

# Joint Management of Shared Resources, Issues and Conflicts of the Nso and Oku Tribes in the Ngongbaa Montane Forest Area, NWR of Cameroon

Jean-Louis Tatah<sup>1</sup>, Elvis Kah<sup>2\*</sup>

<sup>1</sup>Department of Geography, Faculty of Arts, Letters and Social Sciences, University of Yaounde I, Yaounde, Cameroon

<sup>2</sup>School of Geology and Mining Engineering, University of Ngaoundere, Ngaoundere, Cameroon

Email: bandzem@yahoo.ca, \*kah\_elvis@yahoo.fr, \*elvis18289@alumni.itc.nl

**How to cite this paper:** Tatah, J.-L. and Kah, E. (2024) Joint Management of Shared Resources, Issues and Conflicts of the Nso and Oku Tribes in the Ngongbaa Montane Forest Area, NWR of Cameroon. *Natural Resources*, 15, 149-172.

<https://doi.org/10.4236/nr.2024.156011>

**Received:** April 15, 2024

**Accepted:** June 25, 2024

**Published:** June 28, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Wherever people live together in or near homelands that harbour joint natural resources such as forest, water, minerals, oil etc., they must collaborate, co-exist and share these resources irrespective of their genetic, social, cultural, and political peculiarities. This is not always the case when self-interest, ethnic divisions, elitist politics, economic interest and power tussle set in. The Nso and Oku people who reside in the Ngongbaa Forest area constitute an example of joint management of resources where at one period, their relationship over the management of the Oku Mountain Forest was cordial and at another, the relationship became conflictive. This study was designed to study the influence of the KIFP forest management policies on the Nso indigenous forest Management system in Ngongbaa Forest, and its implications. The data collected for the study was secured through the administration of a questionnaire to residents of 10 villages adjacent to the Ngongbaa Forest, and forest users who carried out livelihood activities there between 1963 and 2015. These forest user groups include beekeepers, rat trappers, grazers, mushroom gatherers, ground honey/tree honey harvesters, carvers, etc. The investigation also extended to the traditional leaders of Nso and Oku who are in charge of the land tenure systems. The findings show that the Oku Mountain Forest is jointly owned by the Nso and Oku people. The Nso own the eastern half of the forest known as Ngongbaa Forest while the Oku own the western half, known as the Kilum Forest. The cordial relationship that existed between these people ensured the conservation of the forest. But the conflicts that later set in, especially due to the creation of the Kilum Mountain Forest Project in 1987 later changed to the Kilum Ijim Forest Project (KIFP) in 1992

sidelined the local communities which was contrary to the dispositions of the new Cameroon forest law enacted in 1994. Thus, the indigenous conservation practices became ignored which the local population never digested well. This seriously jeopardized the wellbeing of the forest in general.

## Keywords

Conflict, Joint Management, Shared Resources, Ngongbaa, Kilum, Conservation

---

## 1. Introduction

Local communities often constitute the focal point whenever the implementation of natural resource management policy is concerned. This is due to the important position they occupy vis-à-vis the resources in question. But Governments, especially in countries with a past colonial history, have often side-lined their involvement in the process of natural resource management following external influences. This exclusionary approach pursued through the creation of protected areas or state-managed areas has orchestrated the seizure of native lands, sacred forests and communal land from the local communities [1].

Such a policy had enormous ramifications in the Ngongbaa montane forest in Bui Division of the North West Region of Cameroon. The main focus of this study is that there is an overlap of interests and activities emerging from the first occupants of the land versus Government superimposition. Due to local practices and needs, there is however frustration on the part of the local communities. Government's action of creating protected areas in previously owned-up forests or family forests (also known as sacred forests), however, offsets local attachment to their milieu which cannot guarantee any meaningful conservation practices by the local communities. To this effect, the main consequence has been the degradation of resources in the montane forest under study [2].

The policy of creating protected areas that emanated from the colonial administration can be viewed as a policy of alienation where it was believed that the indigenes had no interest in forests since the only lands, which were not vacant consisted of their farms and plantations. This is because one cannot explain scientifically the spiritual importance of these forests to the people as the scope of reasoning of the colonial masters was limited only to economic interest [3].

Drawing from the French colonial masters whose interest was to entrench the interest of the state in resource management; the independent government of Cameroon adopted its first land legislation (Ordinance No. 61-OF-14) on the 16<sup>th</sup> of November 1961 which was successively amended in 1963 and 1968 which brought about the concept of "National Lands" which undoubtedly is a euphemism for vacant land. These laws were a progressive and sure institutionalization of state monopoly in natural resources management and the relegation of the

local communities to the background [4].

Under the British, all land legislation laws enacted in Nigeria were the ones in application in British Cameroon. As time went on, the United Republic of Cameroon enacted the 1973 Forestry Law (Law No. 73/18 of 22 May 1973 and its Decree of application No. 74/351 of 17<sup>th</sup> August 1974) [5]. This law represented the first national endeavour to provide an integrated normative and institutional framework for forest tenure. Thus, President Amadou Ahidjo—President of the United Republic of Cameroon at the time said “*l'avènement de la République Unie du Cameroun nous donne l'occasion de réadapter et d'harmoniser les réglementations forestières, jadis en vigueur dans les Etats Fédérés*”. Speaking on behalf of the state's economic interest, the main objective of the 1973 law depended on what the former president further said “*la rationalization de nos ressources forestières*” [6]. Unfortunately, the law only ceded “secondary” forest produce to the local communities which could not be exercised in totally protected areas. Sections 18, 19 and 20 of the 1973 Law stipulated that all naturally growing trees belonged to the state and could only be harvested after due authorization by the Minister of Agriculture [7].

This law soon became outmoded and was replaced by a new one in 1981 (Law No. 81/13 of November 1981 and its Decree of application No. 83/961 of 12<sup>th</sup> April 1983). Though no measure changes were effected, limited powers were given to local communities to be exercised in some vacant lands and not with the protected areas. Thus at the dawn of the 1980s, the level of rapprochement towards local communities was still timid as one cannot pretend to accept the fact that some local communities had sent motions of support to President Ahidjo in recognition of their cultural links with nature. This law was still found inadequate in addressing the problems its promulgation had intended to solve and so was subjected to review. In the follow-up of the Rio Resolutions and the convention related to the forest sector, these issues had to be taken into account. Thus, the Forestry, Wildlife and Fisheries law, an outcome of these reflections, came into being in 1994 (Law No.94/01 of 20 January 1994) with its Decree of application No. 95/531 of August 1995 which brought about the concept of Community Forestry. The 1994 Forestry Law sparked off another heated debate as government circles asserted that local communities concerns have actually been taken care of but we will be categorical to state here that this law (the one in application today) simply reinforced the conception of the state as the ultimate owner of national forests. This is illustrated by the classification it affected and initiated the problematic community forest [8].

