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Challenges of Extension Workers in Reaching Rural Women Farmers in Enugu State Nigeria

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Abstract

The study examined the challenges of extension workers in reaching rural women farmers in Enuqu State Nigeria. Questionnaire was used to collect data from a sample size of 52 extension workers. Data were analyzed using percentage, mean statistic, chart and factor analysis. Results revealed that training and visit method (100%) and farmer group (98.1%) were the major extension approach used in reaching rural women farmers in Enugu State. The challenges of extension workers in reaching rural women farmers through training and visit were grouped into four - attitude related factor, institution factor, motivation related factor and supervision related factor. The challenges of extension workers in reaching rural women farmers through farmer field school approach were grouped into four - acceptability related issue, financial related issue, logistic related issue and location specific related issue. Also, the major challenges in reaching women farmers through farmer group were grouped into four - institution support related issue, organization related issues, finance related issue and communication related issue. The study recommends that existing farmers' organization should also be properly strengthened by monitoring the already existing groups and providing services when needed.

Keywords: challenges of extension workers, rural women farmers in Nigeria.

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Introduction

Agricultural production remains the main source of livelihood for most rural communities in developing countries generally, and Sub- Saharan Africa (SSA) in particular. It is the main source of food and employs 70-80 percent of the population in Nigeria (Ozor, 2009). With agriculture being the main source of food for Nigeria, there is that need for agricultural extension to ensure the sustainability of the food. Agricultural extension has a focus of working with the people rather than working for the people. This is because it has the aim of building the capacity of the clientele to be resourceful and developing the ability to take initiatives. The task of agricultural extension is to help rural people utilize science or innovations that are tested and viable in their day-to-day activities so that they could be better off. It is also inbuilt in the farmers' ability to identify their problems, prioritize such and work out how to solve such problems. This will also involve ability to work as a team i.e. building team spirit in the people.

Extension work does not only involve taking of research findings to farmers but it also takes the farmers problem to the researchers and help formulate activities designed to meet the ever-increasing problems facing farmers. Therefore, extension is involved in dissemination of useful information through the appropriate methods to farmers. It is a policy instrument, which uses communication to introduce voluntary changes in the presumed public or collective utility. The style of communication adopted by extension workers and their competence in communication skills, have been widely recognized as having a major influence on the ability and effectiveness of extension services (khalid, 2005).

Extension has a key role to play in the promotion of policy education, the adoption of nutrient management and pollution control technologies among both crop and animal producers. Agricultural extension service is a key actor in the agricultural innovation system. With its strong and wide grassroots presence, it remains the major source of knowledge for farmers in developing countries. An effective agriculture extension system will need to provide a broad range of services (advisory, technology transfer, training and information) on a wide variety of actions (agriculture, marketing and social organization) needed by rural people so that they can better manage their agricultural systems and livelihoods. The role of women in agriculture and in rural development is increasingly recognized both at international and national level. Women have been found to play an active role in agricultural production in Africa. Despite the dominant and important role women play in agricultural production in the country, they are hardly given any attention in the area of training and/or visitation by extension agents with improved technologies. Banks hardly grant them loans and they are hardly reached with improved seeds, fertilizer and other inputs (Damisa, Samndi and Yohanna, 2007).

According Oakley and Garforth (1997) Agricultural extension services often relate more specifically to male farmers. Conversely, non-agricultural extension programmes are frequently directed toward women and seek to improve the use of resources within the family. Many women are farmers in their own right, either because there is no man living with the family throughout the year or because women in some societies have their own land and their own crops for which they are responsible. Even where the head of the household is a man, women may do more than half the farm work. Rural women work very hard for long hours, usually for little reward (Oakley and Garforth, 1997). Overcoming gender bias requires attention to

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what stands in the way of equitable service provision. What are the various extension approaches adopted in reaching rural women farmers? What are the challenges of these various extension approaches adopted by extension workers in reaching rural women farmers?

Objectives of the study

The overall objective of the study was to ascertain the challenges of extension workers in reaching rural women's farmers in Enugu State, Nigeria.

