

# Summary of the management plan and the FSC approach for the FMU 11 005

Janvier 2015

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#### **Preamble**

In 2006 the signing of a temporary operating agreement binds the company; CAFECO with The FMU 11-005.

The management Plan in force for the FMU 11-005 was developed with the support of the consulting firm FRM (Forest Resource Management) and approved in 2014.

The ranking process has changed the boundaries of the FMU. ,its area increased from 80,800 to 70,298ha. This new limit was the subject of a certificate of surface measurement No. 218N78 / MINDAF / DRSO / DDIWSDC / T200 6 October 2011 from the Departmental Service of the Cadastre of Manyu.

The ranking order is being signed at the prime ministry. The revision of the management plan was made necessary because of these major changes and realities observed during eight years of planning.

As part of this review, a new management inventory was conducted on the FMU at a rate of 1% in order to improve knowledge about the resource.

Further studies were also conducted including wildlife inventory and village hunting study.

This revision is also an opportunity to integrate the knowledge gained after more than 8 years of implementation of the management plan.

The request made by the company to revise the CAFECO FMU 11-005 Management Plan was accepted by the forestry administration in early 2013.

The principles that have guided the revision of the Development Plan are:

- Update the division into series;
- Reorganize groups of species, especially exploited species with the principles in force in Cameroon, to take into account the business plan of the company CAFECO that puts into value the FMU;
- Recalculate the DMA of species managed with the principles in force in Cameroon and based on the new data of the management inventory;
- Redo an equi-volume cutting of the unexploited portion, over the remaining time (21 years), the 30-year rotation period is not altered.

This major revision work thus led to replace the activity of forest exploitation on the FMU 11-005 in the context of sustainable management principles in force throughout the Congo Basin.

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#### 1. INTRODUCTION

In Cameroon, CAFECO company is awarded the FMU 11 005 and a sawmill based in Nguti. The FMU is certified according to FSC standards. The Sawmill at Nguti is certified according to FSC and OLB standards.

The summary of the Management Plan for FMU 11 005 has been developed on the basis of the management plan of FMU 11 005 revised in 2013 and approved by the Cameroon forest administration on September 22, 2014. The additional provisions taken as part of the FSC process have been incorporated into this document.

This document is available for dissemination and consultation with stakeholders committed to sustainable forest management for the FMU 11,005.

#### 2. ENVIRONMENTAL POLICY OF CAFECO SA

Being aware of the impact of its activities on the natural environment, the company CAFECO implements management strategies considering the environment from the resource in the forest to product sold out of its processing plants.

It has the objective to certify 100% of its activities according to the FSC certification scheme \* or any other recognized scheme, ensuring to its customers the origin and responsible production of its wood.

#### As such CAFECO will:

- Respect the forest legislation

The regulation of exploitation and processing of forest resources will always be followed and applied strictly (implementation of management plans, practice low-impact operations, compliance with NIMF ...). CAFECO will facilitate monitoring and control missions of the state agencies.

- Develope people's participation in forest management
The involvement of local communities in responsible forest management will be promoted

through the consultative platforms set up to take into account socio-cultural interests in the management of the resource. CAFECO supports social projects on the request of the local population and takes all necessary measures into account to avoid conflicts.

- The supply of wood only from legally sources and give priority to certified wood. CAFECO priority will be to buy only wood with a minimum of legally recognized certification. If necessary to be supplied with non-certified wood, CAFECO will select suppliers based on their compliance with environmental and social standards put in place.
- Protect species and high value ecosystems for conservation.

  Future stems or seed producers, rare, endemic or endangered wildlife and plant species, ecosystems with cultural values or protection are identified and preserved of all logging activities.
- Minimize negative environmental impacts on the environment CAFECO has implemented rigorous operational procedures to reduce the environmental impacts of its activities, particularly those concerning the opening of forest roads, rationalization and responsible waste management, and streamlining of the use of

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chemicals.

- Encourage research and development activities In order to understand and master the dynamics of its resource, CAFECO has set up a long-term partnership with research and development organizations, and incorporates such results in its planning strategy.
- Mobilize its staffs around civic values.

The managerial policy and management of human resources of CAFECO are based on the values of respect, trust and teamwork. CAFECO is committed to improving working conditions and always be a good corporate citizen in which its staff find a source of personal and professional development notably via work security and access to training, internal communication. CAFECO also conducts advanced policy for the fight against HIV AIDS.

- Maintain the performance, efficiency and improving its environmental management system

THE SERVICE OF SUSTAINABLE MANAGEMENT AND CERTIFICATION have the mission to track, monitor and improve the procedures of CAFECO. This service attached directly to the general directorate has the resources and authority to ensure the sustainability and improvement of continuous harmonious management system, sustainable and responsible exploitation and processing of forest resources.

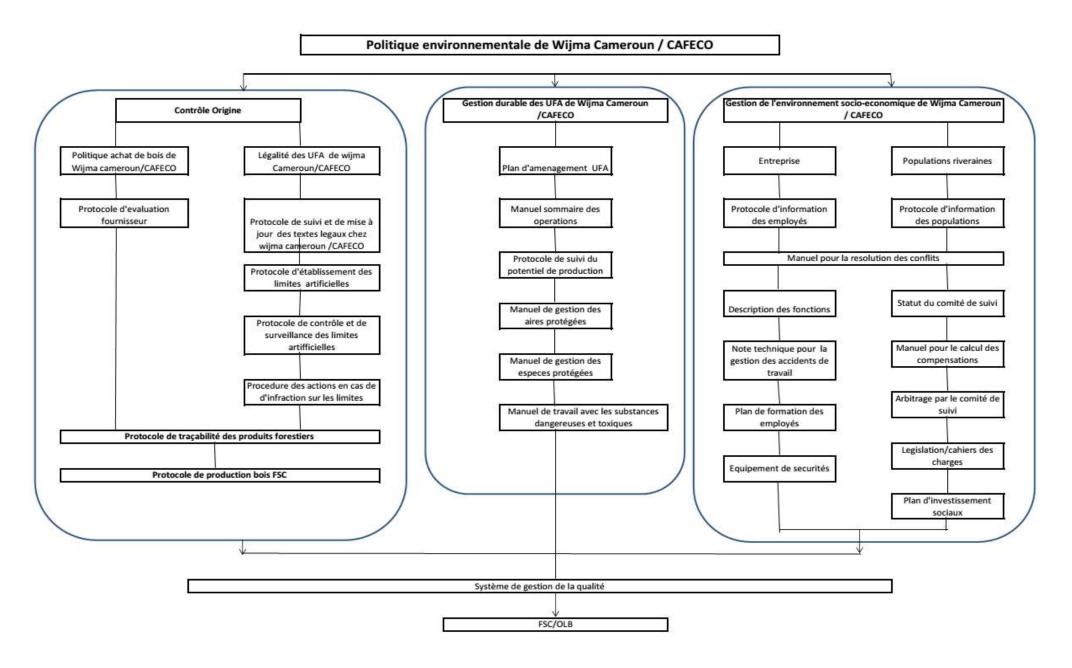
The maintenance of these objectives requires the involvement of all both of the management team for its moral commitment as well as the operator by its action on the ground.

Done in Douala, November 13, 2011 (Version 3)

The Director General of CAFECO SA

Valentin Mouyenga

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#### 3. MANAGEMENT PLAN OF THE FMU 11005

#### 3.1. Introduction

This management plan (MP) has been elaborated on the basis of inventories carried out in 2013 according to the existing national standard. The data of this survey have been controlled, approved and treated. Socio-economic studies are based on information obtained during a field interview done in 2008 then updated in 2013. Wild life inventory and studies on traditional hunting were done in 2013. The Management plan had been done according to the decree 0222/A/MINEF of 25 May 2001.

#### 3.2. Biophysical characteristics of the forest

#### 3.2.1. Administrative et physical Information

Summary of administrative information						
Country	Cameroun	Cameroun				
Region	South-West					
Division	Manyu					
Sub-Division	Eyumodjock					
No. FMU	11 005					
No. Concession	1087					
No. Provisional Convention	0592					
No. Book of responsibilities	0592					
No. Decree of classing						
Concessionist	CAFECO					
Concessionist licence						
Approbation date						
Surface	70289 hectar	s (divided into FMU 11 005 A and 11 005 B)				
Geographical site	Geographical site					
	FMU 11005 5°30′ and 5°80′ North of the latitude 8°80′ and 9°13′ East of the longitude					

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#### 3.2.2. Geographical Context



Fig1: Location of the FMU 11 005

#### 3.2.3. Ecological Contexte

#### 3.2.3.1. Topography

Generally, the relief of the South-West region presents three distinct entities:

- The Littoral plain whose continuity is only interrupted by the mount Cameroun (Tiko bassin at Rio del Rey);
- The Ndian basin (a region very low in contact with the Sea);
- Mamfe basin (depression zone, more or less circular between the High Plateaux of West to East, plateaux of Akwaya to the North and the Rumpi mountain of the South).

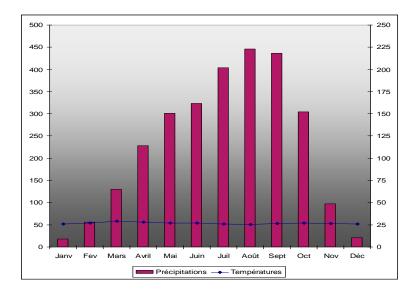
Between the Northen part of the forest 1087 (towards Eyumojock town) and the Southern part (Korup national park), the relief presents a hilly form intercepted by vallys with a mean altitude of 400m. the highest altitude in the region is about 1050 m (towards Mbinda et Okuri).

#### 3.2.3.2. Climat

The zone of the FMU 11 005 is subjected to an Equatorial climate characterised by two seasons varying within a year as follows:

- A longer rainy season from mid-March to mid-November (8 months)
- A shorter dry season from mid-November to mid-March(4 months)

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#### 3.2.3.3. Geology and soils

The soils of the South West Region being volcanic are ferralitic and sandy-clay by site and are considered to be generally fertile (Fako and Meme Division). This has favoured the creation of large industrial plantations which today, dominates the agriculture of the zone.

#### 3.2.3.4. Hydrographty

The Forest concession is found in the Manyu basin and drains the manyu streams and its affluents, of which the largest is the Munaya. Also, there exist other streams of small and medium size around and in the forest forest massive (Akarem, Akam, Berun, Akegam, Aklhim, Akwi, Wer, Awa, Akok, Taban, Oroako, Bakep, etc.). Also the presence of Lake Ejagham in the Mamfe hallow must be mentioned which contributes, with the rivers, to supply the population in halieutic proteins.

