



# CAMEROON GENDER AND ENVIRONMENT WATCH (CAMGEW)

Authorisation N<sup>o</sup>.000998/RDA/J06/BAPP

Tel: (237) 675184310/6 97037417

[www.camgew.org](http://www.camgew.org)

Email: [camgew@yahoo.com](mailto:camgew@yahoo.com); [camgew@gmail.com](mailto:camgew@gmail.com);

P.O. Box 17 Oku, North West Region – Cameroon

## TITLE

### DEVELOPING THE VALUE CHAIN OF OKU WHITE HONEY IN KILUM-IJIM FOREST FOR INCOME GENERATION AND JOB CREATION

Written by: *Wirsiy Emmanuel Binyuy* Email: [wirsiyemma@yahoo.com](mailto:wirsiyemma@yahoo.com)

**Position:** *Apiculture and Nature Conservation Campaigner*

**From:** *Cameroon Gender and Environment Watch (CAMGEW)*

#### A- PRESENTATION OF KILUM-IJIM FOREST

The Kilum Mountain Range and the Ijim Ridge are covered with a montane forest called Kilum-Ijim forest that is peculiar in producing Oku White Honey. The Kilum-Ijim forest is part of the Western Highlands of Cameroon called Bamenda Highlands forest. The Kilum Mountain is found in two tribes- Nso and Oku which are in Bui Administrative Division in the North West Region of Cameroon. The Ijim Ridge is found in the Kom tribe in Boyo Division of the North West Region of Cameroon. The area around the Kilum-Ijim Forest is one of the most densely populated parts of Cameroon. It is estimated that close to 300,000 people live within a day's walk to the forest.

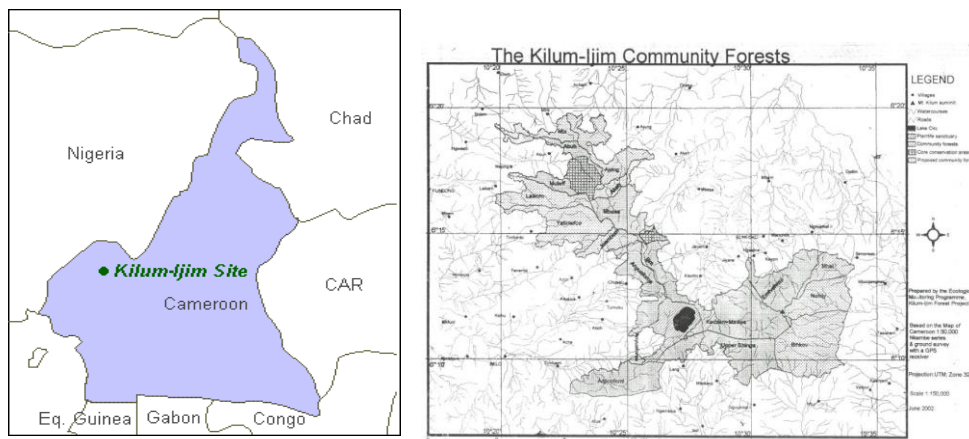


Fig 1: Position of Kilum-Ijim Forest in Cameroon

The Kilum-Ijim forest covers an area of 20.000 hectares. Mount Kilum has its peak at 3.011 m with a large crater lake at 2500m altitude along Cameroon volcanic line and the adjoining Ijim Ridge at 2.000-2.500m. The contiguous Kilum and Ijim Mountain Forests are located between latitude 6°0TN and 6°1TN and Longitude 10°20'E and 10°35'E. BirdLife International created the community forests and divided the Kilum- Ijim forest into 18 community forest. About 44 communities live in the Kilum-Ijim Community Forest. During the period 1987 to 2003 of project execution, there was forest regeneration, environmental education and training on alternative source of livelihoods like agroforestry and bee farming. The Kilum-Ijim forest has a natural setting with about 80% of the population based there made up of natives of Nso, Oku and Kom tribes, some of whom come in from close towns in these tribes to farm. The Kilum-Ijim region is known nationally for its traditional healers due to the many medicinal plants in the bio-diverse Kilum-Ijim forest. This population is attracted by rich volcanic soils and the near temperate climate that favours crop cultivation. Bee farming is practiced in the forest and Oku White Honey demand has increased after its certification as a Geographical Indication Product.

