



## Role of Women Cooperative in Agricultural Development: (A Study of Women Cooperative Members in Awka South)

Okafor Ogochukwu Esther<sup>1</sup>, Okafor Patronila Ifeoma<sup>2</sup>, Uzondu Chikodiri Scholastica<sup>3</sup>  
<sup>1,3</sup>Ph.D

<sup>1,2</sup>Department of Cooperative Economics and Management, <sup>3</sup>Collage of Agriculture Mgbakwu,  
Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

### ABSTRACT

This paper dwelt on the role of women cooperative in agricultural development focusing on Awka south local government area of Anambra state. Sixty-five (65) farmer members were randomly selected from six women cooperative in the area. In this research, descriptive analytical method was used to investigate the specific objectives. They include descriptive statistics such as frequency distribution table, percentage, mean and standard deviation. For the hypothesis posed, t-test or t statistics was used to draw if there is any significant effect of the cooperative roles on the members output. Likert scale analysis was used to examine the perception of members on how cooperative functions\activities such as input supply, marketing and processing have brought about an enhancement to their economic well-being as represented by output. The researcher found out that women cooperative in the area has played significant role in marketing and processing of their members agricultural produce. The effect of the cooperative functions\activities (input supply, marketing and processing) has significantly improved the income and standard of living of the women farmer member of cooperative in the area. Women cooperative are encouraged to process and market their member's agricultural produce since it has strong significant effect on their member's income, and also provide credit and improved varieties of inputs to their members at appropriate time to enhance their productivity. On the other hand, government should aid those women cooperative in the area by giving them loan and grants to boost their productivity and also construct a good road network for easy evacuation of their produce to the cities where they

will attract more income to the members of women cooperative.

### INTRODUCTION

#### BACK GROUND OF THE STUDY

The sustainable production of food is the pillar of women's work as farmers, farm workers and natural resources managers (Onyemobi, 2000). In doing so, they contribute to national agricultural output, maintenance of environment and family food security. Large majority of the farmers operate at the subsistence smallholder level, with intensive agriculture being uncommon. Household food and nutrition security relies on rural food production and this contributes substantially to poverty alleviation (Yemisi and Aisha, 2009). It has been noted that in the early 1980s, while the population grew rapidly, food production and agricultural incomes declined in many African countries including Nigeria. In many of the countries, the diminishing capacity of agriculture to provide for household subsistence increased the workload shouldered by women as men withdrew their labour from agriculture preferring jobs in the urban centres. Hence, there is an increased attention being given to the role of smallholder subsistence agriculture in ensuring food security of the continent, since some 73% of the rural population consists of smallholder farmers. (Yemisi and Aisha, 2009).

Furthermore, Yemisi and Aisha (2009) argued that rural women now play a pivotal role, which is crucial to the overall success of effort directed at agricultural development in rural areas. The role that women play and their position in meeting the challenges of agricultural production and development are quite

dominant and prominent. Their relevance and significance therefore, cannot be over emphasized. Findings from a study financed by the United Nations Development Programme (UNDP) revealed that women make up some 60-80 percent of agricultural labour force in Nigeria, depending on the region and they produce two-third of the food crops (World Bank, 2003). The above notwithstanding, these wide spread assumption that men and not women make the key farm management decisions has prevailed. Sadly, female farmers in the country are among the voiceless, especially with respect to influencing agricultural policies. Such policies, which are aimed at increasing food production, tend to either underestimate and totally ignore women's role in both production and the general decision-making process within the household. More so, they noted that various contributions of women to agricultural production in Nigeria have been variously described in the literature but their role in decision-making process in agriculture has not been widely employed or at best, remains minimal. (Yemisi and Aisha, 2009)

However, they emphasized that there are some factors militating against women in participating in agricultural production, some of which are socio-cultural and economic in nature. The task of surmounting such obstacles can be daunting, even though women have largely succeeded in overcoming some of them. Thanks in no small measure to the actions and persistence of women's groups and community – based organizations and the civil society organizations fighting their cause. (Yemisi and Aisha, 2009).

