The consequences of inappropriate management of slopes especially in Lot 8 could potentially lead to degradation of water quality by the accumulation of sediments in rivers, direct blocking of river flows and damage to the river buffer zones. This function of forests on slopes is very closely linked with HCV 4.1. In order to provide specific guidance to Olam Palm to properly manage these slopes according to RSPO criterion 4.3 the hilly areas of Lot 8 have been categorised into three main classes and mapped. The three main classifications are:

- Slopes of 0 to 5 degrees: No specific measures are required
- Slopes of 5 to 20 degrees: Specific measures to control erosion need to be implemented
- Slopes above 20 degrees: Conversion and planting should not occur in such areas

The map above shows a stratification of the slopes with 10 metres of precision. The map shows in red the slope above 20 degrees (red areas) that should be excluded from planting due to high erosion risk. The map has been generated from the Lidar survey. As the Lidar data helped in generating a precise model (10 metres of precision) some areas can be over represented in the scale used for this map (they would not appear as important as they appear on this map if the scale was bigger). Areas surrounded with a continuous line are areas with very high risk of erosion and must be set aside for slope and watershed protection, unless there is a robust proof from the field that those areas are below 20 degrees. Areas surrounded with a dashed line are high erosion risk areas. The slopes of these areas should be carefully evaluated prior to any conversion operations.

*OLAM Légende Infrastructures FOUR PLA Hydrographic network WELIGA Slopes (degree) DARLO D' - 10" (0514.91 ha) 0" - 15" (2675.45 ba) KOREDO ster 20" (368.2 ha) Erosion risk areas Very high B FOUN ZANGY Proportion of slopes areas 15.3% PARIS-BIFOUN II proforest TERLEA

HCV 4.2 in Lot 9

Figure 1: map of Lot 9 and HCV 4.2 areas

As explained under HCV 4.2 under Lot 8, the red areas should be precluded from any conversion activity due to high erosion risks. Red coloured areas with continuous line are those with slopes of above 20 degrees and should not be planted. They represent around 1% of the total area. The areas surrounded with a dashed line are potentially erosion risk areas; they represent 3% of the total area of the Lot. These areas could be planted but with implementation of erosion control measures.

Areas of peat soils

There are no areas of peat soil in the assessment areas of Gabon

Local people's lands

There is basically no local people's land within the boundary of the concession although local farmers could potentially develop parts of these areas for farms.

HCV 5 in Lot 8

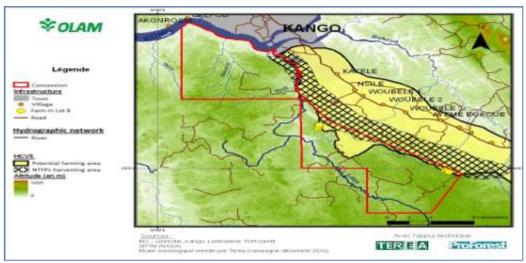


Figure 2: Map of Lot 8 and local people's land and land-use areas

The area shaded yellow in Figure 11 shows the agricultural lands of villages around Lot 8 and the hatched area represents the main NTFPs harvesting zones. Although the concession is about 5 km from the villages, a handful of local people have their farms (yellow dots on the map are potential locations of farms) in the concession, nevertheless, local farmers do not generally farm beyond 5 km from villages. Information presented in Figure 11 is a compilation of data collected during the participatory mapping exercise with the villages. According to the draft Gabonese HCV national interpretation document, farms are not by definition considered HCVs but are important to the individual farmers and should be dealt with through a process of free, prior and informed consent.

HCV 5 in Lot 9



Figure 3: Map of Lot 9 and HCV 5 areas

As explained under Lot 8 above, the map presented below is a compilation of data and information collected during the participatory mapping exercise with the population of the villages. The yellow area represents the agricultural lands of villages around Lot 9 and the hatched area represents the NTFPs (here we have represented andock and noisetier) harvesting zone. In this Lot, the villages of Akok, Afog Bidzi and Ebel Abanga have their farms located within the concession, along the road. The agricultural zones for the villages between Four Place and Darlo extend to the western boundary of the Lot with few farms located within the concession. The hatched areas (NTFP) collection zones should be excluded from any conversion activity. The yellow areas should also be excluded from conversion unless there is agreement with the villages and farmers concerned through an FPIC process.

