

## Challenges of Tree- Crop Society Members' Involvement in Plantation Forestry In Benue State, Nigeria

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### Abstract

This study investigated challenges faced by co-operative Societies in their efforts to establish forest plantations. A total of 240 respondents drawn from 1, 240 members of six co-operative societies were randomly selected and interviewed using questionnaire. Data obtained was analysed using both non inferential and inferential statistics. Results showed that members were involved in forest plantation establishment of various tree species. Challenges to members of Tree Crop Association to involve in forest plantation included extension support activities, lack of financial support, lack of government support, diminishing living standards and level of awareness for plantation establishment. It was recommended that if these challenges were removed, members would embark more on plantation forestry.

**Keywords:** - Challenges, plantation forestry, involvement.

### INTRODUCTION.

Deforestation is said to be on the increase in recent years. According to International Panel on Climate Change (IPCC, 2007), deforestation stood at 7.3 million Ha/yr. If urgent steps are not taken to check the trend, it is feared that our forests will completely disappear. There is therefore evidence of our ecosystems becoming less diverse in terms of forest species and products. In order to avoid this calamity, there is global consensus on the need to recreate forests through plantation development for a long term sustainability measure. This view must be embraced by all segments of society, Quiror (1994).

In many societies, indigenous peoples have successfully cultivated and inhabited areas with fast and high yielding tree species to replace the naturally occurring species that people have destroyed indiscriminately. (Alcorn, 1994, Warren 1992). The indigenous knowledge accumulated by those peoples and communities constitute a reservoir of adaptations which are of great importance for long-term sustainability.

Societies' relevance as partners in progress and as advocates of community forestry development has been neglected by governments and its agencies. One implication of this is that half of more of indigenous ecological science practices have been obscured by the prevailing non-involvement of co-operative societies. Yet it is reported (Jiggins, 1994) that when people are given the opportunity to exercise their rights particularly to influence the development agenda, they usually opt for the best to conserve forests, since they derive a lot of livelihoods from them. In many cases, the interests of this group of people are not respected when virgin forests are often destroyed.

Several attempts have been made by some of the co-operative societies (Dagba 2011) to be involved in community forestry with lots of hurdles. In this study, it was discovered that not much support was given to local communities by way of finance, free seedlings and extension services for effective participation in community forestry. As a result, not much impact is created by the co-operative societies in the state as far as forest development and conservation are concerned. The pertinent question therefore comes to mind. What are the real challenges facing co-operative societies in Benue state that their efforts have not yielded the desired result? It was in an attempt to unravel the possible challenges to plantation establishment that this study was carried out.

### METHODOLOGY

The data used was collected from 480 respondents randomly among 1,240 members drawn from six local government areas of Gwer, Gwer-west, Makurdi, Gboko, Tarka and Guma.

The instrument used was an interview schedule which sought information on members' involvement in plantation forestry as well as challenges experienced by them. The test-retest method (administration of questionnaire twice on the same respondents i.e. match group with a time interval of 2 months – (Egbugara, 1993) was used for determining the reliability of the instrument, which gave a r-coefficient of 0.80.

Multiple regression analysis was employed to determine the relative importance of each of the independent variables, the net contribution of each variable and total variance explained by all the variables on the challenges to co-operative societies' involvement in plantation forestry. Of all the various combinations entered, the one with the highest predicting values was adopted. The regression equation is:

$$Y = K + AK_1 + BX_2 + CX_3 + DX_4 + EX_5 + FX_6 + GX_7 + HX_8$$

Where Y is the challenger to societies' involvement in plantation forestry

K = Intercept which is constant

A,B,C,D,E,F,G and H are the net contributions of each of the variables.  
 $X_1, X_2, X_3, X_4, X_5, X_6, X_7$  and  $X_8$  respectively to the dependent variable Y.  
 $X_1$  = Extension support activities  
 $X_2$  = Lack of financial support  
 $X_3$  = Lack of government support  
 $X_4$  = Diminishing living standards  
 $X_5$  = Level of awareness for plantation forestry  
 $X_6$  = Control over productive resources

### **Measurement of Variables.**

#### **Awareness**

This was measured by asking respondents to say whether they were aware of the need for plantation forestry or not.

#### **Involvement**

Respondents were asked to indicate their level of involvement in plantation forestry through a 3-point scale. If involved= (1), partially involved= (2) or seriously involved= (3).

#### **Control over Productive Resources.**

This was measured by asking respondents to indicate if they had control over their productive resources, or they had to take permission from others.

#### **Control over planting Decision.**

This was measured through an indication of whether they could make decisions on their own about plantation forestry or they needed others to direct them.

### **RESULTS AND DISCUSSION:**

#### **Co-operative societies' involvement (roles) in plantation Forestry.**

The co-operative societies were aware of their different involvement/roles in plantation forestry of different species through very high scores as shown in Table 1.

Their challenges in plantation activities were in the form of extension support, financial support, government support, diminishing living standards, level of awareness, control over productive resources, control over plantation operations and control over actions.

#### **Regression Analysis:**

Multiple regression showed that control over plantation establishment (Beta = 0.22) was the greatest predictor of members challenges to involve in plantation forestry. Contribution of other challenges in diminishing order was: control over actions (Beta = 0.13), control over productive resources (Beta = 0.12), lack of government support (Beta = 0.05), extension support activities (Beta = 0.02), lack of credit support (Beta = 0.23), diminishing living standards (Beta = 0.02) and lack of awareness Beta = 0.01). All the variables entered could predict 72 percent of the variations in the challenges to co-operative societies' involvement in plantation forestry ( $R^2 = 0.71$ ). They all have linear relationship with the dependent variable. It gave a constant of 3.25 and a standard error of 0.18, F value = 3.2. Thus, the variables in the regression equation are good predictors of the variations in challenges to co-operative societies' involvement in plantation forestry.

### **CONCLUSION AND RECOMMENDATION**

There was high level of participation by co-operative societies in plantation forestry in the study area with many challenges. Their greatest challenge was that they had little or no control over establishment of plantation as well as actions pertaining to the activities connected thereto such as provision productive resources which included extension services and credit support. It was recommended that co-operatives are given free hand to decide how, where and when to establish plantations with full support by government by way of inputs, the co-operatives will perhaps succeed in plantation establishment.

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Table 1 Identified challenges to Co-operative Associations’ involvement in Plantation Forestry

Challenge	Frequency	Percentage
Extension support activities	51	10.6
Lack of credit	31	6.5
Lack of government support	46	9.9
Diminishing living standards	46	9.9
Level of awareness for plantation forestry	27	5.6
Control over productive resources	76	15.8
Control over planting operations	96	20.0
Control over actions	107	22.3

Table 2 Contributions off variables in the regression equation to the dependent variable.

Regression	Beta values	S.E Beta	T	Sig. T
Extension support activities	0.03	0.04	1.27	1.14
Lack of credit support	0.02	0.06	5.54	0.59
Diminishing living standards	0.02	0.09	0.08	1.08
Lack of government support	0.07	0.001	4.32	1.01
Level of awareness of plantation forestry	0.01	0.01	3.37	0.71
Control productive resources	0.13	0.02	-4.7	0.1
Control over planting operations	0.28	0.09	6.86	0.38
Control over actions	0.15	0.01	2.35	0.08

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