

# RSPO NEW PLANTING PROCEDURES

## Summary Report of ESIA and HCV Assessments

### Olam Palm Gabon, Mouila Lot 3

### May 2015

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## 1. Executive Summary

In 2010, the company Olam Palm Gabon (OPG), a subsidiary of the group Olam International Limited, partnered with the Government of Gabon, to establish industrial oil palm plantations and palm oil processing facilities adhering to the international standards of the Roundtable on Sustainable Palm Oil (RSPO), to service local and international markets.

Olam Palm is committed to achieving RSPO certification for all of its oil palm plantations, and because this concession is a new planting, it is subject to the RSPO new plantings procedure (NPP). RSPO NPP requires a comprehensive and participatory independent social and environmental impact assessment (ESIA) of the area concerned that includes the identification of all primary forest, HCV areas and local peoples' land.

OPG has previously obtained RSPO New Plantings Procedure (NPP) approval for 3 palm plantation developments in Gabon (Awala, Mouila Lot 1 and Mouila Lot 2 plantations), which are currently in development.

The present ESIA covers a proposed plantation known as Mouila Lot 3, located in Ngounié province starting approximately 5km south of the town of Mouila (population approx. 23,000). A road network surrounds the concession, including 14 villages (total population 800) and the town of Mouila itself. The Concession is a long-term agriculture lease covers 23,780 ha in Ngounié Province, southern Gabon (Bail Emphyteotique signed between the Director General of Olam Gabon and the government).

As part of the Gabon Strategic Plan, the Government of Gabon has been working on national land use planning that considers agronomic factors, land use, land cover, conservation priorities, ecosystem types, protected areas, etc. in order to guide future development and conservation activities. Mouila Lot 3 was selected using this data as a suitable option in terms of rainfall, topography, soil, logistics and operations.

The Mouila Lot 3 concession is predominantly savannah grassland (75%) with forests restricted to riparian galleries and isolated patches (25%). It is located ca. 50 km to the north-east of Moukalaba-Doudou National Park, and approximately 40-45 km south of from Waka National Park. Lot 3 does not overlap with any Ramsar Site or Intact Forest Landscape (IFL). However, the site does overlap with a Central African Regional Program for the Environment (CARPE) landscape. There are various small-scale agriculture and ranching activities within the concession, including a ranch with a land title. These areas will either be excised or compensated through the FPIC process. There are no other valid permits overlapping.

## 1.1 Assessment of Forest Areas

Forests cover approximately 25% of the concession. A forest inventory was carried out in 21 randomly selected 0.5 ha plots (250 m x 20 m) located within the forest strata across the concession. The species composition was dominated by Okoumé and species of the *Euphorbiaceae*, *Caesalpiniaceae* and *Olacaceae* families, typical of disturbed forests of southern and Coastal Gabon. This was corroborated by the forest structure, characterised by trees under 25 metres in height, a canopy cover rarely exceeding 60%, and a dense undergrowth. While some IUCN Red Listed species were identified in the concession, the overall frequency of individual rare, threatened and endangered species together is not particularly significant for Gabon, as this forest composition is widely found.

The survey data identified four main types of forests within the concession:

- Mixed seasonally flooded forest and degraded or secondary forests characterised by *Anthostema aubryanum*, *Uapaca guineensis* *Pycnanthus angolense* (9/21 plots)
- Older secondary forest characterised by *Strombosia grandifolia*, *Strombosiopsis sereinii*, *Calpocalyx dinklagei* (8/21 plots)
- Mature flooded forest dominated by *Hymenostegia sp*, *Cynometra mannii* (1/21 plots)
- Pioneer forest colonizing the savanna, dominated by *Acoumea klaineana* (3/21 plots)

There are no significant areas of primary forest within the concession.

## 1.2 Areas Required to Maintain or Enhance One or more HCV

Areas supporting HCV 1, 4, 5, 6 were identified during the HCV assessment. These are described in the report.

## 1.3 Peat Soils

There are no peat soils within the project area, evidenced by the soil and agronomic studies. The Mouila Lot 3 Estate has land with slopes of undulating to rolling (4–24% or 2–12°). The study area consists of sedimentary and metamorphic rocks of the calcareous schist of the Nyanga Formation, Pediments and Sub-Recent Alluvium. Flooding is localized and not a serious problem in the Estate. Most of the areas are well to moderately well-drained.

## 1.4 Local Peoples' Lands

Identification of areas important to local communities was carried out by 360 degree participatory mapping in each village. This process identified both the areas currently used for hunting, fishing, logging and collection of non-timber forest products and sacred and culturally important sites, both within and outside the concession. A socio-economic survey of each village potentially impacted by the project completed the information on resource use and livelihoods. The maps were validated by the communities and will significantly guide the FPIC process and further HCV spatial planning. Potential

impacts on villages varied, and are provided, along with other details in Table 1. Most villages other than Baleka and Bavanga conducted a majority of activities outside the concession.

Table 1: Size and activities of the studies villages and the potential impact of concession development (source: socio-economic studies and participative mapping).

	Village or Town quarter	Estimated population size (no of households) <sup>1</sup>	Activities	Level of potential impact
1	Moutassou	12 (6)	Old villages and cemeteries, camps, sacred sites, hunting, fishing and NTFP	Medium
2	Ikolo	15 (6)	Camps, fishing, hunting, NTFP. Plantations close to permit edge.	Low
3	Mouninghou	59 (18)	Old villages, hunting and fishing	Medium
4	Koumbanou	30 (11)	Some NTFP collection and fishing. NB <i>Koumbanou and Maramba populations are merged.</i>	Low
	Maramba	2 (1)		
5	Makanda	12 (6)	Old villages and cemeteries, camps, sacred sites, hunting, fishing and NTFP, plantations and fallows. NB <i>Makanda and Okoumou populations are merged.</i> Makanda is inside the concession.	Medium
	Okoumbou	25 (11)		
6	Mouladoufouala	12 (6)	Fishing, hunting	Low
7	Mbengui	14 (11)	Old village sites, sacred forest, hunting and fishing	Low
8	Douya	90 (30)	Old village, camp, sacred site, hunting and fishing	Low
9	Guiamba	50 (20)	Old village, hunting, fishing	Low
10	Guisa Carrefour	55 (21)	None	None
11	Idemba	250 (102)	1 Camp, abandoned plantation, hunting and fishing	Low
12	Mbadi	40 (20)	Hunting, fishing and NTFP	Low
13	Bavanga quarter	n.a	Old villages, sacred forest and cemetery, camps, hunting, fishing, plantations	High
14	Bangui-Baléka	n.a	Old village, sacred sites, cemeteries, camps, hunting,	High

<sup>1</sup> Etoughe EFFE Socio-economic Survey of Mouila Lot 3 for OPG (2015)

quarter		fishing, NTFP, plantations, artisanal logging and sand extraction	
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## 2. SCOPE OF THE ESIA AND HCV ASSESSMENT

### 2.1 Organisational Information and Contact persons

Olam Palm engaged TERE, a Gabonese environmental consultancy, to conduct the ESIA in Mouila Lot 3. The firm has established expertise in the fields of mining, quarrying, gas and oil, fisheries, forestry, and infrastructure and worked previously on OPG's Awala plantation ESIA. Tere worked with Proforest UK to validate the ESIA methodologies in order to ensure that results were suitable for ESIA and HCV assessment. The results from the ESIA were one of the primary data sources used for identifying HCVs. ESIA's are required by Gabonese regulations as well as the NPP.

The HCV assessment was carried out by Proforest UK according to the requirements of the HCV Resource Network Licensing Scheme. The HCV Assessment for Lot 3 has already been Peer Reviewed and passed the HCVRN quality control requirements. It is the first HCV assessment to do so under the new scheme. Proforest is an independent company working with natural resource management and specializing in practical approaches to sustainability. Their expertise covers all aspects of the natural resources sector, from forestry and agricultural commodities to conservation, supply chain management and responsible investment.

Table 2: Lot 3 HCV and ESIA assessment personnel

Name	ALS Licence	Organisation	Role	Qualification
David Hoyle <a href="mailto:david@proforest.net">david@proforest.net</a>	ALS15008DH	Proforest	Lead Assessor	<i>MSc Resource Mgt.;</i> <i>BSc Geography.</i>
Dr Audrey Versteegen	ALS15032AV	Proforest	Principal Assessor	<i>PhD Carbon Sequestration;</i> <i>MSc Land Reclamation &amp; Restoration;</i> <i>MSc Biochemistry.</i>
Dr Mike Senior		Proforest	Discipline specialist	<i>PhD Tropical Forest Ecology;</i> <i>BA (Oxon) Hons. Biological Sciences.</i>
Name		Qualification		Expertise
Terea Consulting team: Environmental and Social Impact Assessment				
1. Aubin MBOUMBA;		1. Degree in Environment and Sustainable Development		1. ESIA facilitation
2. Gustave NGUEMA;		2. Pharmaceutical Chemist		2. Chemical analysis
3. Jean-Charles MONTAUFIER;		3. Engineer Hydrology and Hydrogeology		3. Hydrology
4. Charlemagne MOUANDJOURI;		4. Degree in African Anthropology		4. Socio-economics
5. Sarah TOINT;		5. Bioengineer in Environmental Management and Land-use		5. Sustainable forest mgt,

	Planning.	Biodiversity
<b>Water studies, under the supervision of Dr Jean-Daniel MBEGA</b>		
Dr Jean-Daniel MBEGA <i>Agronomy &amp; Forestry Research Institute (IRAF) at CENAREST (National Scientific &amp; Technological Research Centre)</i>	PhD Biological Sciences	Hydrology
Blaise MBOYE <i>IRAF at CENAREST</i>	Engineer Ecology & Biodiversity Mgt Masters Fisheries Management	Fish and aquatic macro-invertebrates
Joseph NDONG NLO <i>l'Ecole Nationale Supérieure de Libreville</i>	Masters Chemical Engineering and Industrial Use; DEA Structure & dynamics of reactive systems	Environmental (aquatic) chemistry
<b>Soil study</b>		
Dr Paramanathan a/l Selliah <i>PARAM Agricultural Soil Surveys, Malaysia</i>	PhD Soil Science	Pedology
<b>Botanical and faunal studies under the supervision of Dr Alfred NGOMANDA</b>		
Dr. Alfred NGOMANDA <i>Tropical Ecology Research Institute (IRET)</i>	PhD. Evolutionary Biology and Ecology	Wildlife biology and botany
Dr. Nestor ENGONE OBIANG <i>IRET and National Herbarium</i>	PhD. Biology and Ecology	Botany
<b>Socio-economic survey</b>		
Prof. J.E. ETOUGHE EFE <i>IRET at CENAREST</i>	PhD Sociology	Socio- economic research specialist
Edwige EYANG EFFA <i>IRET at CENAREST</i>	DESS GIS Masters in African Languages	Participatory mapping specialist; GIS expert;

## 2.2 List of Legal Documents, Regulatory Permits and Property Deeds Related to the Areas Assessed

A long-term (49 year, renewable to 99 year) agriculture lease (Bail Emphyteotique signed between the Director General of Olam Gabon, the Prime Minister, Minister of Economy and Sustainable Development, Minister of Agriculture, Animal Husbandry and Fisheries, and Ministry of Forests, Environmenta and Protection of Natural Resources) on 22 April 2015.

