



Cameroon Gender and Environment Watch (CAMGEW)



Empowered lives  
Resilient Nations

# KILUM-IJIM FOREST HONEY VALUE CHAIN DEVELOPMENT



Produced April 2020

# Cameroon Gender and Environment Watch (CAMGEW)

Act Locally, Think Globally



Mother Earth's Future in our Hands

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Cameroon Gender and  
Environment Watch (CAMGEW)



Ministry of Livestock, Fisheries  
and Animal Industries



Ministry of Environment, Nature Protection  
and Sustainable Development



Ministry of Forestry and Wildlife

# Acknowledgement

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## CAMGEW TEAM

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## Project Introduction

This project promoted the development of the honey value chain as a way to protect the Kilum-Ijim forest, create jobs and increase income especially for actors in the chain. The target group was women and youths. Women and youths were chosen to promote inclusiveness and take advantage of their numbers and energy to build entrepreneurs. Entrepreneurs are needed to think creatively and innovatively so as unblock Kilum-Ijim forest potentials for livelihood improvement in a sustainable way. The forest is a source of bee forage though threatened by bushfire. When community members engage in apiculture, they no longer burn the forest and should bushfire occur, they work in solidarity to put it off. The solidarity that has been built among bee farmers through organizing them into groups and cooperatives has made them work together and be available for each other in times of happiness, joy, difficult moments and sadness. Because bee farmers depend on the forest for honey that gives jobs and income they have to protect the forest from bushfire. Bee farmers become ambassadors of the forest and so do forest sensitization and bushfire prevention. When honey and honey by-products are converted to money and to basic community needs [like bees wax soap, powder soap, candles and honey juice, honey wine] the community then values the forest and protects it because it is the source of income and jobs. The major forest threat in Kilum-Ijim is bushfire. Bushfire destroy beehives and the forest. Community members are poor, unemployed and there is gender inequality. Youths and women are highly hit by poverty and unemployment.

CAMGEW then work on the principle of “Prevention which is better than cure”. When this is done **Forest = Honey = Jobs = Money = gender equality**

This project promoted inclusiveness by encouraging women and youths to take advantage of the opportunities in the honey value chain.

In many cases, community natural resources are moved to other areas at primary stage for transformation to basic needs while communities remain poor. They are paid less for their natural resources at primary stage and buy them expensively when transformed and brought back to them. The trainings on organized on transformation permitted communities to develop local industries and move towards self-reliant in meeting their basic needs. Powder soap, soap, candle, honey juice and honey wine are basic necessities for communities. Candles provide lighting for communities with electricity for children to study. Honey juice and wine is used in solidarity gatherings, celebrations and funerals. With the Cameroon Anglophone socio-political crisis drinks and detergents have grown expensive and unavailable as roads are blocked and businessmen afraid to move because of arm conflicts. Electricity is off for many days. Communities need new ways of survival so honey juice and wine, bees wax soap and powder soap and also bees wax candles become alternatives. CAMGEW was also conscious of the quality of the products and so did training on improving honey and bees wax qualities.

CAMGEW supported trained forest community members in Oku with basic needs like cooking oil in the place of paying transport because it was very risky moving with money in the conflict zone. Movement was restricted and this also affected communities who lacked basic needs.



## ABOUT KILUM-IJIM FOREST

Kilum-Ijim forest is in North West Region of Cameroon and it is part of Bamenda Highland Montane Forest. The forest produces Oku White Honey- certified as Geographic Indication Product which is cherished nationally and internationally. The forest covers 20.000 hectares with its peak at 3011m and a Crater lake called Lake Oku at 2500 m altitude. Kilum or Oku Mountain is the second highest mountain in Central and West Africa. It has a rich ecosystem with non-timber forest products like Oku White honey, stingless bee honey, mushrooms, medicinal plants, spices, brown honey (from forest peripheries), etc.

Oku White Honey is produced by trees like *Nuxia congesta*, *Prunus africana*, *Schefflera abyssinica*, *Schefflera manni*. Only 2 of these products are certified in Cameroon with the other being the Penja White pepper. Much bees wax is extracted from honey locally and sold without transformation. Kilum-Ijim forest area has a rich culture and is a touristic destination. Carving is highly practiced there.

The Kilum-Ijim forest hosts the first community forests in Cameroon. There are 18 community forests in Kilum-Ijim forest and a Plant Life Sanctuary around the Lake surrounding. The forest is the largest highland forest region remaining habitat for Bannermans turacco-a red feathered bird that is only found in the Bamenda Highland Region and is classified by IUCN Redlist as Endangered. The red feathers are used by notables in the forest region. The major threat to the forest is bushfire which destroy forest biodiversity and beehives which is a source of community livelihood.

