

# Empowerment through Participation in Afforestation Programme among Toshia Community in Nigeria

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## Abstract

Desert encroachment is a universal phenomenon that affects the developed and developing nations as well. This has become an impediment in Africa and particularly among Toshia community in Nigeria. This makes it necessary to adopt a measure through participation in afforestation programme to fight desert encroachment. This present, study attempts to determined level of perception, participation and empowerment among the participants in afforestation programme in Toshia, Nigeria. Self-administered questionnaire was used to collect data from 150 participants who were purposively selected. The data was analyzed using multiple linear regressions to determine the factors that significantly contributed toward empowerment of the participants of the afforestation programme. Finding of this study shows that participation is the most significant variable that predicts the level of empowerment ( $R^2 = .349$ ,  $p = 0.000$ ). The study concluded that for conservation programme to succeed, empowerment benefits must be tangible to the participants.

**Keywords:** Empowerment; Participation; Community development; Afforestation; Community empowerment

## 1. Introduction

Community participation approaches to development remain a vital instrument by development agencies to reach and assist rural communities in developing nations. Development intervention in the past has tended to focused on knowledge transfer to the beneficiaries communities through top down approaches (Fao, 1991). Decades of failure of development funding of the top down approaches to reach the rural communities (Cernea &

Ayes, 1997). Realization of his has led the community to adoption of bottom up approaches to community development through participation in afforestation programme.

Rural communities participation in afforestation programme, could be attributed to a number of environmental and socio cultural factors. According to Victor and Bakare (2004) community participate in afforestation programme if they are able to get live hood sustaining product from the forest. Studies had shown that factors such as economic benefits influence community to participate in afforestation programme.

There are many alternative method of reclaiming environment (Deji, 2007) and afforestation has been identified as one of the appropriate technique to combat desertification and desert encroachment. Forest policy management of many developing nations encourage afforestation, for instance in Nigeria the forest management policy decrees to emphasize afforestation and ensure trees were not exploited, felling of trees edict, 1986. The offence encourage fine of five thousand naira (N5,000) or to be imprisoned for a period not exceeding three years. The Sri-Lanka forest management policy of 1995 provides promotion of afforestation on State lands (FPU, 1995). However, afforestation programme on large scale required a huge amount of money. But in many developing nations, afforestation has been suffering from lack of adequate funds (Chin, 2000). The objective of this study was to determine the level of perception, participation and empowerment among the participants of afforestation programme in Toshia, Nigeria. The objective of this study is to determine the factors that contributed to the empowerment of the participants of the afforestation programme in Toshia community.

## **2. Methodology**

### *2.1 Research Design*

This study adopted quantitative approach by employing survey design. The choice of the method is because it investigates phenomena from the samples of the population as representatives and the participants as the unit of analysis (Sulaiman, 1998). Survey design was used based on the facts that understanding quantitative research is committed to seeing the world from the participants' perspective.

### *2.2 Respondents of the study*

The sampling technique used in the selection of the respondents was purposive sampling because it has the advantage of choosing those who are in the mind of the researcher also they are those who are involved in rising and planting trees in the area of the study. A total of 150 respondents were selected for this study from Toshia community in Yunusari local government of Yobe State, Nigeria. The participants were identified as key elements in developing rural communities

### **3. Instruments and Measurement**

#### *3.1 Questionnaire Administration*

A set of structured questionnaire consisting of close-ended questions (with answers options) was used to gather information and it was divided into five sections. According to Dillman (2000) the questionnaire is a well established method of data collection within the context of social research. The measurement scale for the study was based on review of literatures and some empirical studies. The study measures participation, perception and perception in desertification and afforestation programme. Maddox (1985) opined that the scale was used in research because of its high validity. On the other hand, Hair et al. (1998) suggest the use of the Likert scale for research design that used self administered survey. In addition, Zikmund (2003) asserts that it is simple to administer. Therefore, the researcher modified the questions and adopted it in this study. The questionnaire consists of socio-economic and demographic background of the respondents. The background variables studied were age, gender, and level of educational background.

#### *3.2 Process of Data Collection*

The data collection processes in this study involved the use of questionnaire to collect information about the respondents and their perceptions towards the afforestation programme. This study adopted questionnaire to gather the data with little adjustment based on interactions that had taken place between the researcher and the community members. The data was collected during dry season because most of the participants are farmers who cultivate their farms between July to October every year. Prior to the actual data collection, the researcher had contacted the village head, the community elders and the leadership of the afforestation programme in order to enlighten the community about the survey and the benefit of involving the local people in the survey of the afforestation programme. In addition, the interactions helped the researcher to ensure that the survey instrument (questionnaire) developed answer the study objectives and it is in line with the objectives of the programme. The researcher used camel, donkey motor vehicle and tracking to pass through the sand dunes and desert shrubs in order to connect with the participants.