### **2.3 Location Maps and Description**

The concession, known as Mouila Lot 3, covers 23,780 ha in Ngounié Province, southern Gabon. It is located in the forest-savannah transition region of southern Gabon, in one of the two savannah fingers reaching northwards into Gabon from the Republic of Congo (see Figure 1). A combination of historical exploitation and edaphic factors has shaped the vegetation in this area. Almost all the forest areas have experienced disturbance or degradation, which reflects the degree of anthropogenic activity.

Lot 3 is found on the western side of the River Ngounié flood plain, the concession overlaps with the catchments of five rivers: Douya, Ijevoula, Doumina, Idigui, and Dibotsa, which have their sources in the Tandou Mountains of the Mayombe Massif to the west and flow eastwards emptying into the River Ngounié. The concession is delimited by the N1 road (Libreville – Mouila – Tchibanga Highway) to the east, the River Douya to the north, the lower edge of the Tandou Escarpment to the west and the River Dibotsa to the south.

Lot 3 lies on a flat to gently undulating (< 6 degrees) plain over limestone/shale bedrock, yielding soils of moderate to low fertility. However, most soils are suitable for palm plantations, with fertiliser additions as required for economic yields. The elevation of Mouila Lot 3 ranges from 90 to 130 m. above mean sea level. Located in the humid tropics, very close to the equator, the area is characterised by its hot and wet nature. The total annual rainfall ranges from a low of 2,173 mm to a high of 2,694 mm to give a four-year mean of 2,152 mm<sup>2</sup>.

The Mouila Lot 3 concession is located ca. 50 km to the north-east of Moukalaba-Doudou National Park, and approximately 40-45 km south of from Waka National Park. Lot 3 does not overlap with any Ramsar Site or Intact Forest Landscape (IFL). However, the site does overlap with a CARPE landscape (see HCV Report Summary published separately). Mouila lot 3 site is part of a bigger investment plan by Olam International in the wider landscape; Lot 3 is located close to two other palm oil plantations currently being developed by Olam – Mouila Lot 1 and Mouila Lot 2. There are also several other different land-uses prevalent in this landscape, including: village settlements and associated small-scale subsistence agriculture and forestry concessions, as well as conservation areas.

### **2.4 Area of New Plantings and Time-plan for New Plantings**

OLAM Palm Gabon intends to establish new plantings across the concession, setting aside and managing HCV areas as discussed in this summary. Commencement of planting is planned for the commencement of the rainy season around September 2015. The planting plan is to still be finalized and will be subject to adjustment according to the outcome of FPIC procedures.

A nursery area of ca. 50 ha has been developed within the Savannah area inside the concession, approximately 2km from the village of Mouladoufouala, at the time of this NPP submission. It was prepared with the authorisation of the Department of Environment (DGE) and the prior consent of the local village, after evaluation by the Environmental and Social Impact Assessment (ESIA) technical team

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<sup>2</sup> Mouila Lot 3 Soil study data.

of experts, subject to a short assessment and management plan. The Nursery is also subject to the full ESIA and ESMP. No trees were cleared for nursery preparation.

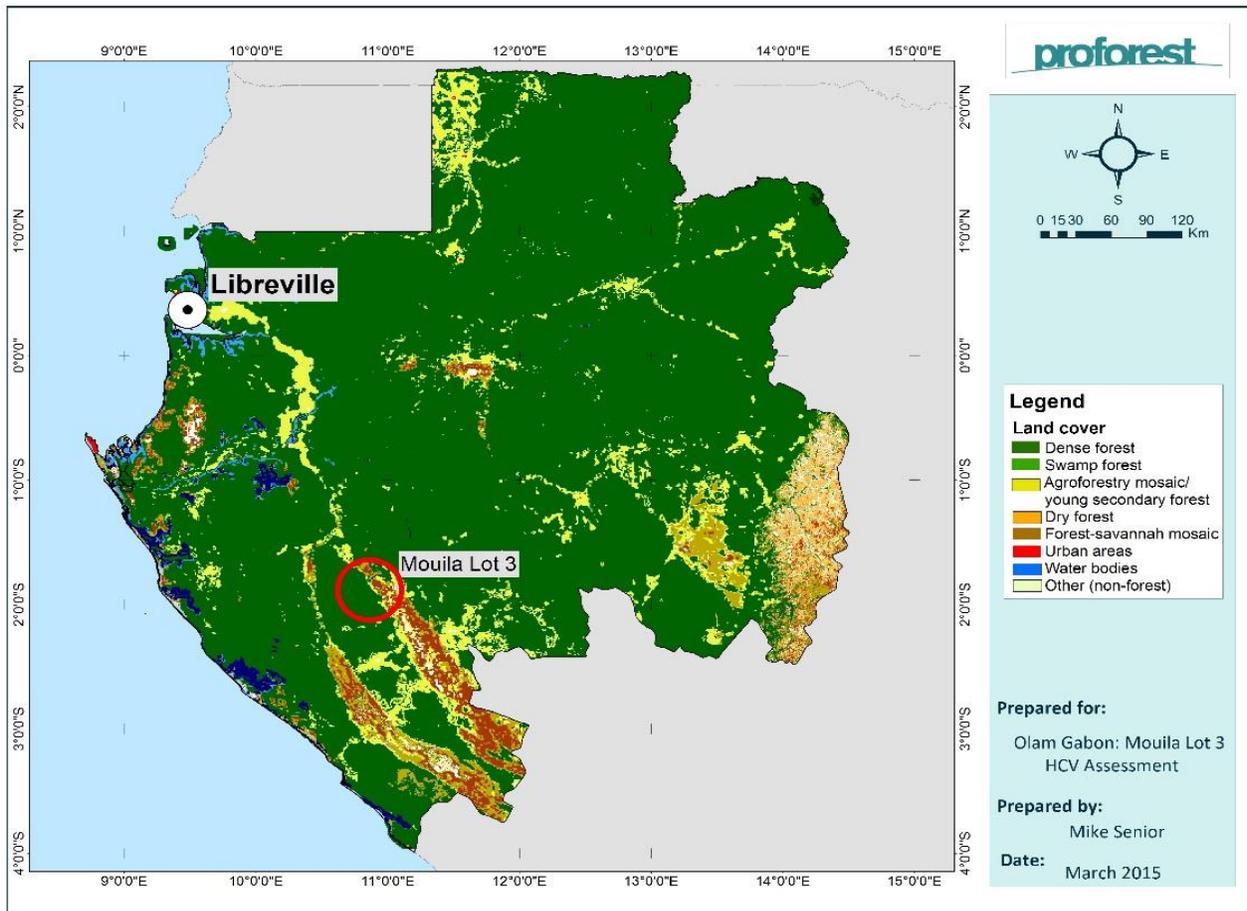


Figure 1: Location map for Mouila Lot 3.

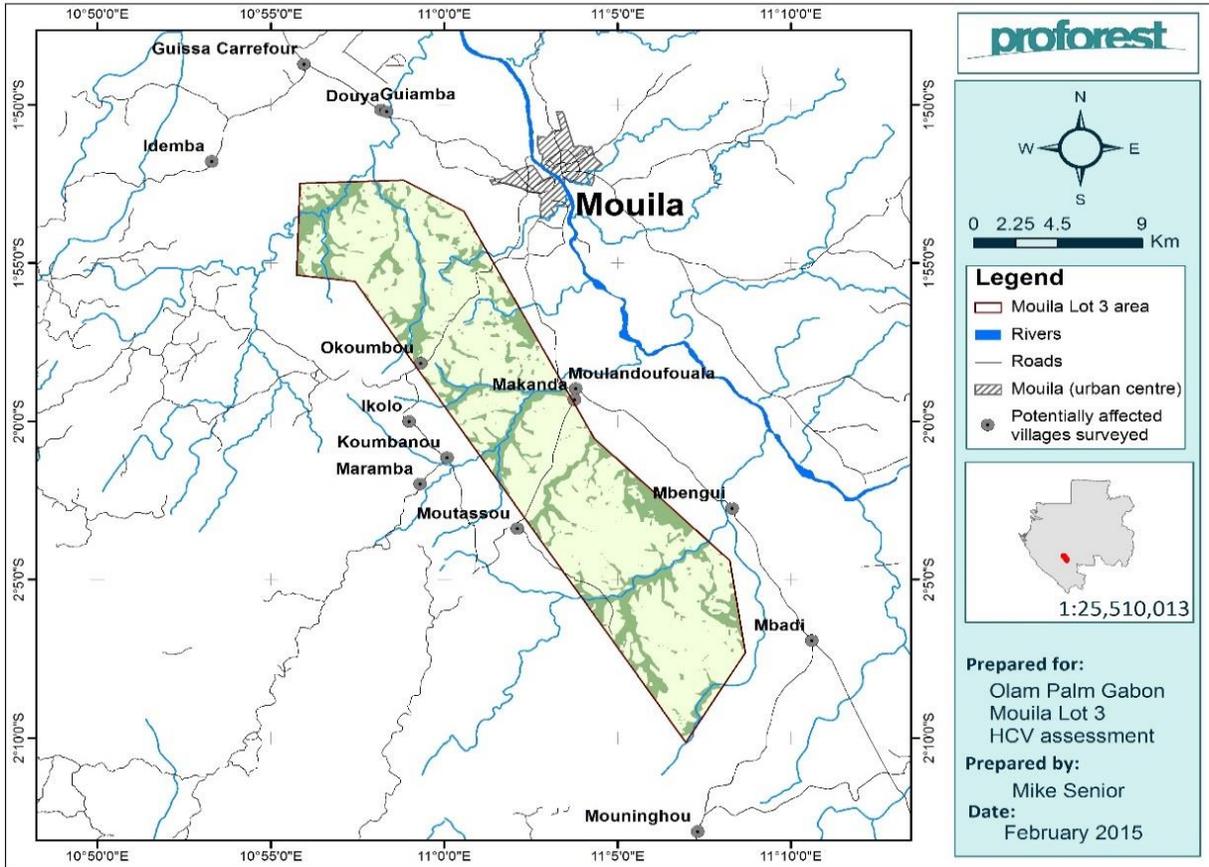


Figure 2: Mouila Lot 3 Map showing location of main village and Mouila town.