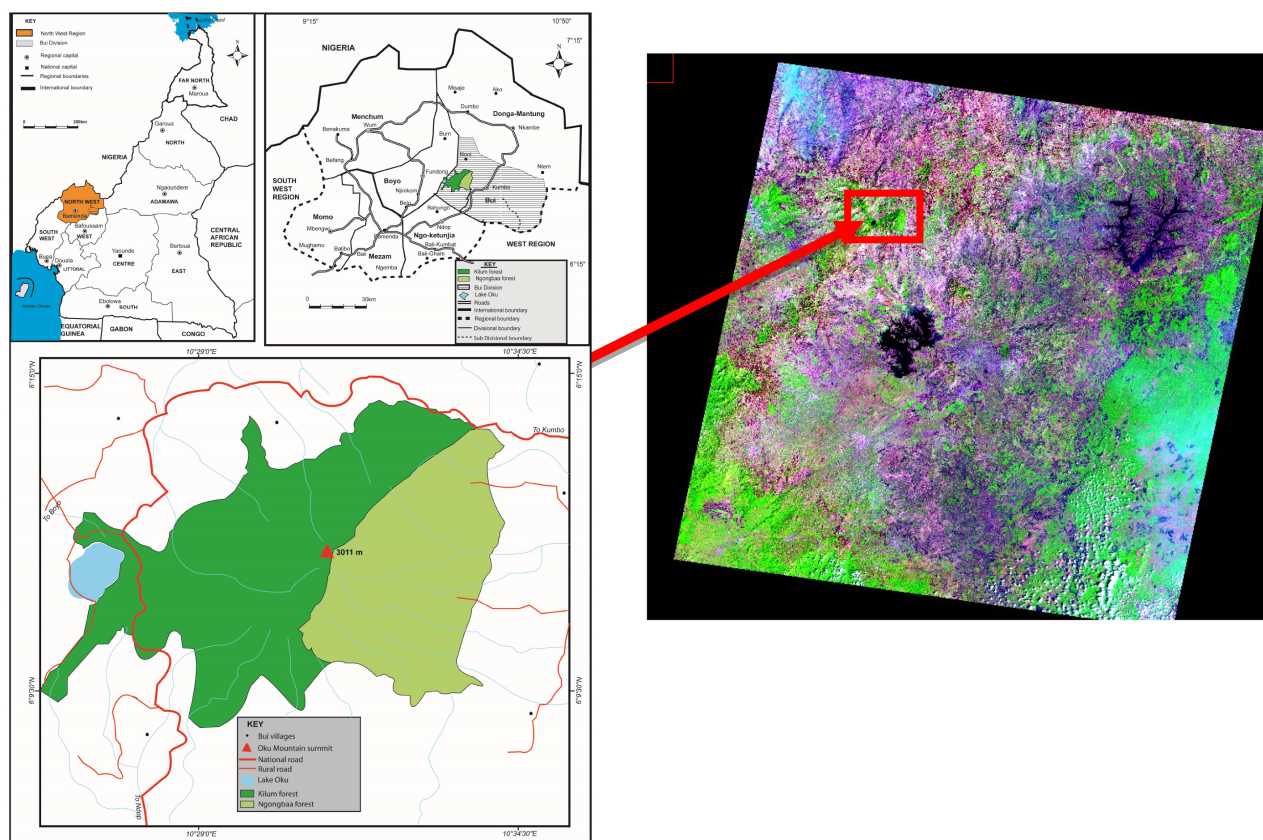
This study aims at raising the issues and conflicts plaguing the smooth management of the Ngongbaa Montane forest as it constituted part of the Kilum Ijim Forest Project (KIFP) when it was created. A joint property of the Nso and Oku tribes in the North West Region of Cameroon, the creation of KIFP rather brought about bias and animosity between these two tribes as their specific concerns and traditional practices in the forest that hitherto existed were not taken into consideration. It should be noted that this forest is a host to some rare and endangered

fauna and flora species in Cameroon with some having cultural and medicinal value that the local population has a lot of attachment to them. Their location in a mountain area (Mount Oku, 3011 m of altitude) that is second to Mount Cameroon, enables one to imagine their importance to the local population.

## 2. Materials and Methods

### 2.1. The Study Area

The Ngongbaa and Kilum Forests are located on the west of Bui Division in the Bamenda Highlands of Cameroon. Ngongbaa Forest known locally as Ngongbaa Kov is located on the east-facing slopes of Mount Oku between latitudes  $N6^{\circ}11'$  and  $N6^{\circ}14'$  north of the equator and between longitudes  $E 10^{\circ}31'$  and  $E 10^{\circ}35'50''$  east of the Greenwich meridian. The Kilum (Oku section of the Oku Mountain Forest) is found on the western half of the Mountain between latitude  $6^{\circ}10'0''N$  and  $N 6^{\circ}14'0''N$ . of the Equator and between longitudes  $10^{\circ}28'0''E$  and  $10^{\circ}34'0''$  east of the Greenwich meridian as depicted on **Figure 1**. The Ngongbaa Forest parallels the Kilum Forest and from their lower slopes, they culminate to their common summit at (3011 m). According to Banadzem (2008) and Shey Ghanghanin (2012), the Ngongbaa Forest covers a surface area of about 3234 hectares. From the map of Nkambe 32-XVII, and LANDSAT Image of 1988, Geo



**Figure 1.** Location of the Ngongbaa and Kilum forest and in the Landsat image scene. Source: National institute of Cartography, LANDSAT Image 2019 and GPS data.



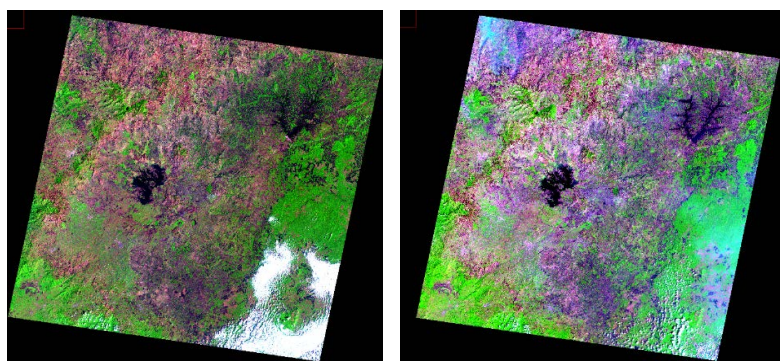
Image 2015 and Google Image 2015, the Ngongbaa Forest covers a surface area of 2977.6 hectares while the Kilum section extends for 5150.3 hectares, making a total surface area of 8127.9 remnant Oku montane forest.

## 2.2. Materials

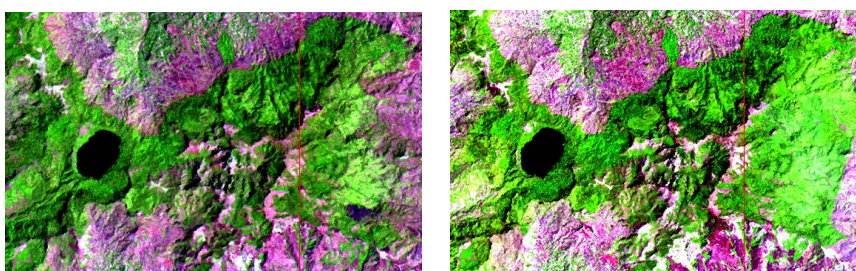
Socio-economic and pluviometry data were treated with descriptive and differential statistical methods using Excel and Word softwares. The GPS (of the Garmin receiver) was used and data from LANDSAT Images were treated to produce polygons, shapefiles and maps of the Ngongbaa and Kilum forest using ENVI and ArcGIS softwares. MapSource software was used to download GPS data for further projection on the geo-referenced map of the study area. The data collected was analysed with Microsoft Excel sheet and presented in the form of tables, maps and photographs.

To evaluate land-cover change over time due to the conflicts, recourse was on the processing of satellite images. This consisted of the superposition of many information layers with ENVI and ArcGIS softwares [9]. The data needed for this were as follows;

- Landsat satellite images of OLI (Landsat 8) of 2019 and Landsat 4 (ETM) of 1988. They were downloaded from the Internet on which different processing techniques were applied to obtain land cover of the two periods as **Figure 2** and **Figure 3** show the two scenes of the images and the extracted study area respectively.



**Figure 2.** Scene p186r56\_4t880202\_z32\_RGB.tif Scene L72186056\_05620190116\_B70.L1G.



**Figure 3.** Extracted study area from the Landsat scenes.

The choice of Landsat satellite images is that, being of multi-spectral bands, the Landsat multispectral radiometer has spectral bands that stretch from the visible to mid-infrared. Added to that the recent development has two supplementary bands that are added to Landsat 8 which is mostly destined to atmospheric correction (blue band at 440 m) and cloud detection (1380 m). Added to this Landsat image has a band of Quality Assessment (QA) where each pixel contains a decimal value. If this value is transformed to a binary number of 16 bits, one is able to detect some details on the surface, sub-surface and the atmosphere of the earth [10].

- GPS eTrex 10 with a precision level of 3 m with which precise location of some phenomena were done in the field;
- A computer whose characteristics could enable the handling of Remote Sensing and GIS processing of data. Thus, this mostly concerned the RAM which is 4 GB, capacity of 500 GB of the hard disc;
- Topographic map of Bafoussam at scale of 1/200,000 obtained from the National Institute of Cartography which served in orientation;
- Remote Sensing software (ENVI) where the processing of the Landsat images were carried out;
- Official Vector files for Cameroon obtained from the National Institute of Cartography which served in the location and delimitation of the study area;
- GIS software (ArcGIS), where geo-referenced shapefiles for Cameroon were treated and the samples projected.

### 2.3. Methods and Techniques

Most scientific research in the social sciences today incorporates both the deductive and inductive methods. This is important in the sense that the deductive methods stem from the intrinsic imagination of the researcher while the inductive methods demonstrate the ability of the research to handle certain procedures in data treatment and analysis. In this study, the deductive method was characterised by fieldwork for observation that led to a detailed description of the phenomena while the inductive method saw the acquisition of remotely sensed data, processing and analysis. Thus, this depended on data collection, selection and categorization, data treatment and data interpretation [11].