Despite the availability of this rich forest with a huge potential to be unblock to benefit its people, the forest people still suffers from unemployment, high poverty, gender inequality and lack of basic facilities. There is lack of inclusiveness in the management and benefits from the forest.

Many forest resource exploitation is more masculine.

However, the area around Kilum-Ijim forest is one of the most densely populated in Cameroon: 300,000 people live within less than one walking day from the forests. There is indiscriminate harvesting of forest resources like *Prunus africana* (flagship species) and this has dramatically reduced important tree species' populations leading to reduction in community income sources. The forest is vulnerable to many threats such as encroachment, farmer-grazer conflict, deforestation and bushfires that endanger the ecological balance.

The engagement of the community Forest Management Institutions (FMIs) and population in biodiversity protection needs to be guaranteed through conservation actions and livelihood improvement opportunities. The development of beekeeping can reverse the trend by creating new sources of livelihoods for local communities. CAMGEW has been using apiculture as a tool to fight bushfire. CAMGEW builds capacity on beekeeping. When community members become bee farmers and own beehives in the forest they prevent bushfire and if bushfire occurs they directly put it off to protect their beehives. CAMGEW supports the bee farmers to improve the quality of their products and organize them into cooperatives to ensure a better sale and thus increase their revenue. CAMGEW also assist them look for a market in urban areas and internationally.

There are 18 community forests in Kilum-Ijim forest with 44 villages.

**Community forests in Kilum Forest:** Bihkov, Nchiyy, Mbai, Emfvemii, Kedjem mawes, Ijim and Upper shinga

**Community forests in Ijim Forest:** Juambum, Laikom, Ajung, Yatimuvco, Mbesa, Muteff, Abuh, Mbi, Anyafoma 5, Akeh 1 and Afua/djichami

# PRESENTATION OF CAMGEW

Cameroon Gender and Environment Watch (CAMGEW) is a not-for-profit organization created in October 2007 with authorization number N° 000998/RDA/JO6/BAPP to look for a solution to environmental and women's issues in Cameroon. CAMGEW works locally and thinks globally, integrating gender in solving environmental problems in Cameroon. CAMGEW's Vision is "A society free from poverty, gender inequality and unsustainable environmental practices". CAMGEW's Mission statement is "We do environmental protection by strengthening the capacity of community members especially women and young people in eco-businesses and forest regeneration for livelihood improvement in the Kilum-Ijim forest area".

CAMGEW from 2012 to 2019 planted 80.500 bee loving trees in the Kilum-Ijim forest. She has developed 3 tree nurseries with about 100.000 trees. CAMGEW has trained 1.388 bee farmers in honey production, honey and its product quality control and bees wax extraction. She has also distributed above 1.354 beehives to trained bee farmers and organized above 1200 bee farmers into 5 Oku White Honey cooperatives located around this forest. Women were allocated at least 30% and youths at least 30% of the positions in cooperative to encourage them in apiculture. CAMGEW created a CAMGEW-HONEYSHOP in Bamenda to convert bee farmers honey to money. The Honeyshop sales various honey, bees wax, candles, beesuits, bee smokers, honey wine, honey juice, bees wax soap and powder soap, body lotion, etc. 142 youths and women have been trained on entrepreneurship in honey value chain development. 74 youths and women trained on bees wax soap, powder soap and candle production and 42 youths and women were also trained on honey juice and honey wine production. CAMGEW has succeeded to create 2 Forest multi-stakeholder platforms[one in Oku and another in Nso for Bikov] to exchange ideas on forest issues and assist in decision making.

The 7 Forest Management Institutions (FMIs) in Kilum forest that manages community forest have been reorganized by CAMGEW and other stakeholders after more than 10 years that their terms of offices ended. 772 farmers have also been trained on agroforestry techniques. As of December 2018, about 1580 women had been trained on business skills and 1325 women received financial assistance in form of loans about US\$ 5500 monthly as alternative sources of livelihood to the forest. This served as forest microfinance for women. 24 teenage boys and girls had been trained on dress making, shoe making and hair dressing. 20 teenage girls have been trained on recycling plastics



and clothing's with African fabric waste to produce jewels, hand bags, belts, hand fans, hand purses, table mats, flower jars etc. More than 1476 women and girls have received counseling to help them make decisions and get out of the social challenges. Where necessary they were supported financially through CAMGEW microfinance scheme to better integrate in the society. 400 women were also enlightened on the right to legalization of marriage and 200 women on the mitigation measures to physical, psychological and economic violence. 78 teenage mothers had their capacity improved on nutrition for mother and child from locally available food stuff and 104 teenage girls trained on safe sex to reduce sexually transmitted diseases and unwanted pregnancies.