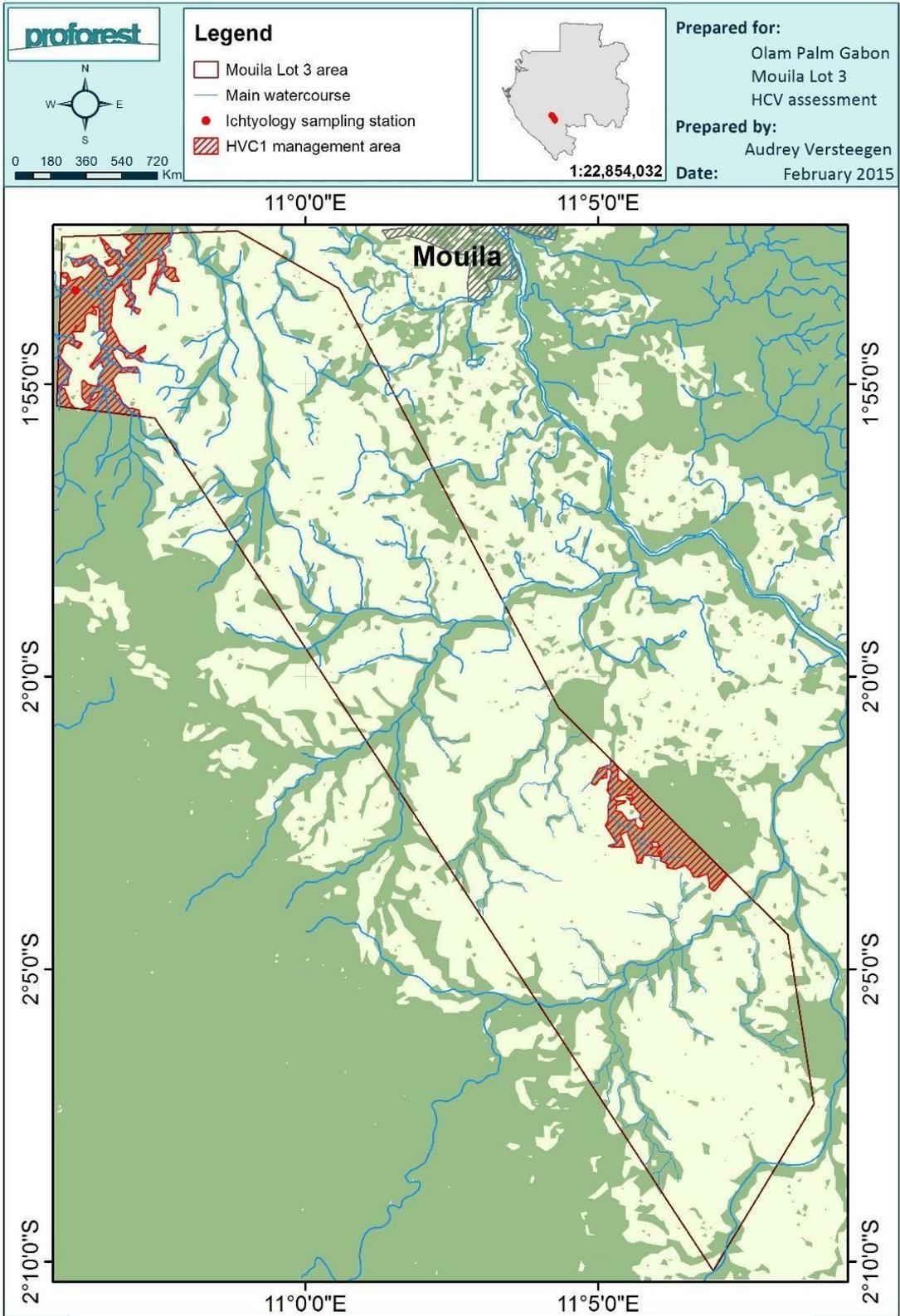


Figure 3: Mouila Lot 3 Map showing location of HCV 1

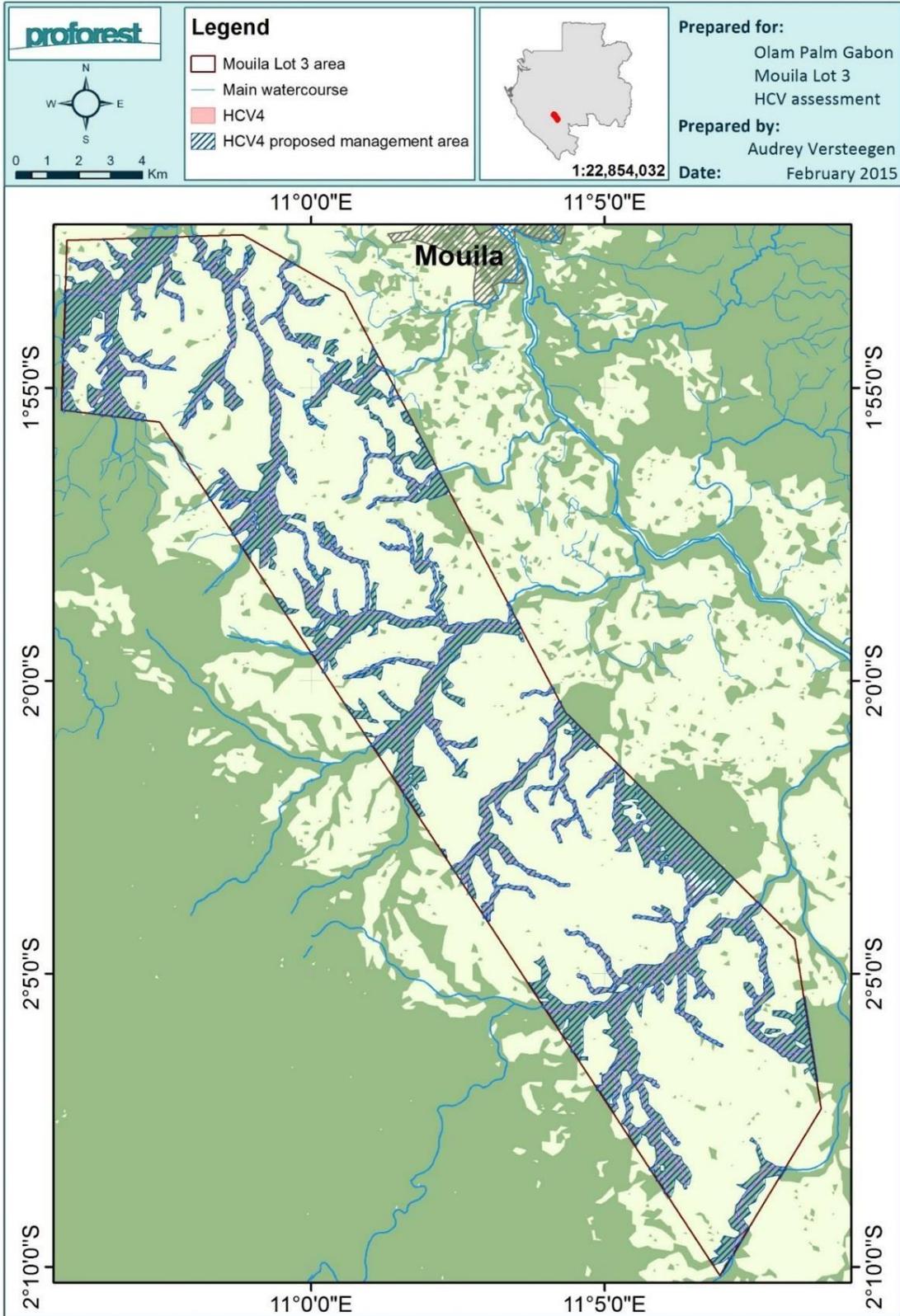


Figure 4: Mouila Lot 3 Map showing location of HCV 4

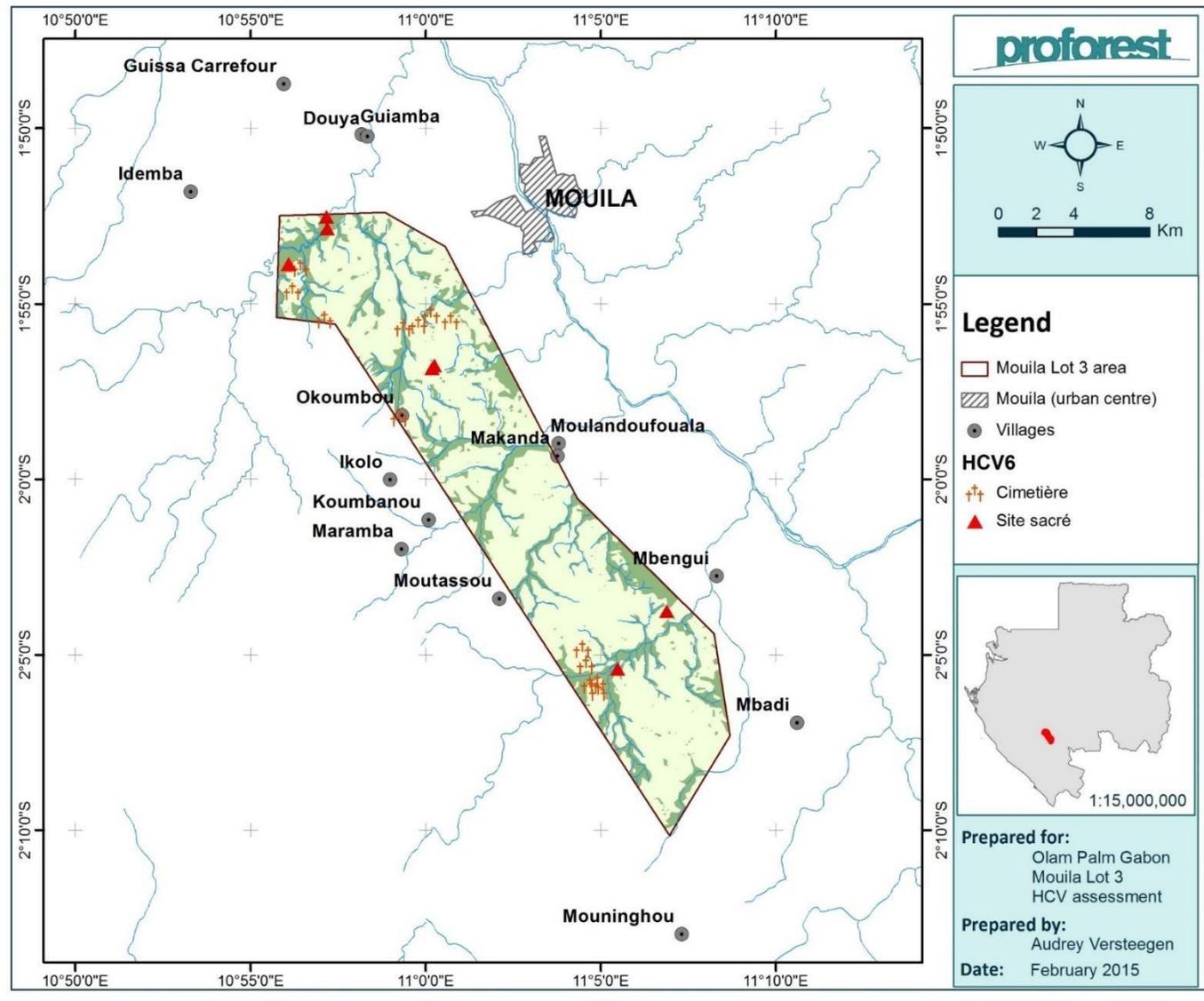


Figure 5: Location of HCV 5 preliminary management areas in Mouila Lot 3, pending completion of FPIC process