Kilum-Ijim forest has a rich ecosystem with non-timber forest products like honey, mushrooms, medicinal plants, alpine bamboos, wood for firewood and carving, spices, additives(colourings, preservatives and flavourings), etc but suffers from forest degradation due to animal encroachment, farming, poaching and unsustainable forest exploitation. Some trees in this forest that produces flowers collected by bees to produce Oku White Honey are *Nuxia congesta*, *prunus africana*, *Schefflera abyssinica*, etc. This forest is predominantly montane, in which trees are too small and inaccessible to be of interest to commercial loggers. These non-timber products could better serve the community and fight poverty if forest income generation activities are promoted and a workable benefit sharing mechanism put in place. The forest has a high potential to improve the living standards of forest people but this potential is under exploited or unblocked. Many forest people depend on these products for their livelihoods. These services and products cannot be available if the forest is destroyed. With a good forest ecosystem benefit-sharing mechanism put in place the living standards of the local people will improve and they will see the need to engage in forest ecosystem management. Environmental education is important to tackle forest degradation through behavioural change and to instil in young people the spirit to grow and participate in forest management. Protecting the forest will enable it to generate water, fresh air, serve as carbon sink, source of beneficial insects and protect

endangered species like *Bannerman's turaco* (an endemic and endangered bird only found in the Bamenda Highland Forest region with Kilum-Ijim having its largest remaining forest), etc all of which are indirect benefits to village dweller.

The Kilum-Ijim area presented a promising test case, with communities already using indigenous practices to manage the forest (Nurse *et al.*, 1994). The Kilum-Ijim Forest has had a long history of indigenous and traditional management. The societies around the Kilum-Ijim Forest, like those elsewhere in the North West Province of Cameroon, still operate on the basis of a traditional centralised political system (Thomas *et. al.*2001).The population uses the forest heavily to get a wide variety of products and services. Most water courses in the area originate from the forest. In addition, the forest has significant cultural and spiritual values to the local population. Community forest management in the Kilum-Ijim area has been enabled through the support of an institutional three-way partnership among the traditional authorities (represented by the Fon, Kwifon and village heads), the local communities (represented by user groups) and government. Traditional authorities would have the role of co-ordinating the activities of the user groups and of resolving conflicts between user groups or members of the same user group (Asanga, 2001). The government also plays this 2 coordination and conflict resolution role as well as the other key role of creating the enabling policy environment for community forestry through legislation and technical assistance.

## **B- PRESENTATION OF CAMGEW**

**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 gender issues in Cameroon. CAMGEW works locally and thinks globally, integrating gender in solving environmental problems in Cameroon. CAMGEW seeks to achieve its objectives based on its credo of Think Globally and Act Locally by liaising with other like minded organizations worldwide. **CAMGEW's Vision:** A society free from poverty, gender inequality and unsustainable environmental practices. **CAMGEW's Mission Statement:** 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's Global OBJECTIVE:** An inclusive and sustainably managed Kilum-Ijim forest through forest regeneration and agroforestry for eco-business.

### **CAMGEW'S SPECIFIC OBJECTIVES:**

- Local government actors supported and citizens' engagement promoted to ensure effective management of the Kilum-Ijim Forest.
- Eco-business operators in Kilum-Ijim Forest area master the techniques of production to produce good quality and sufficient quantity for the market.
- Eco-business operators have adequate capacity and have increased revenue through the commercialisation of their products.
- Women in Kilum-Ijim are empowered & participate in forest management & community development.
- CAMGEW will have developed projects and seek funds to handle challenges in the Kilum-Ijim area and develop a good system to manage funds.
- CAMGEW will work with like-minded organisations and people to share knowledge, experiences on forest local governance issues and learn from them.

**Area of Action:** Kilum-Ijim Forest and environs. **Opportunities:** Consultancy on Bee farming trainings, Agroforestry and Forest regeneration. Using of honey bi-products for the production of other products like wax, candles, and soaps. **Target GROUPS:** Forest users, Less privileged children and Peasant women. She offers: Agroforestry training, Bee farming training, Nursery development, Child development, Forest regeneration, Micro-credit schemes for women and Environmental education.

## **C- CAMGEW CONCRETE ACTION AND ACHIEVEMENTS IN OKU WHITE HONEY VALUE CHAIN DEVELOPMENT**

**Honey production:** From 2012 to 2018, CAMGEW planted 76000 bee loving trees in the Kilum-Ijim forest to increase bee forage. CAMGEW also developed 3 tree nurseries with about 90.000 bee loving trees. 960 Bee farmers have been trained in honey production and 755 beehives distributed to encourage trained bee farmers get started.

**Organization of bee farmers:** About 1000 bee farmers have been organized to 5 new Oku White Honey cooperatives around Kilum-Ijim forest. These newly created cooperatives have come to join the lone existing Oku Honey Cooperative based in Oku. Organizing bee farmers to cooperative ensure honey quantity and quality that favours the market.

