

**(CAMGEW)**



**“Nchiy Community Forest regeneration for increased honey production and biodiversity”**

**Progress Report**

## **ACKNOWLEDGMENT**

Cameroon Gender and Environmental Watch (CAMGEW) is grateful to the Rufford Foundation through their small grants for their financial to realize this project. CAMGEW is thankful to the Ministry of Forestry and Wildlife (MINFOP) for technical assistance in forest regeneration process. The participation of youths and community members in nursery development, environmental education, forest clearing, transportation of seedlings to the forest and tree planting is also applauded. CAMGEW is also grateful to the following personalities of Oku for their support in the course of forest regeneration: Divisional Officer-Oku, traditional Authorities, and all other persons who assisted directly and indirectly for being very resourceful in the realization of the planting exercise.

## **INTRODUCTION**

Cameroon Gender and Environment Watch (CAMGEW) is a non profit created in October 2007 with authorisation number N° 000998/RDA/JO6/BAPP to work locally and think globally, integrating gender issues in solving environmental and social problems in Cameroon. CAMGEW believes that the future of our mother planet-earth is in our hands (men and women, young and old) and also that the planet can be sustained by putting social and environmental justice at the centre of development using a participatory approach. CAMGEW seeks to achieve her objectives by liaising with other like-minded organisations worldwide. CAMGEW has as vision "Changing lives of women, children and communities while protecting the environment and as mission to fight poverty; promote sound environmental management, gender balance and economic sustainable development.

### **Presentation of Project area**

Nchiiy Community forest is found under the Oku Forest in Kilum Mountain forest. Oku is found in Bui Division of the North West Region of Cameroon. The population is English speaking. Oku has the largest remaining Bamenda Highland Montane Forest with a large crater lake called Lake Oku at altitude around 2500m. The Oku Community Forest is the first community forest in Cameroon. The forest has a unique ecosystem and is the largest remaining habitat for Bannermans tauraco-a red feathered bird that is only found in the Bamenda Highland Region and is classified by IUCN Red list as endangered. Kilum Mountain with altitude 3011 meters is the second highest mountain in Cameroon, Central and West Africa after Mount Cameroon. Honey from Oku Forest is white in colour and is commonly called Oku White Honey. It is cherished nationally. It is certified as a Geographical Indication Product. Oku has a rich culture. Carving is highly practiced in Oku.

Oku has a population estimated at about 130,000 inhabitants. With a total surface area of about 800km<sup>2</sup> of which 300km<sup>2</sup> are covered by the forest. This gives the locality a population density of about 162 persons per km<sup>2</sup>.

The Kilum Mountain Forest is rich in Non Timber Forest Products (NTFP) such as herbs for medicine (like *Pittosporum veridiflorum* (mannii), *Agauria salicifolia*, *Prunus africana*), rodents, wood for carving, alpine bamboo which is used locally for construction, additives (colourings,

preservatives and flavourings), mushrooms and the Oku honey with its peculiarity of being white in colour.

### **Presentation of the Project**

Nchiiy Community Forest is in Kilum Mountain Forest and is degraded by bushfires and farm encroachment. The community sent out encroached farmers from forest and stopped bushfires in 2010. Since then, no bushfire has occurred except in February 2015 that a portion of the forest was burnt by a farmer accidentally and the fire was put off by other farmers and forest users like bee farmers and hunters. CAMGEW through this project had to collect tree seeds from other preserved parts of forest, nurse and plant the trees in degraded forest portions. CAMGEW also had to develop a nursery of 2000 trees of 10 different tree species. The nursery was to serve as a ground for forest Education for schools/Community on tree importance to honey production, bird and animal diversity, watershed and medicinal properties. The nursed trees had to be planted in the forest by the community.