#### 3.2.3.5. Vegetation

The forests of the FMU 11005 predominantly belong to the biafréen Caesalpiniaceae District (covering nearly 90% of the area of the FMU) in north-western Atlantic District sometimes altitude between 500 and 800 meters (it is a forest characterized by the absence or scarcity of semi-deciduous forest elements and a poor distribution of Caesalpiniaceae in terms of species, localized at certain points only); the latter group is composed of:

- -The Atlantic Forest in rare Caesalpiniaceae, North Western style with coastlines indices: also called Piedmont forest. This forest type of semi-sempirente trend marks the transition between the evergreen forests of low and medium altitude. The sub-montargnardes forests. It is usually seen between 500 and 800m. This forest is in the form of islands north of the FMU and cover about 5% of its area.
- The degradation Facies pronounced evergreen forests: in the north-western Atlantic District, alterations caused by humans are low and largely extended in the form of small clearings in the preparation of food crops, forestry exploitation and industrial crops that have not yet reached this forest type. Furthermore, there are residual forest species, species more or less anthropophilic, with anémochores or zoochores and heliophilous seeds or related to man (non

logged hardwoods, edible fruits) sometimes frequent and abundant. Across the Ejagham country, there is the extension of *Eupatorium odoratum*.

They also belong to the submontane. Formed mostly in submontane forests (800-1200 to 1800-2200m):

Three species are endemic to the region. These are *Brachystegia kennedyi, Tabouate brevipaniculata (Cesalpiniaceae) and Scytopetalum klaineanum (Scytopetalaceae)* 

#### 3.2.3.6. Wildlife

The forest concession borders the Korup National Park which is home to a rich and varied fauna. For mobility, the animals know no borders.

Table: Major and mammals means inventoried on UFA 11-005 (Bobo, 2013)

FAMILY	COMMON NAME	SCIENTIFIC NAME	
	Artiodactyles		
Bovidae	blue duiker	Cephalophus monticola	
	Duiker black dorsal stripe	Cephalophus dorsalis*1	
	Ogilby duiker	Cephalophus ogilbyi*	
	Yellow-backed duiker	Cephalophus sylvicultor	
	sitatunga	Tragelaphus spekei	
	buffalo	Syncerus caffer	
Tragulidé	water chevrotain	Hyemoschus aquaticus	
swine	potamochère	Potamochoerus porcus	
	primates	· · · · · · · · · · · · · · · · · · ·	
	crowned Mone	Cercopithecus pogonias	
	Mone	Cercopithecus mona	
	Hocheur	Cercopithecus nictitans	
Cercopithecidae	Red-whiskered ear	Cercopithecus erythrotis	
	Preuss's red colobus	Procolobus preusii	
	Drill	Mandrillus leucophaeus	
	Collared mangabey	Cercocebus torquatus	
Pongide	chimpanzee	Pan troglodytes	
	rodents		
Histricidé	brush-tailed porcupine	Atherurus africanus	
	pholidota		
	giant Pangolin	Smutsia gigantea	
Manidé	tree pangolin	Manis tetradactyla	

carnivores							
feline	panther	Panthera pardus					
Viverridé	chive	Civettictis civetta					
Herpestidé	mongooses spp	Herpestes spp					
Proboscidés							
Eléphantidé Forest Elephant Loxodonta Africana cyclo							

<sup>&</sup>lt;sup>1</sup>red duiker

- Endemic fish species have been identified in the lake Ejagham, within the FMU:
- Sarotherodon knauerae (Neumann & Schliewen Stiassny, 2011);
- Sarotherodon lamprechti (Neumann & Schliewen Stiassny, 2011);
- Tilapia Ejagham (Dunz & Schliewen, 2010);
- Tilapia nigrans;
- Tilapia fusiform;
- Fundulopanchax gardneri lake;
- Procatopus aberrans;
- Barbus cf. callipterus.

Lake Ejagham of Cameroon is a very small oval lake with a maximum depth of 18meters that is in the basin of the Cross River and is currently isolated from the proximity of the river Munaya by a waterfall of several meters high. It thus makes a case of isolation of species of fish (and other aquatic inhabitants) very special.

#### 3.2.4. Socio-economic context

#### 3.2.4.1. Socio-demographic characteristics

The population bordering the FMU 11 005 are mostly Ejagham and are distributed in the 25 surrounding villages. People express themselves in the Ejagham language. However pidgin also constitutes a communication medium

Repartition of the population per village				
Village	Total			
BABONG	3 422			
ARARU	561			
NKHOGO	345			
BAKUT	367			
EKOGATE	189			
OGURANG	270			
BABI	320			
MBOBUI	90			
MBOFONG	67			
ABAPKA	20			

AKWA	307
EKONEMAN OJONG	173
AJAMAN	983
OKURIKANG	214
INOKUN	619
MBENYAN	316
NDEBAYA	840
NSANAGARATI I	326
EKONEMAN AWA	355
OTU	1691
OKURI	389
MBINDA	466
AYAOKE	692
ONAKU	431
EYANG EMANGHA	173
Total	13626

#### 3.2.4.1. Activities of the population

#### a.fisheries

The presence of a dense river network around the villages bordering the forest concession unfortunately does not give rise to intense fishing activity, it is rather marginal. 28.5% fished by hand. It is mostly practiced in the dry season in the major rivers across the region. The income provided by fishing activity generally range from 1200 to 570,000 F CFA annually. Fish is sold both to people living in the village as well as those from outside

#### - B. hunting

Hunting practiced out of the norms prescribed by regulations (hunting season, means used, class of animals) is considered illegal. In the absence of alternative solutions, hunting rather remains a way of life for the people of the forest zone, game constitute not just an extra source of animal protein, but also a source of income. It should be noted that within the population, many people are aware that hunting as practiced here is prohibited.

Depending on the catch, the most hunted species are respectively duikers, porcupine, bush pigs, monkeys, pangolins and cane rats.

#### c. Other products harvested from the forest

Non-timber forest products(NTFPs) listed for the use of local populations of FMU 11 005 include fruits (Bitter cola, Ndjansang, wild mango, wild pepper, cola nuts), herbs (eru), the rattan and raffia used for handicrafts (basketry and roofs), bamboo (poles), vegetables / leaves, palm wine, mushrooms, honey and many others.

Periods of picking these products vary according to the nature of the product and on its biological characteristics. The fruits are harvested seasonally, bark are collected throughout the year and while the rest as need arises.

#### d. Traditional agricultural activities

Agricultural activities are based mainly on:

- Food crops (cassava, cocoyam, cucumber, sweet banana, plantain, corn, watermelon, fruit crops etc ...).
- Cash crops (cocoa, oil palm).

Cocoa farming is practiced by 91.28% of respondents (mostly women). The total area sown by cocoa is estimated at 508.25ha with an average of 3.24ha / farm.

#### e. Tree cutting and chainsaw milling

Although this activity requires prior an operating license, the populations of the forest area, because of their lifestyles, are always called upon to cut trees to meet:

- The creation and / or expansion of farms (62.79%);
- Adjustment of shading on existing farms (55.23%);
- Construction needs (9.3%);
- Finally, the collection of firewood and manufacturing of other products (3.49%).

#### f.Development Companies and CIG

Community and social life is mainly oriented towards social actions (tontine)

- Farming activities and towards economic development actions.
- -CIGs (Common Initiative Groups), indicators of associative development exist in the area.
- -An instance of consultation (GFMCV), involving local people in forest management FMU has been established through the Village Forest Management Committees.
- -The PSMNR-SWR (Programme for the Sustainable Management of Natural Resources in Cameroon South-West Region) has been working since 2006 in the South West region to support the Regional Delegation of MINFOF and the village communities around protected areas of Mt. Cameroon, the Korup National Park and Takamanda-Moné to promote rational and sustainable use of natural resources and biodiversity conservation. Through the implementation of management plans for protected areas and village development plans, the program helps to reconcile conservation activities with measures to improve the living conditions of local residents.

The PSMNR-SW is a development program of the State of Cameroon co-funded by the Federal Republic of Germany through KfW in collaboration with GIZ.

#### g. Industrial activities and forest exploitation industries

#### Operating Companies

In the Manyu Division, industrial activities revolve solely around logging carried out by two companies, namely: CAFECO (FMU 11 005) and SEFFECAM (FMU 11 001, 11 002, 11 003, 11 004 and 11 006).

#### • Processing Companies.

The processing activities of CAFECO SA takes place in Nguti. A small processing unit is being developed at Ossing.

#### - Mining

There is currently no mining activity in the area. The northern part of the FMU 11 005 was included (on 12,869ha or 20% of its surface) with quite a formal exploration and mining licenses accorded to the company SOFTROCK Energy Ltd (Licence No. 00203 / MINIMIDT / SG / DMG / SDAM signed by the Minister of Industry and Mines 05/05/2008).

The exploration license was awarded in 2008 for a period of 3 years renewable once. During this period of research, several field surveys are conducted but the work of identification is mainly done by remote sensing, not affecting the forest canopy.

#### - Agro-Industries

No agro-industrial activities, according to our information, there are in the area.

#### - Industrial fishing

No industrial fishing exists in the area.

#### - Tourism and Ecotourism

The most interesting tourist potential of the area is the crater lake Ejagham. This site is not for the moment valued. Lodging structures are almost non-existing in the area: the only Hotel is at Eyumojock and contains 13 bedrooms.

It should be noted that this FMU is bounded in its southern part by the Korup National Park which is very rich in its biodiversity. This is an immeasurable opportunity for development of ecotourism.

#### 3.2.4. infrastructure

#### - Communication Channels

Communities along FMU 11-005 are very isolated, besides the localities in the north of the FMU who benefit from the newly paved road linking Mamfe and Eyumojock to Nigeria.

Other localities have roads that may be impassable in the rainy season:

- Mamfe -Ajayukndip Axis, which provides access to the FMU 11005, by crossing the river Munaya via a Ferry belonging to CAFECO SA;
- The Eyumojock Inokum Babong axis;
- The Eyumojock Otu axis. The ferry on the river Munaya also permit the local populations to move freely.

The Kumba-Mamfe road through Konye-Manyemen-Nguti is impassable in the rainy season.

#### -Habitat

Most of the houses are made of clay and covered with mats, few houses are covered with metal sheet roof.

CAFECO employees are live in Ajayukndip equipped with a drinking water source and a standby generator. Depending on the progress of exploitation activities, employees will lived in the villages closest to the site. CAFECO has put in place a canteen at Ajayukndip to meet the primary needs of its employees.

#### -Schools

Only primary education is provided in the villages bordering the FMU: from the 25 surrounding villages, 13 have a primary school. Eyumojock has 3 primary schools and a technical college (CETIC). A total of 22 schools (primary and nursery) are present in the area (17 public institutions and 5 private institutions). Infrastructure in these areas with schools remains inadequate, particularly with respect to elementary education.