#### 2.3.1. Data Collection

This study depended on both primary and secondary sources of data. The data for this study was collected in 10 villages that were grouped according to community forest area which include Simonkov, Fonmboh, Mbontovi, Buh, Tadu, Mbonyar Taashem, Vekovi, and Ntur (**Table 1**). Sample sizes were determined for each village from where a set questionnaire was administered to the sampled population. Furthermore, interviews, observations, and focus group discussions were also organised. The administration of the questionnaire was done systematically and randomly to 10% of the 1835 total household population of the

area [12]. For effective coverage and a representative data collection, one questionnaire was administered in every tenth household until the sample intervals were completed. 43% of respondents who were not interviewed stemmed from the absence of respondents or refusal to respond to questions.

**Table 1.** Households respondents in the 12 villages of Ngongbaa Forest area.

Community Forest area	Name of Village	No. of Households 1987	10% of 1987 Household Respondents	No. of Effective Respondents
Bihkov	Ntur	38	4	4
	Vekovi	662	66	45
	Wvem	290	29	22
	Taashem	16	2	2
	Shuukov	15	2	2
	Kai	20	2	2
Mbai	Fonmboh (Tankiy)	17	2	2
	Tadu	245	25	18
	Simonkov	145	15	10
	Buh	278	28	23
	Mbontovi	49	5	5
Nchiyy	Mbonyar	60	6	6
<b>Total</b>		<b>1835</b>	<b>184</b>	<b>141</b>

Source: BUCREP and Fieldwork, 2010.

The first phase of the fieldwork consisted of collecting geographic coordinates, taking photographs, observing land use patterns, degree of forest degradation and important flora and fauna species in the forest. The activities that constituted the fieldwork were identifying sampled interested features and registering them with the GPS, doing an in-situ macroscopic description ie doing geographical, structural, topographic and vegetative description in the study area.

The research team also administered the questionnaire to the stakeholders of Ngongbaa area which included administrative authorities, traditional authorities locally referred to as ShuFaay some *village heads, faays, ashuufaay, manjong group leaders, forest management groups, Forest Management Officers (FMOs), former-workers of the defunct Kilum Mountain Forest Project (KMFP)*. All these stakeholders were subjected to both questionnaire administration and semi structured interviews. These also took into consideration representatives of Oku immigrants resident in the study area, Forestry authorities in Bui Division and

others in order to better understand how the policies of KMFP and KIFP were implemented in Ngongbaa area. Forest users such as beekeepers, carvers, hunters, mushroom harvesters, and wild honey harvesters who carry out livelihood activities in the forest were not left out with semi structured interviews. Information was also procured through personal communication (pers.com.) from informants identified to possess specific information. Focus group discussions were done with members of three community forest groups of the Ngongbaa Forest area which included Bihkov, Mbai and Nchiyy. We also carried out overt (participant) observation and guided visits to the forest and conflict villages.

### **2.3.2. Data Treatment and Analysis**

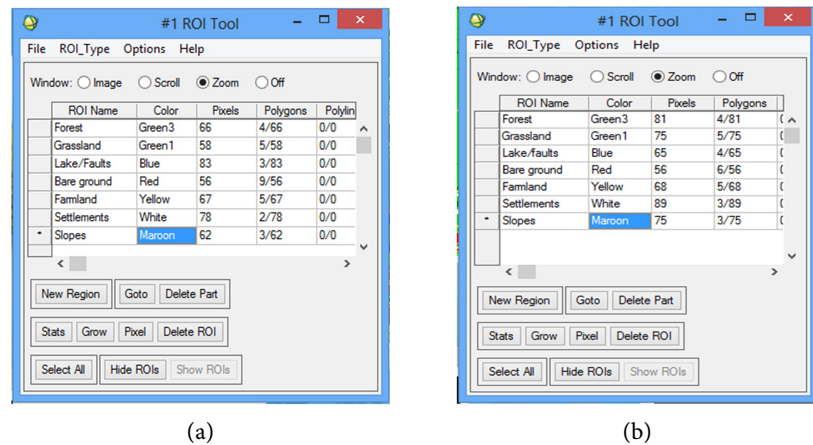
Socio-economic and pluviometry data were treated with descriptive and differential statistical methods using Excel and Word softwares. The GPS (of the Garmin receiver) was used and data from LANDSAT Images were treated to produce polygons, shapefiles and maps of the Ngongbaa and Kilum forest using ENVI and ArcGIS softwares. MapSource software was used to download GPS data for further projection on the geo-referenced map of the study area. The data collected was analysed with Microsoft Excel sheet and presented in the form of tables, maps and photographs.

From the source of the Landsat image, it was already geo-referenced. To this effect, the first operation on it was colour composition or band combination which was then followed by sub-setting to obtain just the section covering the study area. It should be noted that each Landsat image corresponds to a specific spectral band in which the image is acquired. The variety of Landsat bands provides many choices to realize band combination.

To pre-treat the images, and given the fact that Landsat image has 7 bands, a band combination was determined at 5, 4, and 3 bands. This combination provides a coloured image. Geometrically, the scene was resized to extract the zone of interest at the size of  $565 \times 357$  pixels that covers the study area, giving a total surface area of  $163.8 \text{ km}^2$ . The image was then opened in ArcGIS software and following the projection system that Cameroon conforms to (UTM WGS 84, zone 32 North), the sample classes located with GPS during fieldwork were projected in order to determine their spectral behaviour for proper classification. This then acted as a guide to the image interpretation and determine the rest of the classes present in the study area [13].

After effectuating unsupervised classification to determine the number of classes that make up the image, sampling was done. This sampling did not take into consideration all the classes as revealed by the unsupervised classification. In this case, we took into consideration 7 classes which were Forest, grassland, settlement, bare ground, water surfaces, farmland, and slopes which were guided by fieldwork as illustrated in **Figure 4**. This was followed by post classification to obtain the statistics for each class.





**Figure 4.** Sampled classes in the treatment process for 1988 (a) and 2019 (b).

### 3. Results

#### 3.1. Genesis of the Issues and Conflicts in the Ngongbaa Montane Forest

Field investigations revealed that there are two main groups of people who depend on the Ngongbaa and Kilum forests for their livelihoods, the semi-Bantu clans (Nso and Oku) and the exogenous nomadic Fulani (Mbororo) herdsmen of the Jaffren tribe [14]. These two groups of people who originated from the ancient Sudanese kingdom of Bornu, (Rifem), settled as far back as the 9<sup>th</sup> millennium. Oral and literary history indicates that the Nso, Oku and Mbiame people were once an integral part of the Nso Fondom. Later on, a conflict erupted in the royal family in Kimbo where one of the princes who committed an act of felony in the 19th century was obliged to leave and later founded the Oku Fondom. The separation of the Nso, Mbiame and Oku can be attributed to a succession conflict that resulted in the breakaway of three princes in 1892 that founded the Fondoms of Oku and Mbiame [15]. When the Mbiame people left Nso, they migrated east to Kovkinkar, while the Oku went west. After several stops, the Oku people finally settled at Bô, a locality in the north of the present Oku village. After several relocations from this site, the Oku people finally settled at the present site of Elak.

The settlement of people on the slopes of the Oku Mountain in general, and the Ngongbaa Forests in particular dates back to the periods of Bani (Fulani) raids, tribal wars of conquest and German expeditions in the Bamenda Grassfields which forced people to seek refuge in inaccessible areas particularly in forests. Later on, the search for new space and family conflicts obliged some people from large family groupings in Nso such as the *Ndzeendev*, *Yuuwar*, *Tsenla*, Nso palace and Mbiame palaces etc. to migrate west and settled on the slopes of the Oku Mountain where they established farmsteads that developed into villages. From the Oku traditional administrative capital at Elak, Oku has developed from the exploitation of resources on the slopes of the Oku Mountain into villages and what is now referred to as Oku Subdivision [16].

The Mbororo of the Jeffren tribe entered the Ngongbaa and Kilum sides of the Oku Mountain during the late 19<sup>th</sup> Century when the whole of the Bamenda Highlands was affected by the Fulani raids from the north and west. Later on with agreement with the Fon of Nso, the Mbororos settled on the Bansa Plateau (Nkum and Mbiame Hills), on the hills of Banten and Jakiri, Simonkov, Mbo-nyar, Tadu, Vekovi and Ntur). By the late 1920s the Mbororo overcame the obstacles posed by the rugged relief and with agreement with the Fon of Oku, they acquired grazing land on the Oku Mountain. Due to pressure on land for the Mbororos, their animals have been confined in the grassland enclaves (hilltops) including Kilum hill.

