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WOMEN EMPOWERMENT FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT IN AKWA IBOM, NIGERIA

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ABSTRACT

This study was conducted using survey design focused on women empowerment for sustainable agricultural development in Akwa Ibom State, Nigeria. Women are always involved in all aspects of agriculture: from planting to transformation and commercialization of the products. Thus, the critical role of women in agriculture has led to the realization of the fact that empowerment of women is necessary for bringing about sustainable development at a faster pace. Data were derived from 300 women farmers in Abak, Ikono and Uyo Local Government Areas of Akwa Ibom State. Findings from analysed data revealed that there is a significant need for women empowerment for sustainable agricultural development in Akwa Ibom State. Factors such as poor access to land, credit and technology significantly hinder women empowerment and so lower the pace of sustainable agricultural development. Strategies that would enable women attain economic independence, own productive assets and have more access to credit would enhance women empowerment for sustainable agricultural development in the State. Based on these findings, it is recommended that women should increase their economic self-sufficiency through educational and training programmes to enable them participate fully in social and political activities that would enhance their ability to overcome structural barriers to their full productivity and empowerment.

Key Words: Empowerment, gender, economic independence, agricultural development, education.

INTRODUCTION

There is increasing realization of the critical role of women in Agriculture and of the fact that empowerment of women is necessary for bringing about sustainable development at a faster pace. However, much needs to be done to ensure that women get direct benefit particularly those from underdeveloped areas and underprivileged communities. In the past decade, increasing attention has been given to the implications of political and legal measures for the economic progress of women (Joshi and Kirjavainen, 2002). In a stratified society like ours, access and empowerment of different sections of the societies are becoming serious concerns and to address it, planners, managers, social scientist all over the world have started deliberating and devising way out. In ensuring an egalitarian development gender equity still remains a dominating issue over other vulnerable issues like poverty, class conflicts, ethnic issues, etc. (Rodriquez, 2003). Gender issues beyond its epistemological meaning certainly imbibe other components like production relation, access to education, geographical distribution, occupational imperatives, marital system and even physical and physiological weaknesses (Santra and Kundu, 2001). Also, the increased importance attached to good governance and human rights including the rights of women, has helped legitimize laws and policies as fundamental issues in gender-based development strategies. Many customs which differentiate on the basis of gender are based on an assumption of male superiority to reinforce the notions of female frailty and female domesticity (RangneKar, 2003). This leads to customs that establish man's domain as being in the public sphere and woman's as being in the kitchen (Ekong and Olowu, 2002; Oluwasola, 1998). This role division frequently leads to the development of laws which cannot be applied logically and consistently. The resulting gender based economic inefficiencies are concealed within the legal principles and conventions adopted by a society, and corrective action requires reorienting the way in which these principles have been applied historically (FAO, 2001; Raju and Fidansi, 1997). The basic requirement in this reorientation process is to understand how the laws (or lack of them) affect gender equality in access to and control of resources and opportunities. The sustainability of agriculture

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development has become a prerogative to women's participation moving across all caste and economic echelon (Swami Nathan, 2003). This brings up the need to ascertain and assure the areas where women are still far from enjoying the minimum available privileges. However, the question of empowerment has been thrown to a very complex integrated situation where illiteracy, lack of awareness, low level of skills, suppression (Bhatnagar and Schware, 2000) in appropriate technology institution and information, etc. are the pertinent questions to be answered in the course of making the woman empowered, confident and accorded to the mainstream social processes. Thus, the present deliberations will go contextual with the realm of women's empowerment in sustainable agriculture development resulting in substantial improvement in agricultural production in Akwa Ibom State.