For the 2008/2009 school year, 58 teachers were posted for 1934 school pupils, or in average, more than 33 students per class (FORUDEF, 2009).

#### -Health Centers

On the health aspect, the 25 villages bordering the FMU have only three functional centers: Babong, Otu and Ekok health centers,. Two health centers were built at Nsanagarati and Ogurang but remain non-operational (FORUDEF, 2009). Most of the local population has to go to Eyumojock or Nigeria for treatment. Health conditions are precarious. This situation is found throughout the district. Most diseases are related to unsafe water: Diahrées, Typhoid and Malaria are the most common. CAFECO employees benefit from access to the clinic installed at Ajayukndip. A partnership was concluded with the Mamfe public Hospital which aims to support and monitor the health of employees in the case of accident or illness. A medical examination and an annually systematic visit is done for all employees. An awareness program, anonymously detection and free support to HIV / AIDS is accessible to all employees.

#### -DrinkingWateSupply

Drinking water is a major problem for the people. Only two villages; Ayaoke and Otu, are equipped with drinking water. The well furnished with manual pump in Otu is an action of the council, thanks to the repayment of annual forestry fee. The well in Ayaoke is a social achievement of CAFECO, with its own funds, allocated to voluntary donations. In 2007, the Government funded a project to build a water supply at Nsanagarati. Project management was provided by the company SAITEC, but this water supply has never worked. In 2012, a project supported by the FEICOM permitted the establishment of a water source in the village of Mbinda and an additional water point in the village of Otu (http://water journalists Africa. word press .com).

#### -Electrification

None of the 25 villages bordering the FMU is connected to the conventional network distribution of electrical energy. At the level of Nsanagarati I and Out villages, community generators were set up: the communities have organized to handle their operating expenses. The villages of Ekoneman Ojong, Okurikang and Eyang Emangha also have generators but they only work on certain occasions, for lack of organization of the village communities (Effala, 2008). CAFECO helped electrify the villages of Okurikang and Araru, by assisting them with a generator as a social project, managed by the communities.

#### -Recreation

There are no leisure facilities in the villages. On the contrary, most of them have an "Ekpe hall" where they practice their traditional activities, dedicated only to men.

#### 3.3. State of the forest

#### 3.3.1. History of the forest

#### - Origin of the forest

This FMU is an ancient forest area classified as a production reserve (Ejagham Reserve), founded in 1934. The forest was converted to an FMU and assigned to CAFECO by an appel d'offre in November 2006, on the basis of 3050 FCFA / ha / year for forest tax (RFA). The procedures for forest classification are being finalized (area measurement certificate issued by the forest administration, filing decree for signature at the prime minister).

#### - Natural or human disturbances

No major natural disturbance were identified. The FMU, as was defined before the classification process was very disturbed by human activities, while containing within itself towns like Eyumojock and crossed by many roads.

With the new delimitation of the FMU, the integrity of the forest covering the FMU is not threatened:

Disruptions related to the activities of local residents remain limited mostly outside the perimeter of the FMU. The major forest disturbances are related to forest exploitation. The northern part of the FMU is concerned with artisan (illegal sawing) activities for sale to neighboring Nigeria.

#### - previous Forestry services

#### Reforestation

There are forest plantations established by the National Office of Forest Regeneration (ONADEF) near Eyumojock, mainly of Gmelina arborea and Tectona grandis.

#### Inventory and other environmental studies

The FMU is in Phase V of the National Reconnaissance inventory, only the first 4 phases have been completed. A national forest inventory was taken in 2004 and 2005 with the technical and financial support of FAO. It was a stratified systematic survey covering the whole country. In the forest stratum, the sampling units were arranged systematically at each 30 'north of the latitude and 15' longitude east (500 sq m side). The outcome of this sampling identified 235 sampling units whereby six (73, 74, 75, 95, 96, 97) cover the FMU. The results of this inventory, the gross volume is estimated at 347.7 m3 per hectare for the main species of diameter greater than or equal to 20 cm. The exploitable volume for the same species is estimated at 62.6 m3 per hectare. The main species are composed mostly of Fraké, Emien, Ayous, Tali, Ilomba, Aleppo, Fromager, Dabema, Sapelli, red Padouk and Azobé (MEDINOF, 2008). In 2008, a management inventory was conducted for CAFECO by MEDINOF, with 0.97% of survey intensity on the surface included in the provisional agreement (81,549 ha).

#### Exploitations

There was no exploitation in the FMU before its allocation to CAFECO because the FMU was classified as a forest reserve. This FMU was surrounded by two licenses:

- In the Southeast part, by the license n°1724 covering an area of 114 650 ha which was attributed to **MUKETE Plantation**. It has been operating from 8 March 1980 to 08 March 1985.
- In its northeastern part N ° 1776 license covering an area of 62,080 hectares and allocated to **CIF company** from 14<sup>th</sup> December 1987 to 13 December 1992.

In 2005, the provisional exploitation agreement was signed with CAFECO Company. Up to this revision of the management Plan, 9 AAC were opened to exploitation: 5 AAC of FEU1 and the first 4 AAC from FEU2.

#### Other facilities (forest, tourism, hunting, etc.)

None of these facilities had been established previously in the area.

#### 3.3.1. inventories

#### 3.3.2.1. Summary of management inventory results.

This inventory was conducted according to national standards, in December 2012 to May 2013. The only difference lies in the fact that saplings (diameter between 10 and 20 cm) were counted on the first 50 meters of each plot and not the first 5 meters as suggested standards, to better understand this diameter class. The values of the actual sapling provided by the Tiama software are to be divided by 10. The field work was conducted by GTG company accredited for the realization of inventories, under the supervision of the management unit of CAFECO and the consultancy firm FRM, advice from the CAFECO Company. The selected sampling rate is 1% for trees over 20cm in diameter. This value was higher than the 0.5% threshold required by national standards; this reflects the importance given to this activity by the management of CAFECO Company, concerned to obtain results with good accuracy. The definition of the sampling plan was a document given to the forestry administration. The main results compilations performed with the software Tiama and handed to the forestry administration in the inventory report No. 08359492 are included here. They are complemented by many other interesting results with the FDP ® software developed by FRM. The compatibility of the results between the two programs was checked beforehand. Small differences are sometimes encountered due to rounding of numbers operated at different times of the compilation of channels.

The table below shows the results of the management inventory: table of stock in (m3/ha and m3)

Essence	Code	Vol./ha	Vol. total	Vol.>=DME
Abam à poils rouges	1402	0,68	46 412	18 092
Abam évélé	1408	0,00	55	0
Abam fruit jaune	1409	0,11	7 643	2 164
Abam vrai	1419	0,00	60	0
Acajou blanc	1102	0,00	56	0
Acajou de bassam	1103	0,87	59 169	40 302
Aiélé / Abel	1301	1,72	117 215	102 828
Alep	1304	6,98	475 454	354 058
Andoung brun	1305	0,58	39 372	36 286

	1	T	T	T
Andoung rose	1306	0,13	8 740	7 319
Aningré A	1201	0,34	23 222	3 201
Aningré R	1202	0,38	25 680	2 990
Azobé	1106	9,39	639 325	566 502
Bahia	1204	1,10	74 820	42 583
Bété	1107	0,00	99	0
Bilinga	1308	1,25	85 285	63 567
Bongo H (Olon)	1205	0,05	3 510	1 385
Bossé clair	1108	0,32	21 683	7 099
Bossé foncé	1109	1,01	68 600	10 272
Dabéma	1310	7,52	511 824	482 763
Dibétou	1110	0,45	30 344	11 078
Doussié blanc	1111	0,84	57 430	14 784
Doussié rouge	1112	0,78	53 371	20 851
Ekaba	1314	0,01	401	0
Ekop ngombé gd feuilles	1600	0,01	421	421
Ekop ngombé mamelle	1601	0,24	16 192	698
Emien	1316	2,34	159 532	151 485
Eyong	1209	1,87	126 974	102 557
Faro	1319	0,93	62 992	60 062
Fraké / Limba	1320	1,95	132 952	117 987
Framiré	1115	1,24	84 597	82 428
Fromager / Ceiba	1321	2,28	155 063	149 585
Gombé	1322	0,30	20 634	11 869
Ilomba	1324	9,36	637 215	501 277
Iroko	1116	0,84	57 251	35 811
Kossipo	1117	0,10	6 968	4 172
Koto	1326	0,88	60 232	35 624
Longhi	1210	0,30	20 235	4 971
Lotofa / Nkanang	1212	0,02	1 415	740
Mambodé	1332	0,86	58 218	53 972
Moabi	1120	0,75	51 317	34 130
Movingui	1213	1,25	85 206	54 933
Mukulungu	1333	0,11	7 468	6 325
Naga	1335	7,94	540 463	499 711
Naga parallèle	1336	0,005	3 398	3 342
Niové	1338	6,80	462 629	258 299
Okan	1341	2,72	185 321	179 930
Onzabili K	1342	1,52	103 717	98 516
Onzabili M	1870	0,18	12 465	10 392
Padouk blanc	1344	1,84	125 530	44 818
Padouk rouge	1345	4,79	326 289	276 449
Sipo	1123	0,41	27 963	23 392
Tali	1346	2,27	154 302	150 566
Tiama	1124	0,34	23 321	10 139
Tiama Congo	1125	0,02	1 600	832
Zingana	1349	0,43	29 428	26 715
0				1 -00

#### - Productivity of the forest

#### - Increases

Increases used are those recommended in the "Guide in the Development of a management plans" - MINEF 1998 and incorporated in Tiama software. We consider a linear application of this value (i.e a steady increase over time for a given species)

#### - Mortality

Annual mortality is fixed at 1% of the stems, and also for all classes of diameter (Tiama hypothesis).

#### - operating Damage

A 7% reduction in the number of stems is applied to all diameter classes below the DME / DMA (Tiama hypothesis).

#### 3.3.2.3. Diagnosis of the state of the forest

The analyzes of the management inventory (diametric structures, maps of distribution) highlight the mature forest stand and is, in a large part, not exploited. The south of the concession has a higher woody diversity and also corresponds to a highly rugged area which will be more difficult to value. Current knowledge of the forest is used to decide on when to go in for logging and to adapt this revision of the management plan to the real potential of the concession.

#### 3.3. proposed development

#### 3.3.1. Development objectives of the forest

The development objectives of the forest aims at maintaining the integrity of the ecological, social and environmental functions of the forest.

The FMU 11-005 has as main objective; timber production on a sustainable basis, through the implementation of this management plans.

Several conservation / protection areas have also been defined.