# **SECTION I**

## **TREE PLANTING**

### **Introduction**

Forest regeneration is an important activity with a global interest. The Kilum-Ijim Forest has a vital role to play in climate change mitigation. Considering that forest conservation is important for watershed protection, promotion of biodiversity, sustaining livelihoods, promotion of apiculture and fighting climate change. CAMGEW's action in regenerating the Nchiiy Community forest with 5000 native trees instead of 2000 trees projected is a step in this line that support government's policy for forest regeneration and a United Nation's policy to fight against climate change. CAMGEW from the 2<sup>nd</sup> June to 3<sup>rd</sup> August 2015 carried out forest regeneration activities in the Nchiiy Community Forest. These activities included planning meetings with FMI members and communities, the identification of the sites to be regenerated the clearing of paths for tree planting, digging of holes, pecking, carrying of trees to the forest and planting proper of the trees in the various Community Forests.

### **TREE PLANTING METHODOLOGY AND ACTIVITIES**

The tree planting exercise took place between June 2<sup>nd</sup> and August 3<sup>rd</sup> 2015. The activities started with planning meetings with Nchiiy community at Mbockeghas, identification of area to be planted, slashing for regeneration, digging and pecking of the holes and the transportation and planting of tree seedlings. The tree planting ended with a crowning ceremony and was combined with environmental education sessions for community members.

Field visits were made by CAMGEW staff with Nchiiy Community Forest members and some of their Forest Management Institution (FMI) members to identify the area for regeneration. Slashing of grass started after identification by community members in preparation for tree planting. During tree planting seedlings were planted 5m apart. The plastics from pots carrying the seedlings were removed from the forest after planting. The tree planting ended with a crowning ceremony that brought forest stakeholders, women, youths and other community members together. CAMGEW organized this event to present work done in forest regeneration to the authorities and to use the medium for sensitization on the need to protect the Nchiiy Community forest. This year CAMGEW also did maintenance of the 3500 trees she had planted 2014 with funds from Both Ends. During the maintenance dead trees were replaced.

## TREE PLANTING ACTIVITIES

### 1. Planning meeting and site identification

CAMGEW team organised a planning meeting for tree planting in Nchiiy Community Forest with the aim of identifying the compartment in which the trees will be planted and the duration of the activities. The meeting was held on the 2<sup>nd</sup> June 2015 and had 8 participants. It started at 9:00AM and ended at 11:30AM. During the meeting it was agreed that the portion of the forest that was destroyed in February 2015 by bushfire will be planted.

### 2. Slashing to create paths for planting

Slashing (clearing) started from 6<sup>th</sup> June 2015 and ended on 11<sup>th</sup> June 2015. 11 community members took part in the slashing. This activity was done every day from 8 to 2:00PM. At the end of the slashing, community members prepared the holes for tree planting 5 meters apart and pecked with sticks. These were holes on which trees will be planted. The digging of the holes and pecking was done in three phases (6-10 June and 3<sup>rd</sup> August 2015 with 800, 2200 and 2000 pecks and holes prepared respectively).



Community members and youths doing the slashing

### 3. Transportation of seedlings to the forest and planting

Tree planting was done in three phases with assistance from CAMGEW field staff. The first phase involved the whole community and this was on 6 June 2015 where more than 80 community members took part in the tree planting. 800 Schefflera plants were cut and transported to the forest for planting by Community members. Between the 7<sup>th</sup> and 10<sup>th</sup> of July 2015, 2200 trees of 12 different varieties (*Prunus africana*, *Carapas grandifolia*, *Nuxia congesta*, *Pittosporum mannii*, *Agauria salicifolia*, *Zyzigium staudtii*, *Croton macrostachyst*, *Maesa lanceolata*, *Schefflera abyssinica*, *Bridelia speciosa*, *Psychotria penducularis* and *Psydrax dunlapii*) were transported and planted in the Nchiiy Community Forest. CAMGEW got these trees from her nursery in Manchok-Oku because the trees nursed in the nursery at Mbockeghas under Rufford Foundation grants were not yet ready. The activity involved 11 Forest users and some community youths. The 3<sup>rd</sup> phase of the tree planting took place on the 3<sup>rd</sup> of August 2015. 28 community youths and some forest users took part in the activities. 2000 trees of different varieties were planted. Environmental education was done in the course of the tree planting. The last phase of the tree planting involved a forest regeneration crowning ceremony during which talks were made on the importance of forest for watershed and livelihood improvement.

