

# MBAZZI AND NAMUNGO FOREST: A SITE REPORT



BY

# IFRI RESEARCH TEAM

Research Note Number 2, 1999

Uganda Forestry Resources and Institutions centre (UFRIC)

An IFRI Collaborating Research Centre

MAKERERE UNIVERSITY
FACULTY OF FORESTRY AND NATURE CONSERVATION
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# For more information about UFRIC and its activities please contact:

Dr. Gombya-Ssembajjwe, William, Director,
Abwoli, Y. Banana, Co-Director,
Mr. Bahati, B. Joseph, Data Manager,
UFRIC

C/o Faculty of Forestry and Nature Conservation
Makerere University,
P. O. Box 7062, Kampala

## **UGANDA**

Tel: 256-41-543204/543647/8 Fax: 256-41-533574 E-mail:ufric@starcom.co.ug

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## MBAZZI AND NAMUNGO FOREST

A Site Report Prepared for Presentation to the Local People and
Owners of Namungo Forest

By

Members of the Makerere University-Indiana University
International Forest Resources and Institutions (IFRI)
Research Program, 1999

The members of the Research team included William Gombya-Sembajjwe, Dr. Abwoli Banana, Joseph Bahati, Monica Kapiriri, Pius Kizito, George Mwambu, Gorretie Nabanoga, and Anne Nakawesi of Makerere University; David Green, Associates in Rural Development; Cheryl Danley, Michigan State University; and Dr. C. Dustin Becker and Dr. Elinor Ostrom, Indiana University. They were assisted by Charles Lwanga, Sekindi Serevest, Mr. Matovu, Mzee Charles, and Sam Serulyo. This study is the first pilot study of a project funded by the Africa Bureau of USAID (AFR/ARTS/FARA) to the Decentralization: Finance and Management Project of the Associates in Rural Development, Burlington, Vermont; Indiana University, Bloomington, Indiana; and Syracuse University, Syracuse, new York.

For copies of this report please write to:

Dr. Gombya-Ssembajjwe William, Leader, UFRIC, Faculty of Forestry and Nature Conservation Makerere University, P. O. Box 7062, Kampala, UGANDA

Tel: 256-41- 543204/543647/8

Fax: 256-41-533574

Email:ufric@starcom.co.ug

# TABLE OF CONTENTS

List of Tables	iii
List of Appendices	iii
The History of Mbazzi	1
The chronology of events in Mbazzi village	2
The products from the Forest	3
The plants of Namungo Forest	s.iMembers.of.the

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r. Gombya-Ssembajiwe William, Leacar, UFRIC, Faculty of Forestry and Nature Conservation, akerere University, P. O. Box 7062, Kampala, UGANDA el: 256-41-543204/5436-7/8
xx 256-41-533574

ii

#### List of Tables

Table 1. Trees species recorded in the 30 plot	Children William the lines are	5
Table 2. List of Forest Products		7
Table 3. Abundance of forest Products in Nat	mungo Forest	8
Table 4. Species list for shrubs and herbs fou	nd in Namungo Forest	9
List of Appendices		
Namungo Forest	government of Her Majesty B	10

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#### I. THE HISTORY OF MBAZZI

The history of Mbazzi settlement can be traced as far back as 1830 when the population in the region was very sparse. Homes were founded at the edge of the grazing lands on the hilltops. The valleys were left as a forest resource base. The people were largely subsistence farmers although they also hunted and gathered food from the forests around them.

In 1890, Kabaka Chwa was enthroned at the age of 3 years. Stanslus Mugwanya was one of the regents who took charge of the kingdom on behalf of the young infant King. It is also at this time that Mugwanya's workers came to this place. They started making axes (locally known as Mbazzi) on the hilltop. The local people then called that hill Mbazzi, a name that was later acquired by the settlement.

When Kabaka Chwa became of age, he gave Mugwanya the right to use this land which included forested areas. Mugwanya paid 3 ivory pieces to the Kabaka for the land and allowed peasants who had to pay *Busuulu* (land rent) and *Nvujjo* (rent in kind for use of land) to Mugwanya's family to settle on it.