#### 3.3.2. Land allocation and users rights

#### 3.3.2.2. Land Use

USE	CODE	Objective (s)	Surface (ha)	Prioritise Activity (ies)	Mode (s) of identification	SERIE
Forestry: Wood production	FOR	Timber production	62 415	Forest manageme nt, Forestry exploitation	Analysis of management inventory data on GIS	Product ion Series
Protection: Biodiversity	CON	Maintaining biodiversity, sub-montane forest, Buffer with the Korup NP, Lake Ejagham	920	Ecosystem protection	Mapping and analysis of the management inventory	Conser vation series
Wildlife protection	FAU	Wildlife conservation	5000	Protection of	Data analysis of fauna	protecti on

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				emblematic species (Elephant, Drill, Chimpanze e, Water chevrotain)	inventory GIS	series
Protection: rivarian strip streams	RIV	Protection of the banks of water bodies, including Lake Ejagham	1963	Ecosystem protection	Applying a ratio of 3% of the total area of the production series	

### -Users Rights

		ACTIVITY UNDER THE RESPONSIBILITY OF THE RECIPIENT		ACTIVITY IN THE YEAR OF USE RIGHTS BY POPULATION RIPARIAN					
USE	CODE	Commercial logging	Sand, gravel and laterite extraction	Service timber harvesting	Harvesting bamboo and rattan	Subsist hunting.	Subsist fishing.	subsist picking	Grazing and agriculture
Forestry: Wood production	FOR	Ré	Re, Ré	Ré	Re, Ré	Re	Ré	Ré	In
Protection : Conservation	CON	In	In	In	Re, Ré	Pe	Ré	Ré	In
Protection : Wildlife	FAU	In	In	In	In	In	In	In	In
Protection: Riparian	RIV	In	In	In	Re, Ré	Pe	Ré	Ré	In

- Pe: activity permitted everywhere, on all products that can be legally harvested

Re: Activity permitted but subject to a spatial restriction

**Ré:** Activity permitted everywhere, but according to a specific mode of action and a short list of products

In: Prohibited Activity

# 3.3.1. Development of the production series

# - Species appointed in FMU 11005

Species	DME	Gross volum> =	%	%	fitted species
Species	DIVIE	DME (m3 / ha)	70	cumulative	iitted species
Abam à poils rouges	50	0,266	0%	0%	Oui
Abam évélé	50	0,000	0%		Non
Abam fruit jaune	50	0,032	0%	0%	Oui
Abam vrai	50	0,000	0%		Non
Acajou blanc	80	0,000	0%		Non
Acajou de bassam	80	0,592	1%	1%	Oui
Aiélé / Abel	60	1,510	2%	3%	Oui
Alep	50	5,201	7%	11%	Oui
Andoung brun	60	0,533	1%	12%	Oui
Andoung rose	60	0,108	0%	12%	Oui
Aningré A	60	0,047	0%	12%	Oui
Aningré R	60	0,044	0%	12%	Oui
Azobé	60	8,321	1%	13%	Non
Bahia	60	0,625	1%	13%	Oui
Bété	60	0,000	0%		Non
Bilinga	80	0,934	1%	14%	Oui
Bongo H (Olon)	60	0,020	0%	14%	Oui
Bossé clair	80	0,104	0%	14%	Oui
Bossé foncé	80	0,151	0%	14%	Oui
Dabéma	60	7,091	10%	25%	Oui
Dibétou	80	0,163	0%	25%	Oui
Doussié blanc	80	0,217	0%	25%	Oui
Doussié rouge	80	0,306	0%	26%	Oui
Ekaba	60	0,000	0%		Non
Ekop ngombé gd feuilles	60	0,006	0%		Non
Ekop ngombé mamelle	60	0,010	0%	26%	Oui
Emien	50	2,225	3%	29%	Oui
Eyong	50	1,506	2%	31%	Oui
Faro	60	0,882	1%	32%	Oui
Fraké / Limba	60	1,733	2%	35%	Oui
Framiré	60	1,211	2%	36%	Oui
Fromager / Ceiba	50	2,197	3%	39%	Oui
Gombé	60	0,174	0%	40%	Oui
Ilomba	60	7,363	10%	50%	Oui
Iroko	100	0,526	1%		Non
Kossipo	80	0,061	0%	50%	Oui
Koto	60	0,523	1%	51%	Oui
Longhi	60	0,073	0%	51%	Oui
Lotofa / Nkanang	50	0,011	0%		Non
Mambodé	50	0,793	1%	52%	Oui
Moabi	100	0,501	1%	-	Non
Movingui	60	0,807	1%	53%	Oui
Mukulungu	60	0,093	0%		Non

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Naga	60	7,340	10%		Non
Naga parallèle	60	0,049	0%		Non
Niové	50	3,794	5%	59%	Oui
Okan	60	2,643	4%	63%	Oui
Onzabili K	50	1,447	2%	65%	Oui
Onzabili M	50	0,153	0%	65%	Oui
Padouk blanc	60	0,658	1%	66%	Oui
Padouk rouge	60	4,061	6%	72%	Oui
Sipo	80	0,344	0%	73%	Oui
Tali	50	2,212	3%	76%	Oui
Tiama	80	0,149	0%	76%	Oui
Tiama Congo	80	0,012	0%		Non
Zingana	80	0,392	1%	76%	Oui
TOTAL		70,217			76%
Nb essences			56		42

<sup>-</sup> Logging activities are conducted in compliance with forest-based intervention based on standards and requirements (management DME, management blocks, Annual logging plot, etc.) of the management Plan.

#### **3.3.1.1.** *Species undeveloped in FMU 11 00*5

species	DME (cm)	No. of stems / ha> = 20cm	DMA retained (cm)	Group
Azobé	60	1,539	70	2
Naga	60	1,268	80	2
Iroko	100	0,120	100	2
Moabi	100	0,121	100	2
Ebène	60	2,620	60	3
Abam évélé	50	0,002		3
Abam vrai	50	0,002		3
Acajou blanc	80	0,002		3
Bété	60	0,002		3
Ekaba	60	0,003		3
Ekop ngombé gdes f.	60	0,002		3
Lotofa / Nkanang	50	0,013	Species	3
Mukulungu	60	0,019	excluded from	3
Naga parallèle	60	0,005	the	3
Tiama Congo	80	0,018	exploitation	3
Bubinga E	80	-		3
Bubinga rose	80	-		3
Bubinga rouge	80	-		3
Ekop naga nord-ouest	60	-		3
Faro mezilli	60	-		3
Omang bikodok	50	-		3

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#### 3.3.1.2. Rotation

As instructed by the forest administration (see Order No. 222 / A / MINEF of 23<sup>rd</sup> May 2001, Article 8 paragraph 2), Forest Exploitation Units are subject to a provisional division into annual logging plots (AAC) of equi-surface.

The limits are based as much as possible on landscape units defined by natural elements (rivers) to facilitate operation.

The equi-logging area was made only from FEU 3. AAC opened before the present revision was maintained in the state, although due to the overlapping of certain plots with wildlife protection and conservation Series newly defined, the surface between some of them are found to have significantly decreased (case AAC 2.3).

Table 41 of the management plan has the characteristics of each annual logging plot. This revision has strongly impacted some surfaces open to exploitation before the revision of the MP, Table 41 incorporated the original total areas concerned (AAC 1.1

The rotation is fixed at thirty years to ensure continuity of the forest as long as possible after an exploitation cycle. The forest is divided into 30 equi-surface logging areas wherever possible.

#### 3.3.1.1. Calculation of reconstitution and diameters rate

Essence	DME	DMA (cm)	Taux de reconstitution
Abam à poils rouges	50	50	122%
Abam fruit jaune	50	50	152%
Acajou de bassam	80	80	57%
Aiélé / Abel	60	70	50%
Alep	50	80	124%
Andoung brun	60	90	52%
Andoung rose	60	80	52%
Aningré A	60	60	241%
Aningré R	60	60	322%
Bahia	60	60	80%
Bilinga	80	90	51%
Bongo H (Olon)	60	60	69%
Bossé clair	80	80	73%
Bossé foncé	80	80	128%
Dabéma	60	90	104%
Dibétou	80	80	145%
Doussié blanc	80	80	92%
Doussié rouge	80	80	66%
Ekop ngombé mamelle	60	60	757%
Emien	50	70	62%
Eyong	50	70	62%
Faro	60	80	60%
Fraké / Limba	60	80	78%
Framiré	60	90	51%
Fromager / Ceiba	50	50	238%

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Gombé	60	60	79%
Ilomba	60	70	58%
Kossipo	80	110	138%
Koto	60	60	50%
Longhi	60	60	50%
Mambodé	50	80	63%
Movingui	60	70	60%
Niové	50	50	66%
Okan	60	90	85%
Onzabili K	50	80	64%
Onzabili M	50	50	52%
Padouk blanc	60	60	115%
Padouk rouge	60	80	72%
Sipo	80	110	138%
Tali	50	80	64%
Tiama	80	80	107%
Zingana	80	100	73%
Overall rate for managed selected DMA)	with the	79%	

# 3.3.1.1. Order of passing

		Year of	Total Surface *	Useful Surface
FEU	ALU	exploitation	SIG (ha)	
Plots before revision (MP, 2008)				
	1	2 006	2 490	2 415
	2	2 007	2 457	2 383
1	3	2 008	2 476	2 402
	4	2 009	2 456	2 349
	5	2 010	2 346	2 276
TOTAL FEU 1			12 225	11 825
	1	2 011	2 270	2 202
2	2	2 012	2 227	2 160
2	3	2 013	2 189	2 123
	4	2 014	2 000	1 940
Revised plot	S			
2	5	2 015	2 418	2 394
TOTAL FEU 2		11 104	10 819	
	1	2 016	2 481	2 429
	2	2 017	2 222	2 062
3	3	2 018	2 359	2 330
	4	2 019	2 520	2 495
	5	2 020	2 484	2 416
TOTAL FEU 3		12 065	11 731	
	1	2 021	2 199	2 165
4	2	2 022	2 107	2 076
	3	2 023	2 114	2 089

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	4	2 024	2 228	2 194
	5	2 025	1 919	1 898
TOTAL FEU 4			10 564	10 419
	1	2 026	1 966	1 966
	2	2 027	2 123	2 123
5	3	2 028	1 861	1 861
	4	2 029	1 871	1 871
	5	2 030	1 979	1 979
TOTAL FEU 5			9 799	9 799
	1	2 031	2 058	2 046
	2	2 032	1 750	1 748
6	3	2 033	2 057	2 051
	4	2 034	1 715	1 687
	5	2 035	1 791	1 788
TOTAL FEU 6			9 369	9 317
<b>TOTAL PRODUCTION SERIES FMU</b> (AAC 2.5 to 6.5)			44 215	43 684