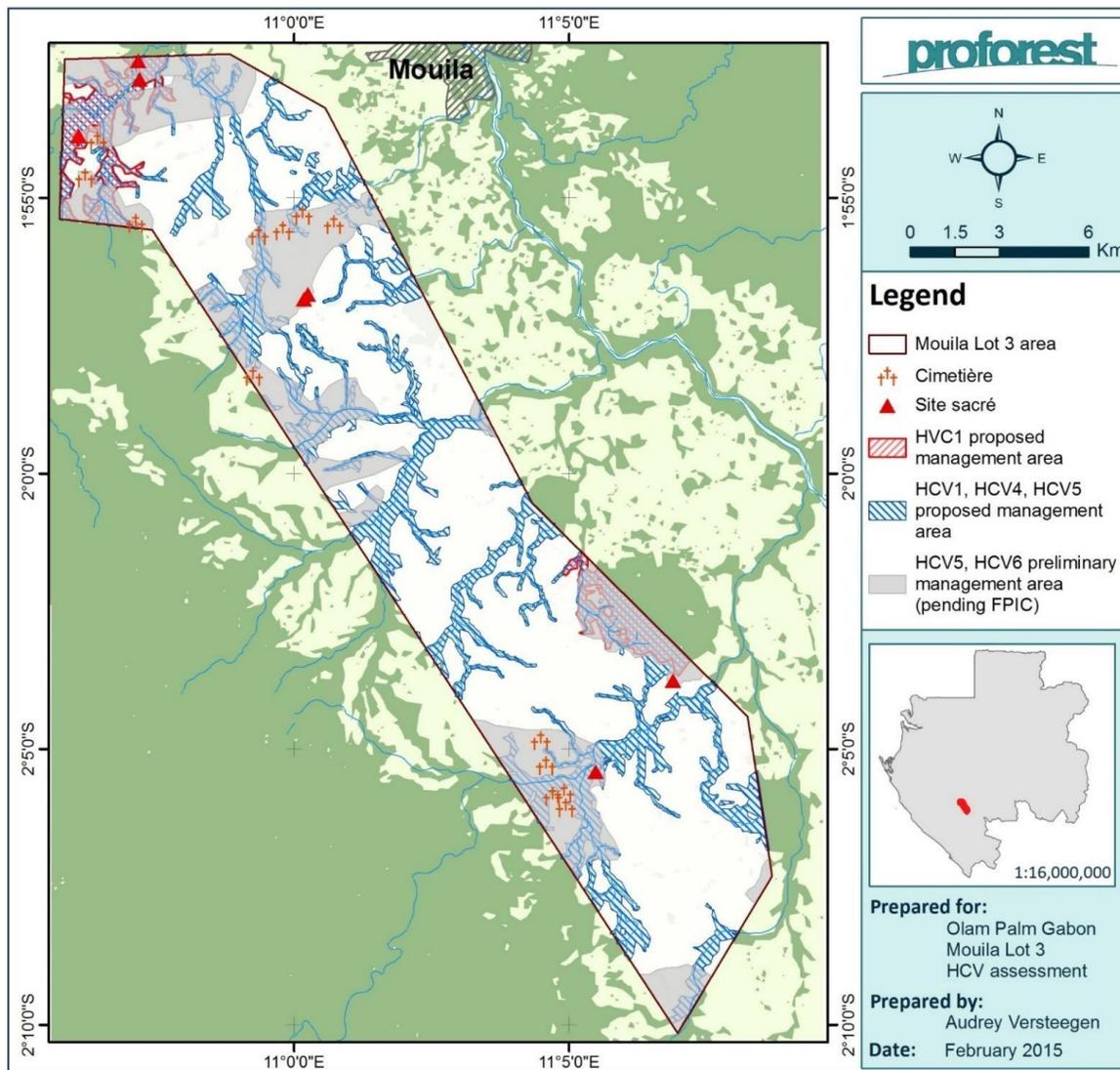


Figure 6: Location of HCV 6 in Mouila Lot 3

### 3. ASSESSMENT PROCESS AND PROCEDURES

Olam jointly engaged Proforest and Terea to supervise and verify the field studies and analysis of results necessary to fulfill the ESIA and HCV assessments. The methods were reviewed and approved by Proforest, after expert consultation, prior to any fieldwork being carried out.

#### 3.1 Assessment process

Proforest, Terea, selected field experts and Department of Environment officials visited the site at various times between July and November 2015 for preparatory and scoping missions. Proforest reviewed the terms of reference for field experts and coordinated with Terea to ensure that ESIA reports were appropriate for HCV interpretation.

Data collection took place between November 2014 and early February 2015. Proforest and Terea separately accompanied the field teams during the fieldwork. Participatory mapping was the final part of fieldwork to be completed, with validation of the maps obtained in all the villages by the end of February. Village level consultations were held in the last week of February and the final ESIA consultative meeting was held in Mouila on March 25<sup>th</sup> 2015.

Table 3: Timeline of activities for the ESIA and HCV assessments

Activities		2014					2015						
		J	A	S	O	N	D	J	F	M	A	M	
Pre-assessment	Information exchange	■											
	Initial field scoping visit by Dept. of Environment (DGE), ESIA team, Proforest & consultants	■											
	Preparation and planning, including development of methods and sampling protocols		■	■	■								
Assessment (field studies, consultations, HCV identification, sharing of results)	Participatory mapping and socioeconomic survey					■	■	■					
	Biological field data collection – full assessment					■	■	■					
	Validation of the participatory maps							■	■				
	Public consultations in Mouila								■	■			
Preliminary conclusions, concerns, and recommendations	Expert workshop								■	■			
	NGO and expert stakeholder consultations								■	■			
Reporting & Peer review	Peer review								■	■			
	HCV reporting, peer review & submission									■	■		
ESIA Validation	Final ESIA consultations in Mouila										■	■	
	ESIA revision and submission											■	■

### 3.2 ESIA and HCV Assessment baseline survey methodologies

In order to inform the ESIA and HCV identification and interpretation for Mouila Lot 3, the following field baseline surveys were carried out:

- Flora – forest and savannah inventories;
- Fauna – terrestrial mammals, fish and macro-invertebrates;
- Soils;
- Hydrology; water and soil chemical analysis, and
- Socio-economics and participatory mapping.

The **flora inventory** was split into two parts: forest areas and savannahs. In the **forests**, the botanical team sampled 21 (250 m x 20 m) randomly selected 0.5 ha plots located within the forest strata. For each plot the team described the general habitat characteristics, and then recorded the species and the diameter at breast height (DBH) of every tree over 10 cm in diameter. A total of 2,927 individual trees (dbh  $\geq$  10 cm) were recorded during the forest survey, representing 183 species in 44 families.

The botanical team surveyed the **savannah** species 100 (5 m x 5 m) 0.25 ha plots, located in 5 different savannah areas inside Lot 3. The team recorded all the species identified in the plot, as well as the relative abundance of each species in the site, using the phytosociological method.

Pressed samples of unknown plants species were identified at the National Herbarium of Gabon.

The **faunal (mammal) inventory** was focused on the forest zone and adopted two methodologies:

**Recce-transects:** A four-person wildlife inventory team carried out 7 recce-transects located in a systematic manner inside the major forest zones in the concession and recording all direct and indirect observations. The inventory focused primarily on large mammals but other taxonomic groups were also recorded.

**Camera traps:** Thirty-eight cameras were placed every 200 m along either 1 or 2 km transects, making a total of 8 km sampled with camera traps. The cameras were left for an average of 37.7 days, making a total of 1,432.6 camera-days of effort.

The faunal diversity was further assessed by sampling the **fish and macro-invertebrate** populations in the 5 water catchments overlapping the concession area. Fish samples were collected in 13 locations using nets of different mesh sizes. 765 samples were collected for identification and analysis. Aquatic macro-invertebrates were sampled in 14 stations using a *surber* net and identified in the laboratory. The results were analysed in order to calculate biodiversity indices and the ecological quality of the watercourses. 1,103 macro-invertebrate samples were collected across the stations.

A comprehensive **soil survey** was conducted by a Malaysian soil expert. A system of free traversing was employed for the survey. A sampling intensity of one examination point for every fifty to hundred hectares was maintained.

**Hydrology and water quality:** Samples and measures were taken during two field missions to gather data on size, depth, water velocity and flows, biochemical and ecological quality of the main rivers in the

site - Douya, Idigui, Dibotsa, Ilevoula and Doumina. Water was sampled in 14 locations and analysed for pH, oxygen, salinity, nutrient load and heavy metal contamination.

**A socioeconomic study** was carried out for 14 villages and 2 quarters of Mouila town which were assessed as potentially being impacted by OPG operations. A combination of group discussions at the village/quarter level and semi-structured questionnaires at the household level was used in a qualitative study of resource use.

**Participatory mapping** was carried out in the same 14 villages and 2 quarters of Mouila town to identify and map sites and resources of cultural or economic significance to the local population. Mapping was carried out in a 360 degree arc around most villages, to assess the relative importance of activities inside and outside the concession. The mapping was conducted in two stages with designated members of each village. First, discussions were held and sketch maps produced. On the basis of this preliminary phase, an exercise of GPS field mapping was organised – where the social mapping team and representatives of the local communities walked along paths and throughout customary use areas to identify and map sites of importance, such as hunting or fishing grounds, sacred sites, NTFP, etc. The digitally-produced maps were validated by the local communities before being shown to a wider group of villages and to local authorities for a final validation.

## **Stakeholders Consultations**

### Public Consultations

Community consultations were conducted at different times by Olam staff and the assessment team. Part of this consisted of general initial visits to introduce the potential project. Visits by social survey and mapping teams led to agreements and plans to conduct participatory mapping and socioeconomic studies in all potentially affected villages. After the participatory mapping, results were presented to each village for validation of the information (locations and place names). As part of the ESIA, Terea presented a summary of ESIA results first in the villages, and in a final, general meeting involving local communities, elected officials and government representatives.

The public consultations had the following overall participation (all were present for the final town hall consultation, each village consultation had the village representatives, the local authorities for that particular Département ('County'), the DGE, Olam, Terea and the social experts):

- The Governor of the province of Ngounié;
- The prefects of the departments of Tsamba Magotsi, Douya-Onoye, Mougala and Dola;
- The representatives of the following authorities: Directorate General for Environment and Nature Protection (DGE), Provincial Directorate of Agriculture, Provincial Directorate of Water and Forests; Gendarmerie Nationale
- The Deputies (Elected Representatives) of Douya-Onoye, Mougala, Dola, Central Ngounie and Mouila;
- Senators of Mouila, Tsamba Magotsi, Douya-Onoye, Mougala;
- The Mayor of the town of Mouila;
- The presidents of departmental ('county') councils of Tsamba Magotsi, Douya-Onoye, Mougala and Dola;
- The Village Chiefs and populations of potentially affected villages and village groupings;
- The Chiefs and populations of potentially impacted areas of the town of Mouila;

- The representative of a Non Governmental Organization (Croissance Saine Environnement)
- The representatives of Olam Palm Gabon;
- The representatives of TERECA Consultancy;
- The lead expert of socio-economic and participatory surveys, respectively.

