

# PROGRESS REPORT ON THE FOREST RESTORATION ACTIVITIES FOR THE PHASE I AND PHASE II PLANTING

# IN WEST BUGWE CENTRAL FOREST RESERVE

**NOVEMBER 2021** 



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# **1.0 Introduction**

The UTGA team continued to work closely with NFA in the tree planting activities for restoration in West Bugwe CFR. The restoration activities have been separated into two phases to make it easy to appreciate and review the work done thus far.

#### 2.0 Phase I

During phase I, a total of 22,990 seedlings were planted in May 2021. Even if the plan was to plant trees to cover 40ha, an area measuring 103.73 ha was covered with planted trees. This area however comprised of some rocky (hard pan) which were thus unplantable and portions of regenerating forest, that did not require disturbance. Maintenance activities were thus carried out and these included;

- 1. Spot weeding
- 2. Tree survival assessments
- 3. Seedling delivery.
- 4. Beating up/blanking





### **Description of activities under Phase I**

# 2.1 Spot weeding

This was done at the beginning of September 2021 in order to pave way for the survival counts and beating up but also to ensure that those seedlings that survived are devoid of weeds. All spots with tree mortality were also pitted.

It was also agreed by the UTGA & NFA team on the ground that where the planting had been done by opening planting trails in the thickets, there was need to reopen or maintain the trails to allow enough light to reach the young plantings. This was to limit competition of the planted trees provided by the brushwood and to open up spots for replacement of dead trees.



# 2.2 Tree survival assessments

This was carried out to determine the survival rate of the planted trees and also to help to determine the scope of beating up. It was noted that while most of the plantings were Maesopsis Eminii, they do not have good resilience.

The Survival in open areas was quite good but in the trails through thickets, it wasn't very good. Survival assessment forms were developed and shared with the contractor and



demonstrations on how to use them was done, thus survival was ably assessed. The survival assessment procedure consisted of taking note of the living and dead saplings, of which a sum was obtained and thus a percentage of the living species was taken to ascertain the average survival percentage. The average survival was found to be 52.76%. This survival could be attributed to the poor rains during and after the planting.

# 2.3 Beating up/blanking

Resultantly, there was need to replace the seedlings that died in the phase one planting. Since initially the net planting based on the seedlings used was 40 hectares, the seedling requirement for beating up was **47.24%** of those used for initial planting. Therefore, as part of finalizing phase I activities, **11,800 seedlings** were used to replace those that did not survive in phase I.





In Nelly's report on Item 8, she mentions Fire break/ external boundary maintenance - Fire breaks not attended to yet, the team awaits boundary opening to be implemented by NFA. In restoration, we do not prepare firebreaks as we do in plantations.

#### 3.0 Phase II

Activities done as part of the phase II planting included;

- 1. Seedling delivery
- 2. Seedling maintenance
- 3. New planting



- 4. Plan for community engagements
- 5. Plan for designing & installing sign posts
- 6. Plan for mapping.

# **Description of activities under Phase II**

#### 3.1 Seedling procurement and delivery

Seedlings were got from both the UTGA nursery, NFA nurseries in Namanve, Banda and Mbale and these were delivered to site.

Activity	Seedlings (No.)	Remarks
New planting	31250	All used
Encroachment/boundary	8034	These are being maintained at site while we wait
planting		for boundary opening by NFA.
Immediate replacement	6950	To immediately replace those that fail during
in Phase II plantings.		the phase II plantings.

The species choice was based on;

- Their site suitability as indicated in the forest management plan for the reserve.
- Their availability
- Species survival in the previous planting season

The seedlings used for beating up of Phase I planting were transported together with those used for phase II planting. The following seedlings species were delivered.





# **Indigenous Species**

S/n	Species	Quantity
1	Maesopsis eminii	4,000
2	Prunus africana	8,000
3	Khaya anthotheca	7,300
4	Albizia zygya	4,760
6	Tamalindus indica	900
7	Antiaris toxicaria	1,300
8	Vitex doniana	854
9	Afzeria africana	7,722
10	Melia Volkensii	5,000
11	Gmelina aborea	2,000
12	Azediracta indica	3,000
13	Spathodea Campanulata	1,877
14	Makhamia Lutea	2,000
15	Albizia Gumifera	1,287
	TOTAL	50,000

# **Eucalyptus**

S/n	Species	Quantity
1	Eucalyptus Grandis	3089
2	GC Clones	4945
	Total	8034

# 3.2 Seedling maintenance

Two suitable locations with good protection and water sources were identified and temporary holding nurseries were established to maintain the seedlings throughout the planting period. Two workers were allocated the responsibility of taking care of the seedlings at each site. Four watering cans and two jerrycans were purchased to help in the seedling maintenance. It was agreed that UTGA will pay a monthly fee of fifty thousand shillings to the owner of one of the temporary nurseries for the storage and allowing us access an underground water source for the time we will be using the facility.



### 3.2 New planting

Under phase II planting, while 54ha were planned to be restored, area of 56.18 hectares (Refer to annex) was mapped out for the actual planting on the ground. This area had no gaps like the site for phase I planting. It mainly comprised of thickets originating from the main road from Kampala to Busia. These have all been fully planted and the net planted area is 50 hectares based on the number of seedlings planted.