During the 1930s, Mbazzi area was discovered to be very fertile and suitable for cotton growing. Coupled with the fact that it was sparsely populated, it attracted many people from other areas of Buganda to come and settle. Settlers of Mbazzi paid Busuulu of Ushs 4 per year and Nvujjo in form of local beer every brewing time, and meat (no fixed amount) every Christmas time. Among the immigrants was Namungo's mother, who came in 1939 and was allocated a plot of 10 acres on Mugwanya's land.

In 1940, coffee was introduced as an alternative, more profitable cash crop than cotton. With the increase in income resulting from the sale of coffee, formal education was introduced and permanent homes of baked bricks and iron sheets constructed throughout the village. A number of people also acquired bicycles, which at that time cost between Ushs 70 and 100.

In 1948, all of the forests on crown lands in Uganda were declared the property of the government of Her Majesty the Queen of England. Part of the forested area that the local people had been freely using was thus gazetted as Lwamunda Forest Reserve. However, the local people were given the right to harvest dead and dry wood. medicinal plants, and other forest products in reasonable quantities. This attracted commercial logging of the forest initiated by Indian immigrants in 1953. Many local people became involved in commercial logging as labourers but never as owners of the logging business. The technology used for harvesting was primarily pit-sawing.

In 1962, Musa spp (varieties of bananas used for brewing local beer) were introduced from Ankole. People started brewing and distilling a local gin locally known as waragi which expanded the scope of the economic activity. Distillers had to pay Ushs 4 as Busuulu to the landlord whenever they distilled.

In 1974, Namungo offered to purchase what was left of Mugwanya's forest from Mugwanya's son. It was an area of 100 acres on which he would establish a demonstration dairy farm with exotic cows. He paid in installments and finally gained complete title

in 1979. He then incorporated the forestland into his Kawombo Dairy Farm Company. Some of the forest area was cleared for cattle grazing. However, the area was abandoned during the war in 1982 and the forest regenerated.

The first returnees to the village came in 1985. These included 3 widows of Mbazzi who had lost their husbands during the war and were fed up with living as refugees in other people's homes. In 1986, the new regime introduced the Resistance Council (now Local Council) system of local governance. This system helped people to work together for the restoration and protection of the village. By the time of this study in 1993, most residents had returned. The main economic activity was agriculture, with the women engaged in vegetable growing, livestock and poultry production, and the men in cultivation, charcoal burning. and firewood collecting. However, crop raiding by wild animals was reported to be a major problem due to the thick bush and forest that now shelters these wild animals. The crop raiders include antelopes, guinea fowls, and pigs. The people had hoped that the government would compensate them for the losses they incurred due to the civil war but the hopes are now fading.

The apparent disappointment people are still notwithstanding, the optimistic about the future although they are aware that it will take long to rebuild the economy of the settlement to the status before the civil war. With the prevailing peace, people also feel that it is their duty to protect it and to seize this opportunity to embark on developmental programs. One such a programme is the construction of Mbazzi Nursery and Primary School. Otherwise, the settlement has no clinic or health centre, the nearest clinic being 2 miles away in Bujuko trading centre. Moreover, most youths have dropped out of school and taken to petty business activities.

## II. THE CHRONOLOGY OF EVENTS IN MBAZZI VILLAGE

- 1830 Establishment of the village.
- 1890 Kabaka Chwa enthroned at age of three; Mugwanya takes charge of the kingdom as regent of the infant king.
- 1910 Kabaka Chwa gives land to Mugwanya and forest on it becomes family possession of the Mugwanyas.
- 1930 Prince Mutebi Luwangula becomes Kabaka and is named Mutesa II.
- 1930-38 Cotton introduced to the area as a cash crop and immigration to the area increases.
- 1939 Namungo's mother moves to the area and acquires 10 acres of land.
- 1940 Coffee introduced as a cash crop substitute to cotton and becomes a major product of the area.
- 1948 All forests in Uganda gazetted and declared the property of the Queen of England. Namungo forest is named Lwamunda Forest Reserve.
- 1953 Asian immigration to the area increases; commercial logging of the forests begins.
- 1970 Namungo purchases remainder of Mugwanya's

forest from Mugwanya'sfamily.

1982 - Civil war erupts in the area and the forest is used as a refuge.

1985 - Three widows return to Mbazzi to re-establish homes.