**Table1: Nchiiy Community Forest Forest Regeneration Summary**

SN	ACTIVITY	Number of persons involved	PERIOD/DATE	VENUE CF=Community Forest	OUTCOME
1	Planning meetings	7	2 <sup>nd</sup> June 2015	Mbockenghas	-
2	Slashing	11	6 <sup>th</sup> June to 11 June	Nchiiy CF	-
3	Digging and pecking	31	6 <sup>th</sup> June-3 <sup>rd</sup> August 2015	Nchiiy CF	5000 holes dug and pecked
4	Transportation of seedlings and planting	119	6 <sup>th</sup> June-3 <sup>rd</sup> August 2015	Nchiiy CF	5000 trees transported and planted
5	Crowning ceremony	31	3 <sup>rd</sup> August 2015	Nchiiy C F	-
6	Maintenance	11	6 <sup>th</sup> to 14 <sup>th</sup> June 2015	Nchiiy CF	-
7	<b>Monitoring:</b> -It is done continuously by Forest users who report to CAMGEW team. -CAMGEW team does regular weekly monitoring in the field	Every forest user	Continuous	Nchiiy CF	-



Environmental education in practice during tree planting for young people



CAMGEW, community members and young people do tree planting. Young people are taught how to plant trees. This child says he is planting this tree and want that both of them grow together.



Community members, young people and CAMGEW after doing tree planting and teaching young people by doing tree planting in the forest

### CHALLENGES

1. There many domestic animals like goats in the forest. The presence of these animals disturbs the growth of planted trees and those growing naturally. More sensitizations need to be made to encourage community members to remove their animals from the forest. There is need to work closely with community leaders to come out clearly with action to solve this problem.
2. The forest is highly degraded. Many parts were formerly farmlands that were taken away from farmers. Some parts have earlier suffered from bushfires. More trees need to be planted in Nchiiy Community Forest.
3. The nature of roads was also a challenge. Given that it was in the rainy season, the forest roads were bad. The seedlings could not be transported using a car to the peripheries of the forest. CAMGEW team had to use motorcycle taxi for the transportation of tree seedlings from where the car could end to the forest. Many women could not also be involved because of the distance from the settlement of Mbockenghas-Oku.

### SUCCESS

1. The project was aimed at regenerating the Nchiiy Community Forests with 2000. CAMGEW ended up planting a total of 5.000 native tree species of 12 different varieties including *Prunus Africana*, *Carapas grandifolia*, *Nuxia congesta*, *Pittosporum mannii*, *Agauria salicifolia*, *Zyzigium staudtii*, *Croton macrostachyst*, *Maesa lanceolata*, *Schefflera abyssinica*, *Bridelia speciosa*, *Psychotria penducularis* and *Psydrax dunlapii*. Nchiiy community children learned much about these trees, their names, local names, importance, uses and their growth rates. The young people learned how to plant trees and why the planting site was chosen.
2. CAMGEW used a participatory approach in tree planting. Through this CAMGEW has seen increase community solidarity. Youths and community members after participating in tree planting have understood the importance of Nchiiy Community forest and the need for team spirit of community members to protect this forest. CAMGEW played a supervisory role in the process.
3. Through sensitization in the Oku Community Radio and Kumbo City Community Radio, many people are changing their mentalities. Some people are removing

goats from some parts in the forest. Community members especially those who took part in the regeneration process are now patrollers as they monitor the trees that they planted with CAMGEW supervision.

### TREE PLANTING CONCLUSION

The forest stakeholders were brought close together and they are realizing a need for a forest stakeholder platform. CAMGEW is thankful to the Rufford Foundation for providing funds to realize this activity. CAMGEW hopes to make this tree planting a yearly activity.