<sup>•</sup> From the ALU 2.5 (plot revised in 2013, the total area affected excluding surfaces in series for Coastal Conservation (3% of the initial surface)

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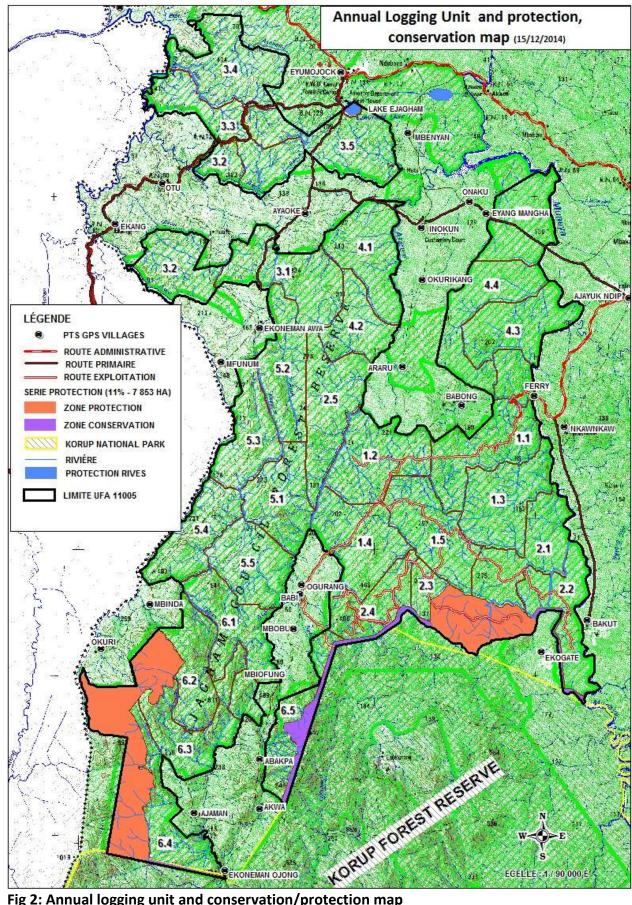


Fig 2: Annual logging unit and conservation/protection map

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#### 3.4.3.5. Forest roads

Apart from FEU 1 and 2 which have just gone via exploitation, the rest of the FMU have not yet been evaluated, and the principal road network system remains to be defined. Thereafter, the main roads of each new block opened for exploitation will be detailed in its management plan, and the secondary roads will be detailed in their annual operation plan (POA) for each new plot.

#### 3.4.3.6. Special Sylvicultural systems

#### Specific objectives for the management of special species

Under the precautionary principle, the forest manager has decided to implement measures to preserve within the FMU, threatened species.

Species subject to a special sylvicultural system are those of Group 3, we recall the listed below:

Abam Evele (Gambeya perpulchra)

True abam (Gambeya lacourtiana)

White mahogany (Khaya anthotheca)

Bete (Mansonia altissima)

Ebony (Diospyros crassiflora)

EKABA (Tetraberlinia bifoliolata)

Ekop Ngombé gd sheets (Didelotia africana)

Lotofa / Nkanang (Sterculia rhinopetala)

Mukulungu (Autranella)

Parallel Naga (Brachystegia mildbreadii)

Tiama Congo (Entandrophragma congoense)

Ebony (Dispyros crassiflora) is subject to a special silvicultural system. Other special species are rare species in the FMU, having a total density (diameter> = 20 cm) of less than 0.03 stems / ha. They are forbidden to exploit throughout the duration of the rotation.

The distribution of Framiré (Terminalia ivorensis) reflects a slowdown of regeneration in the FMU. Deciduous heliophilous species, Framiré does regenerates in very open environments. As part of the review of the management of the FMU, the DMA is increased to 90cm, which corresponds to a significant rise in its DME, allowing also the increase in the number of preserved seed. A support program for the regeneration of this species through reforestation of degraded areas (parks or fallow land) could be implemented.

Other species (Andok, Essessang), classified into Group 4 (promotion species) have a major interest to local residents and will be of special sylvicultural measures to avoid damage to their population in the mining work. For management species providing NTFP (Non Timber Forest Products) to the populations (Emien Tali), similar measures will also be applied.

#### Sylvicultural rules for special species and mode of intervention

The structure of Ebony populations indicates that exploiting at a DME of 60cm would be sustainable. However, such an operation will not be allowed at the start of the management plan and will be subject to, if necessary, a special request with argumentation. As already mentioned, other species will be restricted from exploitation in the course of rotation. Their future stems will be identified and protected from exploitation. For species with a deficit in regeneration, their

future stems will be protected during mining operations and enrichment planting will take place in case of exploitation of these species.

#### 3.4.3.7. Sylvicultural intervention program

#### - Exploitation to DMA

Tree population for the FMU 11-005 will be conducted in irregular stands, sylvicultural activities are based on cyclical cuts respecting the set rotation time and removing the biggest stems, of greater diameter than the DMA. By increasing the minimum exploitation diameters (DME), the proportion of potential seed producers keep going up, while promoting the regeneration of the forest.

#### - Plantations

Degraded surfaces, directly or indirectly by exploitation (log yards, laterite and gravel quarry, Forest Base and Aja Base) will be enriched by planting tree species from a tree nursery established in 2011 in the Forest Base of Babong. These plantings will be conducted annually and systematically after each exploitation activity. This enrichment work is benefit from the technical support of the Faculty of Agricultural Sciences of Gembloux (FUSAGx), with which WIJMA, a partner of CAFECOSA, has been collaborating with since 2008.

#### 3.4.3.8. Protection Program

The FMU 11-005 being part of the Permanent Forest Domain, requires various protection measures to be implemented in order to ensure the sustainability of the forest and its functions. Conservation and protection serieses have been identified to ensure the protection of sensitive areas or high biodiversity potential. Conservation actions goes via through the materialization of forest boundaries, conservation series, the series of wildlife, management blocks and annual logging plots. This realization, which will be based on standards 9, permits, by rendering visible the limits of the zone, effective monitoring of the territory. The boundary maintenance will be carried out regularly in order to maintain the necessary visibility and monitor the achievement of its limitations.

#### - Protection against erosion (watersheds, river banks, steep slopes)

In the light of the protection against erosion, a buffer zone of 30meters on each side of the main rivers are excluded from the production area and will be protected from exploitation. It will not be realized on the ground but the exploitation actions will be planned so as to prevent logging and penetration of tractors in such areas. Mechanized exploitation is prohibited on all areas above 50% slopes. When these surfaces of steep slopes form a massive of at least 100hectares, they will be mapped and set aside. They will be integrated into a series of protection under use: Protection - Steep slopes during the next revision of the management plan. Planning, GIS and in the field, opening of roads and tertiary roads but also the establishment of parks, will be done so as to avoid near rivers and areas of steep slopes. Crossings of streams will limit the spill of earth in the waters. Rehabilitation measures of degraded soils (old quarries of laterite, old timber yards,) will be implemented.

#### - Protection against fire

Given the prevalence of dense forest in the perimeter of FMU 11-005, the risk of fire are virtually non-existent here, as evidenced by the absence of any recent evidence of fire on the FMU.

#### - Protection against insects and diseases

In this area, there is not enough knowledge now to set measures. Nevertheless, the company will remain attentive to developments in this area and the health problems that appear on the FMU.

#### - protection against the encroachments of the population

Exploitation tracks will be inaccessible once exploitation in a block or an annual logging plots (after possible controls by the administration), to the extent that they are no longer needed to drain the logging plots in the course, in order to regulate the movement of people. Awareness campaigns to ban farming or any other illegal activity within the scope of the FMU will be conducted. The limit of the FMU will be materialized and signs will remind prohibited activities in each series, in access points of the FMU (road barrier).

#### - Protection against pollution

All waste and related products polluting exploitation activities - tires, motor oil, oil filters . - will, depending on their nature, retrieved, sorted and sent for recycling to the recycling companies. Storage and safe handling are set up for all of these products and for toxic products (phytosanitary treatment of wood) and strictly controlled. Hydrocarbons are stored in sealed tanks, equipped with pumps, and secured by recycling bins. Storage and handling of oil, polluting and toxic products are prohibited within 60m of a watercourse.

#### - Monitoring device

Territorial Surveillance of the FMU will be conducted jointly with the forestry administration and local residents. CAFECO implements an annual monitoring of the limits of the FMU, with emphasis on the portions under severe pressure (poaching, illegal logging, opening cocoa farms). Border limits with Nigeria are particularly sensitive vis-à-vis these illegal activities. All recorded offenses will be reported to the authorities.

#### 3.4.3.9. Other amenities

#### - public reception Structures

There is a tourism potential, thanks particularly to the presence of Lake Ejagham. This potential is poorly valued and reception facilities are poorly developed.

#### - Conservation measures and enhancement of halieutico-game potential

The whole territory of the FMU, except in the series of wildlife protection customary hunting and fishing are allowed. The enforcement of existing legislation on hunting is the primary means at our disposal to assist in the conservation of hunting resource. The following specific measures will be implemented to reduce pressure on wildlife in the FMU:

- Awareness initiatives of local communities in joint management with local NGOs,

Forestry Peasants Committees (CPF) and the company's employees;

- Collaboration with the local government authority (MINFOF, MINEPNDD and MINATD) in campaigning against poaching;
- Collaboration with **KfW** and **MINFOF** Conservation (PN Korup) in "sudden operations fists "to fight against illegal logging, poaching and the opening of agricultural farms (cocoa) in the FMU;
- Denunciation of poaching to the competent administration;
- Integration of strict disciplinary measures in the rules against potential offenders;
- closure (ditch, fence, logs) of tracks at the end of the exploitation of each AAC.

A wildlife monitoring will be conducted during the exploitation inventory, identifying signs of the presence of large mammals, to take appropriate management measures for their conservation.