**Quality control:** CAMGEW has organized 4 training sessions for bee farmers to develop a quality control or traceability systems, train bee farmers on postharvest handling of honey and honey products to increase honey and bees wax quality. About 36 bee farmers have been trained on traceability and 81 bee farmers on post harvest handling of honey and honey products.

**Honey marketing:** The created cooperatives are found in the rural areas around forest peripheries and this makes marketing of honey and honey products difficult. The honey and honey product market is found more in urban areas and abroad. CAMGEW decided to create a HONEYSHOP in a nearby town - Bamenda where she buys farmers' honey and sale in town.

CAMGEW is developing a rolling fund for the HONEYSHOP so that she can buy the honey and bees wax immediately as it is produced for the market. This will improve on bee farmers' livelihoods. CAMGEW HONEYSHOP serves like a liaison to supply honey and bees wax of good quality to other towns and abroad. Individual and organized institutions buy from CAMGEW HONEYSHOP to sale in other areas. The profit raise from the HONEYSHOP goes back to support CAMGEW conservation work. The HONEYSHOP has been able to sale honey close to US\$ 23000 and has just break even in April 2018 since her creation in March 2016. The long existing Oku White Honey Cooperative Society based in Oku has also gain grounds in marketing Oku White Honey and its products in Oku and supplying it to some buyers and supermarkets too. She produces between 13 to 17 tons of honey yearly. There are small groups of organized bee farmers that produce and market their products but the product quality is doubted because they lack skills and processing equipment.

**Cooperative Management:** Election are organized at each community and the executive members from different communities come together to elect the cooperative executive. The executive is trained on cooperative management, leadership, accountability and transparency. They receive training in theory and in practice through exchange visit with long existing Oku White Honey Cooperative based in Oku.

**Forest conservation:** CAMGEW has continued to build nature lovers through her bi-weekly forest radio programmes at the Oku Rural radio, school environmental education, forest and tree nursery visit education, social media sensitization, website publication, women microfinance, etc. CAMGEW does regular forest monitoring and fire tracing. Trained bee farmers own beehives in the forest and therefore do not burn the forest for fear to burn their beehives. When bushfire occur in the forest they help to manage it.

## **D- CERTIFICATION OF OKU WHITE HONEY**

Oku White Honey was certified as a Geographical Indication Product in 2013 under African Intellectual Property Organization (OAPI). This product is unique to Kilum-Ijim forest and is not produce anywhere else in the world. This is one of the two products certified under GI in Cameroon. The other product is Penja White Pepper. This certification is done to permit the products to compete in the global market, get higher demand and improve community livelihood. After certification of Oku White Honey in 2013, the honey price has been increasing as CAMGEW works in Kilum-Ijim forest.

In 2012, the Oku White Honey price was 2500FCFA per Kg; in 2013 it was 3500FCFA per Kg, in 2014 it was 4000FCFA per Kg and from 2017 till now 2018 the price is 4500FCFA per Kg. The price of this honey is increasing at different rates in different towns. The Kilum-Ijim White Honey Association (KIWHA) is the umbrella organization that controls the production of Oku

white honey and its products, its transportation and its marketing around the delimitation zone of Kilum/Ijim forest. About 30 tons of honey are produce yearly from the forest.

**Peculiarities of Oku White Honey:** The species of bees available in Kilum-IJim forest that produce this remarkable honey is called *Apis midlifera* adansoni. Oku White Honey Colour content is 9-17mm. The taste quality is flavoured flowery and the texture content is creamy white and lightly granular. The moisture content is between 18% and 20%. All these qualities make Oku White Honey unique. The forest vegetation, the altitude and climate also influence its quality.

## **E- CHALLENGES IN OKU WHITE HONEY VALUE CHAIN DEVELOPMENT**

### **➤ HONEY PRODUCTION**

**Bushfire in the forest:** Bushfire result from either slash-and-burn in surrounding farms, poor honey harvesting, cigarette smoking in forest or burning of vegetation by Fulani herdsmen in the dry season to get new vegetation when rains fall for their cattle. In the past, there were many bushfire in the forest. In 2012 when CAMGEW started working in this forest there were about 7 bushfire yearly but by 2018 we recorded only one bushfire that was stopped at the early stage thanks to forest community intervention.

