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THE ROLE OF EXTENSION SERVICE IN TREE PLANTING IN SOKOTO STATE, NIGERIA

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ABSTRACT

The research work was designed to investigate the role of extension in tree planting in Sokoto state. The study covered eight out of the 23 local governments in the states Forestry II operational area. From each local government ten participants were selected through simple random sampling. A total of 88 respondents constituted the sample size for the study including eight extension agents that were interviewed using a structured questionnaire. The data collected were analysed using descriptive statistics. The study revealed that people were motivated to plant trees through government massive enlightenment and incentives programmes. Lack of transportation and accessible road network and poor remuneration were identified to constitute problems to effective extension activities in the state. Afforestation programmes through extension services should therefore be intensified and accorded priority attention by provision of funds.

Keywords: Extension agents; Forestry extension Services

INTRODUCTION

Forestry extension is vital to the management and development of forest resources. Forest resources, usually are abused, misused or under utilized as a result of lacking awareness of the vital importance of these nature endowment. Consequent upon this, the environment is impacted negatively resulting in low yield, harsh conditions of life and ultimately deprivation, economically and socially. To reverse this ugly trend requires several far reaching measures that include protection of the existing resources, establishment and/or rehabilitation of the forests and massive awareness campaign and education. This latter approach was given prominence especially in the desertication frontline states north of the country including Sokoto state.This can be observed in the direct involvement of World Bank through afforestation programme of Forestry II Project in Sokoto State.

In the past, involvement of people in the effort to manage their resources was not given serious attention, as no thought was given to extension work. The earliest formal extension activity was the tree planting campaign. It has become a social annual event on the government's calendar but has lost the motivation involved at its inception (Oboho *et*

al., 1990). However, it was later observed that meaningful public awareness in the judicious utilization of forest resources can only be achieved with involvement of extension agents/agencies. How much impact did these agencies make in promoting forestry activities and bringing about the desired development in forestry is a germane question.

Sokoto state Forestry II Project was established in 1987 by an edict of the state government to raise planting stock, establish shelterbelts, carry out forestry extension services and conduct of applied research.

This research work was therefore carried out to determine the actual role of extension in promoting forestry activities in Forestry

MATERIALS AND METHODS

Study Area

This research was carried out in Sokoto state. The state lies between latitudes 11^{o}N to $13^{o}30$N and longitude $4^{O}30$E to 7^{o}E of the equator. It is bordered by the republic of Niger at the North, Kebbi state at the west and Zamfara state at the east.

The vegetation is typically Sudan savanna or grassland with a long dry season associated with periodic drought. Rainfall begins in June mostly and ceases early October every year. However, it is usually erratic and unpredictable with a mean annual figure ranging from 500-700mm (Mauman, 1993).

Data Collection

The target population for this study was all the forestry farmers within the clientele system of Forestry II projects. Simple random sampling technique was used to select the farmers. They were drawn from eight local government areas of the two zones of the afforestation programme. Four local government areas were selected from the Northern zone and four from the central zone. Ten participants were selected from each local government area making a total of eighty respondents. Besides, one extension agent from each local government area under study was drawn making a total of eight extension agents.

The basic instrument used for data collection for this study was structured questionnaires were prepared and administered to specific targets, one set was administered to the forestry farmers in the selected local government areas of the study; while the other set was administered to extension agents attached to the local governments under study. Additional information was obtained by interviewing some officers of the project.

Data Analysis

The data collected from the administered questionnaire were subjected to descriptive statistical analysis in the form of frequencies and percentages, which were used in organizing, summarizing and presenting the research findings.

RESULTS AND DISCUSSION

The results in Table 1show that majority of the farmers (60%) were within the ages of 26-47 years while the least number were within 15-25 and above 70 years representing

5% and 3% of the respondents, respectively. This shows that most of the farmers belonged to the active age category they are adults and have access to land or own houses where trees can be planted coupled with the fact that they were aware of the importance of trees in the semi-arid environment.

Table 1 shows that all the respondents (100%) had acquired one form of education or the other. This reveals that those who participated in tree planting have had one form of education or the other, and this agrees with Atala (1981) that extension packages appear to have been too complicated for small scale, tradition and illiterate farmers who use only simple faring implements. All kinds of education are relevant in extension. Besides making communication easier between the extension agent and the clientele, it also makes adoption of innovation faster.