#### Expert and NGO consultations

Proforest carried out three sets of consultations with important stakeholders at the national level at key milestones along the assessment process:

**July 2014 consultations:** This was an introductory session to inform the stakeholders of the project, as well as the HCV and ESIA processes that were planned. Stakeholders were asked to raise any initial concerns regarding the project, site location or the planned process. Consultations were conducted with WWF, WCS, Brainforest and ANPN by the Lead Assessor.

**December 2014 Consultations:** This session was aimed at requesting from the key stakeholders any conservation and or social concerns that they have regarding the development of the Mouila Lot 3 site. These were conducted with WWF, WCS, Brainforest and ANPN.

**February 2015 Consultations:** The third consultation session included a presentation<sup>3</sup> of the assessment teams' preliminary findings and recommendations. Stakeholders were given the opportunity to comment on the assessment and give their inputs. The table below represents the minutes of the meetings held with WWF/WCS, IUCN, and Brainforest.

Stakeholder concerns and feedback were taken into account in the preparation of the final HCV and ESIA assessment reports.

### **3.3 List of Legal, Regulatory and Other Guidance Referenced**

#### **3.3.1 International Conventions, Treaties and Guidelines**

##### **Climate Change:**

- 519/PR/MEPNV by decree of 11 July 2008 on the establishment and organization of the National Authority for the Clean Mechanism (AN -MDP) Development;
- No 748/PM by order of 11 October 2010 establishing the Multidisciplinary Working Group for the CDM (GT -MDP);
- 002/PR/2010 by order of 25 February 2010 a Gabonese Agency of Studies and Observations Spatiales ( AGEOS );
- Decree No. 0122/PR/MRPICIRNDH a Climate Council.

A policy on climate change by Reducing Emissions from Deforestation and Forest Degradation (REDD +), conservation, sustainable forest management and increasing forest carbon stocks also exists and are relevant to international conventions on climate change such as:

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<sup>3</sup> 60 slide presentation showing all the preliminary HCVs (1-6) identified and recommendations.

- UN Framework Convention on Climate Change (and 0030/ 96 of 28/06/1996 authorizing the ratification of the Convention)
- The Kyoto Protocol ratified by Gabon 20 June 2005 (extended to 2020)

#### Conventions on the protection of natural resources:

- Rio de Janeiro Convention on Biological Diversity, ratified by Gabon in 1997
- Algiers Convention, adopted by Gabon in 1968

#### Conventions on the protection of the environment and human health

- Stockholm Convention on Persistent Organic Pollutants (POPs) adopted by Gabon in 2001
- Cartagena Protocol, for genetically modified organisms
- International Convention to Combat Desertification in Countries Experiencing Serious Drought and / or Desertification ratified by Gabon in 1998
- The EHS (Environment, Health, Security) policy of the World Bank

### 3.3.2 National Legislation

#### Overarching laws

- The Environmental Code: Act No. 16/93 of 26 August 1993 on the Environmental Code
- The Forest Code: Law No 16/2001 Law of 31 December 2001 on the Forest Code
- The Agricultural Code: Law No 22/2008 Law of 10 December 2008 on the Agricultural Code
- The Labour Code: Law No. 003/ 94 of 21 November 1994 on the Labour Code
- The Social Security Code: Act No 6/75 Act of 25 November 1975 on the Labour Code

#### With Specific legal context to the project

##### ESIAs

- Article 67 of the Environmental Code: Decree No. 00539/PR/MEFEPEPN of 15 July 2005 regulating Environmental Impact Studies

##### Protection of the environment, human health and the fight against pollution

- Order No. 00247/HAEDR/IG/IPP regulating imports of products with impact on the environment
- Decree No. 541 of 15 July 2005 regulating waste disposal
- Decree No. 542/PR/MEFEPEPN regulating the discharge of certain products in surface, ground and marine waters
- Act No 07/ 77 Act of 15 December 1977 on the establishment of a pesticide regulations

##### Emissions from liquid effluents

- Decree No. 00198/MRS/E/PN/CENAP in the Environmental Code of Gabon controlling liquid effluents
- Order No. 247/96 of 12 March 1996 on the measures required to import, distribute and use of plants or plant products.

##### Protection of natural resources and species with special status

- Decree 0164/PR/MEF of 19 January 2011 regulating the classification of permissible killing of animal species
- Decree of 19 January 2011 0164/PR/MEF regulating the classification of permissible animal hunted

##### Protection of the rights of local populations

- Decree No. 692/PR/MEFEPEPN of 24 August 2004 laying down the conditions for the exercise of customary use rights
- Decree No 1016/PR/MAEPDR of 24 August 2011 fixing the scale of compensation payable in case of willful destruction of crops, livestock, livestock buildings, fish ponds or fish resources relating to the project.
- Article 2 of Decree No. 0137/PR/MEFEPA concerning setting aside of certain plant species in multipurpose Gabonese forests.
- Decree No. 692/PR/MEFEPEPN 24 August 2004 for harvesting of these species in the context of the exercising customary use rights of village communities.

#### 4. SUMMARY OF ASSESSMENT FINDINGS (FOR ESIA ASSESSMENTS)

This chapter presents the summary of key findings in respect of socio-economic impacts to country, region and local communities.

##### 4.1 Human Population

The affected settlements are listed in Table 1 along with the approximate population size and assessed level of impact from the project. The site is located at the meeting point of four Departments of Ngounié Province, being Tsamba Magotsi, Douya-Onoye, Mougala and Dola Departments. The partially paved National Road between the main towns of Mouila and Ndende runs alongside the concession, and dirt roads cross and surround the concession, providing access to a number of small villages. The road network at the back of the concession is in a poor state of repair and several river crossings are impassable to vehicles. The 14 affected villages are represented in Figure 2, there are approximately 660 people living in the villages.

##### 4.2 Sources of Income

The livelihoods of local people are based on small-scale subsistence farming, fishing, hunting and the collection of local non-timber forest products (NTFPs). Access to markets is poor. Sources of household income include the sale of agricultural products, bush-meat, fish and NTFPs. Some villagers work for companies in the area including Olam or receive salaries or pensions from the State. Limited agricultural activities include slash and burn practices in forest areas rather than on nutrient poor savannah soils. The scale of subsistence agriculture is kept low by the relatively high average age of the population. The villages are poor by the standards of rural Gabon. Some households have barely measurable income, others achieve average incomes of 50 to 100,000 FCFA per month especially from animal husbandry, agriculture and hunting. Average income is extremely low however (Table 4: cumulated income for all affected villages, from all subsistence activities is 8,915,000 FCFA, not counting external employment and gifts from relatives which were not assessed).

Table 4: Cumulative estimated annual revenue of 14 affected villages and 2 quarters of Mouila town (main activities)

	Agriculture	Fishing	Bushmeat	Fruits	Other NTFP	Animal husbandry
<b>Annual revenue (FCFA)</b>	2 205 000	830 000	1 815 000	1 060 000	270 000	2 735 000

For those with an income, vegetables, fruits, spices smoked fish, etc. are available daily in markets in Mouila. There are also several shops and supermarkets (CKDO, Gaboprix) where one can buy food, materials, utensils, etc. Larger grocery stores and shops are mainly owned by Malian, Guinean, Mauritanian and Lebanese businessmen.

### **4.3 Land Use and Conflict Management**

The use of village land is, in principle, under the authority of the village chief. Indeed, for any newcomer to the village, the construction of a dwelling and use of agricultural land are subject to approval from the village chief. However, in practice, these requirements are often not followed. The villages are suffering from a long process of gradual abandonment, with small villages fusing (regroupement de village) for convenience. Thus, even small villages may have several hereditary chiefs and a group chief (e.g. 3 chiefs and a group chief in Moutassou, which has 6 households).

Conflicts related to village life are often subjected to the village chief, and if no solution is found there, it can be passed to the district chief or to the highest level (the Prefet or the police). Most common conflicts between villagers are often resolved informally.

### **4.4 Infrastructure and Social Services**

All transport is by road. There is a paved road through Mouila north to Libreville, and south to Ndende (another small provincial town). The furthest village, Mounighou, is 47 km from Mouila. The rivers are not navigable.

Various goods (agriculture, fish, bush-meat, etc.) and handicrafts (baskets) are occasionally sold at the roadside.

Houses are mostly constructed of wood (a structure built from wooden poles and planks) with brick earth walls, the exception being public buildings (schools and clinics) and some (rare) individual houses. The roofs are covered with sheet metal and sometimes straw or dried leaves and palm fronds.

Electricity from the public grid is available in Mouila only, though power cuts are quite frequent and irregularly distributed in different parts of the towns. Most villages in the region do not have access to electricity. Douya, Guissa and Guiamba already have solar lamps installed by Olam. At least one village, Mbengui uses a generator which was a gift from village elites. Fuel for generators is normally provided by 'village sons and daughters' working in town, or political connections.

People in villages obtain water from public hydraulic pumps, rivers and rainwater. All villages have at least one pump except for Okoumbou/Maramba, however several villages have non-functional pumps in a state of disrepair. Existing hydraulic pumps were financed and installed by the Gabonese government or private companies.

The many rivers, streams and natural springs, are particularly used by villages which are not equipped with functioning hydraulic pumps. However it should be noted that the water quality of rivers may be below acceptable drinking quality standards at some times of the year. Rainwater is sometimes collected in barrels, tubs and buckets and then used both for drinking, cooking and household chores. This water source is unavailable in the dry season.

### **4.5 Education and Health Care**

The study area has eight primary schools in the 14 villages catering for between 4 and 75 pupils. The village schools do not in practice offer a complete primary cycle from year 1 to year 5, and students

would leave the village to complete the primary education cycle in Mouila. This is because of the conditions in the village (no electricity, poor educational facilities, absence of teachers etc.). Several schools lack textbooks, tables and benches for students, desks and chairs for teachers, and suitable teacher housing. There are over 10 primary schools and seven secondary schools in Mouila.

In terms of medical care, Mouila has the largest and best health facilities. Douya Onoye is the only department to have a Regional Hospital and other structures such as the Centre de Traitement Ambulatoire (CTA), the Base Epidémiologique et de Lutte contre les Endémies et Ripostes (BELER) and a Provincial centre for maternal and child health.

Further away, the Fougamou Medical Centre is fairly well equipped and has a research center affiliated with the Albert Schweitzer hospital in Lambarene. Also, in Ngounié province, there is a regional health centre, private clinics and several pharmacies.

## **4.6 Subsistence Activities**

### **Agriculture and animal husbandry:**

Shifting agriculture is the primary activity in the villages with women carrying out planting, weeding and harvesting and men, land clearing. The staple food crops are cassava and banana. Farmers use their fields for a few years and then clear new land or return to old fallows. Most farms are located from 500m to a few kilometers from the villages, often within forest galleries and people often construct small huts in the fields so that they can protect against crop damage and raiding by elephants and rodents.