1986 - R.C. system of local government introduced.

1993 - Village firmly reestablished; women
undertake vegetable
production and men
commercial harvesting of
forest products for cash.
They also establish
subsistence farms.

# III. THE PRODUCTS FROM THE FOREST

The most important forest products for the men of Mbazzi village are fuelwood, charcoal, and timber. These products are only harvested from the forest reserve as people are not allowed to cut trees from Namungo's forest. The commonest trees used for fuelwood include Mwokyanyama (Macaranga monandra), Mweganza (Macaranga schweinfurthii), Nkoma (Phoenix reclinata), Mubajonkonyo, Musasa (Sapium ellipticum), and Kirundu (Antiaris toxicaria). These trees are cut and sold in stacks of about 50 pieces on the market in Bujjuko. The price of one stack in Bujjuko is about Ushs 2,000.

The commonest trees harvested for charcoal production are Namalambo (*Parinari excelsa*), Ntaseesa (*Prunus africana*), and Mugavu (*Albizia coriaria*). Charcoal is sold

in sacks for Ushs 2,000 per sack of 50 kg. Timber is harvested through pit-sawing and, to a small extent, by use of chain saws. The commonest species for timber are Nkoba (Lovoa brownii), Namunuka (Celts durandii), Nzingu (Mitragyna stipulosa), and Mukooge (Morus lactea). Men also extract poles for construction. The commonest species for this purpose are Namukago (Funtumia elastica) and Musambya (Markehamia lutea).

The most important products for women users are fuelwood, palm leaves for making mats, and shrubs for making baskets. Unlike the men, however, the women usually collect fuelwood for home use rather than for sale. In one week they and their children collect and use 4-8 headloads depending on family size and needs. They generally harvest small dead branches. For crafts, the women harvest palm leaves and Niulu and Mpurugungu (Marantochloa spp). The leaves are mostly used for making mats which go for Ushs 4,000 to 6,000 each. The price of baskets made from Niulu and Mpurugungu ranges between Ushs 800 and 1,500. The baskets are used for storing food staffs, harvesting grain, and as dishes for serving food. Other forest products harvested by the people of Mbazzi include medicinal plants and wild foods, wild game, sand, water, and stones.

# IV. THE PLANTS OF NAMUNGO FOREST

## Introduction

It would take several months to measure all the herbs, trees, and shrubs in a 40-hectare vast forest. To obtain a reliable estimate of the plant species, their abundances, and class distribution in Namungo forest, therefore, 2.5% of the forest was sampled in 30 randomly selected forest plots. The

information gathered was used to calculate the biodiversity, estimate the availability of local products, and evaluate the forest for either conservation or utilization purposes. The immediate goals for this study were to test the sampling methods outlined in the International Forest Resources and Institutions (IFRI) manual, and to provide the owner and the local community with information about their forest. This document focuses on the availability in Namungo forest of trees and plant species that are locally used for firewood, charcoal, timber, and crafts.

## Methodology

By measuring the boundaries of the forest with the help of the local communities and Namungo's family, a map of the forest was drawn. A grid was overlaid on the map and a set of 30 random x-y coordinates were designated as locations of forest plots. Three teams of 3 to 5 people with at least one skilled botanist located the plot sites in the forest using compasses and a partial grid system to guide them.

Once the centre of a plot was located, three concentric circles were marked in the forest. In the first circle (one meter-radius), the amount of ground covered by herbs and seedlings was estimated. In the next circle (three meter-radius), shrubs and tree saplings were identified, and their heights and stem diameters measured.

Saplings were defined as young trees with a minimum stem diameter of 2.5cm, but less than 10cm. Trees were identified and their DBH and height measured in the third circle which had a radius of 10m. DBH refers to the diameter at breast height, usually measured at 1 4m from the ground.

#### Results

There were 334 trees in the 30 forest plots

representing more than 60 different species (6 trees could not be identified). commonest species were Ssesambya (Trichilia spp), Mugwi (Bosqueia phoberos), Mwokyanyama (Macaranga and Kitwekyankima monandra). (Tebernaemontana holstii). The largest tree species was a Lufugo and Kasiisa (Celtis spp) with a height of about 40m and a DBH of 120cm. Table 1 lists all the tree species identified in the 30 plots, their local names. mean DBH, and mean heights. The availability of different tree species used by local people is summarized in Table 3.

