EU Support to NARO

Agroforestry Research and Development Component

Progress Report for Lakeshore zone

January - December 2004.

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December 2004

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(0415 73208)

→ Plate stand — 10,000 =

→ 04/03/2005

→ 2 Pillows — 9000 =
→ Hangers — 3000 =
→ Cookies — 1000 =

06/03/2005

→ Airtime 5000 =
→ Rent 10,000 =

→ Recieved 10,000 = from Basoga (Debt repay). balance 20000 =

→ Gave/lent 10,000 = to Samson.

→

1.0 Introduction

The lakeshore region comprises the districts of Mukono, Wakiso, Mpigi and Mubende. The Agroforestry program of FORRI has been working with farmers in this region for over 10 years to test and promote various Agroforestry technologies. Under the EU support to NARO, the program has focused on re-establishing contact with earlier farmers as well as establishing new on-farm trials and demonstrations near the FORRI Kifu station in Mukono district. Current work also aims at promoting Agroforestry in primary schools and building the capacity of various stakeholders in carrying out Agroforestry research and development. This work is carried out under three pillars; capacity building, research and dissemination.

2.0 Capacity building

2.1 Staff training

a) Staff training has involved a series of internal short courses on specific topics aimed at filling in skill gaps identified jointly by the program staff and management. These have included;

- Design and management of on-farm experiments,
- Research data management.

b) In a collaborative arrangement between FORRI, ICRAF and Kawanda Agricultural Research Institute, 2 program staff were part of a team that went on a study trip in South Africa on improved fruit growing.

c) The program has also benefited from training opportunities that have been availed to FORRI by NARO secretariat and these include;

- Training in Project proposal writing
- Integrated Agricultural Research for Development initiative by NARO, Makerere University and International Centre for Research in Agriculture (ICRA).

Training	Nature of course	Site staff participating
Design & management of on-farm experiments	Internal	7
Research data management	Internal	8
Study trip in South Africa	External	1
Training in Project proposal writing	External	1
Integrated Agricultural Research for Development	External	2

2.2 Training of partners

a) The training of partners is important in scaling up agroforestry. In pursuing this cause, the program through UGADEN drafted an agroforestry training manual for Uganda. This was during a 1 week training organized to equip NAADS service providers in the districts of Mukono, Mpigi, Wakiso, Luwero, Tororo and Masindi with agroforestry skills.

b) Trainings held at Kifu

We have also been involved in training various groups of people as indicated in the table below.

Date	Course/Subject	Target group	No. of participants
1/8/2003	Tree fodder	T .o Ts	17
11/2/2004	Sensitization meeting on AF	Farmers & concillors of Kabembe	10
14/6/2004	Indigenous fodder in AF	AF staff & collabrators	5
23/6/2004	Nursery establishment & management Practicals	LEMA nursery operators and farmers	12
	Nursery establishment & management practicals	UGADEN AF T.o.Ts	38

Visitors

Below is a table showing different groups of visitors who have been visiting Kifu research station.,

Date	Origin of visitors	Purpose of visit	No. of visitor
5/6/2003	Arua, Adjumani,	AF study tour for district	35

	Yumbe,Moyo &Nebbi	Extensionists	
5/6/2003	Katakwi, Kumi & Lira Districts	AF study tour for district extensionist	20
16/2003	VI-AF Masaka	Sharing experiences in AF with AF programme & farmers	17
22/8/2004	Ethiopia	Sharing experiences with Ugandan research scientists	17
22/3/2004	Soroti (TEDDO)	Afstudy tour for farmers & extensionists	11

3.0 Research

3.1 Improved fruit production

3.2 Fodder production

Indigenous fodder survey was carried out in 2003 and data from the survey have been analyzed and a report produced. Also from this work a research paper was written and published in the Uganda Journal for Agricultural Sciences, 2004. This paper identifies *Vernonia amygdalena, Ficus natalensis, Sapium ellipticum* and *Artocarlus heterophyllus* (naturalized) as the most commonly used indigenous tree / shrub fodder species in the Lakeshore region of Uganda. It also outlines areas for further research in promoting these species for fodder production in the region.

Work with exotic fodder mainly comprised collaborative initiatives with ICRAF to promote Calliandra. Documenting farmers' experiences with fodder has been a major area of focus. The program produced posters of a successful story of a farmer in Mukono. Staff also participated in ICRAF's undertaking to translate 2 technical brochures on Calliandra from English to vernacular (Luganda).

3.3 Soil fertility improvement

3.4 On-farm wood production

Assessment of tree/crop interaction trail was done to establish the growth performance of the three tree species i.e. *Albizzia chinensis*, *Grevillea robusta* and *Maesopsis eminii* before thinning to widen the spacing from the initial 4mx4m to 8mx8m.The main purpose of this activity was to understand the growth performance of the three tree species at the time of thinning and to re-establish the banana crop which had been overshaded by the tree canopy.

Markhamia lutea conservation stand, tree management trail, below and above ground competetion experiments were maintained by slashing.

At Nalwana, a new site was cleared for the establishment of *Prunus africana* provenance trail. A total of 28 families were planted on
Casuarina junghuniana and *Grevillea robusta* provenance trails were maintained by slashing.

3.5 Tree domestication & diversification

4.0 Dissemination

4.1 Nursery activities

Routine activities are the following: watering, root pruning, potting, general cleaning and repairing nursery beds in the nursery site. Grafting of both *Mangifera indica* and *Persea americana* is on going.

Shelling of *Mangifera indica* seeds for raising more rootstock has also been done. Building of a humid chamber to improve on survival of grafted seedlings was done but it is not complete. The delay of this activity contributed a lot to low productivity of improved cultivars of *Mangifera indica*.

Seed acquisition

The following tree species were acquired and sown in seedbeds;

Species	Units	Quantity acquired	Quantity sown
Albizzia chinensis	Kg	2	2
Moringa oleifera	Kg	1	1
Mangifera indica	Bags	10	10
Maesopsis eminii	Kg	5	5
Grevillea robusta	Kg	8	5*
Podocarpus usambarensis	Kg	70	4*
Sesbania sesban	Kg	2	2

* More are to be sown.

Seedling distribution

Below is a summery list of seedlings given out of the nursery for on-farm planting/trails.

Species	Number	Remarks
Mangifera indica	1,938	On-farm planting (Mukono, E.Uganda)
Persea americana	374	-
Calliandra calothyrsus	8,650	Fodder bank establishment (Mukono)
Grevillea robusta	1,510	Boundary planting (E. Uganda)
Prunus africana	243	Trail establishment (Mukono, E. Uganda)
Albizzia chinensis	820	Provide shade for vanilla (Mukono)
Maesopsis eminii	1,020	Boundary planting (Mukono)
Markhamia lutea	?	Boundary planting (Kumi)
Milicia excelsa	391	Biodiversity trails (Mukono,E. Uganda)
Moringa oleifera	159	Biodiversity trail (Mukono,E. Uganda)
Leuceana trichandra	?	Fodder production (Mukono)
Leuceana diversifolia	140	Fodder production (Mukono, E. Uganda)
Azadracta indica	?	-