Typical meals consist of starches (cassava, banana, yam etc.), vegetables, cassava leaves, fish products and bushmeat (gazelle, porcupine, antelope, bush pig, etc.) and sometimes wild foods (caterpillars, snails, Odika, etc.). Rearing of domestic animals is only practiced at a small-scale with households raising a few chickens and goats. Some villages raise goats or work on small, poorly fenced cattle ranches owned by village elites and there is a larger ranch of around 1,000 ha (Biendi II, up to 100 free-ranging cows): this has been excised from the planting area by written consent between Olam and the ranch owner.

Domestic animal meat is rarely consumed by households, but rather meat (especially goats) are used an insurance policy, for paying fines or dowries for example. The majority of households in the study area use firewood for cooking meals. Firewood collection is done in the surrounding forest. Local people gather non-timber forest products (NTFPs) for food, construction, medicinal purposes and small-scale commerce. Gathering activities are concentrated within forest galleries and are conducted at the same time as other activities such as fishing, hunting and agricultural work. The savannah areas yield mushrooms after the first rains post dry-season, especially in burned areas.

### **Hunting**

Hunting is another important activity for households, practiced by men, and taking place throughout customary territories extending into the forested areas. Hunters most commonly use snares, placing them along frequently used forest paths and checking them a couple of times per week. A few hunters use shotguns, but this method is more expensive (purchase of guns and ammunition). The most commonly hunted species are forest antelopes, porcupines, monkeys and red river hogs. Hunters targeting large animals (often protected) species are few in number; however the pressure is sufficient to have reduced most larger species to a fraction of their natural abundance.

Bushmeat is consumed for household protein or occasionally sold to buy basic necessities (soap, oil, salt, rice).

### Fishing

Fishing is an important source of protein in the villages. Both men and women fish, though they generally use different methods. Women's fishing is generally for household consumption and is practiced in small streams during the dry season. In contrast, men's fishing occurs throughout the year and the catch is most often sold for cash income. The most commonly fished species include yarra, silure, carp and catfish. Dwarf crocodiles *Osteolaemus tetraspis* are also captured, although they are protected by national law, and increasingly rare close to the villages.

### Artisanal Logging

Artisanal logging is rarely practiced by communities. Families with customary land rights believe that they have ownership over forest territories and therefore the right to log commercial trees. The prevalent practice is to invite loggers from outside the villages to do this work in exchange for cash and timber products for building.

## 4.7 Cultural values

During discussions and mapping activities, people discussed their village history, and specifically how earlier generations migrated to the area and created the current-day villages. The oral history is limited to one or two generations prior to the current elders and does not permit a deep historical study. The Punu and Vungu ethnic groups have been present in the area for at least 100 years.

These communities have tended to move their village every generation or two, in order to stay close to fertile lands and abundant game. More recently, in the 20<sup>th</sup> Century, the colonial authorities forced villages out of the forests and grouped them along main roads to facilitate tax collection and recruitment of workers. However the old village sites retain some importance as burial grounds and spiritual links to ancestral lands; often, villagers maintain camps and practice activities such as hunting or agriculture around these former villages.

## 4.8 Summary of Key Findings of Socio-economic Impact in Respect to Emergent Communities

Jobs will be created through development of the plantation and its infrastructure. Subcontractors are expected to also hire their workforce locally. The jobs being created will fall under two categories: temporary, which are those lasting for a limited amount of time (i.e. road construction) and permanent, more sustainable roles (harvesters, maintenance workers, social workers, administration, health and safety). The development is likely to generate a dynamic economy in the region.

A monitoring committee (a standing committee of company and community representatives) will be set up to advise and initiate developmental projects as well as oversee employment issues such as hiring of locals, working conditions and capacity building of workers

## 4.9 Issues Raised by Stakeholders and Assessors Comments

### 4.9.1 Public Consultations (Provincial and village level):

Public consultations were held in all potentially impacted villages and Mouila town. The consultations involved local and national government authorities, politicians representing the area, village representatives and representatives from Terea and Olam Palm Gabon (listed above).

Globally, the villagers and communities welcomed the project and have high expectations of Olam Palm to improve their quality of life, regenerate their villages, and provide steady employment. The following concerns were aired:

The position of Makanda remained unclear and requires more time for discussion, which was agreed. Mbengui declared itself against the project, its land will be excised from the project unless the village decides to participate in the FPIC process.

Due to the presence of Lot 1 to the north of Lot 3, the villages of Idemba and Guissa perceive that they are “hemmed in” and thus anticipate the loss of land for agriculture and the loss of native customary rights. Therefore these villages objected to the proposed development of Lot 2 on their lands and requested that these be excised from the plantation. This was also agreed.

Almost all villages expressed their concern on the loss of customary rights and livelihoods, particularly with respect to land for village farming, and wanted the company to respect these by the identification and setting aside of areas for village use and/or compensation through material means that contribute towards social development.

Due to strong dependence on rivers and other water bodies for fishing, drinking water and bathing, many villages expressed concern of the use of agrochemicals by the company and consequent contamination of water bodies; some worried about the possible escalation of elephant damage of their crops.

Villagers requested that sacred sites, cemeteries, and old villages be protected and that access to such sites be granted to them.

Overall they urged the company to respect their customs and traditions while developing the project.

Villagers and elected officials were concerned about the tenure and conditions of employment and the migration of foreign workers that could erode their cultural traditions and impact their livelihoods.

Concerns were also voiced about the rising price of food and concerns that food production would further decline as villagers switch to palm plantation work.

Olam and the government authorities have noted these concerns and committed to include mitigation or avoidance measures in the Environmental and Social Management Plan. The company is legally compelled to follow the recommendations of the ESMP, and bound by its Palm Policy to follow the HCV recommendations. Olam explained that many of these issues would also be taken up during the FPIC process and would be expressed in the Social Contract resulting from FPIC.

#### 4.9.2 Stakeholder Consultation in Libreville

In December 2014 and February 2015, Proforest conducted stakeholder consultation to discuss the HCV assessment results for the Mouila Lot 3 project, proposed by Olam Palm Gabon (see Peer Reviewed HCV Assessment Report).

Below is a summary of stakeholder concerns (full summaries of consultation notes are available in Proforest’s full HCV report):

### Choice of site:

The organisations consulted tended to approve of a savannah-dominated site for plantations and agree that Mouila Lot 3 is appropriate in terms of distance from protected areas, proximity to roads, etc.

### Biodiversity

- Conservation organisations agreed that the site does not appear to be rich in fauna, however they expressed concern that the Mbengui forest has some local importance as a refuge for several species of conservation concern.
- Conservation organisations did not highlight specific risks relative to known priority landscapes but expressed concern that the wider landscape should be considered and that connectivity should be maintained via protection of forest corridors.
- The main concern is to maintain the forest galleries in order to protect water quality, habitat for fauna and fish resources. Brainforest stated that a one-size-fits-all approach to riparian buffer zones would not be adequate to protect river functions.
- IUCN specifically raised the issue of increased hunting and requested a specific plan to manage the impacts.

### Local Communities

- Stakeholders required that social impacts of immigration to the area (e.g. increased pressure on natural resources and hunting) are adequately addressed by management plans.
- Local communities must be allowed to access traditional sites including areas required for harvesting and food production.
- Brainforest recognised that Olam has a track record of working toward social acceptability in Gabon and enjoined Olam to establish a respectable FPIC process for Lot 3.

## 5. SUMMARY OF ASSESSMENT FINDINGS FOR HCV ASSESSMENTS

A full public summary of the HCV assessment is made available separately by Proforest and will be published on the RSPO website. The data below cover the essential findings. The project was assessed as Tier 1 under the HCVRN ALS Scheme. The HCV report was prepared following the new ALS (Assessor Licensing Scheme) and peer reviewed by approved HCVRN peer reviewer.

### 5.1 Data Sources and Quality

Proforest worked with the experts and with Terea to establish suitable methods for data collection and then reviewed all reports, supplementing this information from relevant literature, expert consultation and experience. Additionally, Proforest made use of the precautionary approach to HCV identification.

### 5.2 HCV Toolkits Employed

The reference documents used to interpret and identify HCVs during this assessment include the HCV National Interpretation for Gabon (2008) and recently published Common Guidance for HCV Identification (2013), Common Guidance for the Management and Monitoring of High Conservation Values. HCV Resource Network (2014).

### 5.3 Decisions on HCV status and Related Mapping

The decisions on HCV status are presented in Table 5. HCV 1, 4, 5 and 6 are present in Lot 3.

Table 5: HCV Identification conclusions

HCV	Definition	Assessment identification			Approximate area (ha) <sup>4</sup>
		Present	Potential	Absent	
1	Concentrations of biological diversity including endemic species, and rare, threatened or endangered (RTE) species that are significant at global, regional or national levels	Present	Potential	Absent	1,328
2	Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance	Potential	Potential	Absent	
3	Rare, threatened, or endangered ecosystems, habitats or refugia	Potential	Potential	Absent	
4	Basic ecosystem services in critical situations including protection of water catchments and control of erosion of vulnerable soils and slopes	Present	Potential	Absent	6,277
5	Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples...	Present	Potential	Absent	
6	Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples...	Present	Potential	Absent	6,176 (combined)

A preliminary map of HCV areas is shown in Figure 7 and Figure 8 and provides a draft spatial plan designed to meet the objectives of biodiversity conservation and ecosystems services for HCV 1 and HCV 4 as well as safeguarding areas necessary for the local communities (HCV 5 and HCV 6). A notable feature is the complete protection of the gallery forests protecting rivers and streams, as well as the provisional inclusion of all village activity areas, subject to the FPIC agreements which will decide on the use of village lands.

<sup>4</sup> Refer to Summary Report of Planning and Management, page 6: All areas are approximate based on assessments, and may change following further surveys and FPIC negotiations

- Area of new plantings:

<b>Activity</b>	<b>Area (ha)</b>
<b>A) HVC 1-4 management area<sup>a</sup></b>	6,325
<b>B) HCV 5,6 management area (not included in A)<sup>b</sup></b>	3,600
<b>C) Riparian Areas<sup>c</sup></b>	N/A
<b>D) Surface plantable<sup>d</sup></b>	15,255
<b>E) Infrastructures and roads<sup>e</sup></b>	660 TBC
<b>F) Other excisions<sup>f</sup></b>	1,000 TBC
<b>Total</b>	23,780

**Notes to area table:** All areas are approximate based on assessments, and may change following further surveys and FPIC negotiations. **a.** Mainly forest riparian areas, includes overlap of 2,576 ha of HCV 5 forests<sup>5</sup>. **b.** These are largely savannah areas, we make the assumption that none of the estimated 2,576 ha of HCV 5 within forest may be planted, but ca. 85% of the HCV 5 savannah (3,060 ha) will be accessible for planting through FPIC. **c.** Included within HCV 4 area estimate **d.** Includes approximately 85% (3,060 ha) of savannah area currently classed in HCV 5, subject to FPIC. **e.** Depends on final layout **f.** Potential FPIC exclaves and other claims other than HCV5-6 areas, subject to FPIC

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<sup>5</sup> Description of forest refers to Summary of HCV and ESIA, section 1.1. Assessment of Forest Area.

