

## **Extension Educational Needs Assessment of Women Farmers in South-South Nigeria**

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### **Abstract**

*This paper highlights extension educational needs of women farmers in south-south Nigeria. It is argued that women are responsible for generating food security for their families in developing countries. Thus, women farmers, there is need to devise educational strategy to enhance their contribution to agriculture and rural development. With a multi-stage sampling technique, a total of 300 women farmers were selected for the survey-which primary data were obtained through questionnaires. Descriptive statistics such as simple frequencies and percentages were used to analyzed the results. Recommendations were made that women farmers should be taken seriously as their men counterparts, extension should focus more attention on women and multiple format be adopted to present extension educational materials to women farmers.*

**Keywords:** Extension, educational needs, women farmers, agricultural production, food security.

### **Introduction**

History has it that increase in agricultural sector productivity has contributed greatly to economic growth and the reduction of poverty. According to Brown et al (2001) meeting world food needs in the year 2020 will depend even more than it does now on the capabilities and resources of women. They went further to argue that women are responsible for generating food security for their families in many developing countries particularly in sub-Saharan Africa. Women not only process, purchase, and prepare food, but they also play a significant role in national agricultural production, producing both food and cash crops. Thus, the feminization of agricultural work requires a clear gender perspective to be integrated into policies for effective poverty reduction. Not only are women the mainstay of the agricultural food sector, labour force and food systems- they are also largely responsible for post-harvest activities.

However, unequal ownership of land is a critical factor that creates and maintains differences between women and men with consequences for the coming generation. In Kenya, for example, only 5% of the landowners are women. Despite the fact that African women produce 60-80% of the continents food. A World Bank policy research reported that increased control by women over land titles could have a strong and immediate effect on the welfare of the next generation and on the level and pace at which human capital and physical capital are accumulated (World Bank, 2003).

Furthermore, the inability of women to access credit on competitive terms to invest in new economic opportunities means their incomes are lower than they need as giving micro-credit to poor women in rural areas has proved to be a strong concept as exemplified by Grameen Bank of Bangladesh.

Critical elements include security of land tenure, and control over other productive assts and increased access to financial service technologies, fertilizers and extension services. Improving the circumstances of women producers and raising their productivity are critical to an agriculture led growth in Sub-Saharan Africa. From the foregoing, women operate at a district disadvantage in increasing their productivity and improving their market access. Several studies have documented how women have poor access to resources to respond to market signals.

Enough evidence exist showing that gender inequality limit economic growth directly and indirectly, particularly in Africa and diminishes the effectiveness of poverty reduction efforts. Gelb (2001) describes this as “Africa’s missed potentials”.

Some women farmers are engaged in niche or specialty production (eg. Organic or other value-added enterprises) and direct marketing that allow them to profit on small-to-medium sized farms (Trauger, 2004). According to a recent World Bank estimate, the bulk of the poor, some three quarters live in rural areas where they draw their livelihoods from agriculture and related activities (Kotze, 2003).

A lot of literature has shown the various contributions of women to agricultural production in Nigeria (Rahman and Alamu, 2003; Auta et al, 2000; NAERLS, 2000). Damica and Yohanna (2007) using Zaria in Kaduna<sup>3</sup> state of Nigeria as their study area, examined the level of participation of rural women in the decision-making and found that the high level of knowledge and experience about improved farm practices acquired by the educated women farmers has positive influence in that regard. Women in Anambra state of Nigeria contribute more than the men in terms of labour input in farming and are solely responsible for household management duties (NAERLS, 2000). Women in agriculture in Nigeria as a programme came about in 1988 when it became obvious that inspite of a decade of World Bank’s assistance in building up Nigeria is agricultural extension service, women farmers were still receiving minimal assistance was therefore created within the Agricultural Development Programme (ADP) in 1990 to address the gender related deficiencies within the existing extension programme (Gunsela and Muktar, 2009). The aim of agricultural extension education are to provide farmers (both male and female) with information that enables them to make good assessment/decision in their farm operations. Rural women face more problems and difficulties than that of men in gaining access to credit and extension education services related to agriculture, livestock management and food security (Achamyelesh, 2000).