**Bees abscond from hives:** Bees are trapped into beehives about 15 km from the forest in the valleys and transported to the forest. The valleys are warmer and the forest in the hill is colder. The transportation of bees to forest over long distances always leads to combs breaking. The broken combs are not removed and this cause bees to leave the hives after days back to the valleys. Bees also leave the hives after honey harvesting when harvesting is done wrongly or from July and August when there is little food in the forest. During this period trees like *Maesa lanceolata*, *Croton machrotachyst* and *Pittosporium manii* produce flowers but these trees have been cut to produce tools, make fences and/or for fuelwood. This discourages bee farmers and reduces honey production.

**Presence of goats and sheep in the forest:** There are many goats and sheep own by community members in the forest. These stray animals eat forest herbs and shrubs, young trees growing naturally and those planted. This deprives bees of forage.

**Presence of bee diseases and predators:** CAMGEW discovered that sometimes a bee colony is discovered dead in a beehive. We have not been able to know the reason for the death of bees. There are also predator birds that eat the bees and animals like Honey Barger that destabilises bee colonies and eat honey.

**Fewer youths and women are engaged in apiculture:** Cameroon population is more of young people full of energy. Women make up 51% of Cameroon population and so must be active in

any development activities. Youths and women are marginalised in Cameroon. They are not active in apiculture. There is need to engage them in apiculture.

**Climate change and Oku White Honey:** This year 2018, honey production drop due to variation in rainfall caused by climate change. The rains came earlier and caused the forest trees to produce more vegetation instead of flowers. The flowers that were produced could not last longer on the trees for bees to harvest. Nectar and pollen was washed from the flowers by continuous rain that never gave the bees the chance to harvest it. This caused a reduction in honey production of about 40-50%. Honey harvesting is done from April to May yearly which is heavy but every 2 years harvesting could be done twice in March because of *Nuxia congesta* flowering. It is difficult to predict when rains will start falling. Sometimes the rains come a little late or early but gentle and honey production will be good and sometimes the rains come early and heavy and there is reduction in honey production.

### ➤ HONEY QUALITY

**Packaging and storage containers of honey:** In Cameroon, there are problems of getting good packaging and storage containers. In most cases, farmers and honey sellers use containers that have been used. Sometimes they do not care what the containers were used for before. We promote the use of containers that were earlier used to store or package edible items but we prefer the use of new containers in honey storage and packaging. The quality of honey is highest in new containers. CAMGEW use new containers in honey packaging but they are more expensive.

**Hygiene and sanitation improved:** Honey and its product are sometimes poor in quality because of its poor handling from harvesting, draining, storage and packaging. There is need for more training on hygiene and sanitation with focus on honey and its products handling. CAMGEW loose a partner MANE – France who was buying bees wax from us at 1.5 times the local price because the bees wax we got from farmers had much smoke. The partner paid for a training that was done by Guiding Hope – Cameroon to train bee farmers on how to reduce or avoid smoke in honey and bees wax. This was to ensure sustainability in bees wax supply but not all bee farmers were trained and the process is still ongoing.

**Control system:** There is need for an effective control or traceability system to be put in place to ensure honey and its products quality. The Geographical Indication Certification has a developed control system. The controllers have been trained under Kilum-Ijim White Honey Association (KIWHA) but their work is not felt on the ground because of lack of good coordination and finance to support their activities. Members of KIWHA (bee farmers, cooperatives and controllers) were again trained on organic certification procedure by International Centre of Insect Physiology and Ecology (ICIPE) in Oku in 2016. We need now to match training with action on the field.

## ➤ HONEY MARKETING

**Differentiation of the actors in the value chain:** The value chain for Oku White Honey is not clear. Many farmers and institutions are involved in the production, transformation and marketing of the honey. This makes specialisation to be absent. Everyone seems to do everything in the chain. This is also affecting the quality and quantity of honey and its products. Much time is wasted. Less jobs are created.

**Labelling of honey:** There are problems with honey labelling. Most package honey is never labelled. When the honey is even labelled, it lack specification on the quantity, source, composition and name. The labels are never attractive and this reduces its marketing as compared to imported honey.

**Information available:** It is difficult to get information on the quantity of honey or honey product available. There are fewer events for honey exhibition. There are small producers, buyers and sellers of honey and honey products. It is difficult to get organise and bring these buyers and sellers together to make a big business deal. The information about them is lacking.

**Farmers are not yet convinced on the power of numbers:** Many farmers still work on individual basis. It becomes impossible to ensure the quality and quantity for the market. There is need for them to work under the cooperative.