Bushfires reduced from above 7 in 2012 to zero in 2018 and 2019. In 2014, one bushfire alone destroyed more than 1000 hectares of the forest. In 2017, one bushfire occurred and more than 70 community members mainly bee farmers went to forest to tackle and only less than 5 hectare was destroyed. The more we train community members to become bee farmers the more bushfire is prevented and managed. No bee farmer want to see his/her beehive burnt so they prevent bushfire and so help in forest protection because **APICULTURE = JOBS = HONEY = MONEY = FOREST CONSERVATION**. CAMGEW-Honeyshop becomes a CLIMATE SMARTSHOP because it is an opportunity cost to forgone bushfire that cause climate change. The market for honey must be available to engage communities to protect forest.

CAMGEW believes that the future of our mother planet-earth is in the hands of men and women, young and old and also that this planet can be sustained by putting social and environmental justice at the centre of development.

## AWARDS

|   |   |
|---|---|
| • Gender Just Climate Solutions Award 2019 COP25 Madrid-SPAIN               | • CAMGEW shortlisted for 2020 Ashden Award-uk   |
| • UNDP Equator Prize Award 2019 New York-USA:                               | • National Energy Globe Award for 2018 AND 2019   |
| • UNIDO Prize Award May 2019 Rome-Italy on Agrofood and Biodiversity        | • Pan African Prize Award for Cameroon 2012 AND 2013 by Teach A Man To Fish - UK  |
| • World Bank Recognition 2012 for Work done on Kilum-Ijim Forest Governance | • <u>Cameroon National Award for Kilum-Ijim Forest Conservation, Poverty Alleviation and Development in Oku, 20 MAY 2014.</u> |
| • Recycling Heroes 2020 from Global Recycling Foundation                    | • CAMGEW-HONEYSHOP or NOWEFAM Award by FOMBILLION August 2018.  |
| • Guardian Post National Award 2019 Ebolowa-Cameroon                        |   |

## PLANNED UNDP PROJECT ACTIVITY

**Project title:** Developing the Honey Value Chain for Kilum-Ijim forest Conservation and Livelihood Improvement.

**Project number:** CMR/ERM-SGF/UNDP/19/12

**Budget for activities:** US\$ 19.945 or 11.762.500 FCFA

### PLANNED UNDP PROJECT ACTIVITY

\* Planting of 5000 trees in the Kilum-Ijim forest nursed with funds from Birdlife International through Critical Ecosystem Partnership Fund

- Forest monitoring against bushfire
- Carryout 1 training for 30 bee farmers on honey production
- Carryout 1 training for 30 bee farmers on bees wax extraction
- Provide 40 beehives to trained bee farmers
- Carryout 1 training for 30 bee farmers on quality control to reduce smoke from honey and bees wax
- Purchase of 7 refractometers for 6 honey cooperatives and CAMGEW-Honeyshop
- Carryout 2 training for 40 women/youths in the production of candles, detergents & soap from bees wax
- Carryout 2 training for 40 women and youths on honey juice and honey wine production from honey
- Provide these trained youths and women with material assistance
- Organised 2 trainings for 80 trained youths and women on entrepreneurship skills in honey value chain development



*Participant in Kilum forest receive Honey as start-up material for honey juice and wine production*



*Exhibition of Honey and Honey Products During the Agro-pastoral show in Bamenda by CAMGEW Honey shop*

# FOREST REGENERATION WITH NATIVE BEE LOVING TREE

5500 native bee loving trees planted in 3 community forest of Kilum-Ijim Forest



*Community members of Emfvemii in Kilum forest going for tree planting1*



*Building future nature lovers in Kilum forest regeneration*

Trees planted at Emfvemii, Mbai and Nchiiy Community forest

10 different types of bee loving native forest trees were planted



# FOREST REGENERATION WITH NATIVE BEE LOVING TREE

Forest users like bee farmers, firewood fetches, rat trappers and herbalists visit the forest on daily basis and update CAMGEW on the state of the forest daily

Forest users work closely with CAMGEW to maintain planted trees



*Community members of Nchiy in Kilum forest ready for tree planting*



*Female youths participate in forest regeneration*

Forest management Institutions chosen by community forests members do regular patrols. They work in partnership with CAMGEW

The forest is monitored by CAMGEW directly through weekly visits

# HONEY PRODUCTION

45 persons trained as  
bee farmers in Honey  
Production



*Team work during learning-by-doing in beehive construction training*



*Team work during learning-by-doing in beehive construction training*

## Sex

23 women trained  
22 Men trained

## Age

21 youths trained  
24 Adults trained



## HONEY PRODUCTION

86 local Beehives  
donated to  
trained Bee  
farmers



*Tatah Glory Bindeh Receive beehive from  
CAMGEW staff as start-up*



*Trained Participants with beehives donated*

86 persons trained in honey  
production and those in bees  
wax extraction received  
1 beehive each  
86 bee hives donated



