



**ASSESSMENT OF TRAINING NEEDS OF EXTENSION WORKERS IN SOKOTO  
AGRICULTURAL AND COMMUNITY DEVELOPMENT PROJECT IN NORTH-  
WEST NIGERIA**

**B. Z. Abubakar, M. A. Maikasuwa, F. J. Yelwa and Y. G. Illo**

Department of Agricultural Economics and Extension, Faculty of Agriculture,  
Usmanu Danfodiyo University, Sokoto

**ABSTRACT**

The study was conducted to assess the training needs of extension workers in Sokoto Agricultural and Community Development Project (SACDP/IFAD). Simple random sampling technique was used to select 60 extension workers, 10 from each of the six zones of the project. Data collected through questionnaire administration were analysed using descriptive statistics and chi-square. Results of the study revealed that sex ( $P<0.01$ ), age ( $P<0.01$ ), marital status ( $P<0.01$ ) and work experience ( $P<0.01$ ) were important variables determining the performance of extension workers in the project. On the other hand, education was not a significant variable in the determination of the performance of the extension workers. Results also showed that all the extension personnel have had basic training in extension teaching, but lack agriculture specific trainings. Some of the agriculture specific areas which they needed training most were farm management and soil management. Other major problems that affect their performances were lack of financial incentives and lack of extension teaching materials. It is therefore suggested that extension workers in the project be provided with training in agriculture specific areas such as soil management and farm management. They should also be provided with financial incentives to motivate to enable them perform their extension task well. Adequate working materials should also be made available to them so as to enhance their performance.

**Keywords:** Socio-Economic Characteristics; Extension workers;  
Training needs

**INTRODUCTION**

FAO (1984) reported that one of the reasons for the recent African food insecurity is insufficient use of trained personnel in agriculture. Agriculture being a complex process is dependent on interrelated network that requires a medium by which information about new technology could be transmitted to farmers in ways they can understand and accept. It is in view of this inter-related complexity that trained personnel are needed to sustain high level of agricultural production and to enhance the standard of living of the rural dwellers.

There is strong and urgent need to extend new practices, knowledge and skills of production to rural farmers to increase both crop and animal production in order to supply the growing need of Nigeria. This will reduce foreign exchange expenditure on food imports and raise rural income, thus improving the living standard and the quality of life. This will also reduce rural-urban drift. According to Boydell (1975), the word "Need" implies that something is lacking, while "training" implies that this lack can be supplied by systematic training. A training need is a gap between the kinds of performance or competence an employee has and the kind of performance or competence which he is expected to have. This gap or need grows out of operating problem. When we subtract the knowledge, skills and attitudes (KSA) which an employee has from those, he requires performing a job that gives us the gap.  $KSA \text{ (needed)} - KSA \text{ possessed} = \text{training needs}$ . When there is a difference or gap between actual performance and what is needed (standard) productivity suffers (Craig, 1976).

Training is defined as a process of applying appropriate educational methodology to those situations in which improved performance can result to effective learning. For an extension worker, training includes education, which aims to bring a desirable change in the behaviour of the trainee or the learner.

Training is therefore, recognized as one important weapon and critical dimension of the development process in transferring technical skills to farmers, and is the area where current thinking and emphasis is being placed. Therefore, extension workers should have education or proper training that is frequent, regular and relevant to their needs and the needs of the farmer to enable them transmit the result of research to farmers efficiently. Although the basic training needs of extension workers are met by formal institutions, little effort is made on the agriculture area specific training requirements by these formal institutions.

The general objective of the study was to assess the training needs of extension agents in Sokoto Agricultural and Community Development Project (SACD/IFD). The specific objectives were to determine the qualification and experience of the extension agents in the study area identify the areas in which the agents need more training and find out the constraints faced by the extension workers.

## **MATERIALS AND METHODS**

The Sokoto Agriculture and Community Development Project (SACDP) with funding assistance from the International Fund for Agricultural Development (SAC/IFAD, 1997) is a strategy for accelerated rural development in the arid and environmentally sensitive region of north-western part of Sokoto State.

The project was aimed at improving resource management through community participatory processes, principally in group mobilization for joint action against land resource degradation and for credit supply (IFAD, 1997). Most of the activities of the project are being executed by extension personnel who are mostly ill-educated and inexperienced.

Both primary and secondary data were used for the study. The primary data were collected by the use of close and open-ended questionnaires while secondary information was generated from previous literature.

Simple random sampling technique was used to select 10 extension agents from each of the six zones of the project (Bodinga, Gudu, Tabo, Tangaza, Dange-shuni and

Shagari). A total of 60 respondents constituted the sample size. Also, supervisors were asked to assess the knowledge and skills of extension workers in various fields of agriculture.

The data was analysed by using descriptive statistical tools such as frequency and percentage. Chi-square was also used to infer on some variables.

## **RESULTS AND DISCUSSION**

Table 1 shows the socio-economic characteristics of the respondents. Distribution of the respondents according to gender reveals that most of the extension workers in the project area were males (87%) and very few were females (13%). This means that extension work in the project is dominated by males. This is attributable to the small number of females that have had the requirements and are willing to take employment in extension service delivery. This shows the need for enhancement of female child education in the study area. The chi-square value of 32.28 was significant at 1% level which reveals that gender of an extension worker has significant impact on the role of extension worker in the project and should therefore be considered as an important variable in extension education dissemination.