To sustain this blood and fraternal relationship, the Nso and the Oku people built a partnership that was based on mutual trust and respect for traditions and land tenure system established in their respective fondoms, through a joint management system called *Tehjav*, meaning hunt and share in Lamnso (Nso Language). The *Tehjav* practice enabled forest users to gather at the Nso-Oku forest boundary at a compartment called *Tehjav*. After they harvest forest products they gather them in a hut where they combine their harvests (especially game products) and share equally amongst themselves. In 1987, the Kilum Mountain Forest Project (KIFP) which later became known as the Kilum Ijim Forest Project (KIFP) in 1992 was created to conserve the Oku Mountain Forest which Ngongbaa is an integral part. This project replaced the Nso and Oku indigenous management systems and successfully conserved the Ngongbaa and the neighbouring Kilum Forest. However, some aspects of its policies alienated local community rights over forest resources. This resulted in many stakeholders' conflicts including the Nso-Oku land dispute that are inhibiting the smooth functioning of the whole frame of conservation in Ngongbaa Forest area [17].

### 3.2. The Nso Land Tenure and the Joint Management Systems (*Tehjav*) in Ngongbaa Forest

The land tenure system defines policies pertaining to the management of natural resources. The Nso people, just like any other indigenous societies in Cameroon have developed over several centuries an effective land tenure system that defined the way land, forest and other landed resources are managed. The control, use, and distribution of landed resources like forest, water, and soil in Ngongbaa Forest area have a proportional relationship with the land tenure system. The system of land tenure and the traditional set up is such that the land is owned by the popular saying "*Nsai Dze nsai fon wun nwerong*" meaning, the land belongs to the Fon of Nso and Nwerong secret society." The Fon and the *nwerong* are the custodians of the land on behalf of the entire Nso society, ancestors, and posterity. In this practice, the Fon of Nso is regarded as the overall landlord. However, the daily distribution and control is in the hands of landlords known as "*ataangven*". Landlords hold land as the custodians on behalf of the Fon of Nso and *nwerong* society. The landlords control and distribute land to the community members for collective interest and collect tributes from users. The

Joint management system established in Ngongbaa Forest by the Nso and Oku forest users falls within the framework of the Nso Land tenure system.

From oral sources in the study area, the concept of joint management is not new in the Oku Mountain forest. To sustain the blood and fraternal relationship between the Nso and Oku people, they established a management system called *Tehjav*, which literally means, “Hunt and share in Lamnso”. *Tehjav* was a joint management system wherein the Nso and Oku forest users after their weekly hunt or harvest of forest products, gathered at the *Tehjav* compartment in Mbai forest where they combined their weekly catch and shared equitably. This equitable sharing helped to reduce the risk of a forest user returning home with no animals or other forest products if their yields are low. During a guided visit to *Tehjav*, respondents made us learn that *Tehjav* is now a shrine where Faay Mebvetin, landlord of Kih family performs sacrifices. The activities in the forest were guided by their 8-days weekly calendar (**Table 2**). Two of the eight days-week called *Ngokse* and *Nsamnin* in Nso are traditional Sundays or off days) known as *Vishiy ve bam*). In Oku, two days are also reserved as Traditional Sundays (*Ebchiy ebbamene*). *Ngoilum* (*Ngokse* in Oku) are observed as off days in Nso and Oku. The Nso and Oku weekly calendars are similar to each other but their differences are based on language and specificity. The Nso and Mbiame people speak *Lamnso* while the Oku people speak eblam *əbkwo*. On traditional Sundays, farming and forestry activities are prohibited in Nso while this is a rest day in Oku. Traditional rest days in Nso, Oku and Mbiame are believed to be days during which ancestral spirits carry out their own activities and prohibited from the living. The Nso and Oku land tenure systems differ on both sides of the Memfuiy stream, recognized as the Nso-Oku clan traditional boundary. The Nso land tenure system is practised west of memfuiy stream in the villages of Simonkov, Buh, Mbontovi, Buh, (Fonmboh), Tankiy, Mbonyar (Mbockenghas), Vekovi, Taashem, Shuukov, Vekovi and Ntur. Meanwhile the Oku land tenure system is practiced in villages west of Memfuiy. These villages are (Simonkoh), Mbockfinjis, Chiankah, Ntowel, and Lum. In the past, during the six days of the week, men spent their time in the forest either hunting, harvesting honey, laying hives or harvesting mushrooms and vegetables (*Kifom*).

**Table 2.** The Nso/Mbiame and Oku weekly traditional rest days.

Nso Weekly Calendar	Oku Weekly Calendar	Workdays		Traditional off days	
		In Nso and Mbiame	In Oku	In Nso and Mbiame	In Oku
Ntagrin	Ebkuotuiy	Ntangrin	Ebkuotuiy		
Kavi	Kimeywi	Kavi	Kimeywi		
Reeveiy	Nsanen	Reeveiy		<u>Reveiy</u>	Nsamnen
Kiloveiy	Eydintuiy			Kiloveiy	
Nseeri	Təweykammen	Nseeri	Təweykammen		
Geeggee	Təweykfəy	Geeggee	Təweykfəy		
Ngoilum	Ngokse			Ngoilum	Ngokse
Waiylun	Əbkwey	Waiylun	Əbkwey		

Before 1987, hunting was done on the Oku Mountain following certain guiding principles. If a hunter killed animals, he gave intestines to landlords. Larger animals killed such as leopard, buffalo, lion etc. were to be given to the Fon of Nso or Oku depending on whether the animal was caught on the Nso or Oku side of the forest. In return, the Fon would decorate the hunter with a title of bravery known as *Laangwa*. The landlords of the Ngongbaa who received the animals from hunters hunting on land under their control kept the intestines of the animal and took the rest to the fon. Nso Landlords of the Ngongbaa include Faay Mbolong, faay Membvetin Shuufaay Yungnkuy and Faay Tanini [18].

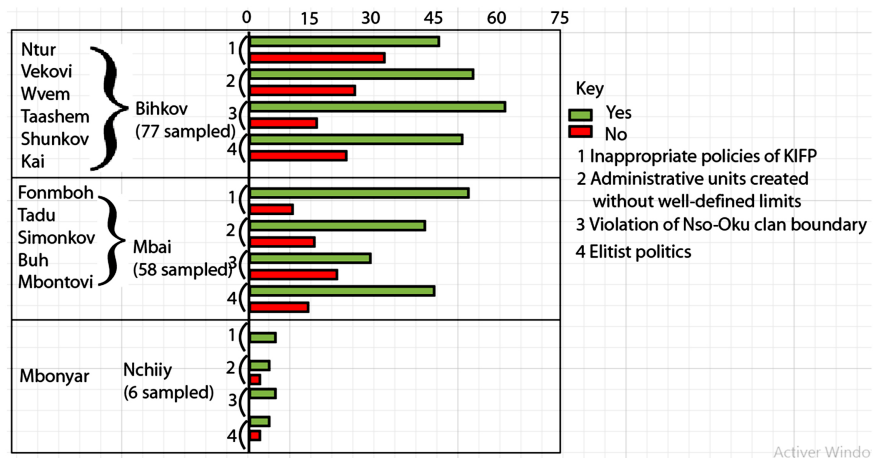
### **3.3. Sources of Conflicts between the Nso and Oku Tribes in the Ngongbaa Forest**

#### **3.3.1. Creation of the KIFP That Included the Ngongbaa Forest**

In assessing the perceptions of the Nso people vis-à-vis the implementation of the Cameroon forestry policy in the Ngongbaa Forest area, the creation of the KIFP was a welcome relief as it prevented the local people from further encroachment into the forest. If not, it could bring about an ecological disaster in the area. In Spite of this appreciation, the actions and practices of conserving the Ngongbaa and neighbouring Kilum forest didn't go well with the local people. They became critical in the manner these policies were implemented. Some of the conservation strategies were either received with mixed feeling or rejected outrightly. It is widely believed that the KIFP is responsible for the breakdown of the Nso land tenure system, the Joint Management System established by the Nso and Oku to manage shared resources of the Oku Mountain. The policies of KIFP were qualified as in-adaptive to the socio-cultural and ethnic characteristics in Ngongbaa and Oku. There is unanimity in Nso in general and in Ngongbaa Forest area in particular that, the relationship between the Nso and the Oku people turned sour in 1987 with the advent of the Kilum Mountain Forest Project (KIFP). This was further compounded by the Democratic Wind of Change and multi-party politics in Cameroon in 1990 (Table 2). From field investigation, 94.3% of the population are of the opinion that the Nso-Oku dispute over Mbai and Nchiiy Community forest, as well as land outside the forest in the villages of Fonmboh (Tankiy), Mbonyar (Mbockenghas), and Simonkov is due to the poor policies adopted by the KIFP projects between the years, 1987 and 2004. Meanwhile, 63% and of the population hold the view that the conflict is caused by the state that create administrative boundaries without well-defined boundaries. 91.5% and 95% of respondents were of the view that the Nso-Oku land dispute was due to the violation of the clan boundary of Nso and Oku fons at Memfuiy through the influence of politicians. The Nso-Oku land conflict in essence is a consequence of the disapproval of the project's policies including [19].