Yemisi and Aisha (2009) have noted that women's contributions to agricultural development are seldom noticed. They have either no or minimal part in the decision-making process regarding agricultural development. Gender inequality is therefore dominant in the agricultural sector, and this constitutes a bottle neck to development, these calls for a review of government policies on agriculture to all elements that place women farmers at a disadvantage. The position and capability of women meeting the challenges of agricultural development cannot be over emphasized. Women make significant contribution to food production and processing, but men seem to take more of the farm decisions and control the production resources. In Nigeria, women play a dominant role in agricultural production, their active participation in African agriculture is also not new but they are faced

with socio- cultural and economic problems which retard the maximization of their potentials.

Nevertheless, the key role played by women in agriculture was in the past largely unacknowledged in government statistics and decision-making. This situation has started to change over the last two decades and much has been achieved in giving recognition to the importance of women in many parts of the developing world Yemisi and Aisha (2009). There also remain a number of areas where progress in advancing gender equality has not been significant and which represent challenges for the future. These includes women lack of access to land, resources entitlements and inputs such as credit and technology and the limited role played by women in planning and formulation policy in the sector. It was concluded that failure to recognize and enhance female labour activities is contributing to current problems with food supply but these can be overcome most effectively through support, rather than their marginalization.

Cooperative all over the world has contributed to agricultural production process through the supply of inputs and marketing of farm output. But much of these efforts do not seem to be well appreciated. In particularly the efforts of women agricultural cooperative in boosting agricultural output and improvement of the socio-economic well- being of the members are often not given the desired attention. Therefore, the aim of this paper is -:

- I. To determine the effort of women cooperatives in the supply of farm inputs and credit to members.
- II. To determine the effort of women cooperatives in land preparation and crop cultivation.
- III. To assess the effects of cooperative efforts on agricultural output and socio-economic welfare of women cooperative farmers.
- IV. To identify factors hindering the efforts of cooperatives in maximally assisting the women cooperative farmers.
- V. To make recommendations based on findings.

#### **Hypotheses of the Study**

- $H_0$  : Old and new members will not differ significantly in their mean rating of the role of women cooperative in input supply and credit.
- $H_1$  : Old and new members will differ significantly in their mean rating of the role of women cooperative in input supply and credit.

## Gender Issues in Agricultural Development

Women have always played an important role in agriculture, undertaken wide range of activities relating to food production, processing and marketing. Women are most often the collectors of water, firewood and fodder. They have access to a store of local knowledge on the medicinal use of plant, they have been in the forefront of soil conservation programmes and it is women who perform most of the household labour devoted to animals. As migration to the cities of the developing world gather speed, women carry with them these rural skills and are responsible for growth of urban and peri-urban agriculture, which is now recognized as being vital to food security in cities.

Nevertheless, the key role played by women in agriculture was in the past largely unacknowledged in government statistics and decision making. This situation has started to change over the last two decades and much has been achieved in giving recognition to the importance of women in the agricultural sector in many parts of the developing world. Moreover, women's roles and status all over the world are generally determined by social institutions and norms, religious ideologies, ecosystems and by class position. In the process of production, handling and preparation of food, women play a multiple role throughout the sequence. They are said to be feeding the world'' Daman (2003). Despite their contributions to food security, women tend to be invisible actors in development. All too often their work is not recorded in statistics or mentioned in reports. As a result, their contribution is poorly understood and often underestimated. There are many reasons for this; work in the house hold is often considered to be part of women's duties as wife and mother, rather than an occupation to be accounted for in both the house hold and national economy. Outside the house, a great deal of rural women labour-whether regular or seasonal-goes unpaid and therefore rarely taken into account in official statistics.

## The Concept of Cooperative

Cooperative can be defined as voluntary and autonomous association of persons who came together, pull their resources (human and material) to solve their economic and social problems (Umebali 2009). Cooperative organization can also be defined as a group of persons who have pooled themselves and their resources on self-help, mutual, equitable and democratic basis to form a business enterprise, which

seeks to solve the socio-economic problems of its members by directly providing them with goods and services on their double capacity as either owner\customers or owner\workers of the cooperative enterprise. (Umebali and Mgbada, 2009).

