



Tropentag, September 19-21, 2012, Göttingen -
Kassel/Witzenhausen

“Resilience of agricultural systems against crises”

Investigation of Agroforestry Practices within *Eucalyptus camaldulensis* Plantations: A Case Study of Kaduna State Forest Management Project, Buruku, Nigeria

WILSON ABAYOMI JAYEOBA¹, BABATUNDE ADENIYI OSUNMADEWA², ABDULWAHAB ZAKARI¹

¹Federal College of Forestry Mechanisation, Forestry Research Institute of Nigeria, Nigeria

²Technische Universität Dresden, Inst. of Photogrammetry and Remote Sensing, Germany

Abstract

The environmental services that agroforestry practices can provide especially their potential contribution to the conservation of biodiversity, climate amelioration and livelihood improvement has recently attracted attention among agroforestry and conservation scientist. An investigation of agroforestry practices within *Eucalyptus camaldulensis* in Kaduna State Forest Management Project Nigeria was carried out. A total of 100 questionnaires were administered with 77 retrieved from the respondents. The questionnaire was structured to access and identify the benefit of agroforestry practices to the rural communities (forest management staffs and the core villagers). Results obtained from the study revealed that 77% of the respondents are male while 52% of the respondents are married. 71% of the respondents are involved in other activities than agriculture, which serve as their source of income. 60% of the respondents rear livestock while 58% of the respondents benefit from non-timber forest products (NTFP). 51% of the respondents experience pest and diseases on their farm. The Chi-square analysis of data collated among 8 variables including gender, age, size of farm land, impact of agroforestry, effect of agroforestry on soil fertility, beneficial relationship between food crops and tree crops revealed that the computed value X^2 of these variables are greater than the critical value thus null hypothesis is rejected and the alternative hypothesis accepted. Therefore there is significant difference within the variables. The results of the study show that agroforestry practices serve as a means of improving the livelihood of the rural communities in the study area and also provide other in-direct benefit such as reclamation of soil fertility. It is recommended amongst other things that there should be provision of adequate knowledge about the benefits derived from improved agroforestry practices to farmers through extension services.

Keywords: Agroforestry practices, Bukuru, *Eucalyptus camaldulensis*, Kaduna, Nigeria