Table 1 indicates that 70% of the respondents were farmers, while 9% were civil servants, 5% and 3% were traders and middlemen, respectively. The high proportion of farmers could be due to the fact that forestry is part and parcel of farming.

Table 1: Demographic Characteristics of the Respondents

Characteristics	Frequency	Proportion (%)
Age range(Years)		
15-25	4	5
26-36	24	30
37-47	24	30
48-58	16	20
59-69	10	12
70+	2	3
Total	80	100
Educational level		
Primary	9	11
Secondary	11	14
Post Secondary	6	8
Adult Education	22	27
Islamic Education	32	40
Total	80	100
Primary Occupation		
Farming	56	70
Trading	4	5
Civil service	7	9
Middle manship	2	3
Others	11	13
Total	80	100

Table 2 shows that 86% of the respondents got the idea of tree planting from extension agents 6% and 8% got the idea through mass media and neighbour/friends, respectively.

The table also indicates that 28.8% of the respondents prefered to grow tree for food, 32.5% for protection as wind brakes, 12.5% and 7.5% for shade and social benefits respectively while 18.7% for economic reasons. The result reveals that the majority

(61.3%) of the respondents would wants to grow trees for food and for protection as wind brakes to check desertification.

It shows that 87.5% o the respondents obtain their seedlings directly from the project while 5 and 7.5% got their seedlings through friends and neighbours and through self-raising, indicating that most of the seedlings supplied to the farmers were raised by the project since individual and community nurseries could not meet the demand for seedlings in the state.

Table2: Distribution of farmers according to their source of idea, seedlings and derivable benefits

Characteristics	Frequency	Proportion (%)
Source of idea		
Extension agents	69	86
Mass media	5	6
Neighbours and friends	6	8
Total	80	100
Benefits		
Social	6	7.5
Food	23	28.8
Economic	15	18.7
Protection	26	32.5
Shade	10	12.5
Total	80	100
Sources of Seedlings		
Supplied by project	70	87.5
Friends and neighbours	4	5.0
Self effort	6	7.5
Total	80	100

Field survey, 1998.

Table 3 shows that 58.8% of the respondents were visited by extension agents monthly, 20% weekly and 7.5% forthnightly while 3.7% of them were visited periodically. This implies that the ratio of extension agents to farmers is low and therefore affects the extension coverage.

Table 3 indicated that 91% of the farmers had easy access to extension services while 9% had no access. This implies that access to extension services by farmers has helped in promoting forestry activities in the areas since majority of the respondents have planted one type of tree or the other. This substantiates Ajakaiye (1981) that extension is the major determining factor of success in any agricultural development.

Table 3 shows that 87% of the respondents felt the impact of extension services in enhancing their production, while 4% did not feel its impact, while 9% of them indicated no response. By implication, this reveals that extension services have had a significant impact on forestry development in the area.

Table 3: Distribution of farmers according to the frequency, accessibility and impact of extension services

Characteristics	Frequency	Proportion (%)
Accessibility to extension services		
Yes	73	91
No	7	9
Total	80	100
Frequency of extension visits		
Weekly	16	20.0
Forth nightly	6	7.5
Monthly	47	58.8
Others	3	3.7
No responses	8	10.0
Total	80	100
Impact of extension services on their production		
Have impact	70	87
Have no impact	3	4
No response	7	9
Total	80	100

Field survey, 1998.

Table 4 shows that 86.3% of the respondents have received one form of incentive or the other from government. While 13.7% did not receive any form of assistance from the government. This implies that provision of incentive by the government to farmers has helped in getting more people involved in tree planting.

Table 4 indicates that 47.5% of the farmers got seedlings from the government, 26.3% got fencing wire, and 3.7% and 7.5% got fencing posts and technical advice, respectively. This implies that the more incentives the farmers could receive the more they participate in tree planting. Provision of incentives is a prerequisite towards greater participation in government programmes, especially where labour is scarce (Atala, 1981).