The need for establishing cooperative enterprise is as follows:

- I. Individual small-scale farmers, industrialist, processor, marketers are too small to acquire and use efficiently the means of production.
- II. They are too small to bargain for discount in the input\factor market and also to ensure a steady supply of these inputs.
- III. They are unable to apply for loans individually and so may be constrained to resort to the informal sources where they may be exploited.
- IV. They are small to produce efficiently because of lack of specialization, small to take advantage of economies of scale hence production unit are not utilized.

## Role of Cooperative in Agricultural Development

Roldan and Ellen (2009) noted that collective action seems a logical strategy to achieve the integration of small holders into dynamic markets. Organizing small farmers into producer organizations has long been a common development intervention to increase their bargaining power visa- visa other actors in the value chain. He further argued that cooperative offers such a possibility by means of organizing and empowering individual small producers through commonly owned enterprise. This form of organization is not all that new, but the context in which farmer cooperatives in developing countries have to operate today is quickly changing.

Nevertheless, new challenges associated with emerging consumer demands, global standardization processes, market requirements and price instability require different roles and capacities from cooperative operating in agro-food value chains worldwide. Cooperatives are now challenged to take on a more pro-active role in marketing, updating their organizational structure and engaging in value chain integration.

However, Tanzanian Federation of Cooperative (TFC) 2006 noted that few years ago, the government of Tanzania has been implementing the poverty reduction strategy. This process recognizes the importance of organizations that bring poor people

together like cooperatives. As part of the programme to reduce poverty, the government wants to encourage people to form cooperative in order to improve their economic prospects. The government would like to see the expansion of cooperatives into sectors other than agriculture, such as finance, industry, mineral, livestock, fishing and transport so that as many people as possible can become involved in the cooperative movement.

More so, Deji (2005) noted that membership of cooperative societies is very significant to favourable adoption behaviour of women farmers towards agricultural innovations, hence should be encouraged as a strategy for improving the agricultural productivity and livelihoods of the women farmers which is crucial to the achievement of sustainable rural development in Nigeria. Furthermore, Saikon and Hung (2008) noted that cooperatives enable small farmers to take collective action to reduce input cost and marketing risks. Through cooperative, the farmers can do collective bargaining or purchasing to get the best deals on seeds, supplies and equipment on their own. According to Saikon and Hung (2008), through cooperative they can purchase the equipment jointly and\ or lease them from the cooperatives feel. Producer's cooperatives may also integrate an information centre or include an extension agency involved in the work helping 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.

Nevertheless, Saikon and Hung (2008) noted that Agro and food processing cooperatives are cooperative which engage in value-added activities from primary agricultural products. Cooperative makes it possible the joint purchase of expensive agro-food processing equipment and machineries which normally would not be possible for small scale agricultural producers. They offer the benefit of enabling the small procedure to enter substantially more lucrative and profit making areas. Business in processed products is substantially more lucrative than business in primary goods. They further argued that study revealed that prices of primary products such as coffee, cocoa and sugar dropped from 200 to 400% while the value of processed goods such as instant coffee, chocolate bars and cornflakes increased more than 200 percent from 1980 to 2000. Furthermore; another study in Mexico noted that

value-adding activities accounted for a 350 percent increase farmer's income.

Moreover, they noted that cooperative helps farmers to collectively sell their products. It allows producers to collectively accomplish functions they could not achieve on their own. Most agricultural producers have relatively little power or influence agri-business or food companies that purchase their commodities. Joining with other producers in a cooperative gives them greater power in the market place. In addition, cooperatives can give producers more control over their products as they make their way to consumers by allowing them to bypass one or middlemen in the market channel. Farmer captures more of the returns that would otherwise go to others.

However, Chambo (2009) noted that 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, also joint agricultural marketing of producer crops. He further argued that agricultural marketing cooperative have been the most popular traditional mode of cooperative development that has linked developing countries with the rest of the world, through export commodity trading.