HCV 6 in Lots 8 and 9

It was identified during the assessment that the belief, tradition and culture of most of the villages in the region are not strongly linked to the forests of the concessions. This is mainly because the traditional beliefs of the native people have eroded away already through either ethnic mixing, or conversion to Christianity, or because they are migrants from the south of Gabon and therefore do not have historical and cultural links with the natural elements around their villages. The only traditional belief generally practised in the villages of the area is performed in Bandja (local shrines) that are built within the villages. Therefore no HCV 6 was identified in Lot 8. The villages of Akok, Afog Bidzi and Ebel Abanga (Figure 12) which are located in Lot 9 are concerned about their cemeteries which are a few metres from the villages. Those burial sites have been designated as HCV 6.

The fishing camps located around Lake Nguene are part of the culture of the people of these villages and have therefore been classified as HCV 6.

Scope of the HCV Assessment Organisational information and contact persons About Proforest

Proforest is an independent company working with natural resource management and specialising in practical approaches to sustainability. Our work ranges from international policy development to the practical implementation of requirements on the ground, with a particular focus on turning policy into practice. Our extensive and up-to-date knowledge of the international context ensures that our work for individual companies and organisations is set within an appropriate framework. At the same time, we are able to bring a wealth of current practical experience to policy development processes and debates. The Proforest team is international and multilingual and has a broad variety of backgrounds, ranging from industry to academia and NGOs. This allows us to work comfortably in many types of organisations, as well as in a range of cultures. We have in-house knowledge of more than 15 languages, including Mandarin, Hindi, French, Spanish and Portuguese. Proforest was set up in 2000 and our expertise covers all aspects of the natural resources sector, from forestry and agricultural commodities to conservation, supply chain management and responsible investment. Contact Person: Abraham Baffoe, Abraham@proforest.net

About TEREA

TEREA – Terre Environment Management – is a consulting firm registered in Gabon in 2005. TEREA works on projects and programmes relating to the environment and sustainable management of the natural resources in close cooperation with forestry and environmental institutions and the private sector in several countries in Central Africa. TEREA is also registered and operates in Europe. TEREA has a competent team of environmental engineers, forest engineers, sociologists and a network of experts and partners that allows the company to work on a broad range of projects and programmes. The activities of the research department is in constant progression since its creation and works in close cooperation with the private sector and forests and environmental administrations in the countries concerned and also with some

partners including the FFEM, AFD, GTZ and the EU/CDE. TEREA supports the sustainable management of almost four million hectares of forest (natural or plantations), and also works with the transformation units of wood in Central Africa and Europe on environmental certifications. TEREA works with a variety of industries including oil, mining, and forest, conducting Environmental Impact Assessment, environmental audits, support with the regularisation of administrative files (ICPE), formation, and environmental management. The objective of our team is safeguarding, management, and the valorisation of the natural resources. Contact Person: Sophie Dirou, s.dirou@terea.org

List of legal documents, regulatory permits and property deeds related to areas assessed

Legal documents

- Convention de RAMSAR du 2 février 1971 relative aux zones humides d'importance internationale;
- Convention CITES (Convention sur le commerce international des espèces de faune et de flore sauvages menacées d'extinction signée le 3 mars 1973 par 87 États, intégrée au Programme des Nations Unies pour l'environnement en 1991);
- Code forestier, loi n° 16/01 du 31 décembre 2001;
- Code de l'environnement (loi 16/93 du 26 août 1993 et ses décrets d'application :
 - o Décret 541/PR/MEFEPEPN 15/07/05 règlementant l'élimination des déchets ;
 - o Décret 542/PR/MEFEPN 15/07/05, règlementant le déversement de certains produits dans les eaux superficielles souterraines et marines.
- Décret n° 692 du 24 août 2004 fixant les conditions d'exercice des droits d'usages coutumiers en matière de forêt, de faune, de chasse et de pèche ;
- Arrêté n° 118 du 1 mars 2004 portant réglementation des activités forestières, minières agricoles, aquacoles, cynégétique et touristique à l'intérieur d'une zone tampon.

Regulatory permits and property deeds

- Convention portant concession de baux emphytéotiques entre la République Gabonaise, représentée par Son Excellence le Premier ministre et Olam Palm Gabon;
- Décision portant autorisation d'exploration des concessions forestières d'une superficie de 51.920 ha, N°0000303 MEF/SG/DGEF;
- Documents cartographiques du projet Olam Palm Gabon / Service cartographique - D.G.E.F - November 2010.