Specifically, the study sought to:

- 1. describe the demographic characteristics of the respondents,
- 2. ascertain the various extension approaches adopted in reaching rural women farmers, and
- 3. ascertain the challenges in the various extension approaches adopted by extension workers in reaching rural women farmers.

Methodology

The study was carried out in Enugu state, Nigeria. The State is located between latitude 6⁰30¹ N and longitude 7⁰30¹ E. It occupies about 8000 square kilometers with a population of 3.9 million people. It shares boundary in the east with Ebonyi State, in the northeast with Kogi and northwest with Benue State, in the west with Anambra State and in the south with Abia and Imo States. Economically the state is predominantly rural and agrarian, with a substantial proportion of its working population engaged in farming. Crops cultivated in Enugu State include yam, cassava, cocoa, palm produce, rice, cashew, cocoyam as well as a variety of fruits and legumes.

Extension workers in Enugu State constituted the population for the study. A total of 52 extension workers were randomly selected out of the 97 extension workers in the State representing 53.6% of the total extension staff in Enugu State. Data were collected from respondents with the use of structured questionnaire. The instrument contained relevant questions on each of the objectives. Content and face validity was done to ensure that the instrument collected the data it intended to collect. This was done by a lecturer in the Department of Agricultural Extension University of Nigeria, Nsukka before field administration.

To ascertain the extent of use of the various approaches adopted in reaching rural women farmers, three point Likert-type scale of "regularly, occasionally and never used", with values of "3, 2 and 1" respectively were used. These values were added to obtain 6, which was further divided by 3 to obtain 2.0, which was regarded as the cut off mean. To ascertain the various challenges faced by extension workers in reaching rural women farmers, a three point Likert-type scale of "strongly agree, agree, and strongly disagree was used against each of the approaches. The values assigned to these options are 3, 2, and 1 respectively.

Percentage, mean statistic, chart and factor analysis with varimax rotation were used in analyzing the data. Data on challenges faced by extension workers in reaching rural women farmers were subjected to exploratory factor analysis procedure, using principal factor model with varimax rotation in grouping the constraint variables into major constraint factor. In factor analysis, the factor loading under each constraint variable (beta weight) represents a correlation of the variables (constraint areas) to

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the identified constraint factor and has the same interpretation as any correlation coefficient. However, only variables with loadings of 0.40 and above (10% over lapping variance) were used in naming the factors (Comrey, 1962).

Results and Discussion

The mean age of the extension workers was 44 years, indicating that they were in their active age hence they should be able to handle extension activities effectively and likely adventurous in the search for information. Majority (53.6%) of the respondents were male, married (86.5%), and literate with only few (5.8%) with higher degree. This implies that most of the extension workers do not improve their educational qualification and this is not encouraging because education is an agent of social change. The delay in upgrading of their knowledge and skills could also result in a lack of innovative ideas which could also indirectly encourages the use of obsolete approaches that are neither relevant nor beneficial to the clientele. The mean job experience among the respondents was 18 years. This implies that majority of the extension workers have stayed quite a long time in their work so they most have been exposed in to their work and other related information needed for the work.

The average time farmers were visited by extension workers was about 13 times per year. This indicates that the respondents do always visit the farmers. Food and Agricultural Organization (FAO) recommended that farmers are expected to be visited at least once in every two weeks (forthnightly), which translates to a minimum of 15 extension contacts in a farming season (Idrisa, Ogunbameru, Ibrahim, and Bawa, 2012). The remaining days the extension workers did not visit may be due to the challenges they face in reaching the farmers which this study tends to find out.