### Methodology

The area of the study is Awka-south local government area of Anambra state. Awka-south is one of the twenty-two (22) local governments Area in Anambra state. It was created in 1989 from Awka local government area. Bounded on the north by Awka North local government area, on the east by Oji-River local government area of Enugu state, on the south by Anaocha local government area and on the west by Njikoka local government area. Awka south has a land Area of 180 square kilometre and population 189,654. (National Bureau of statistics 2006) its geographical coordinates are 6 10'0"North 7 4 0 east. Communities under the local government area are Awka, (HQ) Amawbia, Ezinato, Nibo, Nise, Umuawulu, Isiagu, Okpuno and Mbaukwu. The people of the area speak Igbo language. We have twenty (20) political wards in the area. The people of the area are predominantly blacksmiths, farmers and businessmen. Awka town is known basically as the seat of indigenous technology and craft, carving and

iron works are some of the occupation of the people. The study is a survey and descriptive and data was analysed using largely descriptive statistics. It focussed on selected women Cooperatives in Awka-south local government area of Anambra state. Both primary and secondary data were sourced for the study. Primary data constitute mainly oral interview and structured questionnaires which was personally administered to 65 farmer members of women Cooperatives. Secondary data were sourced from published journals and internet materials etc.

In this research, descriptive analytical method was used to investigate the outlined objectives. They include descriptive statistics such as frequency distribution tables, percentages, mean and standard deviation. To ascertain the effect of cooperative membership on agricultural output of respondents, the means procedure was adopted. The goal here was to calculate subgroup means and related univariate statistics for agricultural output (which is the dependent variable) within categories of the various years of cooperative membership by the respondents. The procedure allowed us to also obtain a t-test analysis which was the basis for accepting or failing to accept null hypotheses. Four-point Likert scale analysis was used to ascertain the perception of the members of the women cooperative on the effect of cooperative services on their agricultural output and their socio-economic well-being. A theoretical mean value of 2.5 was taken as a criterion to judge the means for response to items in the questionnaire. Therefore, any item in the instrument which has a mean equal to or higher than 2.5 was regarded as agree while items with less than 2.5 was regarded as disagree. The focus of the test was to determine whether the responses of the members on the effect of cooperative on their agricultural output and their socio-economic well-being respectively depend on their cooperative experience.

All calculations and estimates were obtained through the use of version 17 of the SPSS package.

### Data Presentation and Discussion

The responses of the members as contained in the questionnaires are presented and discussed in tables 1 to 6 below.

### Socio-economic profile of the respondents

Introduction: The socio-economic profiles of the members are ascertained and analysed to enable us

understand the characteristics of the women members in the area. These are presented in the table below.

**Table 1: socio-economic characteristics**

Items	Frequency	Percentage
<b>Age of members</b>		
20-29	5	7.7
30-39	14	21.5
40-49	20	30.8
50-59	12	18.5
60 and above	14	21.5
<b>Education</b>		
Primary	36	55.4
Secondary	19	29.2
Tertiary	10	15.4
<b>Occupation</b>		
Farming	36	55.4
Trading	19	29.2
Civil servant and others	10	15.4
<b>Marital Status</b>		
Single	7	10.8
Married	58	89.2
<b>Cooperative Experience</b>		
1 year or less than	4	6.2
2 -3years	18	27.2
3-4 years	7	10.8
4 years and above	36	55.4
<b>Cooperative type</b>		
Farmers multipurpose	17	26.2
Producers cooperatives	15	23.1
Multipurpose cooperative	17	26.2
Producers\processing cooperative	16	24.6

Source: Field survey 2010

Table 1 above revealed that majority of the members of women cooperative in the area were in the age

range of between 40-49years representing 30.8%. The table also shows that majority of the members attended primary and secondary education. This was represented by 55.4% and 29.2 respectively. A small number representing 15.4 have passed through tertiary education. This proves that most of the members are not disposed academically enough to easily adopt modern agricultural techniques. Most of the members are farmers representing 55.4%, traders 29.2 and civil servant and others 15.4. This indicates that since

majority of the members are farmers, they will devote most of their time in farming activities thereby increasing productivity. 89.2% of the members are married while 10.8% were single. From the table, 36 members representing 55.4% have had four years and above experience in cooperatives. More so, 17 respondents representing 26.2% belong to Farmers

multipurpose cooperative society, 15 respondent representing 23.1% belong to producers cooperative society, 17 respondents representing 26.2% belong to Multipurpose cooperative society while 16 respondents representing 24.6% belong to producers\ processing cooperative society.