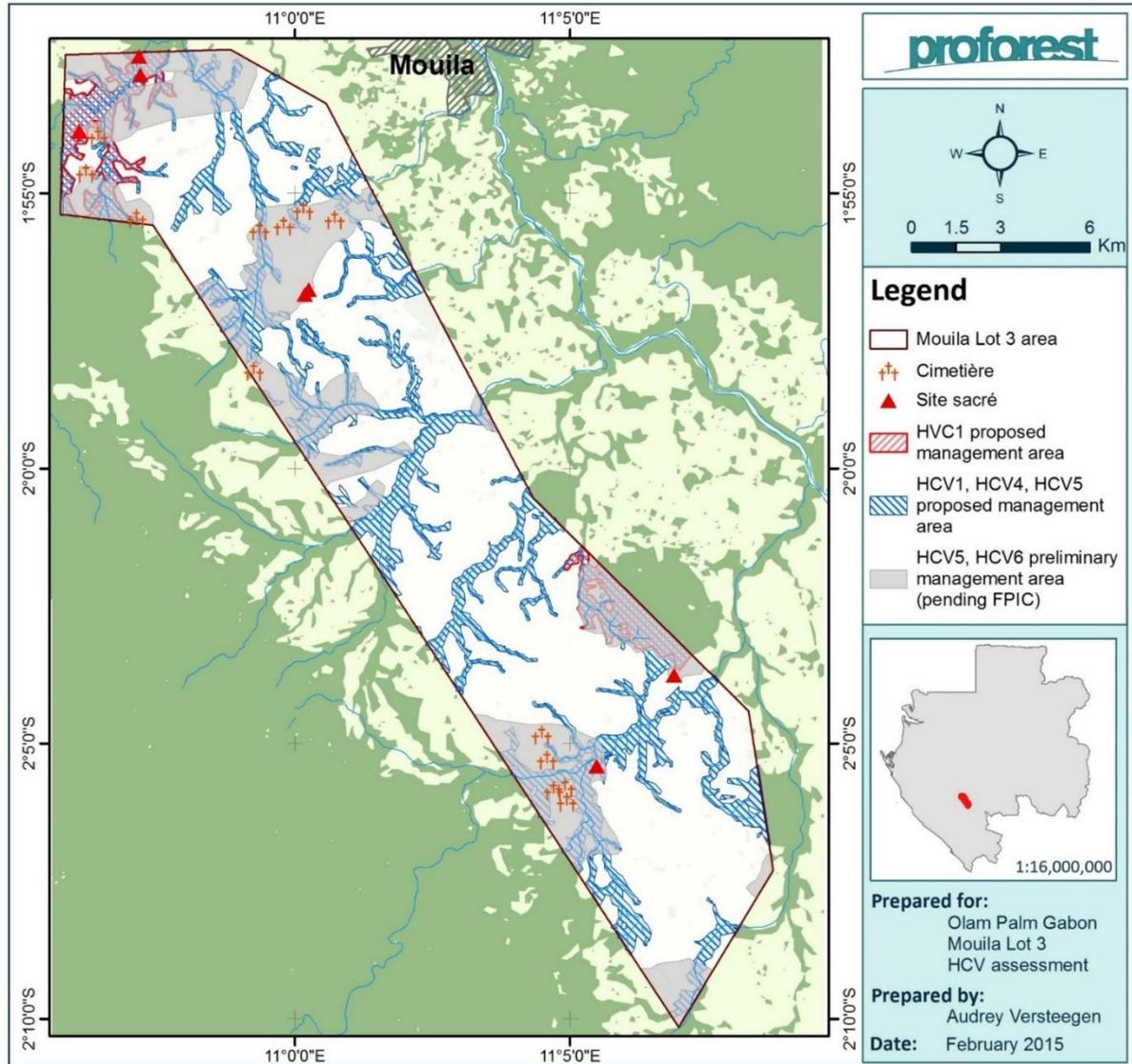


Figure 7: Location of the HCVs and proposed HCV management areas in Mouila Lot 3, pending FPIC agreements.

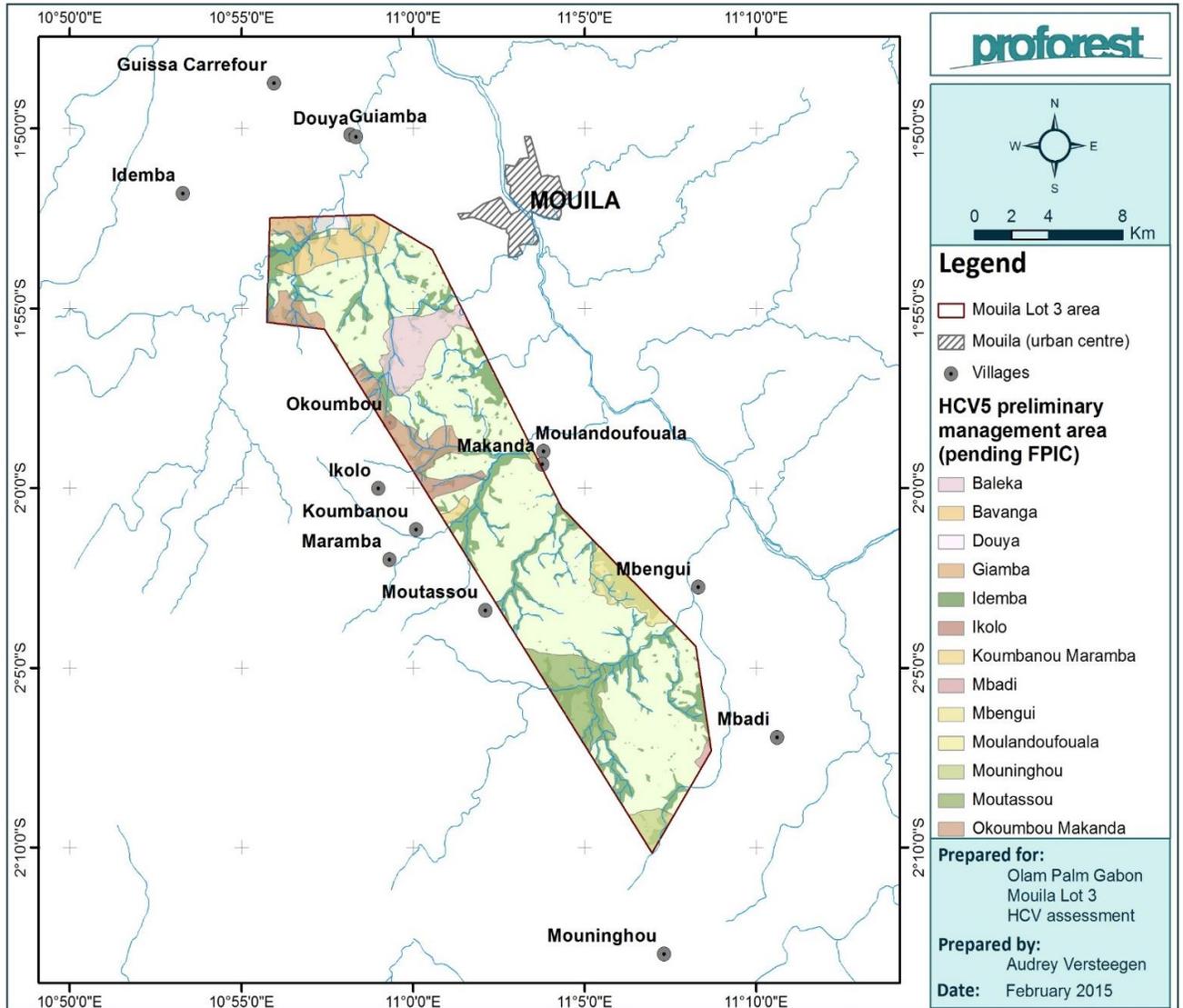


Figure 8: Provisional HCV 5 management areas for Mouila Lot 3, village by village, pending FPIC agreements. Each of the coloured areas are the contours of traditional village activities within the concession, based on validated participatory maps.

## 6. LAND USE CHANGE ANALYSIS

Land use change analysis (LUCA) based on LANDSAT imagery was conducted to determine changes of vegetation since November 2005 using data from Global Forest Watch. The analysis shows no clearance of primary forest since 2005 and HCV assessment has been conducted prior to new planting developments. The SEIA and HCV assessment results are align with the Landuse Change Analysis performed on Landsat imageries (see HCV maps above). In addition, Olam Palm Gabon has engaged with experts to conduct detailed LiDAR survey prior to land operation.

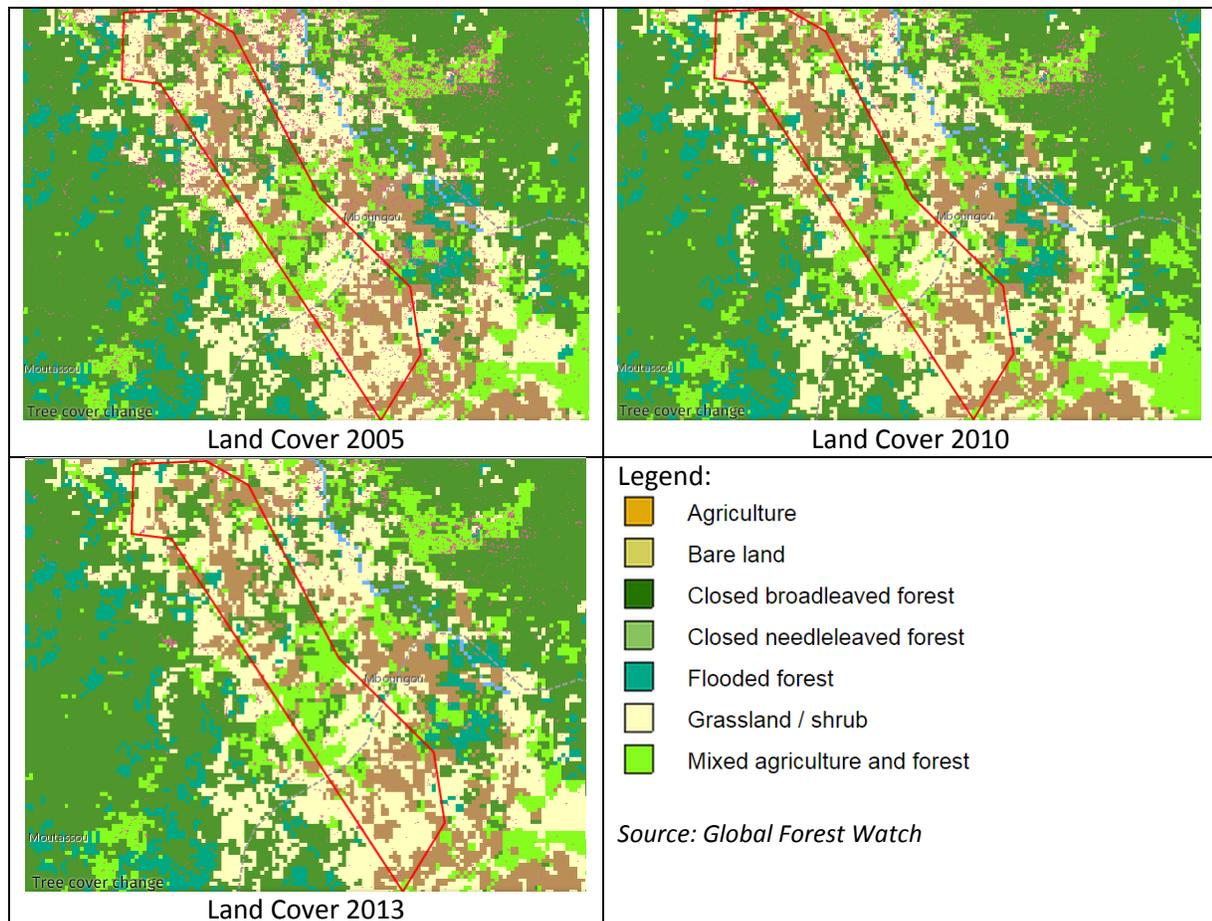


Figure 9: Land cover since 2005

Based on the analysis, there is no clearance of primary forest since 2005. The findings also shows approximately 65 ha of secondary forests were lost between year 2005 to 2010; and 41 ha were cleared between year 2010 to 2013. It is important to note that these areas lost are not due to commercial clearance for palm plantation.