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Table 1: Percentage distribution of respondents by socio- economics characteristics

Socio-Economic characteristics	Percentage	Mean (\overline{x})
Age	~	<u> </u>
21-30	5.8	
31-40	7.3	
41-50	67.3	44.13
51-60	9.6	
Sex		
Male	53.8	
Female	46.2	
Marital status		
Single	9.6	
Married	86.5	
Widow	1.9	
Separated	1.9	
Highest education qualification		
OND	28.8	
NCE	7.7	
HND	32.7	
B.Sc	19.2	
PGD	5.8	
M.Sc	5.8	
Job experience		
1-10	19.2	17.9
11-20	34.6	
21-30	44.2	
31-40	1.9	
How many times the farmers were visited		
per year		
4-8	7.7	12.9
9-13	40.4	
14-18	51.9	

Source: Field survey

Extension Approaches Adopted by Extension Workers in Reaching Rural Women farmers

Figure 1 shows that all (100%) the extension workers used training and visit (T & V) extension approach in reaching rural women. The training and visit extension management system according to Benor and Harrison (1984) ensures that extension agents receive training, and visit farmers regularly to transmit messages that are relevant to farmers' production, processing, storage, as well as home management. In this approach the extension worker visits the farmers fortnightly (every two weeks).

Other extension approaches used by extension workers in reaching rural women include farmers' group approach (98.1%) and farmer field school (61.5%). A farmer

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group is a collection of farmers interacting with one another towards achieving a common goal. One major benefit of the group is that farmers support each other to learn and adopt. A group size of between 20 and 30 is ideal and manageable in order to provide a face-to-face interaction, better communication and the free flow of information (Madukwe, 2006). Farmer field school is a school where farmers practice within themselves under the supervision of the extension workers.

According to Akinnagbe and Ajayi (2010), farmer field schools are participatory method of learning, technology development and dissemination based on adultlearning principles such as experiential learning. It is a typical example of participatory extension method; they are schools without walls. Groups of 20-25 farmers typically meet weekly in an informal setting in their own environment. Farmers are facilitated to conduct their own research, diagnose and test problems and come up with solutions. Both to ensure sustainability and to enhance the sense of ownership and responsibility. The Farmers Field School (FFS) methods have transformed farmers from recipients of information to generators and manipulators of local data.

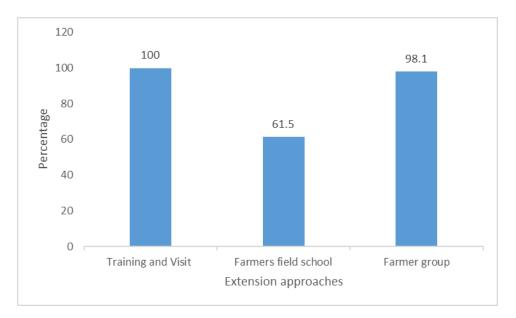


Figure 1: Extension approaches adopted by extension workers in reaching women

Extent of Use of the Extension Approaches by Extension Workers

Table 2 reveales the extent of the usage of the various extension approaches in reaching rural women. Training and visit approach ($\bar{x} = 2.75$) and farmer group approach ($\bar{x} = 2.52$) were the most highly used by extension workers in reaching rural women. This could probably be because extension agents have a good knowledge of the operation of these two extension approaches or due to the extent that the approaches have been in existence in extension practice. Farmer field school (FFS) ($\bar{x} = 1.75$) was not highly used by the respondents ($\bar{x} = 1.75$). This may be because of the newness of the method or due to the challenges associated with

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use of this approach. Not all extension workers have the sufficient knowledge of the operation of this approach.

Table 2: Extent of use of the extension approaches by extension workers

Extent of the approaches used	Mean (\overline{x})	SD
Training and visit (T&V)	2.75*	0437
Farmer field school (FFS)	1.75	0.711
Farmer – group approach	2.52*	0.542
*Extension engrands Llagel		

*Extension approach Used

Challenges of Extension Workers in Using Training and Visit (T&V)