The area planted is in three blocks (see annex) and this time save for very few portions, block planting was done using a random mix of species. Since most of the area was covered with thickets, it was important that no full clearing is done. Planting trails were opened 4 meters apart and trees planted along them at a 4-meter spacing to achieve the 4mX4m spacing and full block planting. This implies that the stocking is 625 trees per hectare.

However, the planting team was faced with the challenge of poor rains. After one week of new planting, there were no rains for the next three weeks. This not only delayed the planting activities but also led to loss of some of the seedlings planted.

Immediate replacement was done soon after the rains reappeared in November. Currently all has been planted but beating up may have to be done at the onset of next year's first rains.







Additionally, it had been anticipated that some encroachment boundary planting would be done with eucalyptus as recommended by NFA but the team on ground advised that this could only be possible after boundary opening has been done since it was still contentious for most of the forest boundary. UTGA wrote to and engaged NFA senior management on the issue and they promised that they had already planned for it under the next schedule. As we wait for the boundary marking, the eucalyptus may have to be maintained and planted next season since the planting contract was completed and the dry season may set in soon.

#### 4.0: Plan for Community engagements

The NFA team on ground was engaged in a discussion on the possible community engagements that can be done during this project and below are some of the suggestions;

- The need to conduct sensitization meetings at different political levels i.e., local councils (LCI, III and V). These will aim at;
  - Encouraging them to plant trees
  - Sensitizing them against encroachment.
  - Encouraging them to protect the new plantings
  - Ensuring that they do not use the planting trails for entry to collect firewood.
- 2. Allocation of work to locals has already contributed to the improvement of the wellbeing of the communities around the reserve and this will continue. The local labour force has comprised of members from the surrounding communities.
- 3. UTGA should consider offering free tree seedlings for local community members to plant on their land. This will be eucalyptus and indigenous species for fast growth and also as alternative wood sources respectively. It will also lessen depletion and reduce pressure on natural forests.





#### 5.0: Plan for planting sign posts

UTGA is working closely with NFA to design sign posts for the project. The plan is to develop three of them and place them at strategic points along the CFR boundary.

#### 6.0: Plan for mapping

UTGA is also working closely with the NFA mapping team to ensure that maps are developed for the project work. The team agreed to visit and do the mapping with focus on first, demarcating the 1,000 hectares allocated for the project but also mapping out the area planted so far. This will happen in early to mid-December.

#### 7.0 Coordinates

Phase I Planting coordinates RESTORED AREA May 2021- 103 73ha

RESTORED AREA May 2021- 103.73ha			
No.	UTM	NORTHINGS	EASTINGS
25	36	06077224	0057807
26	36	0607700	0057838
27	36	0607437	0057579
28	36	0607367	0057536
29	36	0607260	0057298
30	36	0607010	0057077
31	36	0606907	0057008
32	36	0606587	0056927
33	36	0606482	0056992
34	36	0606434	0057094
35	36	0606533	0057135
36	36	0606507	0057180
37	36	0606438	0057322
38	36	0606496	0057246
39	36	0606447	0057439
40	36	0606832	0057877
41	36	0605434	0058278
42	36	0605425	0058246
43	36	0605908	0057515
44	36	0606259	0056961
45	36	0606582	0056811
46	36	060692	0056878
47	36	0607035	0057021
48	36	0607094	0056992





36	0607141	0057020
36	0607231	0057033
36	0607276	0057094
36	0607322	0057101
36	0607448	0057107
36	0607461	007226
36	0607440	0057354
36	0607584	0057548
	36 36 36 36 36 36 36	36 0607231   36 0607276   36 0607322   36 0607448   36 0607461   36 0607440

## Phase II planting coordinates RESTORED AREA 56.18 Hectares

Area 1 - 32.21Ha			
No.	UTM	NORTHINGS	EASTINGS
58	36	0607725	0057801
59	36	0607727	0057562
60	36	0607632	0057575
61	36	0607474	0057453
62	36	0607417	057257
63	36	0607452	0057109
65	36	0607318	0057100
66	36	0607276	0057091
67	36	0607263	0057044
68	36	0607149	0057112
69	36	0607105	0057086
70	36	0607135	0057006
71	36	0607056	0057016
72	36	0606932	0056878
73	36	0607815	0056934
74	36	0608154	0056749
75	36	0607821	0057142



AREA 2 - 13.94Ha			
No.	UTM	NORTHINGS	EASTINGS
76	36	0607725	0057807
77	36	0607705	0057829
78	36	0607481	0057568
79	36	0607438	0057578
80	36	0607382	0057567
81	36	0607297	0057745
82	36	0607186	0057774
83	36	0606960	0057839
84	36	0607665	0057999

Area 3 - 10.03Ha			
No.	UTM	NORTHINGS	EASTINGS
86	36	0606962	0057842
87	36	0607099	0057546
88	36	0607114	0057517
89	36	0606992	0057416
90	36	0606852	0057473
91	36	0606640	0057588
92	36	0606860	0057864

Portions	Area (Ha)
а	10.03
b	13.94
С	32.21
Total	56.18

We will do some work on clearing invasives and a general clean up of area that we've restored. A balancing act of opening up thicket, for trees to get sunlight, yet make it inaccessible for people and animals is also required.