### Assessment of functions\activities

#### Input supply\credit

**Table 2: Means and Standard Deviations of the Responses showing the Effect of Input Supply and Credit Functions of the Women Cooperative**

S\No	Items	N	Mean	Standard Deviation	Decision
7	Varieties of seedlings are supplied	65	2.4923	1.13362	Disagree
8	Improved seedlings are supplied at cheaper prices	65	2.6154	1.08530	Agree
9	Credit is obtained at cheaper or concessionary rates	65	2.3077	1.32197	Disagree
10	Seedlings are supplied well before the planting season	65	2.3077	.93413	Disagree
11	Farm chemicals and fertilizer are supplied at reasonable prices	65	2.0000	.00000	Disagree
12	Credit are obtained at the time they are needed	65	2.3538	.48188	Disagree
Group Mean		65	2.362	0.625	Disagree

Source: Field survey 2010

Table 2 above revealed that the respondents virtually disagreed to all the items except item 8 relating to supply of varieties of seedlings and supply of improved seedlings at cheaper prices. The mean of all the items except item 8 fall below the criterion of 2.5.

#### Land preparation and cultivation

**Table 3: Means and Standard Deviations of the Responses showing the Role of Women Cooperative in Land Preparation and Cultivation.**

S\No	Items	N	Mean	Standard Deviation	Decision
13	Cooperative assists members in land preparation before planting	65	1.6462	0.48188	Disagree
14	Cooperative assists farmers in farm labour sourcing	65	2.4154	0.49662	Disagree
15	Farmers are taught better farming practices\method	65	1.6462	0.48188	Disagree
16	Farmers are taught how to apply fertilizer and chemicals	65	3.3231	0.53349	Agree
17	Provision of plant hire service from the cooperative	65	2.7846	0.51515	Agree
18	Cooperative assists members in sourcing for agricultural lands	65	1.5231	0.61511	Disagree
Group Mean		65	2.223	0.227	Disagree

Source: Field survey 2010

In table 3 above, the mean scores indicate that all respondents disagreed to all the items except items 16 and 17, that is they agreed that farmers are taught how to apply fertilizer and chemicals and that there was provision of plant hire service by the cooperative. While items like; cooperative assists members in land preparation before planting, cooperative assists farmers in farm labour sourcing, farmers are taught better farming practices\method and cooperative assists members in sourcing for agricultural lands were generally disapproved as being part of the efforts of cooperative in land preparation and cultivation..

### Marketing and processing of agricultural produce.

**Table 4: Means and Standard Deviations of the Responses showing the Role of Women Cooperative in Marketing and Processing of Agricultural Produce**

S\No	Items	N	Mean	Standard Deviation	Decision
19	Cooperative assists members in processing and preparation of their produce for market	65	2.6462	.48188	Agree
20	Cooperative collects and market produce	65	3.3538	.83723	Agree
21	Crops and other farm produce are marketed at competitive prices	65	2.9846	.12403	Agree
22	Reduction in crops wastage and pilferage	65	2.5538	.50096	Agree
23	Provision of storage facilities	65	2.3538	.48188	Disagree
24	Transportation is provided to convey produce to the market and/or processing centres	65	2.7077	.96377	Agree
Group Mean		65	2.805	0.473	Agree

Source: Field survey 2010

The mean scores in the table 4 shows that cooperative marketing and processing has many positive effects. this reflects on the mean scores which shows that members agreed to almost all the items: cooperative assists members in processing and preparation of produce for the market, cooperative collects and markets produce, crops and other farm produce are marketed at competitive prices, reduction in crops wastage and pilferage and transportation is provided to convey produce to the market and/or processing centres. However, they disagreed that provision of storage facilities is not among the functions.