Ssesambya species used both for firewood and building poles had a density of 28 trees per hectare, and was the commonest of the preferred species. The species commonly used for charcoal had a relatively low density in the sample plots. For example, Musandasanda (Mimusops bagshawei) had an estimated density of 7 trees per hectare and Ntaseesa (Prunus aficana) only 2. The most abundant timber species were Ssesambya species with 28 trees/ha and Kirundu (Antiaris toxicaria) with 12 trees/ha.

Many of the forest products mentioned by the residents of Mbazzi were found in the sample plots. Table 4 summarizes the uses of forest products and provides an estimate of their abundance in Namungo forest. Mpaanyi (*Dracaena fragran*), a boundary marker for gardens and property, was the most abundant product. However, some of the preferred wood species for making tool handles and drums were relatively scarce in the forest

Table 1: Tree Species Recorded in the 30 Sample Plots within Namungo Forest

Species	Luganda Name	Total No. in	Mean Diam At	Mean Height
		Sample	Breast	(meters)
			Height	
Albizia zygia	Nongo 3	enlentis	(cm)	4
Albizia grandibracteata	Nongo 4	3	20 25	24
Albizia gummifera	Nongo	10		21
Albizia coriaria	Mugavu	The state of	22	22
Antiaris toxicaria	Kirundu		10	8
Beilschmiedia ugandensis	Mwasa	11	39	23
Blighia unijugata	Nkuzanyana		38	29
Bosqueia phoberos	Mugwi	6	19	17
Bridelia micrantha	Katazamiti	30	20	18
Celtis mildbraedii	Lufugo	6	. 15	12
Celtis zenkeri	Kasiisa	10	35	22
Celtis durandii	Namunuka	2	12	13
Chaetacme aristata		4	36	24
Coffea robusta	Muwanika	3	22	14
Cola cordifolia	Mwanyi	2	11	6
Croton macrostachys	Mutmbwe	1	57	34
Dombeya bagshawei	Musogasoga	3	19	12
Entandraphragma angolense	Kikokwa	2	16	15
Entandraphragma angolense		3	17	10
cylindricum	a Muyovu	2	22	20
Euphorbia teke	Man Pa			
Fagara macrophylla	Nabanteta	2	11	7
Fagara angolensis	Munyenye 2	1	10	15
Ficus capensis	Munyenye	6	30	20
	Kabalira	8	21	21
Ficus brachypoda	Mukokowe	2	15	9
Ficus natalensis	Mutuba	3	24	11
Ficus exasperata	Luwawu	5	25	22
Flacourtia indica				
Funtumia elastica	Unknown (a)	5	23	9
	Nkago	14	14	15
Funtumia africana	Nkago 2	7.	19	17
Kigelia africana	Mussa	-1	12	8
Lovoa brownii	Nkoba	4	17.	20
Macaranga monandra	Mwokyanyama	21	24	19
Maesopsis emnii	Musizi	2	15	19
Mimusops bagshawei	Musandasanda	6	33	20
Monodora myristica	Nagamola	2	23	20
Morus lactea	Mukoge	1	18	20

Oxynthus specious	Kamwanyi	5	13	6
Parkia filicoidea	Joge	5	25	22
Phyllanthus discoideus	Kamenyambazi	3	35	28
Piptadenia africana	Mpewere	7	52	29
Pleiocarpa pycnantha	te tumanyi	1	16	10
Polyscias fulva	Setala	7	26	14
Prunus africana	Ntaseesa	2	23	11
Pseudospondias microcarpa	Muziru	18	48	22
Pycnanthus angolensis	Lunaba	3	16	16
Sapium ellipticum	Musasa	4	28	19
Solanum giganteum	Setaba	1	-11	12
Symphonia globulifera	Muyanja	10	25	21
Syzygium cordatum	Kalunginsanvu	2	27	18
Tabernaemontana holstii	Kitwekyankima	22	15	11
Teclea nobilis	Nzo	7	14	13
Teclea grandifolia	Nzo 2	1	33	15
Treculia africana	Muzinda	3	25	22
Trema orientalis	Kasisa	4	. 18	15
Trichilia Prieuriana	Sesambya	22	27	17
Trichilia rubescens	Sesambya 2	1	27	23
Trichilia dregeana	Sesambya 3	2	15	15
Unidentified trees	Unknown	6	19	18
Xymalos monospora	Tokekulu	2	16	6
Zanha golungensis	Muyuki	2	48	32

