Bank of Agriculture.		
Extension visit		
Regularly		
Once in while		
Rarely		
Not at all		
Marketing / processing		
Regularly		
Once in a while		

Rarely		
Not at all		

What has the Cooperative offered to the women farmers cooperators improves their income level?

8. What are your sources of funding the farm?

- (a) From personal savings
- (b) Loan from cooperative society
- (c) Loan from micro-finance agency
- (d) Grants from friends and relatives
- (e) Loan from Nigerian Agricultural Cooperative
And Rural Development Bank

9. **INSTRUCTION: Tick good (√) on the appropriate option**

- i. Improved Varieties of seedlings are supplied
a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- ii. Farmers are taught how to apply fertilizer and chemicals
a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- iii. Credits are obtained at the time they are needed
a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- iv. Farm chemical and fertilizer are supplied at reasonable prices.
a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- v. Availability of herbicides for clearing of grasses
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- vi. Availability of seed treatment chemical
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided
- vii. Improved seedlings are supplied at cheaper prices
(a) Strongly agree (b) agree (c) disagree (d) strongly disagree (e) Undecided

SECTION D – EXTENT OF COOPERATIVE MEMBERSHIP ON LIVELIHOOD DIVERSIFICATION.

INSTRUCTION: Tick good (√) on the appropriate option

I engage in off farm activities such as:

- (a) Processing cassava tuber into cassava flour and garri
- (b) Tapioca production
- (c) Zobo making
- (d) Goat rearing
- (e) Poultry production
- (f) Soya milk making
- (g) Provision shop

Appendix ii

How regular is extension visits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regularly	36	7.4	10.6	10.6
	Once in a while	132	27.3	38.8	49.4
	Rarely	76	15.7	22.4	71.8
	Not at all	96	19.8	28.2	100.0
	Total	340	70.2	100.0	
Missing	System	144	29.8		
Total		484	100.0		

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-29	28	5.8	8.2	8.2
	30-39	81	16.7	23.8	32.1
	40-49	107	22.1	31.5	63.5
	50-59	37	7.6	10.9	74.4
	60years and above	87	18.0	25.6	100.0
	Total	340	70.2	100.0	
Missing	System	144	29.8		
Total		484	100.0		

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	primary	138	28.5	40.6	40.6
	secondary	64	13.2	18.8	59.4
	Tertiary	138	28.5	40.6	100.0
Total		340	70.2	100.0	
Missing	System	144	29.8		
Total		484	100.0		

Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Farming	154	31.8	45.3	45.3
	Trading	60	12.4	17.6	62.9
	Civil servant	126	26.0	37.1	100.0
Total		340	70.2	100.0	
Missing	System	144	29.8		
Total		484	100.0		

Marital Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	26	5.4	7.6	7.6
Valid Married	299	61.8	87.9	95.6
Valid Widowed	15	3.1	4.4	100.0
Valid Total	340	70.2	100.0	
Missing System	144	29.8		
Missing Total	484	100.0		

Fmly size5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Three	21	4.3	6.2	6.2
Valid Four	9	1.9	2.6	8.8
Valid Five	60	12.4	17.6	26.5
Valid Six and Above	73	15.1	21.5	47.9
Valid 6	177	36.6	52.1	100.0
Valid Total	340	70.2	100.0	
Missing System	144	29.8		
Missing Total	484	100.0		

Coop Exp6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	One year	52	10.7	15.3	15.3
	Two years	72	14.9	21.2	36.5
	Three years	66	13.6	19.4	55.9
	Four yrs and above	150	31.0	44.1	100.0
Total		340	70.2	100.0	
Missing	System	144	29.8		
	Total	484	100.0		

DATASET CLOSE DataSet1.

FREQUENCIES VARIABLES=EXTENSIONVISIT Age1 Edu2 Occp3 M.S4
Fmlysize5 CoopExp6

/STATISTICS=STDDEV MEAN SUM

/ORDER=ANALYSIS.