Results in Table 3 reveale that the challenges of extension workers in reaching rural women farmers through training and visit (T&V) approach were grouped into four factors named attitude related factor, institution factor, motivation related factors and supervision related factor respectively. Items with high loading under attitude related factor includes: extension agents lack of communication skill (0.70), unfavorable attitude of the farmers towards the extension agents (0.68), it does not encourage cost sharing (0.65), unfavorable attitude of the extension agents towards the farmers (0.61), involvement in many ad-hoc activities (0.49), low technical competency of extension workers (0.45). Attitudes are important determinants of human behaviors: they provide direction and purpose to behavior and performance (Liaghati et al., 2008). When the extension worker displays an unfavorable attitude towards the farmers, or vice versa it discourages the farmers from participating in any extension activities there by hindering extension agents from reaching the rural women farmers The competency of extension workers which include core knowledge about extension activities, subject matter expertise, programming skills, professional ethics, communication skills, human relation skills, and leadership skills. Some of the extension workers lack the competency needed to transfer knowledge to the farmers which makes it difficult for them to communicate easily to the rural women farmers. Extension workers are heavily engaged in non-technical activities which are otherwise known as "adhoc activities". Examples of these adhoc activities are unplanned tours/visitors from other sectors, emergency situations requiring their presence, attending to visitors, domestic problems etc. this adhoc activities as a whole impinge on the implementation of the regular activities of extension agents (Natural Resource Training Institute, 2005).

Variables that loaded under institution related factor include: poor remuneration of extension agents (0.72), inadequate training facilities for the block extension agents (0.67), inadequate technology suitable for rural women farmers (0.63), low extension workers to farmer ratio (0.54). According to Issa (2013) the number of extension agents to farmer ratio in Bayelsa State was (1:10,568); Anambra was (1:9,409); while Cross-Rivers was (1:4,729). This means that there would be very few (if any) close contact between the rural women farmers and the extension agents. Therefore, they will also find it difficult covering the whole rural women farmers expected of them to reach. Even when the respondents get to the farmers, they find it hard training the farmers because they lack the training facilities to use and train them. This finding is in conformity with the result of similar research by Ogundiran

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(2013) who reported that lack of technology suitable for women are the challenges of extension workers in reaching rural women famers.

Variables that loaded under motivation related factor include: low motivation of the extension agents (0.72), inadequate proper recognition for meritorious services (0.53), poor accessibility as a result of poor road (0.41). Motivation is a very important tool for extension services. These extension workers can be motivated by paying them promptly, for nobody is expected to work hard when he is not paid well. This motivation can also be done by providing a favourable working condition for them, like regular promotion, or by provision of mobility. Extension workers' commitment to their work could dependent on motivation whether intrinsic or extrinsic motivation. So when the extension workers are not properly motivated, they will lack the enthusiasm to carry out their work effectively, hence making it difficult for them to reach the rural women farmers in such situation.

Variables under supervision related factor (factor 4) include: inconsistencies with the monitoring, evaluation and feedback mechanism (0.802), low subject-matter specialists to serve rural women's specific problems (0.645). Supervision is a process of ensuring that policy and administrative procedures and program are carried out properly. One of the main aim of supervision is to maximize development of potential capabilities of extension workers. This can be done by monitoring and evaluating the extension workers. The poor monitoring and evaluation system of extension activities could be due to scarce resources like (funds, inadequate extension personnel, etc.) inadequate training of extension personnel in the methods and skills of monitoring and evaluation of programme activities and the lack of clear directives from the extension service. Inconsistency in monitoring and evaluation hinders personal initiative, when the respondents are not monitored and evaluated well, then they might not know the areas that they did well and the areas they did not do well, so that they will improve on those areas that refine improvement. This poor supervision therefore serves as a challenge to the extension workers in reaching rural women farmers.

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Table 3: Challenges of extension workers in using training and visit method