There are many other goods reasons to target women as improving women’s conditions, especially their education and status, will have much greater impact on the well being of the entire household members than when focusing on men. Consider the following: Agricultural productivity increases dramatically when women get the same levels of education, experience and farm inputs that currently benefit the average make farmer, they increase their yields by up to 24 percent compared to men (Udry et al, 1995). Studies in Egypt and Mozambique showed that getting women to complete primary school reduced the population below the poverty line by up to 33.7 percent. In both studies, female education had a much larger impact on poverty than other factors, including male education (Datt and Joliffe, 1998; Datt et al, 1999). Also, increasing women’s asset raises investments in education and girls health: the assets controlled by women play a significant role in household decision-making, particularly in the allocation of household expenditures to education, clothing and health particularly girl’s health (Quisunding and Maluccio). Women’s education and status within the household contribute to the reduction of child malnutrition identified increases in women’s education as the largest contribution to reduced malnutrition accounting for as much as 43 percent of the variation. Improvements in household food access came in a distant second to women’s education, contributing 26 percent to the rate of reduction (Smith and Hadded, 2000). These finding shows that women are truly “the key to food security” as Quisumbing (2000) puts it.

### **Problem Statement**

Women played a dominant and prominent role in agricultural production and development. According to World Bank, 2003, depending on the region and they produce two-thirds of the food crops. Also, improving the status of women farmers is often seen as a crucial element to improving the well-being of women, their families and their communities. Yet women in comparison to men are often disadvantaged in all aspects and are usually underserved by extension. Hence creating an information gap which this study tends to fill. Taylor and Fransman (2004) suggest that programmes that provide different kinds of learning and encourage dialogue and exploration of different experiences are likely to create appropriate environment for women to learn. Therefore, the general objectives of this research is to conduct an extension educational needs assessments of women farmers in South-south Nigeria. Other specific objectives include to:

1. describe the characteristics of the respondents.
2. identify the type of organization and their usefulness to the respondents.
3. determine the problems faced by the respondents in their farm operations.
4. ascertain the extension educational needs of the respondents.
5. identify the format best suited to the respondents training needs.

## **Methodology**

This study is carried out in south-south region of Nigeria. It is one of the six geopolitical region in Nigeria.

### **Data Collection and sampling procedure**

This study utilized primary data which were obtained through structured questionnaires of both closed and open ended questions and were administered on women farmers in the area. Multi-stage random sampling techniques was employed. First stage-purposive selection of three states of Cross River, Akwa Ibom and Rivers out of the six states because of agriculture second stage is the selection of one agricultural block from each of the 3 stages selected. Third stage is the random selection of 100 women farming households from a list of women in agriculture in each state making a total sample size of 300 women farmers.

A need assessment questionnaire comprising of both closed and open-ended questions was developed to determine the extension educational programme needs of women farmers in the region and a survey method was chosen to collect the data as used by Barber check et, al (2009). Education need is considered a discrepancy between an audience's current status and some desired result (Wilkirts & Jolly, 2002), the working assumption being that education can bring about the desired result. The questionnaires were distributed to all women farmers who registered as members of women-in-agriculture (WIA) programme in the zone making a population of 300 women farmers. Only 201 questionnaires returned were used for the analysis. It is a descriptive study using primary data which were analyzed with simple frequencies percentages.

### **Results and discussion**

The result of the survey analysis are discussed below:

#### **Characteristics of respondents**

The result of Table 1 shows the responses to the respondents age, number of years of farming experience, roles played in the farm; types of farming enterprise and how the farm products are marketed. Majority 160 (73.2%) of the women farmers falls between the age bracket of 21 and above implying that they are within their prime age while others are below 21 years. In terms of years of experience in farming, 130 (61.9%) have operated in the farm and only 10 (4.8%) are not involved in any serious role in the farm. The greatest percentage of respondents (47.6%) are into arable crop enterprise, followed by fruits and vegetables enterprise accounting for 38.1% showing that the women are into diverse farm enterprises. Marketing of products through middlemen recorded the highest frequency 180 (85.7%) whereas non of the farmers market their products through farmers commodity organization. These results has a serious implication for agricultural extension services to meet the challenges of women farmers as their educational need have become obvious, thus, supporting the work of Ndifon et al 2008.

The respondents experience with agricultural extension educational events and the utilization of the information they received at the event are analyzed in Table 2. The result despicts that majority of the women farmers used the women in agriculture as their primary source of information (95.0%) followed by Non governmental organizations (NGOs) (75%) while agricultural extension service source recorded only 9.5%. they also found the information from women in agriculture most useful (85%) indicating that the extension needs of women are lacking. Table 3 shows the result of responses to the question that respondents should identify the problems they face during their farm operation. However, the most often and greatest responses by the women as being considerable or moderate was lack of family support (80%) followed by the point that women producers are not taken seriously as men (78%) as well as need for child care (70%), of all the nine problems, only three were shown to be considerable or moderate with respect to their farm operations.