Statistics

		How regular is extension visits	AGE	Education	Occupation	Marital Status	Fmly size5
N	Valid	340	340	340	340	340	340
	Missing	0	0	0	0	0	0
	Mean	2.68	3.22	2.00	1.92	.97	5.11
	Std. Deviation	.998	1.287	.902	.905	.346	1.163
	Sum	912	1094	680	652	329	1736

Statistics

		Coop Exp6
N	Valid	340
	Missing	0
	Mean	2.92
	Std. Deviation	1.124
	Sum	994

Statistics

	Cooperative assists members in processing	Cooperative collect and market produce	Crop and other farm produce are marketed at competitive prices	Reduction in crop wastage and pilferage	Provision of storage facilities
Valid	340	340	340	340	340
N Missing	0	0	0	0	0
Mean	3.40	4.15	4.04	3.70	2.53
Std. Deviation	1.027	.888	1.061	1.244	.667
Sum	1155	1411	1372	1259	861

Statistics

	Transportation is provided to convey produce to the market and or processing centre	Income and standard of living increase	Better farming practice was introduced	Increase in employment in the community	Poverty level has reduced
Valid N	340	340	340	340	340
Missing	0	0	0	0	0
Mean	2.32	2.78	2.89	4.59	3.47
Std. Deviation	.469	.750	.807	.492	1.130
Sum	790	945	983	1562	1179

Statistics

	Better quality of output	There are now more varieties of crops	Total output has increased	Better quality of output	There are now more varieties of crops
Valid N	340	340	340	340	340
Missing	0	0	0	0	0
Mean	3.14	3.40	3.28	2.99	2.33
Std. Deviation	.855	.579	.841	.271	.472
Sum	1069	1157	1114	1015	793

Statistics

		Total output has increased	Increase per hectare ouput	Crop quality has increased	Crop quality has met local demand
N	Valid	340	340	340	340
	Missing	0	0	0	0
	Mean	2.04	3.54	3.60	3.21
	Std. Deviation	.233	.516	.573	.510
	Sum	695	1205	1225	1091

Cooperative assists members in processing

		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	.3	.3	.3
	Disagree	50	14.7	14.7	15.0
	Undecided	187	55.0	55.0	70.0
	Agree	17	5.0	5.0	75.0
	Strongly agree	85	25.0	25.0	100.0
	Total	340	100.0	100.0	

Cooperative collect and market produce

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	10	2.9	2.9	2.9
Undecided	82	24.1	24.1	27.1
Agree	95	27.9	27.9	55.0
Strongly agree	153	45.0	45.0	100.0
Total	340	100.0	100.0	

Crop and other farm produce are marketed at competitive prices

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	44	12.9	12.9	12.9
Undecided	53	15.6	15.6	28.5
Agree	90	26.5	26.5	55.0
Strongly agree	153	45.0	45.0	100.0
Total	340	100.0	100.0	

Reduction in crop wastage and pilferage

	Frequency	Percent	Valid Percent	Cumulative Percent
--	-----------	---------	---------------	--------------------

Valid	Disagree	74	21.8	21.8	21.8
	Undecided	106	31.2	31.2	52.9
	Agree	7	2.1	2.1	55.0
	Strongly agree	153	45.0	45.0	100.0
	Total	340	100.0	100.0	

Provision of storage Facilities

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	192	56.5	56.5
	Undecided	115	33.8	90.3
	Agree	33	9.7	100.0
	Total	340	100.0	100.0

Transportation is provided to convey produce to the market and or processing centre

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	230	67.6	67.6
	Undecided	110	32.4	100.0
	Total	340	100.0	100.0

Income and standard of living increase

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	141	41.5	41.5	41.5
Undecided	133	39.1	39.1	80.6
Agree	66	19.4	19.4	100.0
Total	340	100.0	100.0	

Better farming practice was introduced

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	131	38.5	38.5	38.5
Undecided	115	33.8	33.8	72.4
Agree	94	27.6	27.6	100.0
Total	340	100.0	100.0	

Increase in employment in the community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	138	40.6	40.6	40.6
	Strongly agree	202	59.4	59.4	100.0
	Total	340	100.0	100.0	