Factors					
Challenges of extension workers in using T&V	1	2	3	4	
Time limitation in visiting the rural women	0.323	0.304	0.276	0.228	
Low extension workers to farmer ratio	-0.199	0.549	-0.038	0.200	
Poor accessibility as a result of poor road	-0.181	0.133	0.419	-0.111	
Low technical competency of extension workers	0.454	0.097	-0.220	0.180	
Creativity and innovativeness of the extension agents is suppressed by national T & V approach	0.400	0.404	-0.238	0.193	
Unfavorable attitude of the extension agents towards the farmers	0.611	-0.267	-0.363	0.148	
Unfavorable attitude of the farmers towards the extension agents	0.682	0.164	0.115	0.037	
Inadequate training facilities for the block extension agents	0.101	0.675	-0.033	0.085	
Weak linkage between the extension agents and the research institutes	0.117	0.529	-0.612	-0.048	
Cultural barriers of different communities	0.490	0.301	-0.210	-0.473	
Extension agents lack of communication skill	0.703	-0.161	-0.067	0.063	
Poor remuneration of extension agents	0.096	0.725	0.199	-0.078	
Inadequate proper recognition for meritorious services	0.042	0.362	0.530	-0.250	
Low motivation of the extension agents	0.154	-0.036	0.721	0.155	
Inadequate technology suitable for rural women farmers	0.192	0.637	0.228	0.172	
Low subject-matter specialists to serve rural women's specific problems	0.024	0.171	-0.043	0.645	
Insufficient essential teaching and communication equipment	-0.050	0.440	0.059	0.447	
Inconsistencies with the monitoring, evaluation and feedback mechanism	0.276	0.069	-0.117	0.802	
Involvement in many ad-hoc activities	0.495	0.196	0.321	0.316	
It is too labour intensive	0.595	0.303	0.404	-0.092	
It does not encourage cost sharing	0.658	800.0	0.087	-0.103	
Low subject-matter specialists to serve rural women's specific problems Insufficient essential teaching and communication equipment Inconsistencies with the monitoring, evaluation and feedback mechanism Involvement in many ad-hoc activities It is too labour intensive It does not encourage cost sharing	0.024 -0.050 0.276 0.495 0.595 0.658	0.171 0.440 0.069 0.196 0.303	-0.043 0.059 -0.117 0.321 0.404 0.087	0.6 0.4 0.8 0.3 -0.0	

Extraction Method: Principal component Analysis Rotation method varimax with Kaiser Normalization

Factor 1: attitude related factor, factor 2: institution factor, factor 3: motivation related factors and factor 4: supervision related factor

Challenges of Extension Workers in Using Farmers' Field School

Table 4 reveales that the challenges of extension workers in reaching rural women farmers through farmer school field (FFF) were grouped into four factors namely acceptability related issue, financial related issue, logistic related issue, location related issue. The challenges that loaded under acceptability related issues (factor 1)

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includes: lack of support and enhanced of capabilities in the locally established groups by the extension agents (0.755), farmers non acceptability of the innovation brought to them by their fellow farmers (0.598), insufficient demonstration materials (0.558), resource limitation which makes them unable to experiment with their little resources (0.539), late arrival of funds (0.525), inadequate provision for women farmers' participation in extension programmes (0.454) and farmers incompetence in carrying out recommended practices (0.436).

Farmers find it difficult accepting an innovation brought to them by their fellow farmers either because he knows everything about the farmer that brings the innovation to them, so they tend to look down on the farmer especially when the farmer has no say in the village or when the farmer is a poor farmer. This therefore discourages such rural women farmers there by serving as challenge to the extension workers in reaching them. Most farmer field school have limited resources for carrying out the experiments required of them. This makes it difficult to experiment with their own limited resources. Even when the funds are been allocated to them for the procurement of these resources, before the fund could reach them, the planting season must have passed. This may be due to many procedures required for the allocation of the fund. So this discourages the rural women farmers from participating in the farmer field school there by serving as a challenge for the extension workers in reaching the rural women farmers. Some of the farmers are not literate therefore they lack the knowledge of how to carry out the required practices in the farmer field school. This is in line with Akinnagbe and Ajayi (2010) who identified farmers' acceptability as a constraint to farmer led approach, inadequate material and or late arrival of funds as the challenges of the famer led extension approach.

