

## **Project Update: December 2022**

### 1.0 INTRODUCTION

The project with the aim of understanding the community perspective about the Ngel Nyaki Forest Reserve and what services has the forest provided to them. To achieve this aim, a series of activities were carried out. These include visits to communities, interactions with head leaders and ethnic groups within the communities.

### 2.0 ACTIVITIES

1. Reconnaissance visit.
2. Community interaction/community perspective.
3. Seed collection and propagation.
4. Seedling donation.

#### **2.1 Reconnaissance Visit**

My team and I invited the community heads leaders and their subordinates who all converged at Nigerian Montane Forest Project (NMFP) field station for interaction and to notify them of our plans to visit their communities. From the initial proposal, my team and I had proposed to work with four communities but during our interaction with the head leaders, the attention of the team was drawn to other micro communities, with populations of between 50 and 100. This raised the number of communities finally sampled to eight. We had a pilot survey by randomly interacting with five individuals each from the communities irrespective of their ethnic group, we assessed what plant can possibly serve as a source of income.

#### **2.2 Community Interaction and Community Perspective**

My team and I were able to visit the ethnic groups and Fulani herdsmen in the following communities: Dujure, Dombo Gishi, Panso, Gidan Musa, Mayo Yembe, Zongon Ajija, Yelwa and Mai Wuya. The ethnic groups interacted with were Fulanis, Mambilla, Ndola and Kaka. Other ethnic groups such as Kambo and Panso we interacted with were identified to know plants in Fulfulde and Ndola and other languages. We selected 10 individuals comprising five males and five females to be part of the interactions. During our interaction, we identified Dujure, Dombo Gishi, Panso, Gidan Musa, Mayo Yembe, and Mai Wuya were dominantly *Ndola* ethnic group and speak *Fulfulde* in addition to local dialects. While Yelwa and Zongo Ajija dominantly Mambilla, Fulanis Kaka, few Kambo ethnic groups and speaks Fulfulde as general language. Therefore, plants were mostly identified by the people using Ndola, Fulfulde, Mambilla and Hausa languages. We interacted with the individuals using semi structured questionnaires, with team members interpreting in local dialects. The following questions was used to interact:

1. What do you think of Ngel Nyaki Forest Reserve?
2. What are some of the plant/tree species that have benefited you or your grandparents?
3. What part or parts of these plants do you use?
4. What are the plants used for?
5. What is/are the local name?

## 6. Are there other benefits derived from the Forest reserved?

We allowed the people to plug stems or plant branches allowing us to identify the scientific names while they share their knowledge of the plant, what purpose they use it for and if they knew where this plant was within Ngel Nyaki Forest Reserve.

The local people believe that the Ngel Nyaki Forest Reserve is their inheritance as their parents were originally occupants of the site. This is evident in the list of species that were planted by their parents and these plant species are what they have continued to benefit from. The community categorically listed some plant species and locations of where these species are found within the reserve (Appendix 1).

The community shared a list of trees that have served as medicine, fodder, food (condiments) and for craft (still compiling data of the list of ecosystem services). Both the head leaders and the community members agreed that the reserve hold a great treasure for the present and future generation in terms of medicine, energy (fuel wood) source of income and food.

The different communities identified some tree species which used to be abundant in some part of the reserve but are no long available as a result of exploitation. The plant *Ricinodendron heudelotii* (Appendix 2) used for making drums, *Prunus africana* (medicine) *Irvingia gabonensis* (food and condiment), *Beilschmiedia mannii* (food and condiment), *Canarium schweinfurthii* (food and condiment) and *Dombeya ledermannii* (bark fibre used for knitting bags). These species were mentioned by the communities as species which are locally extinct due to over exploitation and other human activities. Though other list of plant species were mentioned, however, they were less significant as their population are not threatened compared to the ones mentioned above according to the ethnic groups.

Other benefit derived from the reserve include honey and lichens which are harvested and sold for income while twigs from lianas, thatch grasses are harvested and used as roofing materials.

### **2.3 Seed Collection/ Seed propagation**

My team and I have started the collections of seeds from the forest. The seeds collected and propagated are *Beilschmiedia mannii* (Konkoli) *Entandrophragma angolense* (sapele mahogany), *Pterocarpus erinaceus* (African rose wood) and *Bridelia speciosa*. The collection was based on the emphases of their importance mentioned by the individuals we interacted with in all the communities, and these were the seeds available during the interaction. It is expected that when the seedlings are ready for transplanting, they will be given to some individuals to nurture on behalf of the community and we will continue to monitor the seedlings.