Poverty level has reduced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	74	21.8	21.8	21.8
	Undecided	133	39.1	39.1	60.9
	Agree	33	9.7	9.7	70.6
	Strongly agree	100	29.4	29.4	100.0
	Total	340	100.0	100.0	

Better quality of output

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	103	30.3	30.3	30.3
Undecided	85	25.0	25.0	55.3
Agree	152	44.7	44.7	100.0
Total	340	100.0	100.0	

There are now more varieties of crops

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	16	4.7	4.7	4.7
Undecided	171	50.3	50.3	55.0
Agree	153	45.0	45.0	100.0
Total	340	100.0	100.0	

Total output has increased

	Frequency	Percent	Valid Percent	Cumulative Percent
--	-----------	---------	---------------	--------------------

Valid	Disagree	86	25.3	25.3	25.3
	Undecided	74	21.8	21.8	47.1
	Agree	180	52.9	52.9	100.0
	Total	340	100.0	100.0	

Better quality of output

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	15	4.4	4.4
	Undecided	315	92.6	97.1
	Agree	10	2.9	100.0
	Total	340	100.0	100.0

There are now more varieties of crops

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	227	66.8	66.8
	Undecided	113	33.2	100.0
	Total	340	100.0	100.0

Total output has increased

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	.6	.6	.6
	Disagree	321	94.4	94.4	95.0
	Undecided	17	5.0	5.0	100.0
	Total	340	100.0	100.0	

Increase per hectare output

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	.6	.6	.6
	Undecided	152	44.7	44.7	45.3
	Agree	185	54.4	54.4	99.7
	Strongly agree	1	.3	.3	100.0
	Total	340	100.0	100.0	

Crop quality has increased

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	14	4.1	4.1	4.1
Valid Undecided	108	31.8	31.8	35.9
Valid Agree	217	63.8	63.8	99.7
Valid Strongly agree	1	.3	.3	100.0
Total	340	100.0	100.0	

Crop quality has met local demand

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	16	4.7	4.7	4.7
Valid Undecided	237	69.7	69.7	74.4
Valid Agree	87	25.6	25.6	100.0
Total	340	100.0	100.0	

FREQUENCIES VARIABLES=SOURCEFUND SUPIMPROV VARIETY
 FARMERSTAUGHT TIMELYCREDIT FERTGOODPRICE AVAHERBI
 AVASEEDCHEMICALS IMPRSEEDCHEAP OFFfARMACTIVITIES

/STATISTICS=STDDEV MEAN SUM

/ORDER=ANALYSIS.

I engage in off farm activities such as

	Frequency	Percent	Valid Percent	Cumulative Percent
Processing cassava tuber into cassva flour and garri	31	9.1	9.1	9.1
Tapioca production	113	33.2	33.2	42.4
Zobo making	62	18.2	18.2	60.6
Valid Goat rearing	78	22.9	22.9	83.5
Poultry production	17	5.0	5.0	88.5
Soya milk making	19	5.6	5.6	94.1
Provision shop	20	5.9	5.9	100.0
Total	340	100.0	100.0	

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Profitmargin

/METHOD=ENTER TIMELYCREDIT FARMINPUT COOPMKT
 EXTENSIONVISIT.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.385 ^a	.148	.138	228122.240

a. Predictors: (Constant), How regular is extension visits, Cooperative collect and market produce, Credits are obtained at the time they are needed, FARMINPUT

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3035385456 955.725	4	7588463642 38.931	14.582	.000 ^b
Residual	1743331834 0103.100	335	5203975623 9.114		
Total	2046870379 7058.824	339			

a. Dependent Variable: Profit margin

b. Predictors: (Constant), How regular is extension visits, Cooperative collect and market produce, Credits are obtained at the time they are needed, FARMINPUT

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	19804.361	84065.724		-.236	.814
1 Credits are obtained at the time they are needed	-3983.942	16967.166	-.012	-.235	.815
FARMINPUT	1959.839	14977.601	.007	.131	.896
Cooperative collect and market produce	106263.360	14445.520	.384	7.356	.000
How regular is extension visits	-3057.381	12502.228	-.012	-.245	.807

a. Dependent Variable: Profit margin

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Profitmargin

/METHOD=ENTER FARMINPUT TIMELYCREDIT EXTENSIONVISIT.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.104 ^a	.011	.002	245491.126

a. Predictors: (Constant), How regular is extension visits, Credits are obtained at the time they are needed, FARMINPUT