As a link between the KIFP policies and the Nso-Oku land boundary dispute, information gathered in the field show that the in-adaptive policies of KIFP discussed below have an inextricable link with the Nso-Oku land dispute. The

non-creation of a project site in Ngongbaa Forest side as it was done on the Oku and Kom sides in 1987 and 1992 respectively, brought a spirit of frustration in Nso people in general and those of Ngongbaa Forest area in particular (Figure 5).



**Figure 5.** Respondents views to the origin of the Nso-Oku conflicts over the Oku montane forest.

The cumulative responses of respondents on table show that 96.5% and 78.7% of the population respectively believe that political manoeuvres and the ploy to seize their forest was the major reasons for which a project site was not created in Ngongbaa Forest area. Respondents in the Bihkov Community Forest Groups at Vekovi and Shuukov, revealed that, they would have loved to have a project site created in Ngongbaa Forest area. It is widely believed in Nso that Ngongbaa (also Ngongbaa kov) is the original name of their section of the Oku Mountain Forest. Rather Kilum was used as the project name to their dissatisfaction which they believe was politically motivated.

### 3.3.2. The Renaming of Ngongbaa Forest as Kilum Forest and New Toponyms in the Area

The Renaming of Ngongbaa Forest as Kilum Forest coupled with other toponyms of forest compartments were widely rejected in Nso and the Ngongbaa forest area. The Nso people consider that Ngongbaa Forest is the ancestral and historical name of the Nso section of the Oku Mountain Forest and not Kilum. They believe that it was the handiwork of a local politician of Oku origin who deliberately changed the name of the forest in 1987 in order to claim ownership. To the Nso people Kilum had never been the name of the forest. The renaming of Ngongbaa is widely contested by the Nso people who gave the view that Ngongbaa and *Kikoh Ebkwo* respectively were the original names of the Nso and Oku sections of the Oku Mountain Forest. The locally recruited staffs of the then created KIFP who for the most parts were Oku people in collaboration with politicians changed names of some forest compartments and places with Oku toponyms. These include the renaming of Mbonyar as Mbockenghas, Takiyah for-



est compartment as Nchiiy, Simonkov as Simonkoh, Fonmboh as Tankiy and Ntovi as Ntowel. We noticed that the Kilum grassland patch sandwich between Ngongbaa and Kilum forest represents a very small proportion of the forest. Nso politicians believe that the project was biased as it was helping to transfer ownership of the Ngongbaa Forest to Oku [20].

### **3.3.3. The Alienation of Tenure Rights to the Local People over Forest Resources**

The forceful eviction of farmers and landlords who owned farms in the forest before 1987 strained the relationship that the local people entertained with the KIFP. Most of the farming population of the Ngongbaa Forest area lost all or part of their farms in the Ngongbaa Forest. This was an extension of the 1983 encroachment ban imposed by the Bui prefectural order. No form of compensation accompanied the loss of farmland. This aroused a lot of anger among the farmers. To further complicate matters, the traditional landlords lost shrines in the forest where sacrifices were performed. Many attempts by the Nso people to recover what they have lost with advent of the creation of KIFP, they were being detained by the forces of law and order [21].

Furthermore, the transfer by the project of the management of the Nchiiy and Mbai community forests to FMOs who are not landlords and are non-Nso natives, was considered by the Ngongbaa local people as the continuous efforts of the project to seize their forest and transfer the administration of the area to Oku. These FMOs have only usufruct rights and not rights of tenure, and therefore, have no rights whatsoever to manage the forest that was seized from them. It is for this reason that the Fon of Nso affirmed that he does not benefit from the Mbai and Nchiiy community forests as nothing from these forests has been given to him by the FMIs.

### **3.3.4. The Exclusion of Some Nso Villages from the Community Forest**

In accordance with the new forestry law No.94/01 of 20 January 1994 which provides favourable conditions for greater involvement of local people in the management of forests, the Nso communities unlike its Oku counterparts were side-lined from decisions concerning the management of KIFP. For example, to create the community forest in the area, Nso villages of Buh and Tadu were excluded and were not part of negotiations that led to the creation of community forest. The administrative authorities held the view that these two villages were considered as Kumbo villages that has no portion in the Oku Mountain Forest. Considering the fact that the villages of Mbonyar, Fonmboh (Tankiy), Simonkov, and Mbontovi were Oku villages implies that the Ngongbaa Forest had nothing to do with the Nso section of the Oku Mountain Forest. Field evidence show Buh and Tadu villages sidelined from the list of beneficiary villages represent 70% of the population. The villages that were involved in community forest are those of the Bihkov and Nchiiy Community Forest areas including Ntur, Vekovi, Taashem, Wvem, Kai, Shuukov, and Mbonyar. The villages of Mbai area that were involved in community forest included Mboovi, Simonkov,

and Fonmboh (Tankiy)-Tadu. When questioned on the issue, the forestry officials contacted explained that Buh and Tadu villages were excluded from community Forest for two main reasons, firstly that the two villages were not adjacent to the forest which is not true, and secondly, that it was in the respect to the provisions of article 27 (2) of the Decree of 1995, which provides for creation of community forest only to communities living near forest which is still not true [22].

Due to the above justifications, this will also imply extending the administration of Oku into the Nso villages of Simonkov, Fonmboh-Tadu and Mbonyar, Mbontovi. The above villages are Kumbo villages, where Nso landlords settled Oku people who immigrated into the area to seek refuge. The pioneer Oku in-migrants were excommunicated by *kwifon* of Oku for committing acts of felony and witchcraft. Worst still the relocation of some quarters of Kumbo Sub Division to Oku sub Division further strained the co-existence of the people.

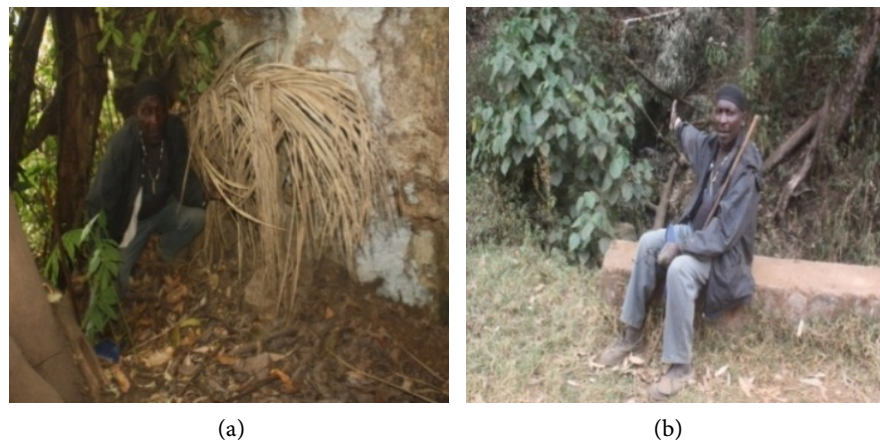
By not classifying project sites based on ethnic groups that have territories in the Oku Mountain means that the KIFP undermined the ethnic, traditional land tenure and forest management characteristics of the Oku Mountain region. Moreover, considering that Buh and Tadu villages were in Kumbo and therefore could not be considered as forest communities, gave birth to an unending crises between the Oku settlers in Ngongbaa and their host (Nso). These seeds of discord here do not guarantee effective conservation of the forest as intended by the project and therefore lay a ground work for future disastrous conflict. The KIFP rather contributed in straining the fraternal relationship the Nso and Oku people enjoyed since 1942 when Oku people started settling in Ngongbaa area.