### **2.4 Seedling Donation**

Based on the pilot survey conducted during recognizance visit, Konkoli (*B. mannii*) was identified as one of those plant that has high income value and on that note, during our awareness campaign, we were able to donate 10 seedlings of *B. mannii* to each community and we also taught them how to propagate from seed. The seedlings

donated were purchased from an individual of Yelwa community whom had learned to propagate from trainings I had carried out earlier in 2021 through the NMFP. Buying the seedlings was to encourage others to propagate and plant native species in farmland and in their houses. This was to serve as a medium to demonstrate how they can possibly make an income from propagating native species.

### 3.0 EVALUATION

#### 3.1 Community interaction and awareness programme

We have been able to interact with the surrounding communities and even more than we proposed. In addition, we have identify how different the ethic forest edge communities perceive the forest in terms of ecosystem provision (Appendix 1).

#### 3.2 Seed collection and seed propagation

We have collected some seeds from the forest which were identified to be of value as mentioned by the ethnic groups.

#### 3.3 Identifying Landscape for propagation

We also identified areas which are potentials sites for afforestation. These sites are the degraded part of the reserve which deforestation has occurred and regeneration is slow due to grazing activities. We also found out that planting some of the trees species in their homes and farm lands will also reduce human pressure on the reserve.

#### 3.4 Seedling Donation

We have been able to donate *B. mannii* seedling to the eight communities with six communities (Panso, Mai Wuya, Mayo Yembe, Gidan Musa, Dujure, Dombo Gishi) receiving 10 seedlings each while large communities (Yelwa and Zango Ajiya) received 20 seedlings each making a total of 100 seedlings donated.

### 4.0 NEXT STEP OF THE PROJECT

1. Data Compilation and analyses will be done in January and February 2023.
2. Seed Collections: Target Seeds to be collected for more propagation includes: *Ivangia gambiansis*, *Prunus africana* and *Dombeya ledermannii* (March 2023). More seeds are expected to be available within these periods of the month.
3. Monitoring of seedlings donated will be carried out to assess how the communities and individuals are nursing the seedlings (April 2023).
4. Another batch donation of Seedlings will be carried out from May and June 2023 during the rainy season.
5. Final report and results of the project will be available in June 2023.

**Appendix 1: Local names of some plant species mentioned by the individuals we interacted with.**

S/N	Ndola	Mambilla	Fulfude	Kaka	Hausa	Plant Species	Importance Value	Part Used
1	Ataa	Thor	Kulahi			<i>Terminalia ivorensis</i>	Medicine	Bark/root
2	Aboha					<i>Annona senegalensis</i>	Medicine/food	Leaf & fruit
3	Ava		Baekejo			<i>Piliopsisigma thonningii</i>	Medicine	Bark
4	Kuma					<i>Riciodendron heudelotii</i>	Craft	Wood
5	Konkoli	Konkoli	Konkoli	Konkoli		<i>Beilschmiedia mannii</i>	Food/Condiment	Seed/leaf
6					Madrid	<i>Pterocarpus erinaceus</i>	medicine	Bark
7		Tagar	Seidiya/lbbe			<i>Ficus sur</i>	Medicine	Bark
8	Ashira/dinya	Tergen	Galbije			<i>Vitex doniana</i>	Medicine/food	Bark/Root/Fruit/Leaf
9			Gosgahi		Marke	<i>Anogeisus leocarpus</i>	Medicine/Fuel wood	Bark
10			Bakure			<i>Sacorcephalus latifolius</i>	Medicine/food	Bark/Root/Fruit
11						<i>Prunus africanus</i>	Medicine	Bark
12	Ambata					<i>Garcinia sp</i>	Medicine	Bark
13		Taroo				<i>Anthocleista vogelii</i>	Medicine	Bark
14		Te-el	Dalamhi			<i>Dombeya ledermannii</i>	Craft	Bark/fibre
15			Gauri chollihi			<i>Trema orientalis</i>	Medicine	Bark
16						<i>Prunus Africana</i>	Medicine	Bark/Root/ Leaf /fruit
17					Atili	<i>Canerium schweinfurthii</i>	Condiment/Food	Fruit
18	Ogbono					<i>Irvingia gabonensis</i>	Condiment/Food	Fruit/Seed
19			Jirlahi			<i>Kigelia africana</i>	Medicine	Fruit/Bark
20		Tawur	Sumsum			<i>Syzygium guineense</i>	Medicine/Food	Leaf/fruit

Appendix 2: Plates



**Plate 1:** *Ricinodendron heudelotii* known to be locally extinct. © Emmanuel B.E.



**Plate 2:** Staff of NMFP and Community Head leaders. © Idriss Musa.



**Plate 3:** Staff of NMFP and Dombo Gishi Community members. © Usman Abubakar.



**Plate 4:** Emmanuel interacting with Panso Community members as they share Ecosystem services derived from Ngel NYaki Forest Reserve. © Alfred Christopher.