## WAY FORWARD

- There is need for more specialised trainings on various aspects of apiculture and Oku White Honey Value Chain development.
- Honey storage and packaging materials need to be made available in the market
- Youths and women needs to be encourage to do apiculture
- There is need to promote research on the value chain development especially on reasons why bees leave hives in the forest, the dead of bees, diseases of bees, multiplication of bee colonies, etc
- There is need to promote specialisation of actors in the Oku White Honey value chain development
- Make information available on the Oku White Honey Value Chain
- There is need for technical and financial support the putting in place of a traceability or control system for Oku White Honey.



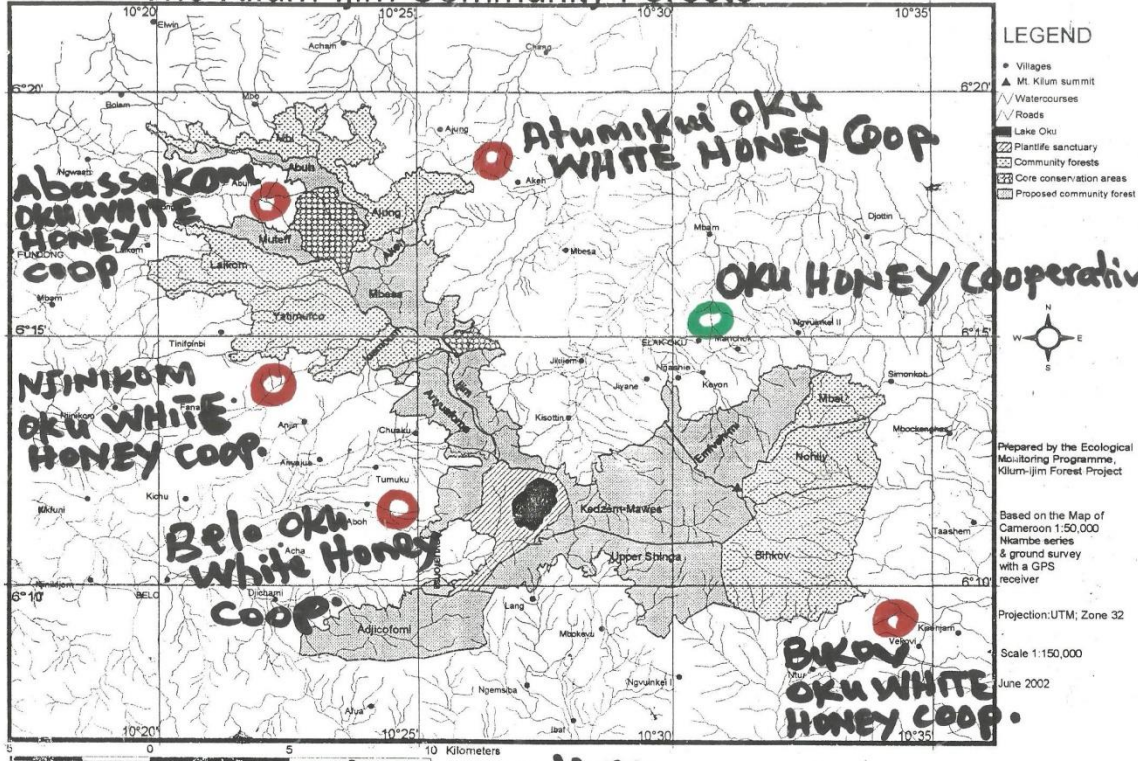
## LITERATURE CITED

Asanga, C. 2001 Facilitating Viable Partnerships in Community Forest Management in Cameroon: The case of the Kilum-Ijim Mountain Forest Area. In: Wollenberg, E., Edmunds, D., Buck, L., Fox, J. and Brodt, S. (eds.) *Social Learning in Community Forests*, 21-44. CIFOR/East-West Center.

**Thomas, D., Gardner, A. and DeMarco, J.** 2001 Devolution of Decision-making: Lessons from Community Forest Management at the Kilum-Ijim Forest Project, Cameroon. In: Jeffery, R. and Vira, B. (eds.) *Conflict and Co-operation in Participatory Natural Resource Management*, 189-203. Global issues series

**Nurse, M. C., McKay, C. R., Young, J.B. and Asanga, C.A.** 1994. *Biodiversity conservation through community forestry, in the Montane forests of Cameroon*. Paper presented in BirdLife International XXI World Conference: Global partnership for Bird Conservation, Rosenheim, Germany, 12-18 August 1994. ODI Rural Development Forestry Network Paper No. 18d

# The Kilum-Ijim Community Forests



**KEY**    ○ = Created Cooperatives  
○ = Existing Cooperative