# BUILDING ENTREPRENEURS IN HONEY VALUE CHAIN

89 persons trained  
on Entrepreneurship in  
honey value chain  
development



*Participants receiving training on entrepreneurship in Honey Value Chain*



*Participants receive training on entrepreneurship in Honey Value Chain*

## Sex

60 women trained  
29 Men trained

## Age

63 youths trained  
26 adults trained

# HONEY AND BEES WAX QUALITY CONTROL

33 persons trained on  
Honey and bees Wax  
quality control



*Demonstration on honey harvesting using modern methods*



*Participants trained on honey quality control*

## Sex

19 women trained

14 Men trained

## Age

14 Youths trained

19 Adults trained

# BEES WAX CANDLE PRODUCTION

89 persons trained on  
Bees Wax candle  
production



*Participants trained on candle production from bees wax*



*Participants trained on candle production from bees wax*

## Sex

60 women trained

29 Men trained

## Age

63 Youths trained

26 Adults trained



# BEES WAX EXTRACTION

41 persons trained  
on bees wax  
extraction

**NB:** Bees wax is extracted from Honey combs after honey is drained



*Sample of bees wax produced*



*Kilum forest bee farmers trained on bees wax production*

## Sex

22 Women trained

19 Men trained

## Age

15 Youths trained

26 Adults trained

# BEES WAX TRANSFORMATION TO SOAP AND POWDER SOAP

47 persons trained on bees wax soap and powder soap production



*Participants trained on bees wax soap production*



*Participants with samples of produced bees wax powder soap*

## Sex

38 Women trained

9 Men trained

## Age

39 Youths trained

18 Adults trained

# BEES WAX TRANSFORMATION TO SOAP AND POWDER SOAP

235 litres of kennel oil and 71kg of bees wax donated to 47 persons trained on soap and powder soap production



*Nayen Elizabeth from Oku receives start-up material for bees wax soap and powder soap production*



*Tatah Solange from oku receives start-up material for bees wax soap and powder soap production*

Each trained person received 1.5Kg of bees wax and 5 litres of kennel oil



# HONEY TRANSFORMATION TO HONEY JUICE AND HONEY WINE

42 Persons trained on  
honey Juice and Honey  
wine Production



*Participants tasting produced honey juice*



*Participants trained on Honey Juice and Honey wine production*

## Sex

22 Women trained

20 Men trained

## Age

24 Youths trained

18 Adults trained

# HONEY JUICE AND HONEY WINE PRODUCTION

210 Kg of honey donated to 42 persons trained on honey juice and honey wine production



*Yah Ernesta Yefon from Manchok village -Oku of Kilum forest receive Honey as start-up material for honey juice and wine production*



*Pa Christopher Ngoran of Vekovi village in Kilum forest receive Honey as start-up material for honey juice and wine production*

Each trained person received 5kg of honey  
Honey is the main ingredient in honey juice and honey wine production

# THE WAY FORWARD

To continue the development of the honey value chain, the following needs to be done:

## CONSERVATION

- Develop strategies to fight bushfire that destroy biodiversity and bee forage
- Develop native bee loving tree nursery to make trees available for planting
- Plant more native bee loving trees in the forest to increase bee forage
- Do more sensitization on the importance of bees and forest and on methods to save them

## CAPACITY BUILDING

- Train more bee farmers on honey production and bees wax extraction
- Train more young people and women on the transformation of honey to honey juice, honey wine and bees wax to soap, powder soap, body lotion, candles, etc
- Train more community members on entrepreneurship in honey value chain so that they develop various businesses in the sector
- Build capacity of community members to engage in the production of bee farming technologies/equipment like bee suits, bee smokers, honey drainers, bees wax extractors, multiplication of queen bees
- Build capacities of community members on harvesting of propolis, bee pollen, royal jelly and bee venom as

additional sources of livelihood

- Train more bee farmers and controllers on traceability and honey and bees wax quality control
- Capacity building on packaging and marketing of honey, bees wax and their transformed products
- Make available in the market honey equipment like refractometers, storage and packaging materials for honey and its products

## ORGANISATIONAL DEVELOPMENT

- Building of organizational strategic plan
- Staff capacity building in the honey value chain development
- Support our organization with office space
- Improve on our communication strategies
- Improve on our financial management system



**OKU WHITE HONEY**





*Community member going to mount beehives*



*Children learn how to plant trees as bee forage*



*Bees and flower*



*TREES IN KILUM-IJIM FOREST*



*Beehive production*



*Forest for water*