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2193637768 41.568	3	7312125894 7.189	1.213	.305 ^b
Residual	2024934002 0217.258	336	6026589291 7.313		
Total	2046870379 7058.824	339			

a. Dependent Variable: Profit margin

b. Predictors: (Constant), How regular is extension visits, Credits are obtained at the time they are needed, FARMINPUT

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	334079.204	74189.147		4.503	.000
FARMINPUT	27173.616	15690.241	.097	1.732	.084
1 Credits are obtained at the time they are needed	3621.733	18225.088	.011	.199	.843
How regular is extension visits	-7717.567	13436.845	-.031	-.574	.566

a. Dependent Variable: Profit margin

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT CoopExp6

/METHOD=ENTER Profitmargin.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.128 ^a	.016	.013	1.116

a. Predictors: (Constant), Profit margin

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	6.966	1	6.966	5.592	.019 ^b
1 Residual	421.046	338	1.246		
Total	428.012	339			

a. Dependent Variable: Coop Exp6

b. Predictors: (Constant), Profit margin

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.686	.117		22.920	.000
Profit margin	5.834E-007	.000	.128	2.365	.019

a. Dependent Variable: Coop Exp6

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT CoopExp6

/METHOD=ENTER OFFfARMACTIVITIES.

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	I engage in off farm activities such as ^b	.	Enter

a. Dependent Variable: Coop Exp6

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.134 ^a	.018	.015	1.115

a. Predictors: (Constant), I engage in off farm activities such as

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	7.712	1	7.712	6.202	.013 ^b
1 Residual	420.299	338	1.243		
1 Total	428.012	339			

a. Dependent Variable: Coop Exp6

b. Predictors: (Constant), I engage in off farm activities such as

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.229	.137		23.633	.000
1 I engage in off farm activities such as	-.095	.038	-.134	-2.490	.013

a. Dependent Variable: Coop Exp6

DATASET ACTIVATE DataSet2.

SAVE OUTFILE='C: \Users\Chuks\Documents\Research works\Ogo UNIZIK\Ogo research analysis.sav'

/COMPRESSED.

FREQUENCIES VARIABLES=FERTGOODPRICE AVAHERBI
AVASEEDCHEMICALS IMPRSEEDCHEAP

/STATISTICS=STDDEV MEAN SUM

/ORDER=ANALYSIS.

Correlations

		How regular is extension visits	Cooperative collect and market produce	Profit margin
How regular is extension visits	Pearson Correlation	1	-.036	-.025
	Sig. (2-tailed)		.509	.646
	N	340	340	340
Cooperative collect and market produce	Pearson Correlation	-.036	1	.385**
	Sig. (2-tailed)	.509		.000
	N	340	340	340
Profit margin	Pearson Correlation	-.025	.385**	1
	Sig. (2-tailed)	.646	.000	
	N	340	340	340
Credits are obtained at the time they are needed	Pearson Correlation	-.059	.122*	.037
	Sig. (2-tailed)	.274	.025	.497
	N	340	340	340
FARMINPUT	Pearson Correlation	.072	.247**	.098
	Sig. (2-tailed)	.184	.000	.072
	N	340	340	340

Correlations

	Credits are obtained at the time they are needed	FARMINPUT
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How regular is extension visits	Pearson Correlation	-.059	.072
	Sig. (2-tailed)	.274	.184
	N	340	340
Cooperative collect and market produce	Pearson Correlation	.122	.247
	Sig. (2-tailed)	.025	.000
	N	340	340
Profit margin	Pearson Correlation	.037	.098 **
	Sig. (2-tailed)	.497	.072
	N	340	340
Credits are obtained at the time they are needed	Pearson Correlation	1	.246 *
	Sig. (2-tailed)		.000
	N	340	340
FARMINPUT	Pearson Correlation	.246	1 **
	Sig. (2-tailed)	.000	
	N	340	340

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).