#### *3.3 Data Analysis*

The data collected were analyzed using the SPSS statistical software programme. Inferential statistics were used in the analyses. The statistical procedure used for the data analyses is multiple linear regressions to determine the factors that significantly contributed toward empowerment of the participants in the afforestation programme.

#### 4. Results

**Table i Demographic profile of respondents**

Background	Frequency	Percentage
<b>Age</b>		
Less than 20 year	1	.6
21-30 years	71	45.8
31-40 year	41	26.5
41-50 years	25	16.1
51 and above	12	7.7
<b>Gender (N=150)</b>		
Male	135	87.1
Female	15	9.7
<b>Level of education (N=150)</b>		
Illiterate	33	21.3
Primary School	39	25.2
Secondary school	26	16.8
Post secondary school	52	33.5

**Table ii multiple regressions of predictors of empowerment level**

model	B (Unstandardized Coefficients)	Std. Error	Beta (Standardized Coefficients)	t	P value
<b>Constant</b>	25.406	9.623		2.640	.009
<b>Participation</b>	.636	.148	.350	4.306	.000
<b>Perception</b>	.521	.121	.349	4.290	.000

R Square=.349

#### 5. Discussions

The sample size of the study is 150 respondents whom have participated in afforestation programme chosen from Toshia community. The age of the respondents was ranged from 20-51years. The study shows that 45.8% (71 respondents) were from the middle age group which range from the age of 21-30years, while 26.5 % (14 respondents) was from the able age group which range from the age of 31-40 years. The study observed that age determine community participation in afforestation programme according to Maskey et al. (2003) older people tend to participate more in the community afforestation programme than the younger people. Male constitute high percentage 87.1 % (135 respondents) and female were only 9.7 % (15 respondents). On educational background, most of the respondents were literates up to the

level of post secondary school. Among the respondents, 33.5% (52 respondents) have acquired post secondary school education (Jakariya, 2000; Chowdhury, 2004) found that level of education influence participation in afforestation programme.

The study objective was to determine the factors that significantly contributed toward empowerment of the participants of the afforestation programme. Multiple linear regressions were used to achieve this objective using stepwise method. Multiple linear regressions is a statistical tool for understanding between an outcome variables and several predictors (independent variables) that best represent the relationship in a population. The advantage for using stepwise method is that only the variables that make significant contribution will be included in the model. Based on the stepwise method used all the two predictors variables were found to be of significance in explaining empowerment level. Table ii illustrate the result of the stepwise multiple regression analyses for the prediction of the empowerment of the participants of the afforestation programme, as well as the contribution of each factor in the model. As depicted in the table the largest beta coefficient obtained was .350 for participation and this corresponds with highest t-statistic of 4.0306, this means that this variable makes the strongest contribution in empowering the participants of the afforestation programme. The beta value for perception was .349 and this corresponds with lowest t-statistic of 4.290, indicating that it makes the least contribution. The R squared of .394 of the variance implies that the two predictor's variables explained about 39.4% of the empowerment by perception and participation. There is close relationship between participation and empowerment, this finding was supported by (Zimmerman & Rappaport, 1988; Schulz et al., 1995Rappaport, 1987).

According to finding of this multiple regression analysis the most significant variable that predicts the level of empowerment is participation. Hence the findings can be inferred that participant's participation support for empowerment is positively related to their perception. Finding of this study also emphasis on the role of participation in afforestation programme for community development.

## **References**

- Chin O, Smithson P, Michele S. (2000). Assessment of sediment and Nutrients in River Nyando in improved Land management in the Lake Victoria Basin. Final Technical Report, ICRL net
- Cernea MM, Ayse K (1997). Social Assessment for Better Development: Case Studies in Runnier and Central Asia. Washington DC. The International Bank for Reconstruction and Development. The World Bank
- Deji OF (2007). Community Socio cultural factors Associated with the participation of Rural women's association in Rural community development projects in Nigeria J. social science 2; 1-6 INSL NET

Dillman, D., A. (2000). Mail and internet Surveys; The tailored design method. New York; John Wiley & Sons

FAO (1991). Plan of Action for People's Participation in Rural Development: Twenty-Sixth Session, FAO Conference. Rome, 9-28, Nov.

Maddox, R. N. (1985). Measuring Satisfaction with tourism .Journal of travel Research,23(3),2-5.

Victor AJ, Bakare Y (2004). Rural Livelihood Benefits from Participation in the Taungya Agroforestry System in Ondo State, Nigeria. Small-Scale Forest Economics, Manage. Policy, 3(1): 131-138.

Zikmund, W. (2003). Business research methods (7ed). Ohio, USA, South-Western; Thomson South-Western.