## 3.4.3.9. **High Conservation Value Forests**

	Presence		
Type HCVF <b>Type de FHVC</b>	in the	location	justification
	FMU		
HCV type 1: Forest areas that	t present co	ncentrations of bi	odiversity at the global, national or regional
HVC 1.1: Protected areas	YES	All UFA	UFA borders the National Parks Korup and Cross River
HVC 1.2: Concentration of	YES	Habitat for the	Among the wildlife species of international or national importance, UFA home:
protected species,		species	- Chimpanzees and drills listed endangered on the IUCN Red List, in Appendix I of CITES
vulnerable, threatened or		concerned,	and fully protected in Cameroon;
endangered		including the series of	- The forest elephants and vulnerable Panthers classified on the IUCN Red List, in Appendix I of CITES and fully protected in Cameroon;
		wildlife protection	- The White-collared mangabeys and Whiskered red-eared classified vulnerable on the IUCN Red List and in Appendix I of CITES;
		·	- Sorted Giant pangolins Near Threatened on the IUCN Red List, in Appendix II of CITES and fully protected in Cameroon;
			- Sorted sitatungas Near-threatened on the IUCN Red List and in Appendix I of CITES; - Aquatic chevrotains fully protected in Cameroon.
			Among the woody species can petre threatened by exploitation:
			- Six species are classified as "critically endangered" (CR) and "endangered" (EN) by IUCN: Mukulungu, Zingana, black Ebony, Pao rosa, Tola and Wengue. Among them, Ebony,
			although present on the UFA and with a diametric structure displaying an exponential decay, is not threatened by a possible exploitation. The Mukulungu, poorly represented, is
			excluded from the operation. The Zingana Tola and show no impairment their regeneration and are not a priori threatened by exploitation. It is the same for Tola. For
			cons, the Pao rosa and Wengue, with a slowdown or a deficiency of regeneration, can be considered as vulnerable within the meaning of criterion 1.2;
			- Twenty species are classified as "vulnerable" by the IUCN, 5 of them have a very low
			density on UFA: White Mahogany, Bubinga E, Ekop Leke Ekop naga northwest Kotibé.
			Aside from the Framiré the latandza and poorly represented species, other species do not
			exhibit deficient regeneration on UFA;
			- Two species are classified "almost threatened" by IUCN: Iroko and Ekop ngombe udder

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Habitat for the species concerned, including Lake Ejagham	all 2 having a relatively large regeneration;  - Ten species are not listed on the IUCN Red List but have very low densities on UFA (or have not registered in 2008) and have been operating banned in the management plan revised 2013: Abam Evele, true Abam, Bete EKABA, Ekop Ngombé gd leaves Lotofa parallel Naga, Tiama Congo, Faro and mezili Omang bikodok.  UFA is home to three endemic tree species and sub-endemic Cameoun the Léké Ekop (Brachystegia zenkeri) Ekop the northwest naga (Brachystegia kennedyi) and Naga (Brachystegia cynometrioides). Eight other species emerge as lower Guinean which 5 are poorly represented on UFA: EKABA, Ekop Ngombé large leaves, Naga parallel Omang bikodok.  Among the animal species, the drill (Drill), the Preuss monkey (Cercopithecus preussi), the
species concerned, including Lake	(Brachystegia zenkeri) Ekop the northwest naga (Brachystegia kennedyi) and Naga (Brachystegia cynometrioides). Eight other species emerge as lower Guinean which 5 are poorly represented on UFA: EKABA, Ekop Ngombé large leaves, Naga parallel Omang bikodok.  Among the animal species, the drill (Drill), the Preuss monkey (Cercopithecus preussi), the
	whiskered red-eared monkey (Cercopithecus erythrotis) and the red colobus preuss (Procolobus preussi) have a particular degree of endemism the interfluve Cross River - Sanaga. In addition, the white-collared mangabey (Cercocebus torquatus) exhibits a degree of endemism particular to the lower Guinean region.  The lake is home to several endemic Ejagham fish species: Sarotherodon knauerae; Sarotherodon lamprechti; Tilapia Ejagham; Nigrans tilapia; Fusiform tilapia; Fuundulopanchax gardneri lake; Procatopus aberrans; Barbus cf. callipterus.
Eastern sector of the wildlife protection series Central West Area of the FMU	An elephant migration between the PN Korup and UFA could be highlighted. A sector in Central West UFA seems to be favored by some mammals like blue duiker, red duikers or African brush-tailed porcupine. This area would have a density of trees producing particularly appreciated by those species fruits
e	
Entire UFA	The forest covering the UFA proves somewhat fragmented and rich in plant and animal species.
e or endangered	
Swamp forest and submontane forest	Protection series / conservation.
	of the wildlife protection series Central West Area of the FMU  Entire UFA  Entire UFA  Swamp forest and

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HCV type 4: essential ecolog	ical service	S	
HVC 4.1: Watershed protection	YES	Series of bank protection, the lakeside Ejagham	Cameroon legislation prohibits operating within 30m of a watercourse. These areas were in fact placed in series of protection in the management plan.
HVC 4.2: Protection against erosion	YES	Areas of steep slopes (> 50%)	The mechanized felling is prohibited on all above 50% slopes. When these surfaces steep slopes form a clump of at least 100hectares, will be mapped and set aside. Some of these areas are found already placed in series conservation / protection in the management plan.
HVC 4.3: Protection against fire	NO		Given the nature of the naturally moist forest, this value is not applicable on FMU
HVC Type 5: essential comm	unity needs		
	YES	Use zones (hunting, fishing, gathering)	Participatory maps produced with the local populations of FMU should help locate areas providing people their food needs.
HCV type 6: Traditional Cultu	ral Identity		
	YES	sacred Sites	Some sacred sites and places of worship have been identified and located. Participatory mapping should be conducted to identify all the important places for the cultural identity of the local population. The identification of these types of sites (sacred sites, ancient villages, large trees, etc.) and location help to conserve during operation.

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#### 3.4.3.10. Promotion and management of Non Wood Forest Products.

Measures for the promotion and management of Non Wood Forest Products (NTFP) will be defined during the implementation of the management plan. Studies conducted to identify, quantify and locate important NTFP for local populations present in FMU, laid the first foundations of a genuine management of these products. These studies have shown an interesting potential for some products (wild mangoes, Cane, coconut leaves ...) and a weak management of recovery / marketing channels. The company CFAECO wants to examine the possibility of supporting, with the help of local partners, identification and organization of promising sectors. In this context, a collaboration with the PSMNR-SWR project (Programme for Sustainable Management of Natural Resources in the South West Region of Cameroon) could be considered to support the enhancement of NTFPs. Protective measures are already defined in this management plan to preserve the stems of tall trees providing NTFPs to local residents. Their implementation will be greatly facilitated by the establishment of an effective operational management.

# 3.4.3.11. Measures to harmonize the activities of the population with the management objectives

Precautions will be taken by the company to not infringe the sites of cultural and economic importance to rivarian communities (respect for sacred sites, NTFPs ...). the population will, moreover, be kept aware of sustainable resource management issues in the FMU (fauna, NTFPs ...).

#### 3.4.3.11. Research activities

Research activities will inevitably fall on the long term, and the elaboration of proposals and their implementation will be done during the implementation of the management plan. The forest manager indicates here three favorite themes for FMU 11-005, taking into account the fact that the research activities must also meet business priorities if we are to achieve full membership. The research programs will be conducted in close collaboration with national institutions (MINFOF, Ministry of Higher Education and Research: universities, forestry schools). For research operations applied in the forest, the local workforce will be employed.

#### - Analytical monitoring of production

with the introduction of improved exploitation inventories (cartography rods, monitoring samples) and monitoring of production processed and / or marketed, the company will have a few years of quantitative and reliable information that will allow it to identify realistic values for the sampling coefficients and marketing coefficients. The product of these two elements, also called proofing coefficient, will allow the passing from a raw standing volumes to net volumes, and thus to better plan the unfolding of the activity. The company also will on this basis seek to optimize the exploitation and processing of timber. Already, input processing tools and explolitation inventory data have been developed and are used. Procedures and tools for monitoring production and traceability have been developed and are being implemented.

#### - Better Knowledge on the technology of secondary species

The corollary of sustainable management is that the company will be working on a finite space. It will therefore inevitably go through a diversification of the economically desirable resource to

maintain a level of activity. Partnership with research institutes will seek to conduct tests on species of little knowledge but relatively abundant in the FMU. Downstream commercial actions will be put in place for some identified promising products.

### - KNOWLEDGE on the dynamics of forest stands

Given the many uncertainties about the evolution of current forest stands, it would be interesting in the context of sustainable management, to better understand the dynamics of these formations. In this context, WIJMA CAMEROON signed on the 27 October 2008 a collaboration agreement with the Forestry Laboratory of tropical and subtropical regions (FORTROP) of the University Faculty of Agricultural Sciences of Gembloux (FUSAGx). The objective is the provision of scientific expertise by conducting applied research in forest ecosystems found on concessions of WIJMA CAMEROON and partner companies, the CAFECO Company. This general agreement is completed by special agreements signed with the non-profit association that manages the Nature + Most field activities FORTROP, a special convention on the themes "forest dynamics, forest and enrichments series of conservation." As part of this partnership, a research device in FMU 11-005 is installed since 2009 in the form of a circuit for monitoring the growth and mortality of targeted species. The device was implanted in the old 3.3 AAC (AAC 5.5 in this review), near the village of Ogurang. 7 target species were identified to be monitored for growth: Mahogany, Azobé, Framiré, Movingui, Okan, Tali Padouk red. On 31 December 2011, 644 stems were integrated into the device. Only Framiré was not yet represented.

The implantation of this device is to:

- Monitoring the growth and mortality of the target species to know their growth and mortality rates;
- Their phenological monitoring to determine their fruiting diameter;
- Monitoring regeneration (monitoring juvenile growth on enrichment parks).

The device has been selected so as to satisfy the following criteria:

Follow  $\sigma$  at least 20 stems per diameter class and species;

- Being easily accessible;
- Follow up 3 to 4 years before operation;
- Minimize travel time ("condensed" devices) to avoid the appearance of bias due to tiredness / fatigue field operators;
- Being located in a representative undisturbed area of the majority of forests concession.

All inventoried stems will be physically marked on the ground (painting or with labels), their DBH measured to the nearest mm and marked height measurement. les modifications

### 3.4.3.12. Public participation in forest management

### - Organizational and relational framework

The administration, the dealer and the local population are jointly involved in forest management. The administration, in particular has the duty to ensure that the provisions of the management plan, but also help the company in resolving conflicts with local populations. Local people enjoy the Users rights in accordance with the management plan and have the duty to participate in the monitoring and protection of the forest. The dealer has the duty to manage the

forest in accordance with the management plan but also to participate in the resolution of conflicts with local people. Relations codification of the three partners will be through the adoption of an organizational framework and relational negotiated consensus.

The organizational framework and relational implemented on UFA 11-005 will consist of two structures, where the local population will be involved:

- The Peasants Committees Forests (CPF), under the leadership of the administration, whose mandate is to animate particular, to inform, to participate in the development of management plans with the

dealer, monitor and control the activities in their area. This mandate is detailed in the Annex to Decision No 1354 / D / MINEF / CAB of 26 November 1999 laying down the Forests classification procedures of Permanent Forest Domain of the Republic of Cameroon. Riverside villages in UFA 11-005 are grouped into 26 CPF since 2010. These CSP benefit from organizational capacity by PSMNR-SW project;

 $\sigma$  A Spatial Plan Monitoring Committee (CSPA), dialogue structure representing the local communities directly involved now CAFECO. The CSPA was established in 2008.