### 3.3.5. Elitist Politics and Influence Peddling

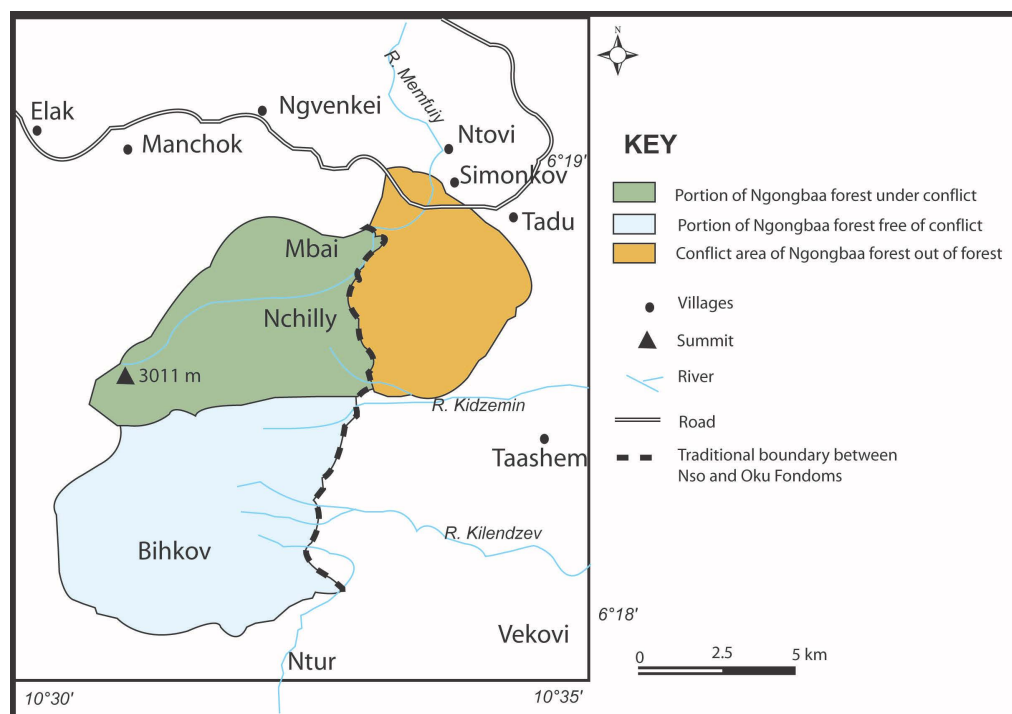
As already stated above, not only the policies of the KIFP and the encroachment of the Oku council area into the Kumbo council area that took off the villages of Tankiy (Fommboh), Simonkov and Mbonyar, a good percentage of the local population attribute the Nso-Oku land dispute to the elite and politicians who influenced KIFP policies and administrative decisions in the area. To them, these are what lead to the violation of the Nso-Oku clan boundary at the Siimonkov locality. The disputed area is a strip of land that stretches over the Nchiiy and Mbai community forests, and some areas within the villages of Tankiy (Fonmboh), Mbonyar (Mbockengas), and SimonKov (formally Ngahkav) (Figure 6). This conflict dates back to the 1950s especially when community work was organised to dig the road to Oku but which halted at Shuusha'a. Since then, the Oku people consider that their boundary with Nso is at Shuusha'a instead of Memfuiy River, which is less than a kilometre west of Shuusha'a (Figure 7).

The boundary between Kumbo and Oku Subdivisions is defined in Decree No. 77/203 of June 29, 1977 and Decree No. 92/187 of 01 September 1992 that created Oku-Noni subdivision. According to this decree, the Oku council area falls under the Oku fondom which is a 2<sup>nd</sup> Class fondom. Implicit in the above decrees is the fact that the boundary between the two neighbouring councils is

the Nso-Oku clan boundary. This means that Simonkov (Ngahkav) included in the decrees creating the Oku council is an administrative error which the government cannot admit. This implies that the administrative boundary between Kumbo and Oku Sub-Divisions is their clan boundary that the two communities recognised as Memfuiy River (**Figure 8(a)** and **Figure 8(b)**). It is for this reason that the inclusion of Simonkov (Ngahkav) as an Oku Village is viewed by in Nso as an administrative error committed by the Oku elite. (Simonkov east of Memfuiy River is the strip of land that the Nso called Mbohshijiy that is now known as new Simonkov. This conflict has had negative repercussions on the Ngongbaa Forest and the rest of the Oku Mountain.



**Figure 6.** (a) A traditional ruler at Shrine and (b) the Memfuiy Bridge.



Adapted from the Ecological monitoring Programme of Kilum Ijim Forest Project

**Figure 7.** Land conflict in Ngongbaa Forest area.



**Figure 8.** (a) Memfuiy River and (b) Bridge on the Kumbo-Oku Road (At Elevation: 2105 m, Location: Latitude 06°13'57.9" and Longitude E10°33'51.0") Source: Adapted from D Lantum, 2005.

### 3.3.6. Forest Degradation in Ngongbaa Forest Due to the Nso-Oku Conflict

The perception of natural resources can be traced back to the Neolithic Revolution while Natural Resource Policy in Cameroon is as old as Cameroon itself. Before the official setting up of the colonial administration in Cameroon in 1884, natural resources were managed according to the peoples' law, that is, the family law. In this light, the village chiefs were the main administrators of the natural resources. Management mechanisms were well defined and understood by the local people. They were so law abiding as Shepherd (1992), states that "indigenous management involved a series of mechanisms put into practice by the local people as individuals, but also in many cases, in coordination with others under some local authority they regard as legitimate". These mechanisms were not imposed from outside but have been developed over time through experience using trial and error methods and sometimes through the adoption of practices they have observed elsewhere. Sene (1985) in the same light says, indigenous management practices are often focused on the role of forest and trees in relation to the farmers' land-use system and household needs. These, it should be understood, is in contrast to public administrative and professional forestry practices which emphasize on wood production and the protective role of forest for national interest.

Historically and culturally, the local communities who live in and around the Oku Mountain area are adjoined to their forest. The forest has played a key role in modelling their ways of life, their behaviour and action. Reasons given for this closeness are that the forest is a common property; it serves as home to their ancestors and is the source of the livelihood of the living. On account of this, the forest in particular and vegetation in general cannot be completely degraded; it is a property to be inherited by the young or future generations. Any forest viewed as such certainly poses sacred value. It is in this wise that Alcorn (1997) states, "the community to whom the forest belongs includes the ancestors, the spirits and the unborn as well as the living of that community". Mukamuri

(1992), even recounts that “cultural beliefs by which some people protect trees is because these trees bring rainfall by stopping clouds as mountains do when causing orographic rainfall”. In the context of religious beliefs, some believe that big trees have to be conserved because the Cuckoo bird (hwaya) hides in it and sings for rain to fall [23].

The sacredness of forest is characterised by religious beliefs upheld by institutional constraints. Most crucial of these beliefs are myths that the forest is the abode of the ancestors or gods of that clan. These myths endow the area with an aura of sacredness. With reverence of these forests as the abodes of the gods, the forests cannot be entered into freely or carry out any form of exploitation, be it cultivation, fetching of wood, gathering, hunting or harvesting of timber. This is what existed between the conflicting communities before conflicts later erupted.

These myths have spiritual instincts as they prescribe certain diseases such as madness, lunatics or physical handicap likely to befall whoever violates any of these stipulations. The different vegetal species that the forest harbours are used to treat these same sicknesses. The threat of supernatural sanctions always take the form of an incapacitating illness that sometimes leads to death when an offending person fails to submit his or herself to ritual cleansing with the traditional authorities [24].

Unfortunately, the arrival of conflicts between the custodian villages of this area has led to the fading away of these myths and beliefs, consequently the degradation of forest over time in the area (**Table 3**). In 1988, for example, forest in the montane forest area covered a total surface of 61.7 km<sup>2</sup>, this dropped to 46 km<sup>2</sup> in 2019 making a total loss of 15.7 km<sup>2</sup> for over 31 years. Going by this figure, it therefore means there is an annual loss of 0.5 km<sup>2</sup>. This degradation of forest cover can largely be attributed to an increase in settled areas that rose from 4.5 km<sup>2</sup> (2.75%) in 1988 to 16.5 km<sup>2</sup> (10.04%) in 2019 on one hand and on the other hand to grassland invasion (firewood harvesting, clearing of forest for agriculture and bush fires). This evolved from 24.1 km<sup>2</sup> (14.74%) in 1988 to 48.1 km<sup>2</sup> (29.38%) in 2019). If such rhythm of degradation is maintained, it is likely that this montane forest can disappear in about 75 years (**Figures 9-12**).

