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## REHABILITATION OF ECONOMIC TREES IN KUSOPA ZONE OF MOKWA LOCAL GOVERNMENT AREA OF NIGER STATE (A PILOT PROJECT FOR POVERTY ALLEVIATION)

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### ABSTRACT

Mokwa Local Government Council of Niger State falls within Bida Emirate and was carved out of then Lavun Local Government in September, 1991, with its headquarters at Mokwa. The local government shares borders with Moro Local Government area in Kwara state, Kontagora, Edati, Borgu, Layun, Mashegu as well as Agaic Local Government Area of Niger state. The Local Government comprises of seven districts namely: Mokwa, Muwo, Tauma, Kudu, Kede Tiffin, and Kede Tako respectively. Of recent it has been observed that the economic trees in this zone notably palm trees and Kolanuts have stopped yielding very well as it used to be in the past years. Thus the need to carry out investigations on this poor yield in the area with a view to finding solutions to the likely problem.

**keywords:** Rehabilitation, Militating factors, Improved seedling, Propagation (Husbandry)

### INTRODUCTION

Non-wood or non-timber forest products are in the past not being catered for in the zone. The present situation of the environment and economy worldwide has therefore placed a very good premium and much emphasis on these neglected forest products.

They are therefore regarded as major products in some areas nowadays when the income they accrue for the government and individuals are from the Non-timber Forest Products. Hence the need to commission a national study into their inventory, utilization and sustainability. But unfortunately the commitment is not there from the government and the policy makers, rather fragments of the country has been studied especially in the rainforest ecosystem in Southern part of Nigeria.

Little or nothing has been done in terms of the savanna area of the country (i.e Northern part of the country) that constitutes above 80% of our national landscape. The study therefore intends to fill part of this gap by considering the Mokwa Local Government Area of Niger State, a representative sample of Northern guinea savanna area of Nigeria. Thus this study is focused on the main economic trees in Kusopa zone of Mokwa Local Government Area in Niger state.

The following objectives are set out to identify the perculiar economic tree products available in each town or village under Kusopa zone of Mokwa Local Government Area.

### OBJECTIVES

1. To identify the economic trees available in the study area.

2. To find out the rate of production of the identified economic trees in each area of study.
3. To identify the problems affecting the production of some economic trees and proffer solution.
4. To provide some improved seedlings for maximum yield.
5. To recommend some basic social amenities, this will help rural area for development in the zone.

## **METHOD**

A reconnaissance survey and assessment of the entire Kusopa zone was carried out so as to able to identify the economic trees in the zone. An ecological study of the zone was later embarked upon during which soil samples were randomly collected at different depths/ levels from various farm plots in randomly selected towns/villages in the zone.

Along side this data collection was the oral interview and administration of questionnaire conducted amongst the community people in the zone with a view to eliciting further information on factors militating against high yield of the economic trees in the zone. The soil samples that were collected form the zone were later analyzed using standard laboratory tests and analytical procedure. The results obtained from the analysis were then presented in tabular forms and appropriate recommendations and conclusion were made from the results of the soil analysis and questionnaire.

## **RESULT OF THE SOIL ANALYSIS**

S/ No	SITE/DEPTH	Ph	Na	K Cmol /kg	Ca Cmol /kg	Mg Cmol /kg	%C	Mg/ kg Av.P	H <sup>+</sup>	%O. M	CEC	%N
1.	0-15cm LOW/PLAIN LAND BOKANI	6.10	0.13	0.04	1.00	0.65	1.84	0.76	0.095	3.16	1.92	0.18
2.	15-30cm LOW/PLAIN LAND BOKANI	5.40	0.16	0.09	0.53	0.83	2.56	1.22	0.075	4.40	1.69	0.26
3.	30-45cm LOW/PLAIN LAND BOKANI	5.20	0.40	0.08	1.10	0.53	1.12	0.87	0.085	1.93	2.20	0.11
4.	0-15cm UP-LAND	6.10	0.15	0.08	1.23	0.54	5.12	0.70	0.090	8.81	2.09	0.11
5.	15-30cm UP-LAND	5.50	0.17	0.10	1.20	0.41	1.28	0.76	0.091	2.20	1.97	0.13
6.	30-45cm UP-LAND	5.60	0.16	0.12	0.80	0.61	3.53	1.16	0.080	6.24	1.77	0.35

7.	0-15cm EZCHI UP- LAND	6.20	0.19	0.42	3.75	0.44	0.40	1.74	0.085	0.69	4.89	0.04
8.	15-30cm EZCHI UP- LAND	6.10	0.18	0.34	1.50	0.48	0.72	2.03	0.075	1.24	2.58	0.07
9.	30-45cm EZCHI AREA UP-LAND	5.50	0.17	0.29	2.50	0.81	1.52	1.57	0.083	2.61	3.85	0.15
10.	0-15cm EZCHI UP- LAND	6.00	0.20	0.17	0.70	0.95	0.64	2.50	0.090	1.10	2.11	0.06
11.	15-30cm EZCHI PLAIN LAND	6.30	0.20	0.10	1.15	0.32	0.48	0.99	0.080	0.83	1.85	0.05
12.	30-45cm EZCHI PLAIN LAND	5.80	0.17	0.06	0.93	0.40	0.72	0.12	0.095	1.24	1.66	0.07

**HINT**

% N	-	PERCENTAGE NITROGEN
% O.M	-	ORGANIC MATTER
CEC	-	CATIONS EXCHANGABLE CAPACITY
Av.P	-	AVAILABLE PHOSPHORUS
% C	-	PERCENTAGE ORGANIC CARBON
Cmol/kg	-	PER KILOGRAMME

**INTERPRETATION AND RECOMMENDATION**

**Interpretation:** The parameters determined IN SAMPLES 1,2 and 3 falls within the range for fertility rate for soils. Sample 2 was low in Ca but high in %C. 4,5,6 have approximately the same level of parameters determined but 6 is low in Nitrogen and high in organic carbon. This thus reduces the fertility of samples of soil. Sample of soils in 7,8,9 have values that are within the fertility range while 10, 11 and 12 are below the range.

**RECOMMENDATION**

Soils in 2,4,5 will be suitable in compost making as they are high in Nitrogen. Other samples of soil will need additional supply of the salts of cations and exchange bases to meet the nutrients needs of plants/ crop to be grown there. NPK fertilizer (organic or inorganic) will be the appropriate one to be used.