### RECOMMENDATIONS

- CAMGEW recommends that all domestic goats found in the forest be removed to permit the growth of planted trees and the natural regeneration of the forest. Goats eat up planted and natural seedlings of Prunus and other tree species. The goats prevent the natural regeneration process of the forest. The absence of goats from the forest will permit young seedlings to grow and increase their rate of survival.
- CAMGEW recommends sanction to the owners of goats living in the forest. General patrols needs to be carried out and goats found in the forest caught. The tradition is encouraged to get involved in the catching of goats. There is a zone with pasture at the top of the forest where they could keep their animals.
- CAMGEW see the need for a project on pasture improvement. This will encourage many community members rearing animals to confine their animals and reduces cases of domestic animals grazing in the forest and farms.

**Table 2: Statistics for CAMGEW tree planting activities from 2012 - 2015 in Kilum-Ijim Forest**

Year	Number of trees planted	Funding institution	Type of tree planted	Community forest (CF)
2012	7000	World Bank	Prunus africana	Emfve-mii CF - Oku
2013	6 600	PPI-FFEM (French-IUCN)-France	Prunus africana	Emfve-mii CF - Oku
2013	3 416	MINFOF- Cameroon	Prunus africana	Emfve-mii CF - Oku
2014	3000	Koning School through Both-ENDS-Netherlands	Variety of bee loving forest native trees	Nchiiy CF
2015	3000	PPI-FFEM (French-IUCN)-France	Prunus africana	Akeh CF - Ijim forest
2015	4500	PPI-FFEM (French-IUCN)-France	Prunus africana	Bikov CF
2015	6000	PPI-FFEM (French-IUCN)-France	Prunus Africana (3500) Native forest trees (2500)	Ajung CF - Ijim forest

2015	5000	Future In Our Hands UK/CAMGEW	Bee loving trees (some replaced dead planted trees)	Emfve-mii CF
2015	5000	Rufford Small Grants - UK/CAMGEW	Bee loving trees (some replaced dead planted trees)	Nchiiy CF

# SECTION II

## NURSERY DEVELOPMENT

CAMGEW developed a nursery using two types of nurseries: the bare root nursery and another type where tree seedlings are planted in polythene pots. This nursery has 3000 trees of various types nursed in pots and more than 25000 trees nursed using bareroot nursery directly on prepared beds. The trees that were nursed could not be ready for planting in June 2015 and CAMGEW got trees from her nursery in Manchok to plant with the Nchiiy community in their forest. These tree seedlings planted included *Prunus africana*, *Carapas grandifolia*, *Nuxia congesta*, *Pittosporum mannii*, *Agauria salicifolia*, *Zyzigium staudtii*, *Croton macrostachyst*, *Maesa lanceolata*, *Schefflera abyssinica*, *Bridelia speciosa*, *Psychotria penducularis* and *Psydrax dunlapii*. The children and community members while planting identified the trees as forest trees with their local names and scientific names.

CAMGEW nursed the following 14 types of trees in the nursery prepared with Rufford Foundation funds: *Prunus africana*, *Carapas grandifolia*, *Nuxia congesta*, *Pittosporum mannii*, *Agauria salicifolia*, *Zyzigium staudtii*, *Croton macrostachyst*, *Maesa lanceolata*, *Schefflera abyssinica*, *Bridelia speciosa*, *Psychotria penducularis*, *Newtonia camerunensis*, *Albizia gummifera*, *Polysias fulva* and *Psydrax dunlapii*.

Community children and adults have been taking care of the nursed trees and learning as the seedlings are growing. They weed the nursery and follow-up the growth of seedlings. The seedlings will be ready for planting by June 2016 and CAMGEW will need support to plant the trees in the forest. The nursery is developed with plank and a live fence is being developed too. The nursery fence has a life span of more than 10 years and so CAMGEW, children and community could continue using it for environment education.

CAMGEW also label the trees with the local names, scientific names and their uses. Children and community members have been learning about the forest trees in our presence and visiting the nursery to learn also in our absence. The nursery is open to the public and you can stand out of the nursery and learn. We are proud this is happening.