**Table 3.** Statistics of land cover change between 1988 and 2019.

Land-Cover	1988 (Km <sup>2</sup> )	% of the total surface	2019 (Km <sup>2</sup> )	% of the total surface
Forest	61.7	37.65	46	28.07
Grassland	24.1	14.74	48.1	29.38
Lake/faults	9.2	5.61	7.5	4.6
Bare ground	15.2	9.26	12.9	7.85
Farmland	32.5	19.85	27.7	16.94
Settlements	4.5	2.75	16.5	10.04
Slopes	16.6	10.14	5.1	3.12
<b>TOTAL</b>	<b>163.8</b>	<b>100</b>	<b>163.8</b>	<b>100</b>



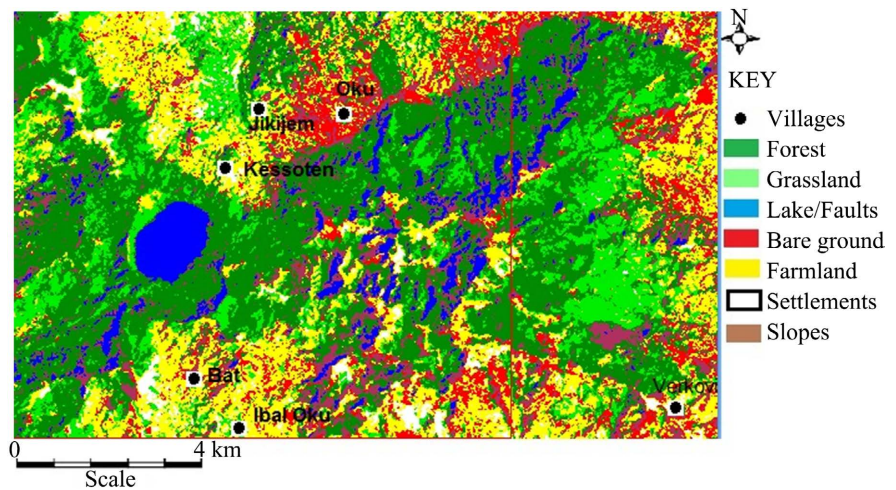


Figure 9. Land cover of the mount Oku area in 1988.

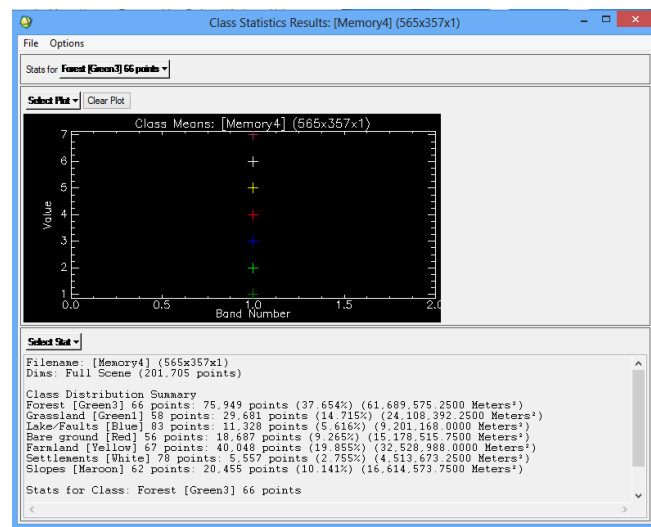


Figure 10. Class statistics of land cover of the Mount Oku area in 1988.

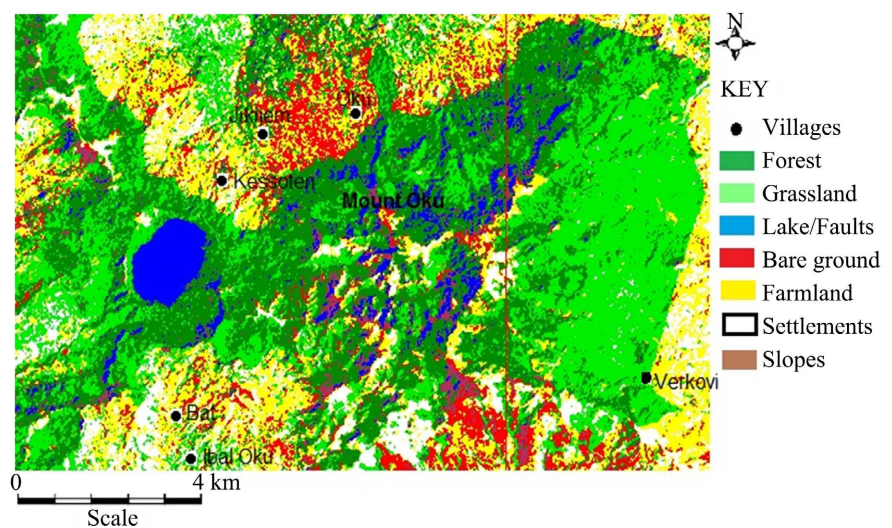


Figure 11. Land cover of the mount Oku area in 2019.



Figure 12. Class statistics of land cover of the Mount Oku area in 2019.

#### 4. Discussion

There has ever been the Pseudo Concept that “There is No Nso-Oku Clan Boundary”. This misleading concept propagated by the local politicians in Bui Division was exploited by Oku residents of Fonmboh, Mbonyar and Simonkov to claim that these villages are integral parts of Oku council. But texts exist which show that these villages are in Kumbo Sub Division. The Nso people claim that the concept is a historicised myth that became known in Bui following the issuance of Decree No. 77/245 of July 15, 1977 designating the Fon of Nso as the paramount Fon of Bui Division. This decree made Nso politicians in particular to promote this ideology in order to rally Oku people in particular and other clans under the kingship and Paramountcy of the Fon of Nso. The notion of the none-existence of a land boundary between Nso and Oku is viewed by land custodians and elders as a gross misinterpretation of the concept which metaphorically refers to blood relationship between the Nso and Oku royal families (*Duy in Nso and Mbile in Oku*) who migrated from the Adamawa Plateau and settled in Kumbo as a single entity before a succession conflict in 1500 separated them in the 18<sup>th</sup> century [25].

However, in terms of language, land tenure and ethnic composition, the Nso and Oku are different with defined clan boundaries represented by natural landmarks (streams and hills). The Nso speak Lamnso while the Oku speak *Eb-lam ebkwo*, that is, a language that draws much from the Ntur (known in Oku as Ntul). In Nso, land is controlled by landlords (*ataangven*) who are descendants

of the *Mntar* family (indigenous Nso people under the patronage of the fons and nwerong. The land tenure system practiced in Oku is that of the Ntur (indigenous Oku people) and to a limited extent that of the Noni. The Nso border villages of Ngongbaa located in the west of Memfuiy stream respect the *kibaami* (public holiday) just like in the rest of the Nso Fondom. When an ordinary person dies, the day following his burial, farming activities are suspended in respect of the deceased. When a notable like the *fon*, *Yaa*, *shuufaay* who is a member of the council of seven (*vibai ve Saamba*) dies, farming activities are also suspended for a week or more through a ritual called *Shishua* depending on the social status of the deceased.

Forest degradation observed over the years in the montane forest has engendered clientellism, vandalism and wanton exploitation of resources of the Ngongbaa Forest. Every year the area suffers from forest fires whose sources had always been a mystery or source of blame game. Some sources attest to the fact that these fires are set deliberately by unidentified indigenous people who disagree with KIFP policies. Here we find landlords whose rights over forest control have been seized by the KIFP and transferred to FMOs who are non-natives. Another group of people in the area believe that forest spirits are responsible for some forest fires, since the creation of the KIFP simply ignored their concerns. Last but not the least, a good chunk of the local residents attribute the bush fires to the former workers of KIFP whose objectives are to attract and sustain funding for the conservation of the forest in order to maintain their jobs. In spite of the efforts to check such fires by the Mbai and Nchiiy Fire Fighting Team (MANFIFIT), in collaboration with the local population; fires continue to ravage the forest.

It should be noted that the policies of KMFP helped to reduce the interests of the Nso people in the conservation of this part of the forest. A network of attacks have been established characterised by felling of trees, ring-barking of *Prunus*, setting fires in the forest, cultivation of Indian hemp etc. Since 2002, only four cases of illegal exploitation of *Prunus* and one case of cultivation of Indian hemp were declared out of several illegal activities taking place in Bihkov community Forest. The local people blame this destruction on the FMO, authorised buyers and illegal exploiters who buy this product from FMIs during the day, but in the night, they buy from illegal exploiters. Forest officials are also blamed for unilaterally granting authorisation to *Prunus* buyers to exploit *Prunus* with the supervision of FMIs in violation of the management agreement. In spite of these violating of forest laws, no legal action has been taken against illegal exploiters.