### Effects of Cooperative Functions/Activities on Output

#### Effect on agricultural output

**Table 5: Means and Standard Deviations of the Responses showing the Effect of Women Cooperative functions\activities on Members' Agricultural Output**

S\No	Item	N	Mean	Standard Deviation	Decision
25	Better quality of output	65	3.3538	.48188	Agree
26	There is now more varieties of crops	65	3.1538	.73380	Agree
27	Total output has increased	65	2.4308	.49904	Disagree
28	Increase per hectare output	65	2.4154	.49662	Disagree
29	Crops quality has increased	65	2.9385	.88171	Agree
30	Crop output has met local demand	65	2.3538	.48188	Disagree
Group Mean		65	2.851	0.787	Agree

Source: field survey 2010

The mean scores 5 reveal that the respondents agreed to three items as being the benefits they gained for being member of cooperative; the items are- better quality of output, availability of more varieties of crops, and crops quality has increased. Nevertheless, they disagreed to these items as not being among the benefits; total output has increased, increase per hectare output and crop output has met local demand.

**Socio-economic effects****Table 6: Effect on members' socio economic welfare**

S\No	Socio-Economic Effects	N	Mean	Standard Deviation	Decision
31	Income and standard of living increased	65	2.5538	.53124	Agree
32	Provision of infrastructure such as road building and maintenance	65	2.0000	.84779	Disagree
33	Better farming practice was introduced	65	2.4462	.50096	Disagree
34	Increase in employment in the community	65	2.8154	.39100	Agree
35	Strongly integrated into market economy	65	2.8000	1.09259	Agree
36	Poverty level was reduced	65	2.93885	.88171	Agree
Group Mean		65	2.851	0.787	Agree

Source: Field survey 2010.

The mean scores 6 reveal that the respondents agreed that their income and standard of living increased. Also they agreed there was increase in employment in the community and that the cooperative has integrated them into market economy and reduce poverty level. However, they disagreed that- better farming practice was introduced and provision of infrastructure such as road building and maintenance are among the effects. This signifies that cooperatives have not done much in infrastructural aspects.

**TEST OF HYPOTHESES**

To the effect of the test of hypotheses, the respondents were categorized according to their cooperative experience i.e. old and new members. For those who have been members for less than one year are deemed to be new members, while those who have been members for one year and above are deemed to be the old members. The result of the test of hypotheses is presented in table 7 below.

**Table 7: t-test of the significance between the responses of old and new members on the role and effects of women cooperative** (N=65)

Competences (Two Tailed)	N	Mean	SD	DF	t statistics	Significance	Decision
<b>1 Input Supply/Credit</b>							
Old members	36	2.708	0.630				
New members	29	1.931	0.225				
<b>Two-tailed test</b>				<b>63</b>	<b>6.316</b>	<b>0.000</b>	<b>Reject</b>
<b>2 land preparation\cultivation</b>							
Old members	36	2.125	0.216				
New members	29	2.349	0.178				
<b>Two-tailed test</b>				<b>63</b>	<b>4.408</b>	<b>0.000</b>	<b>Reject</b>
<b>3 marketing\processing</b>							
Old members	36	3.005	0.556				
New members	29	2.558	0.102				
<b>Two-tailed test</b>				<b>63</b>	<b>4.270</b>	<b>0.000</b>	<b>Reject</b>
<b>4 effect on output</b>							
Old members	36	3.241	0.879				
New members	29	2.368	0.113				
<b>Two-tailed test</b>				<b>63</b>	<b>5.307</b>	<b>0.000</b>	<b>Reject</b>
<b>5 socio-economic effects</b>							
Old members	36	2.884	0.630				
New members	29	2.230	0.293				
<b>Two-tailed test</b>				<b>63</b>	<b>5.157</b>	<b>0.000</b>	<b>Reject</b>



Table 7 above reveals that hypotheses 1 to 5 were all significant at conventional 5% level. Indeed, they were all significant at 1% level. Therefore the null hypotheses (1 to 5) were rejected and we conclude that there are significant differences in the perceptions of the old and new members regarding the effects of the activities and functions of women cooperatives, as well their operational problems.