#### Table 2 List of Forest Products

Most Important Forest Products for Men:

Fuelwood: Tree species (Botanical and Luganda names)

Mwokyanyama Macaranga monandra
Mweganza Macaranga schweinfurthii

Charcoal:

Ntaseesa Prunus africana Mugavu Albizia coriaria Namalambo Parinari excelsa

Timber:

Namukago Funtumia elastica
Nkoba Lovoa brownii
Nzingu Mitragyna stipulosa
Mukoge Morus lactea
Namunuka Celts durandii

Poles:

Namukago Funtumia elastica Musambya Markehamia lutea

# Most Important Forest Products for Women:

Fuelwood: Trees species (Luganda and Botanical names)

Mwokyanyama
Lukoma
Mubajankonyo
Mubajankonyo
Mubajankonyo
(Unknown)

Mubajankonyo (Unknown)
Musasa Sapium ellipticum
Kirundu Antiaris toxicaria

Nkindukindu Palm

Raw Materials for Crafts:

Nsansa (Misumba) Phoenix reclinata Mpurugungu Marantachloa

Other Products:

Food Kaama Dioscorea minutifolia
Medicine Mpewere Piptadeniastrum africanui

 Mpewere
 Piptadeniastrum africanum

 Mululuza
 Vernonia amygdalina

Fruits Matungulu Afromomum sanguina
Meat Mbizzi Suis scrofa

Water Mazzi Stones Mayinja

Sand Musenyu

## Table 3

Abundance of forest products in Namungo=s forest that are commonly used by residents of Mbazzi. Abundance categories are as follows: A=very abundant-found in 20 or more sampling plots; B=moderately common-found in 5-20 plots; C=relatively scarce or local-found in 2-5 plots; D= rare-found in only one plot.

		Abundance
Species	Local Uses	Category
Coffea robusta	Hand tool handles, stool legs	В
Dracaena sp.	Boundary markers	A
Teclea nobilis	Hand tool handles, walking sticks	В
Marantochloa sp.	Weaving material for baskets and mats	C
Cordia millenii	Brewing vats, mortars for grinding, drums	D
Albizzia coriaria	Brewing vat	C
Ficus natalensis	Bark cloth	C
Antiaris toxicaria	Grinding mortars	В
Morus lactea	Spear handles, how and axe handles	D
Trichilia sp.	Door and window frames	В



Group Discussion at Butto - Buvuma Picnic Site

Table 4: Species list for shrubs and herbs found in the 1 and 3 meter radii circles of the 30 forest plots in Namungos forest, 1993.

Species In no brig	Luganda name	Life form	Uses
Leptasus sp.	nd then attern (a) ig to loca	Grass	Thutching
Acalypha neptunica	(a)	Shrub	Fuelwood
Eudenia sp.	(a) MAM 40	Shrub	Fuelwood
Afromomum sanguinus	Matungulu	Herb	Food
Palisata sp.	Nantadabusa	Herb	Unknown
Acalypha volkensii	Jerengesa	Herb	Making baskets
Ficus ucealeris	Kitonto	Herb	Medicinal
Solanum giganteum	Ssetaaba	Shrub	Fuelwood
Cyanthea spp.	Kayongo	Fern	Unknown
Barleria brownii	(a)	Herb	Unknown
Salacia elegans	Kabugu	Herb	Traping fish
Marantochloa sp.	Njulu	Herb'	Making baskets
Draceana fragrans	Luwanyi	Herb	Boundary marker
(a)	Katakula	Herb	Unknown
Commelina sp.	Nanada	Herb	Medicinal
(a) species	6 different ones	Herbs	Unknown

Key: a = unknown



Members of Wamala LCII being trained in nursery techniques.

# Appendix 1:Namungo Forest

Random plots were selected by overlaying a grid on this map, choosing random x,y coordinates, and then attempting to locate these points by orienteering.

# MAP OF NAMUNGO FOREST