Table 4 shows that the need assessment brought up several areas of skill acquisition that respondents would like to receive training in addition to the preferred format for presentation. Several life skill, management, production and marketing skills that usually exist in extension services were of paramount interest to the respondents. This goes a long way to confirm study by Ehmke and Mount (2007) that in many cases, the needs of the respondents are similar to other clientele groups that are increasing in numbers such as small enterprise, beginning and limited resource farmers. Out of a total of 17 skill identified and listed in the needs assessment, 6 skill levels were reported to be minimal among the women and thus requires training.

Such skills include equipment maintenance (69%) working with local government (72%) planning for retirement (68%) equipment operation (55%) building infrastructure (60%) and labour management (70%). Others reported for lower level skills as increasing productivity (2%), using computers (10%) parenting (8%) among others. The respondents preferred hands-on and participatory workshops and seminars corroborating the expectation of Taylor and Fransman (2004). From table 5, the format for skill acquisition and preference best for the women reported was seminar/workshop (98%) followed by on-farm demonstration at local farm (88%), then at home (80%). Presentations on-line recorded the least preference (19%) as majority of them are not computer literate. Because of their responsibility for child care and participation in off-farm activities, 4% of the women preferred written materials which they can always consult after the training.

**Table I: Socio-economic characteristic**

Variables	Frequency	Percentage
<b>Age</b>		
0-20 (yrs)	50	23.8
21-above	160	73.2
<b>No of years in farming</b>		
1-5	80	38.1
6-above	130	61.9
<b>Role in farm</b>		
- sole operator	50	23.8
- one of main operation	20	9.5
- farm partner	130	61.9
- not involved	10	4.8
<b>Type of farming enterprise</b>		
- Arable crop	100	47.6
- Fruits & vegetables	80	38.1
- Livestock	20	9.5
- Others	10	4.8
<b>Product marketing</b>		
- Direct to customers	30	14.3
- Through middlemen	180	85.7
- Through farmer	0	0

Source: Field survey 2009

**Table 2: Types of organization that respondents had used in the past 2 years and the usefulness of the contact to their farm activities**

Types of organization	Used source (%)	Very useful or something useful (%)
Agricultural extension service	9.5	30
Women in agriculture	95	85
Non-governmental organization (NGOs) farm/commodity organization	75	50

Source: Field survey 2009

**Table 3: Problems to respondents farm activities**

Problems identified	Extent of problem: considerable or moderate (%)
Women producers not taken seriously as men	78
Isolation from other women farmers	40
Need for child care	70
Lack of family support	80
Lack of computer knowledge	47
Lack of farm background	30
Lack of group formation	38
Isolation from other farmers	45
Lack of web/email/access	20

Source: Field survey 2009

**Table 4: Current minimal skills level and willingness to attend educational training**

Knowledge/skill	Minimal skill (%)	Want training (%)
Equipment maintenance	69	50
Working with local government	72	70
Planning for retirement	68	60
Equipment operation	55	58
Building infrastructure	60	80
Labour management	70	62
Marketing product	49	56
Pest management	30	65
Increasing productivity	290	85
Organizing and running meetings	40	36
Maintaining environmental health	28	69
Managing finances	30	75
Keeping workers and family sage	25	40
Using computers	10	60
Parenting	8	9
Communicating with family members	6	20
Communicating with domestic partners	5	15

Source: Field survey 2009

**Table 5: Format of educational training that is best for respondents within the next 3 years**

Format	Best for respondents %
Seminar/workshop	98
On farm demonstration at local farm	88
Presentations during regular meetings	50
At home	80
Written materials	40
Electronic materials	20
Online courses	19

Source: Field survey 2009

### **Conclusion/Recommendation**

Women farmers are the bedrock and key to food security but they face numerous challenges particularly extension education needs which if addressed by agricultural extension would go a long ameliorate poverty and food in security in the world country and the world at large.

From the need assessment, the following recommendations are hereby made:

- Women farmers (producers) should be taken seriously as men and extension should focus attention on these women.
- Regular workshop/seminars should be organized for women farmers with better interactive and multiple format at such events.
- Women should as a matter of policy be involved in farmers panel discussion and discrimination against women should stop forth with both from extension and other agriculture service providers.
- Collaboration and networking opportunities should be provided for women farmers to leverage their position with their male counterparts.

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