Left: Polythene pots prepared for tree nursing. Right: Beds prepared to apply manure and nurse trees



Children weeding the trees nursed on polythene pots



Children weeding bareroot nursery



Left: Bareroot nursery. Right: Nursery with trees on Pot



CAMGEW and children working on the nursery



CAMGEW project team and Community Leaders following up tree seeds nursed in pots



Children learning-by-doing



Children learning-by-doing



Children learning-by-doing



Community members take action to develop and follow-up the wellbeing of nursed trees



Community members take action to develop and follow-up the wellbeing of nursed trees

### **LABELLING OF NURSED TREES IN THE NURSERY**



The nursed trees have been labelled with scientific names, local names and the uses of the trees



Working on the nursery after labeling to maintain the wellbeing of the nursery

### **ENDANGERED TREE SPECIE OF NCHIIY COMMUNITY FOREST NURSED**

This tree called *Newtonia camerunensis* is endangered as classified by IUCN Redlist with less than 50 trees of seed bearing age remaining and they are out of the reserves. It is difficult to nurse and grow very slowly. It is only known to be in Kilum-Ijim forest area and parts of Dom Community forest in the NOrth West Region of Cameroon. This nurse seedlings are 5 months old. We can work hard to rescue this plant. We have about 500 nursed seedlings in our two nurseries.



CAMGEW has nursed *Newtonia camerunensis* trees

# SECTION III

## ENVIRONMENTAL EDUCATION

Children learned-by-doing in the nursery and in their forest. CAMGEW used the tree planting that was done together with children and community members to teach children how to plant trees and protect the forest. CAMGEW while in the forest made the children and community members know the problems that the forest was facing and the consequence of not protecting the forest. The children learned methods of preventing bushfires from the forest, methods of tackling bushfires, the harm caused by domestic animals in the forest and the way to tackle this problem, the danger of over hunting and cutting down of fresh wood from the forest for firewood and the reason for community members to own beehives in the forest. Ownership of beehives in the forest helps community prevent bushfire and should bushfire occur all of them will go up to the forest to put the fire off to protect their beehives. This was the first time many of them visited the forest.

In the nursery, children nursed tree seeds, planted seedlings in polythene pots, weeded the tree seedlings and learned about the types of trees, their scientific names, local names, their importance and uses. Government Primary School-Mbockeghas also visited the nursery with all pupils and teachers present. The pupils learned directly from the CAMGEW Environmental Education Officer the importance of the nursery, how set a nursery, collect seeds from the forest, nurse tree seeds and weed the nursery. The teachers who were part of this programme appreciated CAMGEW for developing the nursery in their community and said it will help them do demonstration on what they learn in class with children. **Government Primary School-Mbockeghas visited the nursery with 164 pupils and 6 teachers.**

Our environmental education has been in action as children nursed trees, planted in pots, weeded the nursery and watered the nursery. Our environmental education has been pragmatic. CAMGEW have had about 162 children and community been invited for nursery education this second session. More persons have visited the nursery in our absence.



Environmental education carried out in the CAMGEW nursery at Mbockeghas for Nchiy Community



Environmental education carried out in the CAMGEW nursery at Mbockeghas for Nchiiy Community



Environmental education carried out in the CAMGEW nursery at Mbockeghas for Nchiiy Community



School teacher of GS Mbockeghas learning about nursery development with the pupils



Environmental education carried out in the CAMGEW nursery at Mbockeghas for Nchiiy Community



Children learning-by-doing in nursery development and weeding



Children learning-by-doing in nursery development and weeding



Children learning-by-doing in nursery development and weeding



Children learning-by-doing in nursery development and weeding



Environmental education in action

# SECTION VI

## WAY FORWARD

CAMGEW still have some activities remaining in this project. The following activities still needs to be carried out to complete the project:

- Production of 300 copies of environmental education booklets from articles prepared by students in schools around Nchiiy Community Forest.
- Follow-up of nursed seedlings in the CAMGEW -Nchiiy Community nursery
- Follow-up planted trees in the forest
- Completion of environmental education activities.