These structures will help to promote in every village representative interlocutors the community (including women) who have a key role to play in the planning system advocated.

Methods of operation of these structures are defined and will be disseminated to all local populations.

The general objectives of these structures are:

- Inform, educate villagers on development activities;
- facilitate the exchange of information relating to the UFA between villages and between the villages and society;
- collect, analyze, select the grievances of the people to pass them on the right;
- Identify and formulate proposals for submission to donors, with income from Annual Forestry Fees (RFA);
- Arbitrate disputes UFA.

These bodies, and fulfill the consultation, mediation and conflict resolution, involving populations effectively in the sustainable management of forest resources and establishing trust between the different stakeholders.

¬ population intervention methods in the forest

Use rights of local communities will be respected as long as they comply décrites. Du the specifications that they regularly under the territory of the UFA 11-005 for their customary activities, local people will play an important role in monitoring the forest. Social policy of the company, in terms of staffing, is to promote, to the extent possible, the hiring of local resources.

Specifically, local people will be involved in the implementation of the plan the development of a number of actions, including those listed below:

- Monitoring the territory of the UFA, especially in anti-poaching will conducted jointly with the forestry administration and local residents. of awareness campaigns of the local population in joint management with local NGOs,

Forests Peasants Committees (CPF) and the company's employees will be conducted regularly (1 year).

- Awareness campaigns to ban farming or other activities illegal in the scope of the FMU will be conducted by the company with the population local. This awareness will be introduced at the implementation of the management plan, in close collaboration with local NGOs and CPF;
- Participatory mapping will be conducted to identify all the important places to the cultural identity of the local populations and areas providing their needs elementary. The identification of the types of cultural sites (sacred sites, ancient villages, large trees, etc.) and location help to conserve during operation.

These participatory maps must be made before the start of operations in the AAC concerned, for villages to AAC.

# ¬ Evolution of the population-forest relationships

The gradual establishment of a consultative structure - management as proposed in previous paragraph, should gradually allow people to organize, so that the money collected upon payment of Annual Forestry Fees (RFA) contributes effectively to the development of the region.

The legislation in force in Cameroon, through Decree No. 520 / MINATD / MINFI / MINFOF 3 June 2010 specified the use to be made from the FRG for local communities. This revenue is controlled by a management committee whose creation is; As with CPFS also required by law: the residents committees, which are being installed in the area. Ensuring consistency with the CSPA's duties must be made to avoid confit of interest while on revenue management from West Germany. The FRG is set by the interim operating agreement. It is, for the UFA 11-005 of 3050 FCFA / ha / year. For now, UFA is not yet assigned, the total area of the FMU, serving as reference for the calculation of the FRG, is the appraisal of the provisional agreement, which is 80 800 ha. Until 2010, the amount of the FRG was as follows: 50% to the state, 40% to the municipality of Campo and 10% to village communities (Order No 122 / MINEFI / MINAT of 29 April 1998).

### Part of the RFA paid until 2010

Reference	RFA (FCFA/ha)	Annual amount	State share	Council Part	Pop. Part (FCFA
period		(FCFA / year)	(FCFA / year)	(FCFA / year)	/ year)
2006-2010	3050	246 440 000	123 220 000	98 576 000	26 644 000

In 2010, Decree 520 has changed the distribution of the RFA as follows: 50% to the state, 20% to council, 20% to FEICOM and 10% to village communities.

### Part of the RFA paid annually from 2010

RFA (FCFA/ha)	Annual amount (FCFA / year)		Council Part (FCFA / year)		Pop. Part (FCFA/year)
3050	246 440 000	123 220 000	49 288 000	49 288 000	26 644 000

With the AFR of the AFR, local residents in FMU 11-005 benefit from over 26 million CFA francs every year. Under the terms of the interim operating agreement, the Company pays an allocation to local populations of FMU 50 FCFA / ha / year (approximately 4 million FCFA / year). It is given to the Forest Development Special Fund. This allowance is intended to strengthen the capacity of

people to self-manage. In addition to the allocation of funds, the company CAFECO pay each year for a voluntary donation

Social investments: the gift is for people in outlying villages to the base cut put into operation.

### 3.4.3.13. Duration and revision of the plan

This management plan is based on a rotation of 30 years and covers the period 2006 - 2035. Its development and initial review was an opportunity to bring together a wealth of information already to good planning of the activity on this duration. However, progress daily in the knowledge of tropical forest ecosystems and putting them under management. Similarly, legislation in this area are evolving rapidly in countries of the Congo Basin, and taxation that has a direct impact on the development effort. In this context, it may be necessary to make a management review before the scheduled completion of its application to include such major changes. The legislation leaves the possibility of

revise the management plan every 5 years. This management plan sets the strategic planning, long-term activities on the FMU. It will be completed for planning:

 $\boldsymbol{\sigma}$  medium term on the blocks or LEU by the five-year management plans;

Short term  $\sigma$  on annual cutting by operations plans.

These documents shall be in accordance with regulatory standards

With the income of the FRG, local residents in UFA 11-005 benefit from over 26 million CFA francs every year. Under the terms of the interim operating agreement, the Company pays an allocation to local populations of FMU 50 FCFA / ha / year (approximately 4 million FCFA / year). It is given to the Forest Development Special Fund. This allowance is intended to strengthen the capacity of people to self-manage. In addition to the allocation of funds, the company CAFECO pay each year for a voluntary donation

Social investments: the gift is for people in outlying villages to the base cut put into operation.

### 3.4.6. Environmental protection

Besides the requirements considered for the protection of HCVF, the protection of the environment in this FMU holds essentially to the respect of the standards of intervention in forest areas especially compliance with the requirements for minimum exploitable diameter, protection against invasions of populations, against oil spills, air and water pollution, erosion, poaching.

The actions to be undertaken to protect the environment revolve around a reduced impact logging.

### 3.4.7. Public participation in forest management

There are twenty five peasant-forest committees in the villages bordering FMU 11 005. These committees whose role is to be the interlocutors of the people from the administration and the economic operator, fulfill the following tasks:

Awareness and animation in the villages;

Information to the public on development activities;

Monitoring and appointment of delegates during the execution of inventory in order to identify the harvest sites of non-timber forest products

the collaboration in terms of Concession monitoring;

Furthermore, GFMC (Global Forest Management Commitee) is established. GFMC is an initiative of the company that has already been tested in other regions. It's a friendly atmosphere that allows the company to interact with people as partners in the development of the locality. It is also a forum where all conflicts can find an amicable solution.

### The main activities assigned to the GFMC are:

- Inform and raise awareness on sustainable management, and forestry;
- Facilitate the sharing and exchange of information between villages;
- Collect, analyze and select populations to address complaints to the proper authorities;
- Coordinate, plan and monitor development projects.

GFMC will be structured as follows:

A representative from each of the villages (Active Member)

A representative from each local NGO (Facilitator Member);

A common representative (Associate Member)

**CAFECO Representative (Associate Member)** 

A representative of the administrations concerned (facilitators Members).

People will be involved in this development through the following actions:

Recruitment of the local population according to the needs of the company;

Provision of direct contracts between the concessionaire and the Village forest Management committees for the achievement of certain development works, forest exploitation;

The free collection of certain non-timber forest products as expected within the user's rights of the population without disturbing the main activity; Contracts for the monitoring and control of the forest.

## 3.5. Closing of logging plots and monitoring of the management plan

There is a special tracking system to control when closing a plots. These are:

- Recovery of any junk and waste, cables, filters, etc. parks and road edges, Bridges, culverts, box culverts and temporary embankments, passage through the bed of streams to be removed,
- Ensure the passage of water via bridges, culverts and permanent scuppers,
- Verification with GPS of all important issues (roads, parks, bridges, culverts, junctions, intersections, etc.)
- Blocking main roads until the next rotation by deep ditches or fences,
- Road works that might deteriorate in a few years will be destroyed to avoid blocking waterways.

The duration of this management plan is thirty years rotation. This management plan will be revised every five years. An annual plan of exploitation will be made prior to the issuance of annual operating permit that authorizes the start of logging in a plot.

The concessionist sets up a filing system for all texts, memos and documents relating to the management of the forest,

Monitor of violations on the surface of the FMU will be done in cooperation with the MINFOF. The production monitoring and follow-up of permanent plots will be provided whether the forest production capacity is maintained.

#### 4. MONITORING THE LEGALITY OF PRODUCTION AND FOREST PRODUCTS TRACABILITE

# 4.1. Wood purchasing policy

Wijma Cameroon / CAFECO has set a goal to provide wood only from legal source and to give priority to certified wood.

However, today, the certified resources available in Cameroon does not allow Wijma Cameroon / CAFECO to supply all its production plants.

In its environmental policy, Wijma Cameroon / CAFECO had preview this case and selects suppliers based on their compliance with environmental and social standards in force and according to the logging type.

Originating from FMUs and communal forest, Authorized with the following requirements: Each year, the supplier must demonstrate a responsible management of its resources and then gets the following documents:

- Approval of the valid forestry profession.
- Tax Obligations update
- Approved management plan and in the course of implementation
- An annual operating permit duly approved by the administration and in force
- A certificate from materializing limits of the forest area operated in accordance with the legislation in force:

Cameroon / CAFECO will ensure regular monitoring in accordance with its supplier assessment procedures and depending on the level of demand:

- The quality of operations particularly reduced impact logging
- The relationship of the operator with the local communities and other stakeholders
- Compliance with the limits of the operation area and management prescriptions. originating from Vente de coupe, Authorized the following requirements and evidence:
- Limited exploitation in time with a reduced impact on the environment
- Consent with the forestry profession
- Absence of a dispute with the state on other forests exploitations.
- An annual certificate of operation and a set of specifications
- Respect for logging requirements (volume, diameter, species, CITES, marking, mandatory slips
- ...) of the annual operating certificate, requirements of the specifications and intervention standards in forest areas
- The realization of the limits of exploited forest area;

Wijma Cameroon / CAFECO will ensure:

- That accepted wood come from legally exploited forest.
- That a traceability system is in place to demonstrate that these woods have not been mixed with other sources of wood.

Wijma Cameroon / CAFECO will ensure regular monitoring of its suppliers (at least twice a year) in accordance with its supplier evaluation process:

Originating from Community Forest, banned

Origin; Recovery or removal authorization, prohibited

After suppliers evaluations and results obtained, the timber can be supplied as controlled wood FSC<sup>TM</sup> following the standard 40 005 version 2.1, Wood from acceptable sources or other known and legal sources.