Women Participation in Agricultural Development

The participation of women in agriculture can be seen from many points of view. Women are always involved in all aspects of agriculture: from the planting to the transformation and commercialization of the products. Women produce between 60 and 80 per cent of the food in most developing countries and are responsible for half of the world's food production (Rodriquez, 2003). In Nigeria, rural women's engagement in agricultural activities include rearing poultry and livestock, growing crops and vegetables for family consumption and commercialization and other post harvest activities. Women constitute 49.2% of the National Population and majority of them reside in the rural areas where they live mainly by exploiting the resources of nature (CBN, 1994; NPC, 2006). They are involved in agriculture as suppliers of labour, food crop and livestock producers, processors of food and fish products, marketers of peasant farm surplus, and transporting of farm supplies and farm products between the farm and the home. According to World Bank (1989), women in Sub-Saharan Africa including Nigeria are responsible for the production of about 70% of the total staple food supply in the region. This contribution is higher than that of women in other regions of the world. Food and Agriculture Organization (FAO, 1987) sources showed that women's contribution was 50-60% in Asia, 46% in the Caribbean, 31% in North Africa and the Middle East and slightly more than 30% in Latin America. Women farmers in Nigeria, particularly in Akwa Ibom State are subsistence farmers. Although women's informal and unpaid labour contributes to the overall income of the household, their contribution remains unrecognized since these activities apparently carry little or no monetary value. As such, women's labour was not taken into account and remained invisible in the national labour census. However, this contribution to household food security is only recently starting to be recognized. The involvement of women in crop production also varies according to the type of crop and cropping system as well as the socio-economic status of the family. The need to distinguish between involvement of women in farming operations has shown that women from poor families work as agriculture labour. Estimates indicate that about 35% of rural women work as agriculture labour with little or no involvement in operations of their own farm (Saleque and Mustafa (1997). Above information notwithstanding, it has been estimated that about 60-80% of the labour force in agriculture in Nigeria is made up of women (Adekanye, 1980). The Akwa Ibom women, like other Nigerian women essentially have three major responsibilities, viz. reproduction, production and community management (WID Report, 1994). In view of this, Burfisher and Horenstein (1985) suggested that much still need to be done to ensure women's access to and control over resources to alleviate the constraints they face and to enhance their roles as sustainable food producers and providers of food for the household.

Statement of Problem

It is confirmed by FAO studies that, while women are the mainstay of small scale agriculture, of the farm labour force and day-to-day family subsistence, they have more difficulties than men in gaining access to resources such as land, credit and productivity-enhancing inputs and services. Women's limited access to resources and their insufficient purchasing power are products of a series of inter-related social, economic and cultural factors that force them into a subordinate role, to the detriment of their own development and that of the society as a whole (Jiggins, 1994). Despite their role as the backbone of food production and provision for family consumption, their access to critical resources such as land, credit and technological services are very limited due to cultural, traditional and sociological factors. According to Moyo and Amayo (2007) land is the single most important resource in most countries and fair and secure access is a crucial factor for reducing poverty, increasing agricultural productivity and improving rural conditions. The ill-effect of women's limited accessibility to empowerment resources such as land, credit and agricultural technology has led the researcher to examine these constraints faced by women and come up with strategies for overcoming them. It is hoped that these strategies if adopted would help remove these limitations and enhance women empowerment for sustainable agricultural development in Akwa Ibom State.

Purpose of the Study

The general objective of this study is to survey the factors that would enhance women empowerment for sustainable agricultural development and hence specifically:

1. Assess the limit to which Akwa Ibom State women are being empowered for sustainable agricultural development.
2. Identify the factors that hinder women empowerment for sustainable agricultural development in Akwa Ibom State.
3. Identify the strategies that could be adopted on empowerment of women for sustainable agricultural development.

Significance of the Study

Findings and ideas in this study would be useful since women farmers would realize the need for their capacity building through organizational establishment of self-help groups that could partner with non-governmental organizations (NGOs) whose main interest in agricultural development would enable them increase development of needed human resources for sustainable agricultural development. Through assessment and identification of problems hindering women empowerment, the government would be able to formulate policies that could be implemented to solve these problems and hence boost sustainable agricultural development in Akwa Ibom State. Following suggestions in strategic empowerment interventions, academic institutions will have to research further to discover easier means of adoption and implementation of these strategies for sustainable agricultural development. Women farmers, through their participation in women associations, would benefit immensely from access to loan/credit facilities that would empower them to acquire better farm inputs, modern farming technology and skills resulting in improved status, self esteem and cultured identity.

Research Questions

1. In What ways are women farmers empowered for sustainable agricultural development?
2. What are the factors that hinder women empowerment for sustainable agricultural development?
3. What are the strategies that could be adopted for empowering women for sustainable agricultural development?

Research Hypotheses (Null)

1. There is no significant relationship between women empowerment and sustainable agricultural development in Akwa Ibom State.
2. There is no significant relationship between factors that hinder women empowerment and sustainable agricultural development.
3. There is no significant relationship between strategies adopted for women empowerment and sustainable agricultural development Akwa Ibom State.