The variables that loaded under finance related issues (factor 2) include: insufficient fund to establish the farmer field school (0.889), poor relation of the FFS to local needs (0.684), conflict of interest among farmers (0.648), low incentives for the rural women farmers to participate (0.645) and there is limited coverage achieved (0.481). Conflict can result among the farmers either due to conflict of interest among the farmers or due to the lack of fund required for the establishment of the farmer field school and when such thing occurs the farmers might find it difficult communicating freely within themselves thereby discouraging the active performance of the farmers, it can also lead to a decline in participation of farmers there by serving as a challenge to the extension workers in reaching rural women farmers. This is in line with Dimelu and Okoro (2011) who reported that poor funding was a constraint in farmer field school approach.

There is limited coverage achieved. This is may be due to the limited number of extension workers and the number of extension to farmer ratio, because where an extension worker is expected to visit up to 1,9409 farmers instead of the standard United Nation 1:500-800 they will find it very difficult reaching this large number of farmers. So this discourages the rural women farmers from participating in the farmer field school since there wouldn't be any close contact or relationship between them and the extension workers, there by serving as a challenge to the extension workers in reaching the rural women farmers through farmer's field school. This is also in line Tshering, Rai and Rigyal (2007) who pointed out limited coverage of

extension service as a challenge of extension workers in reaching rural women farmers.

The variables that loaded under logistic related issue (factor 3)include: time limitation in teaching the rural women farmers (0.476), farmers' low rate of comprehension due to their literate level (0.560), weak communication and linkage among farmers and extension service providers (0.484), lack of access to information for rural women farmers (0.471), low level of women's participation because they are busy with house hold chores (0.561), poor control over the study field (0.636), low subjectmatter specialists to serve rural women's specific problems (0.742). Women's daily workloads do not usually allow them to be absent from home for residential training; even attending short courses may cause insuperable problems in arranging substitute care for children or the home. Even where attendance of women is quite high as a proportion of the total, women are given instruction mainly in home economics and craft subjects, not technical agriculture. This prevents the rural women farmers from participating in the farmer field school, therefore serving as a challenge to the extension workers in reaching them.

The farmers do not have time for participating in the school even when they bring out time to participate they are always in a hurry to go and do other activities which makes the time accorded to the farmer field school limited. This therefore serve as constraint for the extension workers in reaching rural women farmers. Farmers' literacy level also prevents them from carrying out the recommended practices. This is in line with Dimelu and Okoro (2011) who reported that low literacy of the farmers is a constraint in farmers' field school approach.

For location specific related issues (factor 4), variable that loaded high include: far location of the farmer field school (0.711), participatory planning is been dominated by village leaders and wealthier farmers (0.629), the farmers experiment may be meeting the needs of farmers of a particular village only (0.562) inadequate technology suitable for rural women farmers (0.553). The location of the farmer field school may also discourage the participation of the farmer because when the school is located in far places only the wealthy farmers will transport to themselves to the area. This implies that there will be limited number of farmers participating in the farmer field school since many women farmers will not participate due the far location of the school, this therefore serve as a challenge to the extension workers in reaching rural women farmers. Participation in the farmer field school is dominated mainly by the village leaders and wealthy farmers, this makes it uneasy for the poor farmers within the study area to participate affectively in the farmer field school, so they will try to isolate themselves, some might even decide not to participate at all.

The farmers' field school also lacks the adequate technology suitable for the rural women farmers. This could also discourage the rural women farmers since that there is no adequate technology for them. The experiment may also be meeting the needs of a particular group may be, the wealthy farmers or the leaders, so other rural women farmers will see no need in participating in the school there by posing as a challenge to extension workers in reaching them. This finding is in conformity with the result of similar research by Akinnagbe and Ajayi (2010) who reported that the location of the FFS, fiscal sustainability participatory planning is still dominated by village leaders, are the challenges of the famer led extension approach. The result of this research is also in conformity with (FAO 1995) report that lack of provision for

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women farmers' participation in extension programmes and lack of technology suitable for women farmers.