As a member of RSPO since February 2011, Olam has completed all new plantings according to the new planting procedures including HCV assessment conducted prior to any land development.

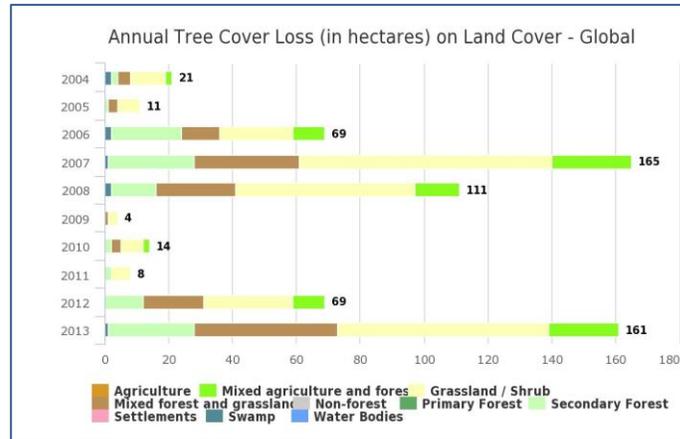


Figure 10: Analysis on vegetation lost based on data from Global Forest Watch

## 7. HCV MANAGEMENT AND MONITORING RECOMMENDATIONS

HCV	Brief description	Main threats (current/future)	Management recommendations	Monitoring recommendations
1	<p>Species diversity</p> <ul style="list-style-type: none"> <li>Two endemic species of fish, including one listed as Endangered by the IUCN, in the River Douya</li> <li>Mbengui terra firma forest with species assemblages</li> </ul>	<ul style="list-style-type: none"> <li>Overfishing by the nearby communities of Bevanga, Douya, Giamba and Idemba;</li> <li>Loss of water quality due to nutrient leaching / fertiliser runoff;</li> <li>Clearing and hunting in Mbengui Forest block;</li> </ul>	<ul style="list-style-type: none"> <li>Two of these villages are openly against the project and accepted the participatory mapping exercise only to excise their customary land from the proposed permit. It is likely that such excision would result in some portions of the River Douya being excluded from OPG's permit. The FPIC process should keep the presence of an HCV in the area in mind in negotiating the zone. It is recommended that OPG carries out further sampling at different seasons to ascertain the presence of valuable fish biodiversity and inform the FPIC process. OPG should engage with local communities on the value present and develop a programme to mitigate the threat from overfishing.</li> <li>The gallery forest around the River Douya should be integrally preserved as a buffer against potential runoff.</li> <li>In consultation / negotiation with the local community, Mbengui forest block needs to be managed for its mammals and forest cover. A local agreement needs to be reached to restrict hunting pressure in this zone.</li> </ul>	<ul style="list-style-type: none"> <li>Regular water sampling following BACI approach (upstream, in site and downstream) to preserve water quality: water quality parameters should remain within an acceptable range (similar to baseline values for microbiology and physio-chemistry recorded prior to land development) to preserve the fish habitat.</li> <li>Further studies and on-going monitoring of fisheries in all the main rivers to ensure that HCV 1 is maintained and enhanced. As well as to verify if further endemic or IUCN listed species are present in the other watercourses.</li> <li>A regular monitoring system needs to be established to ensure that forest cover is maintained and hunting pressure is kept at a minimal level in Mbengui forest block</li> </ul>
4	<p>Basic ecosystem services</p> <ul style="list-style-type: none"> <li>Hydrological functions to maintain water quality and quantity for communities and</li> </ul>	<ul style="list-style-type: none"> <li>Low level forest loss due to clearing for subsistence agriculture and small-scale logging/ timber extraction</li> </ul>	<ul style="list-style-type: none"> <li>Delimit, set-aside and protect riparian forests (these should be identified by following streams and tributaries to their source). Buffer zone width (each side) of 100m for the</li> </ul>	<ul style="list-style-type: none"> <li>Establish network of independent water monitoring stations ;</li> <li>Regular monitoring of forest</li> </ul>

	fisheries, as well as prevent flooding.	<ul style="list-style-type: none"> <li>• Large scale forest loss due to land clearance for palm oil plantation (high level threat)</li> <li>• Loss of water quality and quantity due to loss of forest cover and service provision</li> <li>• Loss of potable water supply downstream</li> <li>• Flooding</li> <li>• Water pollution due to fertiliser and pesticide use</li> </ul>	<p>main rivers and 50 m for the tributaries should be set as a minimum<sup>6</sup>. There are various small pockets of forest that are not directly riparian areas and can be cleared if less than 20 ha in size and if not connected to the river network.</p> <ul style="list-style-type: none"> <li>• Ensure sufficient alternative land available for farming or compensation if there are no alternatives, and prohibit farming and logging in the forest zones;</li> <li>• Ensure implementation of Olam’s SOPs regarding chemical use (RSPO &amp; Olam Farm code)</li> <li>• HCV sensitisation programme (internal &amp; external)</li> </ul>	<p>set-aside zones shows no encroachment by communities and operations;</p> <ul style="list-style-type: none"> <li>• Annual monitoring of set-aside zone shows at least no decrease in canopy cover;</li> <li>• Set restoration goal (natural regrowth) for riparian zone with 5 year milestones;</li> <li>• Regular review of implementation of relevant Olam’s SOPs;</li> </ul>
5	<p>Basic Community Needs</p> <ul style="list-style-type: none"> <li>• Provision of food from farming, hunting, fishing and NTFP gathering in the forest zone</li> <li>• Water supply to communities</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of fertile forest land for farming</li> <li>• Loss of access to traditional hunting, fishing and NTFP grounds</li> <li>• Loss of water quality and quantity due to forest loss</li> <li>• Water pollution due to fertiliser and pesticide use</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure sufficient alternative land available for farming or compensation if there are no alternatives;</li> <li>• Establish a community development programme to provide alternative food sources, with emphasis on availability of suitable protein; Ensure controlled access for fishing;</li> <li>• Strict hunting SOP for all Olam staff and all local communities applicable inside the permit - including zero tolerance to any form of illegal hunting (hunting methods and protected species);</li> <li>• Control all hunting in forest zones coupled with provision of protein sources in the zone (Olam Hunting SOP enforcement patrols);</li> <li>• Ensuring rigorous FPIC process to find mutually agreeable solutions to HCV 5 threats and formalise in social contract (quid</li> </ul>	<ul style="list-style-type: none"> <li>• Establish and implement a participatory monitoring system to regularly track provision of basic needs to the community;</li> </ul>

<sup>6</sup> As proposed in Gabon’s RSPO Draft Principles & criteria (2015)

			pro quo);	
6	Cultural values <ul style="list-style-type: none"> <li>• Burial grounds</li> <li>• Sacred sites in forests (grove, cave...)</li> <li>• Lakes</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of access</li> <li>• Damage to resource</li> </ul>	<ul style="list-style-type: none"> <li>• Enable all communities to have access to their HCV 6 sites;</li> <li>• Sensitise all communities that have identified any HCV 6 sites that are not on the validated HCV 5 &amp; 6 maps;</li> <li>• Develop robust SOP for the identification, demarcation and enclavement and protection of all HCV 6 sites with the communities;</li> <li>• Ensure community member present when clearing operations occurring in any HCV 6 sensitive zones;</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a simple HCV 6 monitoring system and ensure annual internal reporting against it;</li> </ul>

## **8. FREE, PRIOR AND INFORMED CONSENT**

The process to obtain FPIC among villages surrounding the concession is an on-going process which has commenced. From the 6 steps recommended for completing the FPIC process, each of which have several key components, the social team of Olam Palm Gabon have completed the following actions against each step:

1. Step 1(ESIA): The ESIA has been submitted to the Director General of Environment (May 2015), subsequent to public consultations informing all stakeholders about the impacts of the project and addressing any concerns raised. The ESIA also includes a study for the impact of the project on subsistence activities (farming, hunting, gathering, collection and fishing) in and around the concession area and the recommended action to mitigate this.
2. Step 2: (Elaboration of the FPIC process with stakeholders): The details of the FPIC process have been elaborated with local communities and relevant provincial and national government agencies. An information campaign on impacts of the project is presently underway. A register of information requested, issues, claims and complaints has been opened in the offices of Olam, the Prefectures of Mouila and Fougamou and villages potentially affected by the project. Furthermore a list of all stakeholders is maintained and a record of communications, consultations and actions arising from these, is regularly updated.
3. Step 3: (Identification of stakeholders, definition of participative modes of consultations, representation and negotiations): A steering committee to monitor and guide the FPIC process has been established.
4. Step 4 (Identification of the persons affected by the project and estimation of compensation required): An agricultural inventory was carried out to identify owners of crops, farms and timber permits within the concession, allowing Olam Gabon to plan for compensation of owners in accordance to Gabonese law.

The next steps 4, 5 and 6, consist of conducting an agricultural inventory with the ministry of Agriculture to identify owners of crops and farms who are willing to give up land in exchange for suitable compensation; negotiating the free, prior and informed consent from the villagers based on the establishment of agreed compensations, land excisions or enclavements based on village needs, witnessed through a written social contract, and validation of the social contract through the signatures of all concerned parties and a ritual ceremony. Execution of all completed steps (actions) is supported by documentary evidence signed by the relevant stakeholders and Olam Palm Gabon.

## 9. INTERNAL RESPONSIBILITY

This document is the summary of SEIA (Social and Environmental Impact Assessment) and HCV (High Conservation Value) assessments for the 23,780 hectare concession in proximity to Mouila Town proposed for development of oil palm plantations by Olam Palm Gabon and has been accepted by the Management of Olam Palm Gabon. We the undersigned accept responsibility for the assessments and summary.

Signed on behalf of SEIA assessors  
Terea, Gabon



Signed on behalf of HCV Assessors  
Proforest Ltd, UK



DAVID HOULCE  
PROFOREST.

Signed on behalf of Olam Palm Gabon:

Head – Environment and Sustainability, Olam Gabon  
Christopher Stewart