The distribution of the respondents according to age revealed that almost half (47%) of them fell within the 21-30 years age group. This implied that majority of them were in their active age because it is at this age that individuals are more productive in performing their tasks. The chi-square value of 11.20 was significant at 1% implying that age of an extension worker is an important determinant of his performance. Thus, age has to be considered in the assessment of the performance of an extension personnel.

Distribution of the respondents according to the marital status revealed that majority (87%) were married. The chi-square value of 32.28 was significant at 1% level showing that marital status of an extension worker is also a strong determinant of his performance in delivering extension service.

Distribution of the respondents according to educational status shows that majority of the extension workers (60%) had secondary education. The remaining 40% had NCE/OND certificates. However, the chi-square value of 2.40 was not significant implying that educational status of an individual is not an important determinant of his performance in delivering extension service. This could be true because most of the educational qualifications obtained at secondary and NCE/OND levels do not reflect the real qualifications desirable for extension work. Rather, it has always been the on-the-job training received that assists them to perform their extension tasks. This shows the need for the introduction of basic extension teaching in secondary schools in NCE/OND programmes in various tertiary schools particularly in Sokoto State. Distribution of the respondents according to work experience shows that majority (57%) have had not less than 5 years experience in extension work. The chi square value of 19.60 was significant at 1% implying that work experience is an important determinant of the performance of extension workers in the project.

Table 1: Demographic characteristics of the respondents

Variable	Category	Frequency	%	Chi-square value
Gender	Male	52	87	32.28*
	Female	8	13	
Age	<02	0	0	11.20*
	21-30	28	47	
	31-40	24	40	
	41-50	8	13	
	>50	0	0	
Marital status	Married	52	87	32.28*
	Single	18	13	
Educational qualification	Primary	0	0	2.40 <sup>N.s</sup>
	Secondary	36	60	
	OND/NCE	24	40	
	B.Sc/HND	0	0	
Work Experience	1-2 yrs	6	10	19.60*
	3-4 yrs	20	33	
	5-6 yrs	34	57	

\*= significant at 1%, NS = Not significant, Field survey, 2005.

Table 2 shows distribution of the respondents on basic extension training. It is revealing from the table that all the respondents have received basic training in extension teaching. This is a reflection of the effort made by the project to equip the extensionists with the knowledge and skills required to effectively execute their duties. Distribution of the respondents based on the type of training received shows that majority (97%) of the respondents have had on the job and induction training in extension and only 3% received both induction, on the job and in-service training. This means that the level of inclusion of in-service training for extension workers is minimal. This shows some defects in training need considering the observation made by Williams (1984) that in-service training is very necessary in a dynamic field like modern agriculture in a developing country like Nigeria. This shows the need for in-service training to be incorporated in the training programmes for extension workers.

Table 2 further shows that majority of the respondents (80%) received basic trainings that corresponded with their training needs for effective extension service delivery. This is in line with Boyd (1975) who suggests that training need is met when the application of systematic training serves to overcome a particular weakness.

Table 2: Distribution of the respondents on basic extension training

Variable	Category	Frequency	Proportion (%)
Basic extension training:	Received	60	100
	Not Received	0	0
Types of training received:	On the job and induction	58	97
	In-service, induction and on the job	2	3
Whether training received meet the requirements:	Yes	48	80
	No	12	20

Field survey, 2005.

Table 3 shows the distribution of the respondents based on specific areas of training needs in agriculture. It is revealing from the table that all the respondents (100%) required training in farm management. This is followed by the requirement for training in soil management as represented by 78% of the responses. Other trainings such as on fish farming (27%) and poultry production (30%) are not required much by the extension workers. High demand for trainings in soil management and farm management may be as a result of rampant engagement of farmers in crop production activities which create high demand for knowledge on farm land maintenance and improvement, unlike the cases of poultry and fishery, whereby information about land improvement is not very important.

Distribution of the respondents based on the problems faced by the extension workers in Table 4 reveals that all the respondents are faced with the problem of inadequate financial incentives that would enable them carry out their duties effectively. This shows that for an effective extension work to be obtained, extension workers need to be provided with some financial incentives so as to motivate them perform their work efficiently. Lack of working materials is another problem that hampered effective extension work by the project. This means that there is the need to provide adequate extension working materials to the extension workers so that creditable extension work is obtained.

Table 3: Distribution of the respondents based on area of specific training need

Variable	Frequency	Proportion (%)
Fish production	16	27
Soil management	47	78
Poultry production	18	30
Farm management	60	100
Crop protection	23	38
Animal health	11	18
Extension teaching	19	31

The percentages added above 100% because of multiple responses, Field survey, 2005.

Table 4: Distribution of the respondents based on problems affecting extension work

Variable	Frequency	%
Lack of working materials	47	78
Lack of accommodation	11	18
Lack of transportation	23	38
Lack of cooperation form farmers	19	32
Lack of financial incentives	60	100

Field survey, 2005. The percentages added above 100% because of multiple responses

## CONCLUSION

It is therefore suggested that extension workers in the project be provided with training in agriculture specific areas such as soil management and farm management. They should also be provided with financial incentives to motivate to enable them perform their extension task well. Adequate working materials should also be made available to them so as to enhance their performance.

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