Table 4 shows that 46% of the farmers did not normally have problem during their production. About 20% had the problem of diseases and pests, 16% lacked a sound extension programme, 4% did not normally have inputs at the right time, while 15% had problems such as destruction of their seedlings by fire and browsing animals.

The results revealed that the majority of the farmers' encountered little problems during production, while much more problems were encountered during the developmental period.

Table 5 shows that 37.5% of the extension agents fell were within the age group 21-31 years, 50% belonged to 31-40 years age category and 12.5% were within 41-50 age group. This implies that those saddled with the task of extension services are in their productive age, and this would greatly enhance their performance.

Table 4: Distribution of farmers according to incentives, type of incentives from the government and the problems faced during production

Characteristics	Frequency	Proportion (%)
Receipt of incentives		
Yes	69	86.3
No	11	13.7
Total	80	100
Type of incentive		
Seedlings	38	47.5
Technical advice	6	7.5
Fencing wire	21	26.3
Fencing posts	3	3.7
No response	12	15.0
Total	80	100
Problem		
Non-availability of nputs	3	4
Pests and diseases	15	19
Lack of sound extension programme	13	16
None	37	45
Others	12	15
Total	80	100

Field survey, 1998.

Table 5 shows that 87.5% of the agents went through secondary education and 12.5% were holders of certificate and national diploma. This implies that majority of them lacked basic knowledge to enable them perform effectively. This is in line with Williams (1981) that many of the agents acquired and secondary education; their level of performance may be low unless they attend regular training so as to update their knowledge on the subject matter.

Table 6 shows that 62.5% of the agents visited the farmers monthly, 25% visited the farmers weekly and 12.5 visited farmers' forthnightly. The results revealed that most of them could not visit the farmers weekly or forthnightly as a result of one problem or another. Frequency of visit is crucial to the success of any extension programme. Clerk and Akinbode (1968) noted that there was significant association between adoption index and frequency of contact with agents; those contacted more frequently adopted improved practice more often.

Table 5: Distribution of extension agents according to age and level of education

Characteristics	Frequency	Proportion (%)
Age group (years)		
21-30	30	37.5
31-40	40	50.0
41-50	10	12.5
51 and above	0	0
Total	80	100
Level of education		
Primary	0	0
Secondary	70	87.5
Certificate or National Diploma	10	12.5
HND/B.Sc	0	0
Total	80	100

Field survey, 1998.

Table 6: Distribution of extension agent according to frequency of visit and training to farmers

Characteristics	Frequency	Proportion (%)
Visits		
Weekly	20	25.0
Forthnightly	10	12.5
Monthly	50	62.5
Others	0	0
Total	80	100
Training		
Weekly	0	0
Forth nightly	0	0
Periodically	60	75
Annually	20	25
Total	80	100

Field survey, 1998.

Table 6 shows that 75% of the extension agents received training in afforestation periodically while 25 of them received it annually. This reveals that a lot needs to be done to organize forth nightly training to enable them perform to expectation.

Table 6b shows that 62.0% of the extension agents attributed inadequate extension staff and transportation as major impediments to forestry extension in the area. About 38% indicated that lack of training, poor remuneration and inadequate extension training as the problems affecting the full realization of forestry extension in the area.

The results in Table 7 indicate the number of problems that militate against the full realization of forestry development in the areas. This agrees with Benor (1984) that

monetary reward retards the standard of living of agents. Amani (1992) also noted that inadequate salaries and incentives militate against using graduates their acquired knowledge to benefit farmers directly. He also cited inadequate infrastructure and poor transportation as the main problems that limit the performance of agents in the rural areas.

Table 7: Distribution of extension agents according to the problems affecting forestry extension in the area.

Problems	Frequency	Proportion (%)
Inadequate extension manpower and lack of transportation	50	62
Inadequate training and lack of transportation	10	12.5
Inadequate training and poor remuneration	10	12.5
Lack of transport and poor remuneration	10	12.5
Total	80	100

Field survey, 1998.

CONCLUSION

In view of this evidence revealed by this study, it can be concluded that forestry extension in Sokoto state has recorded a landmark despite some operational problems. This is because farmers have now realized the importance of tree planting. It is therefore essential to give forestry extension priority attention by creating the conductive atmosphere for extension agents to discharge their functions.

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