Table 4: Challenges of extension workers in using farmer field school (FFF)

		F	actors	
Challenges of extension workers in using farmer field school	1	2	3	4
nsufficient fund to establish the farmer field school	0.008	0.889	-0.099	0.160
Conflict of interest among farmers	0.362	0.648	0.125	0.046
ime limitation in teaching the rural women farmers	0.329	0.171	0.476	0.138
armers' low rate of comprehension due to their literate level	0.296	0.390	0.560	0.207
Veak communication and linkage among farmers and extension service providers.	0.129	-0.303	0.484	0.291
ack of access to information for rural women farmers	0.053	-0.022	0.471	0.034
here is limited coverage achieved as a result of fund	0.059	-0.481	0.137	0.007
armers non acceptability of the innovation brought to them by their ellow farmers	0.598	-0.187	-0.121	0.329
armers incompetence in carrying out recommended practices	0.436	0.160	-0.231	0.209
ack of support and enhanced of capabilities in the locally established proups by the extension agents	0.755	-0.077	-0.020	-0.045
Participatory planning is been dominated by village leaders and vealthier farmers	0.167	0.222	0.123	0.629
ow level of women's participation because they are busy with house old chores	-0.229	-0.035	0.561	0.237
ow incentives for the rural women farmers to participate	-0.296	0.645	0.247	0.079
ar location of the farmer field school	0.016	0.070	0.088	0.711
oor control over the study field	-0.180	0.161	0.636	0.058
Poor relation of the FFS to local needs	-0.085	0.684	0.070	0.030
nadequate technology suitable for rural women farmers	-0.047	0.311	0.096	0.553
he farmers experiment may be meeting the needs of farmers of a articular village only	0.305	0.014	0.117	0.562
ow access to land for practical purposes	-0.506	0.006	0.076	0.436
ow subject-matter specialists to serve rural women's specific problems	0.212	-0.127	0.742	-0.244
sufficient demonstration materials	0.558	0.094	0.209	-0.013
nadequate provision for women farmers' participation in extension rogrammes	0.454	-0.100	0`.395	-0.225
adequate training facilities	-0.236	0.237	0.466	-0.614
ow capability of the farmers to articulate their collective demands	0.343	-0.362	0.359	0.334
nsufficient essential teaching and communication equipment	0.385	0.233	0.008	-0.531
esource limitation which makes them unable to experiment with their tle resources	0.539	-0.012	0.168	0.104
ate arrival of funds	0.525	-0.191	0.008	0.097

Factor 1: acceptability related issue, **factor 2**: financial related issue, **factor 3**: logistic related issue, **factor 4**: location specific related issue

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Challenges of Extension Workers in Using Farmers Group Approach

Results in Table 5 indicated the challenges of extension workers in reaching rural women farmers under farmer group. Four factors were extracted based on rotated varimax. Factors 1, 2, 3, 4 were named institutional support related issue, organizational related issues, finance issue and communication related issue. The challenges that loaded under institutional issue include: lack of support and enhancement of capabilities of the locally established groups by the extension agents (0.767), farmer groups focus on only one topic (0.639), low adequate information channel (0.613), poor control over the group (0.568), low access to land for practical purposes (0.551). Institutional factor is a factor which hinders the respondents in reaching rural women farmers for this is where the extension workers have poor control over the group of farmers. The farmers work mainly on their own based on what the group decides to do, with little or no guidance from the extension workers. Here farmers might focus only on the topic which they are conversant with neglecting other areas of agriculture.

Farmers group also have low access to different resources like land which they will need for practical purposes. For almost all agricultural practices that are carried out on land and when the land is not available for these practices either because women do not inherit land or because they are not even allowed to own a land, so most of the lands they use is either their son's or their husband's land which they cannot be used by the group. This discourages rural women farmers from joining the group there by having an impact on the extension service delivery.

For organizational related factor include: insufficient financial resources (0.498), farmers time limitation (0.583), low incentive for the rural women farmer to participate (0.730), difficulties in joining groups (0.710), farmers' low rate of comprehension due to the literate level of farmers (0.523). The organization of famers group is low and weak because the group lacks the sufficient financial resources required for them to carry out the operations needed in the group. Even when the resources are there, the women farmers are always busy with home chores there by limiting the time they dedicate to the group activities, which makes it difficult for the farmers to participate actively in the groups hence posing as a challenge for the respondents in reaching the rural women farmers through this approach. Also the literacy level of the farmers are makes it hard for easy comprehension within the limited time available there by posing as a challenge to the extension workers.