From the table also, it is particularly interesting to note that old members appear to be more satisfied with the role of the women cooperative than the new members. Indeed, the mean responses of the old members, in various cooperative activities and the socioeconomic effects, with the exception of land preparation\cultivation are all above the theoretical threshold of 2.5.

### Conclusion and Policy Implications

Cooperative has done so much in agricultural development in the area by providing input to their members; they also market and process their member's agricultural produce based on our findings. Indeed, their efforts have paid off and have contributed significantly to the well-being of the members. But more needs to be done by policy makers and government agencies by providing credits and infrastructural facilities to enhance the output of the women farmers in the area and also for poverty reduction.

Based on the findings, the following recommendations are made to enhance the agricultural development in Awka south.

Credits and improved varieties of inputs should be made available to farmers at the appropriate time to enhance their productivity. If inputs are made available on time and at cheaper rate, it will lead to increased output and also improved their income and standard of living.

Cooperative should assist members in sourcing for agricultural land for preparation and cultivation so as to make the use of machines for cultivation a success. If this is done, agricultural crops will be mass produced and agricultural commercialization would be easier thereby reduce the poverty level of the women in the area.

Government should provide plant (machine) hire for the women cooperatives, for majority of the women

cooperative society cannot afford the huge amount of money involved in purchasing the agricultural plants (machines). This will help them to enjoy economies of large scale production. Storage facilities should be provided to reduce spoilage and pilferage. This will also enhance all season availability of those agricultural products and attract more profit to the farmers during off season.

Government should site or encourage Agro- and food processing cooperative to process and package farmers produce so as to add value to the product and attract higher prices and more income to the women farmers.

### REFERENCES

1. Chambo S. A, (2009) 'Agricultural Cooperative: Role in Food Security and Rural Development'. Paper presented to Expert Group meeting on Cooperative Held on 28-30<sup>th</sup> April, 2009 New York. Sourced from <http://www.un.org/esa/socdw/docs/2009/cooperatives/chambo.pdf>
2. Daman P. (2003) Rural Women Food Security and Agricultural Cooperative New Delhi: Rural Development & Management centre
3. Deji O. F. (2005) Membership of Cooperative Societies and Adoption Behaviour of women farmers: Implication for Rural Development Ile-Ife Kamla – Ray
4. Onyemobi F. I. (2000) towards agricultural revolution and rural development. In Onyemobi F (editor) women in Agriculture and Rural Development. Towards Agricultural Revolution in Nigeria. Falude Publisher.
5. Roldan M and M. Ellen (2009). The challenge of Entrepreneurship in Agricultural Cooperatives.
6. Saikon S. E. and W. Hung (2008) Green Cooperative: A strategy Approach Developing women's Entrepreneurship in the Asian and Pacific Region.
7. 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.
8. Umebali E. E. and Agu F. (2009). 'Understanding the concept, stages and Principles of Cooperative group formation'. Paper presented at National

9. Training Workshop on Cooperative Formation and Development for Microfinance at International Conference Centre, UNIZIK 28<sup>th</sup>-30<sup>th</sup> October.
10. Umebali E. E. and Mgbada as quoted in Umebali E. E. (2009). Understanding The concept, stages and principles of Cooperative group formation: Paper presented at National Training Workshop on Cooperative Formation and Development for Microfinance at the International Conference Centre, UNIZIK 28<sup>th</sup>-30<sup>th</sup> October 2009.
11. World Bank (2000): Advancing Gender equality: Action since Bengin Washington DC. The World Bank.
12. Yemisi I. O. and Aisha A. M. (2009) Gender Issues in Agriculture and rural Development in Nigeria: the Role of women Zaria Idosi publication.