METHODOLOGY

The study area is Akwa Ibom State located in the South-South geo-political zone of Nigeria. It is bounded to the North by Abia and Cross River States, to the East by Cross River State, to the South by the Atlantic Ocean and to the West by Rivers State. There are six (6) Agricultural Zones in the State. For the course of this research the study is based on a multi-stage random sampling procedure to select three of the six zones namely Abak, Ikono and Uyo. A sample size of three hundred women farmers were selected from 15 communities in Abak, Ikono and Uyo Zone respectively using a multi-stage random sampling procedure consisting of 20 women farmers randomly selected from each community. The instrument used was structured questionnaire tagged *Women Empowerment for Sustainable Agricultural Development* (WESADQ) which was developed and used for obtaining relevant information from the respondents for data analysis. The instrument was validated by five experts from Agricultural Science Education Unit of the Department of Vocational Education authenticating its suitability for eliciting needed information from the respondents. The instrument had a four-point rating scale of Strongly Agree, Agree, Disagree and Strongly Disagree response options. Data were collected by personal contact with respondents and with the assistance of the extension agents attached to the different communities. To identify factors that hinder women empowerment, a list of known factors were drawn up and differentiated into three broad categories, viz. (i) land (ii) credit and (iii) access to agricultural technology. Descriptive and inferential statistics were utilized to analyze collated data. All hypotheses were tested using Pearson Product Moment Correlation

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(PPMC) for test of significant relationships at reliability index (r) = 0.996 at $P > 0.05$ level of significance.

RESULTS AND DISCUSSION

Table 1: Mean response of farmers to the relationship between women empowerment and sustainable agricultural development

S/No	Variables	Mean \bar{X}	Remarks
1	Women empowerment encourages increased agricultural production	3.11	Agree
2	Women empowerment is a means of enhancing improved farming practices	3.24	Agree
3	Women empowerment facilitates adoption of new agricultural technologies by women farmers	3.08	Agree
4	Standard of living of women farmers are much improved through Women empowerment	3.33	Agree
5	There has been improvement in household food security through Women empowerment	3.21	Agree
6	Through women empowerment, incidence of malnutrition in families has been reduced	3.22	Agree
7	Women empowerment facilitates economic self-sufficiency of women through self employment	2.90	Agree
8	Women empowerment increases women's access to appropriate technology that reduces work burden and increases food production	3.15	Agree
9	Women empowerment facilitates credit flow to rural women through credit and thrift societies for increased farm input	3.00	Agree
10	Women empowerment encourages women to take independent decisions on various agricultural aspects that enhances increased food production	2.80	Agree

$N = 300$, Cut-off point or agree is $\bar{X} = 2.50$ and above.

Results from table 1 showed that items 1-10 had mean scores above the cut-off point of 2.50, indicating that respondents had agreed that women empowerment brings about sustainable agricultural development in Akwa Ibom State. Although farmers agreed to all items, the response to item 10 (2.80) was comparatively low indicating that even when empowered, women do not easily take independent decisions because of the traditional limited role of women in decision-making in the household (Rodriquez, 2003). However, the highest response (3.33) to item no. 4 showed that the standard of living of women farmers would improve greatly through women empowerment because there would be improved farming practices (3.24); there would be increase in household food security (3.21); there would be reduction in incidence of malnutrition in the family (3.22) and, women farmers would now adopt improved farming practices (3.24).

Table 2: Mean response to factors that hinder women empowerment for sustainable agricultural development

S/No	Variables	Mean \bar{X}	Remarks
1	Women farmers have access to land for any form of agricultural production	2.11	Disagree
2	Women farmers rent plots that they cultivate food crops	2.80	Agree
3	Only women whose husbands have plots of land cultivate food crops	2.28	Disagree
4	Women farmers have no problems obtaining loan/credits from banks for acquisition of farm plots and agricultural inputs	2.30	Disagree
5	Women farmers collect loans from farmers' local organizations/cooperative societies in their areas	3.20	Agree
6	Only women who join the village women groups/cooperatives have access to loans/credit facilities	2.80	Agree
7	Extension officers make women farmers know about fertilizers, pesticides and improved crop varieties in the village	2.40	Disagree
8	Women farmers in the village have access to benefits of agricultural research and new labour decreasing technologies	2.40	Disagree
9	Women farmers have access to government subsidized inputs to small-scale farmers through farmers local organizations/cooperatives	2.40	Disagree

S/No	Variables	Mean \bar{x}	Remarks
10	Women farmers also make decisions on what to plant on their husbands' plots	2.20	Disagree

N = 300, Cut-off point or agree is $\bar{x} = 2.50$ and above.