Wijma Cameroon / CAFECO gives prices to the application of the procurement policy.

Done at Douala October 14, 2011

CAFECO currently has 70 297.87 hectares of forest under its management. This surface area is capable of producing between 40,000 and 62,000 m3 annually according to the species harvested.

To ensure production in the two processing sites (Ossing and Nguti), third party purchases are necessary.

In order to meet its environmental commitments and meet the FSC / OLB requirements, a purchase and traceability policy is put in place.

# 4.2. Monitoring and updating of legislation

To ensure that the company is working under the laws of Cameroon, a monitoring system is installed to collect and archive the laws and decrees published. The heads of each sector are informed. Ongoing research of international texts and decrees are made.

## 4.3. Traceability of forest products

Traceability of the origin of forest products is an integral part of certification. This is a sealed system to prove that a product originates from certified forests (FSC / OLB) and is produced in accordance with all legal requirements; it is a key requirement of certification.

CAFECO uses unique prospecting numbers, logged wood registration numbers and unique sawmill numbers, to ensure the traceability system of its products.

### 5. FSC APPROACH TO SUSTAINABLE FOREST MANAGEMENT

## 5.1. Environmental and ecological responsibility

### 5.1.1. Protected Areas and Forest with High Conservation Value

These areas are protected for various reasons;

- Sensitive Formations
- High priority conservation Formations
- Formation with a buffer role between the FMU and a protected area.

Their management consists of;

- Restriction of access: access is banned
- Definition: A limit with signs indicating the protected area is installed and monitored, as the limit.
- No intervention: No action is possible in the protected area.

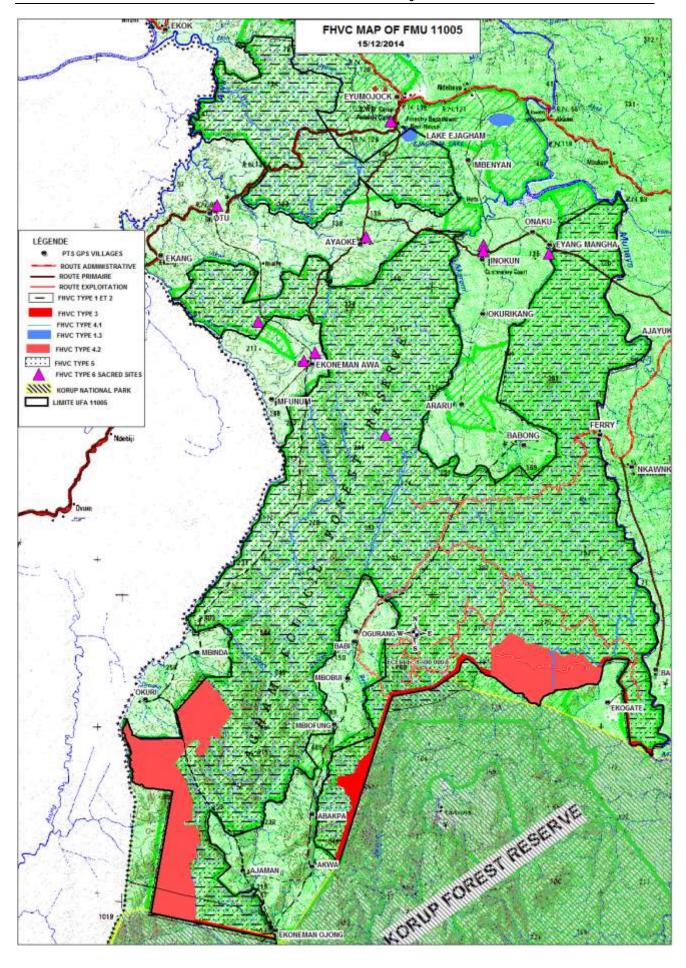


Fig3: Map of FHVC and protected area

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### Maps of protected areas in the FMU 11 005

### - 5.1.2. Protected species

during plot inventory, protected species are listed and receive during counting a conspicuous ribbon and a survey number. They are mapped and during operation these trees must be protected from damage. These are:

- Commercial species: such species were identified by their low representation in the forest. These species are excluded from exploitation and protected.
- Future Trees: The Future trees that represent future harvests are protected by the forest law and also following the management diameter.
- Protected rare and endemic species: These are commercial species inventoried, according to the work of J. and JJ FAURE VIVIEN on la description des espèces floristiques du Cameroun.

### **5.1.3.** Wildlife protection

Wildlife protection in this concession involves reducing poaching in which a number of measures are taken.

- Strengthening the control of access points with the support of the Ministry in charge of forests
- Encourage the creation of anti-poaching Committees in some villages and make them operational;
- Introduce into the rules and regulations of the company and makes them applicable, law enforcement aspects of poaching. During the exploitation period, the company also ensures the availability of other sources of animal protein to its workers (fish, beef) etc at a very low cost;
- Introduce in the clauses of wood transportation contracts with subcontractors, the requirements prohibiting the transportation of poachers and their products;
- Carry out continuous sensitization to the populations, the staff of the company and hunters on the need for the conservation of wildlife, especially protected species. This awareness will be done through continued posters in coastal villages and by organizing seminars and sensitization meetings;
- Enable and encourage local population to the keeping of domestic animals and certain game such as cane rats to reduce pressure on wildlife.

### 5.1.4. Waste treatment

Waste from CAFECO sites originate from activities of various kinds. CAFECO has implemented a procedure to follow based on the analysis of the sources of waste, current possibilities of reducing the amount produced and the possibilities of satisfactory discharge environmentally. Waste is managed according to the table below:

Waste management					
Туре	Origine	Reduction Possibility	Method	Re-use	discharge
Oils and oil filters	Wood Production in the Forest and Transportation	yield	Centralized collection sites	Possible but not relevant	Destruction in Douala
Batteries	Forest wood production,	yield	Centralized collection sites	Lead can be reused	Destruction in Douala

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	transport, households				
Chemical waste	Wood production in forest and sawmill	Yield / alternatives	Always apply the minimum necessary / Training Centralized collection s	Not possible	Destruction in Douala
Tires And other scrap	Wood Production in the Forest and Transportation	yield	Centralized collection sites	Manufacture of rubber mounts or other products	Destruction in Douala
metal waste	Wood Production in the Forest and Transporta	yield	Centralized collection sites	Sale for steel plants	steel industry
household waste	Workers habitat / forest parks	sensitization	Centralized collection sites	Not possible	Burning and discharge

#### 5.1.5. Use of chemicals

CAFECO uses chemicals for the treatment of logs and sawn timber. These chemicals are permitted in Cameroon and in Europe.

Nevertheless, specific measures are taken in the storage facilities and use of these products to avoid any spills. Also, the company plans a minimization of treatments.

## 5.2. Social Responsibility

### 5.2.1. Health and work security

The employer has the responsibility of leading a working policy that avoids or minimizes potential risks to the safety and health of employees. To avoid risks at work it is imperative that employees are made aware of the behavior they should have. Risks must be known, minimized and actions to be taken in case of accident are known.

To avoid accidents, CAFECO has adopted clear safety policy:

In the forest employees are required to wear personal protective equipment (work clothing, helmet and boots or safety shoes). For those who deal with wood, special instructions are applied. To avoid risks at work, it is imperative that employees are made aware of the behavior they should have.

The operator of the sprayer for instance, must wear protective equipment.

First aid plans are developed by the company CAFECO to appropriately respond in cases of a serious accident. An emergency box is available on the sites with an explanatory note on the first-aid measures to be taken.

In order to improve the working conditions and working equipment, statistics are kept on the frequency and nature of accidents. Based on these statistics, positions of high-risk activities are identified and appropriate actions taken.

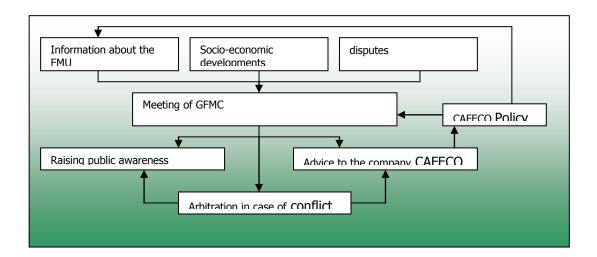
## 5.2.2. Training of Employee

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A professional staff is essential to manufacture good quality products. Since the first training for controlled logging, several training missions are carried out in CAFECO to improve employee skills.

#### 5.2.3. Involvement of local residents

GFMC was created to act as an interface between the population and the company. (Roles and composition detailed in Part 3.4.7. and in the diagram below).



### 5.2.4. Conflict resolution procedure

Despite all the efforts that CAFECO SA makes so as to avoid conflicts, they are some conflicts that are difficult to avoid. CAFECO has planned several procedures to address this situations. Complaints received must be stored in special lap.

To ensure that the complaint is well understood the concerned should be contacted. It is possible that this mode of contact gives a solution partly. In case the solution is made immediately and verbally, a small report should be included in the lap to explain that the complaint has been resolved and what solution has been made.

In case the complaint persists after contact, it is necessary to assess the cause of the complaint and what solution could be possible.

In case the company can not provide a solution, this must be explained to the person in question and the following options discussed. Two options are available;

- An intermediary may be contacted to assist with the resolution of the problem (Monitoring Committees) or
- An appeal can be made in the court of justice.

# 5.2.5. Compensation for damage plantations

When it is possible for logging activities to affects a third property, the following steps are to be taken by the logging company. No activity will take place by the company within the territory concerned without the agreement being signed to the extent that the damage could have been planned in advance.

The procedure is as follows:

- 1. Identification of the of the party concerned
- 2. Identification of its land title

- 3. Evaluatio of the extent of the damage
- 4. Explanation of the scale to be used for the calculations
- 5. Negotiation on the value of the damage
- 6. Documentation of the valid agreement signed by the parties and witnesses.
- 7. Documentation of the place concerned by the Agreement on map, duly signed by the parties and witnesses.

If an un-expected damages arises, compensation is done as in the cases where the damage was expected.

The above victim may contest the finding and claim compensations out of the scale applied. In this case the approach to conflict management is applied.

In case the conflict is not resolved, and as the last opportunity for the termination of the conflict it is possible to use a multidisciplinary committee to analyze the problem in question in the field (this committee consists of MINADER representative, a MINFOF representative, a representative of the company, a beneficiary, and administrative authorities)

#### 5.2.6. Social investment

CAFECO has invests socially in the following domains:

- Information and sensitization of the population and employees,
- Real investment through a voluntary social fund of 7millionFCFA distributed to the villages of FMU 11005 per zones for a year,
- Indirect investment via payment of the RFA (of which 10% is allocated to local populations)