Variables that loaded under finance related issues (factor 3) include: low access to finance (0.706), insufficient essential teaching and communication equipment (0.830), and insufficient demonstration materials (0.563). For any organization to progress they need sufficient fund for the running of the group. Farmers group lack these finance which they need to procure demonstration materials for carrying out the required practices, to get communication equipment for the transfer of knowledge in the group. Without these, it could discourage the rural women farmers from participating in that sense making themselves unavailable for the extension workers and also serve as a constraint to the extension workers.

For communication related issue (factor 4), variables that loaded include: farmers lack of communication skill (0.659), lack of information channel (0.655), low capability of the farmers to articulate their collective demands (0.567), insufficient

material resources for the group (0.549), decline of cooperatives and other farmers organization (0.432). Farmers lack the communication skill to convey messages well to their fellow farmers. They also lack the communication channel needed. For any communication to take place there must a receiver, a sender and a channel for communication of these messages. So when the sender does not convey his or her message well then the receiver might not understand the message been conveyed. Likewise, when the communication channel is not there then transfer of information will be difficult within the farmers, these therefore discourages the women farmers from involving in farmers group there by serving as a constrain for the extension workers in reaching the rural women farmers through these approach since the women farmers will not easily be available for the farmer group.

Table 5: Challenges of extension workers in using famer group approach

			Factors			
Challenges of extension workers in using farmer group approach	1	2	3	4		
Insufficient financial resources	0.088	0.498	0.314	0.124		
Farmers time limitation	0.074	0.583	0.374	0.002		
Low incentive for the rural women farmer to participate	0.072	0.730	0.106	-0.194		
Difficulties in joining groups	0.103	0.710	-0.187	0.138		
Farmers in competency in carrying out recommended practices	-0.077	0.587	0.197	0.407		
Insufficient material resources for the group by farmers	-0.120	0.010	0.346	0.549		
Poor control over the group	0.568	0.037	0.217	0.279		
Farmers lack of communication skill	-0.278	0.012	0.295	0.659		
Lack of information channel	0.034	0.043	-0.152	0.655		
farmers groups focus on only one topic	0.639	-0.272	-0.002	0.195		
Low capability of the farmers to articulate their collective demands	0.352	-0.161	-0.174	0.567		
Decline of cooperatives and other farmers organization	0.183	0.113	0.032	0.432		
Low access to finance	0.127	0.049	0.706	0.098		
Participatory Planning Is Still Dominated by Village leaders this requires that only poor households may participate in farmer groups	0.379	0.299	0.088	0.158		
Low access to land for practical purposes	0.551	0.117	0.207	0.033		
Low adequate information channel	0.613	0.138	0.286	-0.167		
Lack of support and enhancement of capabilities of the locally established groups by the extension agents	0.767	-0.031	-0.011	-0.192		
Insufficient essential teaching and communication equipment	0.159	-0.044	0.830	0.094		
Insufficient demonstration materials	0.276	0.138	0.563	-0.109		
Farmers' low rate of comprehension due to their literate level of farmers	0.146	-0.523	0.218	0.069		

Factor 1: institutional support related issue, **factor 2**: organizational related issues, **Factor 3**: finance issue and **factor 4**: communication related issue

Conclusion and Recommendations

Training and visit and famers group method were the main approach used by the extension workers in reaching rural women farmers Enugu State, Nigeria. The major challenges of extension workers for the various approaches used in reaching rural women farmers were categorized into attitudinal related factor, institutional / organisation related issues, finance related issues and acceptability related issue. The organizational issues like extension worker motivation, supervision and communication were considered very paramount. Since training and visit and farmers group were the major approaches presently used in reaching rural women farmers, the farmers organizations should be properly strengthened by regularly monitoring the already existing groups and providing services when needed.

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