Although response to item 1 (2.11) showed that women farmers do not have easy access to land, item 2 (2.0) agreed to the fact that women farmers rent plots that they cultivate food crops. This confirms the fact that women have no right to land ownership in Nigeria (Ekong and Oluwu, 2002)). Response to item 4 (2.30) showed that women farmers have problems obtaining loans/credits from banks because women's rights to land have been marginalized. This denies women the use of land as collateral to obtain loans from credit agencies (Oluwasola, 1998). Response to items 7 (2.40); 8 (2.40) and 9 (2.40) showed that women farmers have little or no access to benefits of agricultural research and as such do not know much about the use of fertilizers, pesticides, improved crop varieties and new labour decreasing technologies. Also, they have no access to government subsidized inputs to small-scale farmers probably because they do not know that such a scheme exists and some of them do not belong to farmers' local organizations/cooperatives. However, the women farmers who are married and their husbands are alive responses to item 10 (2.20) showed that women do not take decisions even on what to plant on their husbands' plots.

Table 3: Mean response to strategies adopted for women empowerment and sustainable agricultural development.

S/No	Variables	Mean \bar{x}	Remarks
1	Women farmers should be given access to all types of non-formal education on agricultural extension to improve their skills	3.20	Agree
2	Women farmers should establish organizations or self-help groups for financial empowerment	3.00	Agree
3	Credit flow to rural women should be channeled through credit and thrift societies	3.04	Agree
4	Literacy programs should be put in place for rural women to benefit from modern scientific knowledge, technology and skills in agriculture	2.9	Agree
5	Extension and research centres should give more attention to women enterprises in order to develop women needs and concerns for agricultural development	3.06	Agree
6	Women farmers should have access to political power and participate in policy formulation for empowerment	3.20	Agree
7	Government should set up health centres where women would have access to family planning programmes and health education	3.10	Agree
8	Women farmers should be actively involved in economic activities that enhances capacity building and strengthen access to financial and technological resources	2.9	Agree
9	Women farmers should attain income security through income generating projects and ownership of productive assets	2.80	Agree
10	Women farmers should have access to information and communication technologies to improve the communication and mediation skills in all fields	2.90	Agree

N = 300, Cut-off point or agree is $\bar{x} = 2.50$ and above.

Results from table 3 showed that there was a high response to item 1 (3.20) and item 6 (3.2). Response to item 1 showed that there is need for women farmers to be given non-formal education as constraints such as time and age make provision of formal education very difficult to them. Therefore, non-formal education provides the best vehicle for transferring new knowledge and technology to them for empowerment. Also, there is need for women farmers to have access to political power and policy formulation as furthering their social and political participation at all levels will enable them overcome structural barriers to women's full productivity (Santra and Kundu, 2001). Response to item 7 (3.10) indicated that one of the strategies for women empowerment involves the government setting up health centres where women would have access to new methods of family planning and suitable contraceptives. This would help reduce the burden of frequent pregnancies and hence, reduce lack of time due to heavy household responsibilities (Raju and Fidansi,

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1997). Other strategies accepted by women farmers for empowerment include establishment of organizations or self-help groups for financial empowerment coupled with the fact that credit flow to rural women should be channeled to them through these organizations which are often put in place as credit or thrift societies. On the whole, women farmers gave positive response to all the strategies to be adopted for women empowerment for sustainable agricultural development. These included the fact that literacy programmes should be put in place for the rural woman to benefit from modern scientific knowledge, technology and skills in agriculture (2.90); women farmers should be actively involved in economic activities that enhances capacity building and strengthen access to financial and technological resources (2.90); women farmers should have access to information and communication technologies to improve their communication and mediation skills in all fields. These skills when employed would enable them exchange their own experiences, knowledge and work skills with other persons and increase their awareness about women's rights, allocated facilities and, resources by government or other organizations (Santra and Kundu, 2001). Response to item 9 (2.80) has shown that women farmers should attain income security through income generating projects and ownership of productive assets. They need to have control over limited resources, like land and livestock so that they could take control and implement certain decisions that will create a sense of belonging and ownership. This will enhance their decision-making ability to meet some physiological needs like self-esteem and confidence.