Location map

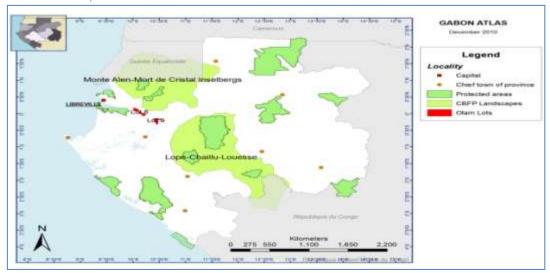


Figure 4: Map of Gabon showing protected landscapes and Lots 8 and 9

The three concessions of Olam Palm are located in the western part of Gabon. Lot 9 overlaps with Monte Alen-Mont de Cristal CBFP landscape and is also located in a Ramsar site, Lot 11 is contained within the Ramsar sites, and Lot 8 is upstream of the Pongara National Park. Details of the site are given in the following section.

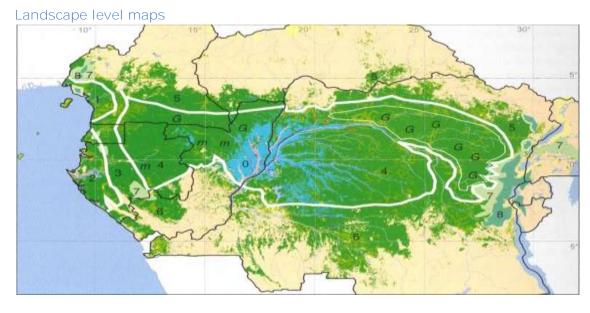


Figure 5: Map of Central Africa showing the different forest types

Apart from a vast area of swamp forest (0) in the centre of the Congo Basin, the forests can be divided into: (1) the Biafrean forests of the Cameroun coast, (2) the Biafrean forests of the Gabonese and Equatorial Guinea coasts, (3) the Ceasalpiniaceae forests, (4) the Iowland Congolese forests, (5) the Camerounese-Congolese semi-deciduous forests, (6) the Gabonese-Congolese semi-deciduous forests, (7) the sub-mountain forests, (8) the mountain forests, (m) the Maranthaceae forests and finally (G) the forests with dominance of Gilbertiodendron dewevri (Vande Weghe, 2004).

In order to ensure the protection of biodiversity and ecosystems of conservation significance, the priority sites of the Central African forests have been categorised into eleven (11) large relatively intact areas, termed Congo Basin Forest Partnership (CBFP) Landscapes, based mainly on the representativeness, the viability of species

populations, the sustainability of their ecological processes, and the integrity and resilience of their ecosystems (CBFP, 2006). The CBFP conservation activities focus on

these landscapes as outlined in white in the following map.

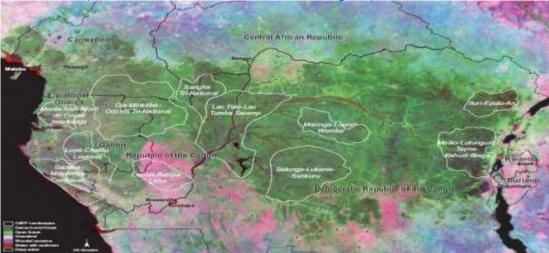


Figure 6: Map of Central Africa showing the different priority landscapes

Concession level maps



Figure 7: Map of Gabon illustrating the locations of Olam Palm concessions

The three Olam Palm concessions (Lots 8, 9 and 11) with a total size of 51,920 ha are located in the provinces of Estuary and Moyen-Ogooué. Lot 8 is located in the Department of Komo Kango of the Estuary Province and has a size of 20.030 ha. It is bordered to the north by the Komo estuary and to the north-east by the River Lobe. Lot 9 with a size of 18,530 ha is located in the Department of Abanga-Bignié in the province of Moyen-Ogooué. It is bordered to the east by the River Abanga and to the south by the River Ogooué. There are two lakes located in this lot. These are Lake Nguene (the bigger of the two) and Lake Azougué. Lot 11 is located between the Department of Abanga-Bignié and the Department of "Ogooué et les Lacs". This concession is also in the Moyen-Ogooué province. This concession is bordered to the north and the west by the River Ogooué.