## 5. Conclusions

Whenever the Kilum Mountain Forest Project took over the management of the Oku Mountain Forests in 1987, it introduced an exogenous system that was incompatible with the indigenous system hitherto practiced in the area. This project that only concentrated on the western part of the forest shadowed the visibility of the Ngongbaa forest in the eastern part. Since conservation decisions

concerning the whole forest were mostly taken in Oku, the Ngongbaa part was only constrained to follow without the people's consent. The asphyxiation of the Ngongbaa forest at the advent of the project was due to the absence of stakeholders' analysis during the inception phase of the project. It was also found that the land dispute between Nso and Oku in the Ngongbaa Forest area was directly linked to the in-adaptive policies of KIFP and elitist politics. These conflicts led to ecological debt, forest fires, and vandalism of forest resources in the Ngongbaa forest.

For conservation to be restored in the Kilum Montane forest, this study recommends the following;

- The historical appellation of the Ngongbaa which is the name of the Nso section of the Oku Mountain Forest and other toponyms of villages and forest compartments that have been renamed be restored.
- The Ngongbaa Forest should be considered as a separate entity within the framework of the management of the Oku Mountain Forest.
- In line with the local administrative recommendations in 2008 concerning this forest, Decree No.92/187 of 1/9/2002, creating Oku councils which erroneously included the Nso village of Simonkov as part Oku subdivision be revised. This revision should consider the Memfui (y) and the Chavchav streams as the natural boundary between Kumbo sub-Division and Noni subdivisions. It is certain that if these things are respected, there will be peaceful co-existence between the people living around this forest.
- In order to solve the Nso-Oku land dispute, a new administrative unit called Ngongbaa Sub-division could be created. Its territorial jurisdiction could comprise the following villages, Buh, Tadu, Fonboh (Tankiy), Mbohntovi, Simonkov, Mbiim, Keri, Taashem, Faakuiy, Nyambah, Mbohnyar (Mbockeghas), Kintangrin, Ngamase, Tajaiy, Ndzenkwa, Kilomen, Nkim, Dzee, Jongon, Ngang, Taabam, Mbohshimawir, Tahkiyah, Laikenjoh, Juude, Taakimbang, Mbohshintangrin, Keri, Mbohshua, Semti, Banten, Mbohsha-a, Nkimnkighin, Baaseh waikom, and Saanyar. The headquarters of this subdivision could either be in Buh, Simonkov (east of Memfui stream) or Tadu which are already endowed with educational, housing, health and electrical facilities. The creation of an administrative unit could only be done after a thorough analysis of the socio-cultural, anthropogenic characteristics and relationships between the communities that inhabit the area.

## Acknowledgements

We want to thank the Kilum Ijim Mountain Forest Project (KIMFP) and the Ministry of Environment, Nature Conservation and Sustainable Development of Cameroon for giving us access to their documentation centres and responding to questionnaire administration for the realisation of this study.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- [1] Mengang, J.M. (1985) Evolution of Natural Resource Policy in Cameroon. Yale F & ES Bulletin No. 102, 239-248.
- [2] Banadzem, J.L.T. (2008) The Role of Indigenous Peoples in Forest Management: Case Study of the NSO Community of Ngongbaa Forest Area, Bui Division. Maîtrise Dissertation, Department of Geography, University of Yaounde I, Cameroon.
- [3] Borrini-Feyerabend, G. (1996) Collaborative Management of Protected Areas: Tailoring the Approach to the Context. IUCN, 167 p.
- [4] Njoh, A.J. and Akiwumi, F. (2012) Colonial Legacies, Land Policies and the Millennium Development Goals: Lessons from Cameroon and Sierra Leone. *Habitat International*, **36**, 210-218. <https://doi.org/10.1016/j.habitatint.2011.08.002>
- [5] Poulvier, D. and Eba'A Richard, A. (2000) Community Forestry in Cameroon: Prospects for Development with an Emphasis on Market Potentials, Reconnaissance Mission on Behalf on DFID Cameroon Forestry Programme Coordination Support Project. British High Commission, Yaounde, DFID, 27 p.
- [6] Vabi, M.B., *et al.* (2000) The Devolution of Forest Management Responsibilities to Local Communities: Context and Implementation Hurdles in Cameroon. WWF.
- [7] MINEF (1998) Manual of the Procedures for the Attribution, and Norms for the Management of Community Forests. CLE, 98 p.
- [8] Besong and Ngwasiri (1995) The 1994 Forestry Law and Rational Natural Resource Management in Cameroon. PVO-NGO/NRM, 63 p.
- [9] Mwaniki, M.W., Moeller, M.S. and Schellmann, G. (2015) A Comparison of Landsat 8 (OLI) and Landsat 7 (ETM+) in Mapping Geology and Visualising Lineaments: A Case Study of Central Region Kenya. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, **7**, 897-903. <https://doi.org/10.5194/isprsarchives-xl-7-w3-897-2015>
- [10] Blasco, F. (1990) Guidelines on the Use of Landsat and Spot Satellite Images for Land-Use and Forest Change Detection. Provisionnal Version, FAO, 63 p.
- [11] Agnew Mck, N. and Sandra, W.P. (1969) The Science Game: An Introduction to Research in the Social Sciences. Prentice Hall.
- [12] BUCREP (Bureau for Population Census and Research) (2010) Final Report of Results of the General Census of Population and Habitat (2005). 6 Volumes + 1 Special Edition, 66 p.
- [13] Mayaux, P., De Grandi, G. and Malingreau, J. (2000) Central African Forest Cover Revisited: A Multi-Satellite Analysis. *Remote Sensing of Environment*, **71**, 183-196. [https://doi.org/10.1016/s0034-4257\(99\)00073-5](https://doi.org/10.1016/s0034-4257(99)00073-5)
- [14] Enchaw, G.B. (2009) An Assessment of Modern Conservation Strategies Adopted for the Management of Natural Resources in Kilum-Ijim Project Area. Ph.D. Thesis, Department of Geography, University of Yaounde I.
- [15] Lantum, D.N. (2000) Fon Nso' Sehm Ataar (1947-1972). Father of NSO Development. NSO, History Society Publication, Kumbo, Bui Division, North West Province-Cameroon. BP Nlongkak, 93 p.
- [16] Lamnso Literate Language Association (2010) Ngòn Nso Woo Ngàà Maa Wong. Work on the Nso Cultural History Produced on the Occasion of the Nso Cultural Festival.
- [17] Ngwasiri, C.N. (2000) The Community Forestry Programme in Cameroon: A Par-



- participatory Management Option? CIFOR Working Paper No. 5, Yaounde, Cameroon, 67 p.
- [18] Nicholas Azenui Asanga (2019) Modelling Land Tenure in Relation to the National Land Administration Model. Case Study of the North West Region of Cameroon. Msc Dissertation, 56 p.
- [19] Lewis, C. (1996) Managing Conflicts in Protected Areas. IUCN, 213 p.
- [20] Gardner, A.A., De Marco, J. and Asanga, C.A. (2001) A Conservation Partnership: Community Forestry at Kilum-Ijim-Cameroon. Rural Development Forestry Network. 9.
- [21] Grazia, B.-F., Kothari, A. and Oviedo, G. (2004) Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation, Adrian Phillips, Series Editor. World Commission on Protected Areas (WCPA), Best Practice Protected Area Guidelines Series No. 11, IUCN, The World Conservation Union, 112 p.
- [22] Pimbert, M.P. and Pretty, J. (1995) Parks, People and Professionals: Putting "Participation in Protected Area Management". Discussion Paper 57, United Nations Research Institute for Social Development.
- [23] Lambin, E.F., Turner, B.L., Geist, H.J., Agbola, S.B., Angelsen, A., Bruce, J.W., *et al.* (2001) The Causes of Land-Use and Land-Cover Change: Moving beyond the Myths. *Global Environmental Change*, **11**, 261-269.  
[https://doi.org/10.1016/s0959-3780\(01\)00007-3](https://doi.org/10.1016/s0959-3780(01)00007-3)
- [24] Ostrom, E. and Janssen, M.A. (2002) Beliefs, Multi-Level Governance, and Development. *Annual Meeting of the American Political Science Association*, Boston, 29 August-1 September 2002, 88.
- [25] Ntaimah, P.T. (2012) The Oku Trail (Ketiantian ɔbkuo): Tracing Roots, Footprints and the Edification of a Cultural Space. AuthorHouse.  
<https://www.authorhouse.com>