Test of Hypotheses

Hypothesis 1:

Table 4: Analysis showing significant relationship between women empowerment and sustainable agricultural development

$\sum X$	$\sum Y$	$\sum Y^2$	$\sum X^2$	$\sum XY$	rxv	r-critical
480	570	52442	38942	48600	0.77	0.113

Pearson Product Moment Correlation Coefficient was used to establish the relationship between women empowerment and sustainable agricultural development. Result on table 4 revealed that the calculated rxv value of (0.77) is greater than the critical value (0.113) at 0.05 level of significance. Therefore the null hypothesis is rejected. This implies that there is a significant relationship between women empowerment and sustainable agricultural development.

Hypothesis 2:

Table 5: Analysis showing significant relationship between factors that hinder women empowerment and sustainable agricultural development.

$\sum X$	$\sum Y$	$\sum Y^2$	$\sum X^2$	$\sum XY$	rxv	r-critical
480	570	52442	38942	48600	0.77	0.113

Results on table 5 have shown that the calculated rxv value of (0.98) is greater than the critical value of (0.113) at 0.05 level of significance, thus rejecting the null hypothesis. It implies therefore that there is significant relationship between factors that hinder women empowerment and sustainable agricultural development.

Hypothesis 3:

Table 6: Analysis showing relationship between strategies adopted for women empowerment and sustainable agricultural development.

$\sum X$	$\sum Y$	$\sum X^2$	$\sum Y^2$	$\sum XY$	rxv	r-critical
839	361	88943	17243	36907	0.98	0.113

Result on table 6 above showed that the calculated rxv of (0.98) was also higher than the critical r-value (0.113) at 0.05 level of significance. Therefore, the null hypothesis is rejected. This implies that there is significant relationship between strategies adopted for women empowerment and sustainable agricultural development.

DISCUSSION OF FINDINGS

Test of hypothesis 1 revealed that there is a significant relationship between women empowerment and sustainable agricultural development. This is in agreement with Santra and Kundu (2001) who stated that if women are empowered, feminization of Agriculture will be in the offing and the theme *Women Feed the*

World will be true in its actual sense. However, Rodriguez (2003) also pointed out that empowerment of women is necessary for bringing about sustainable agricultural development at a faster pace. Test of Hypothesis 2 also revealed that there is a significant relationship between the factors that hinder women empowerment and sustainable agricultural development. This result is in support of Ekong (2002) who earlier pointed out that women farmers lack crucial productive resources such as land, labour and capital which render their image as being marginal and inefficient producers. Rodriguez (2003) had also stated that while women are the mainstay of small-scale agriculture, of the farm labour force and of day-to-day family subsistence, they have more difficulties than men in gaining access to resources such as land, credit and productivity enhancing inputs and services. Test of hypothesis 3 has shown that there is significant relationship between strategies adopted for women empowerment and sustainable agricultural development. This result is in agreement with Rodriguez (2003) who had earlier pointed out that, women empowerment would bring out results of an innovative approach to human resource development for sustainable agricultural development. Santra and Kundu (2001) also stated that women could be empowered through capacity building and social political participation that would increase their access to political power, policy formulation and strategic gender training programme. This is achievable through the establishment of organizations or self-help groups for their own networking and blocking of financial barriers. Essien (2005) concluded that to exclude, ignore or in other ways handicap women from participating fully in the socio-political and economic life of society, is an impediment to the developmental process.

CONCLUSION

From the studies, it was concluded that there is a significant need for increased women empowerment for sustainable agricultural development. Factors such as land, labour and capital significantly hinder women empowerment and so affect sustainable agricultural development. Thus, the process of women's empowerment is conceptualized in terms of personal assertions and confidence, ability to project themselves as women, attaining economic independence, ownership of productive assets, ability to handle capital and assets and provide leadership in both women and community related issues at all levels.

RECOMMENDATIONS

This study is geared towards achieving sustainable agricultural development through women empowerment. It is therefore recommended that:

1. Women should increase their access to new information over appropriate technology and would reduce work burden, credits, markets and growing sector of the economy.
2. Government should increase their assistance to women in the area of child care, health care, family planning and water supply.
3. Women farmers should establish organizational structures like cooperative groups that would link them with relevant government agencies/financial institutions that can assist them obtain loans that would enable them achieve increased, sustainable and profitable agricultural development.
4. Women should increase their economic self-sufficiency through educational and training programmes for self employment.
5. Women should further their social and political participation at all levels to overcome structural barriers to their full productivity.

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