



## Summary Report of Planning and Management for a Pre-Nursery in the Municipality of Mouila, Gabon

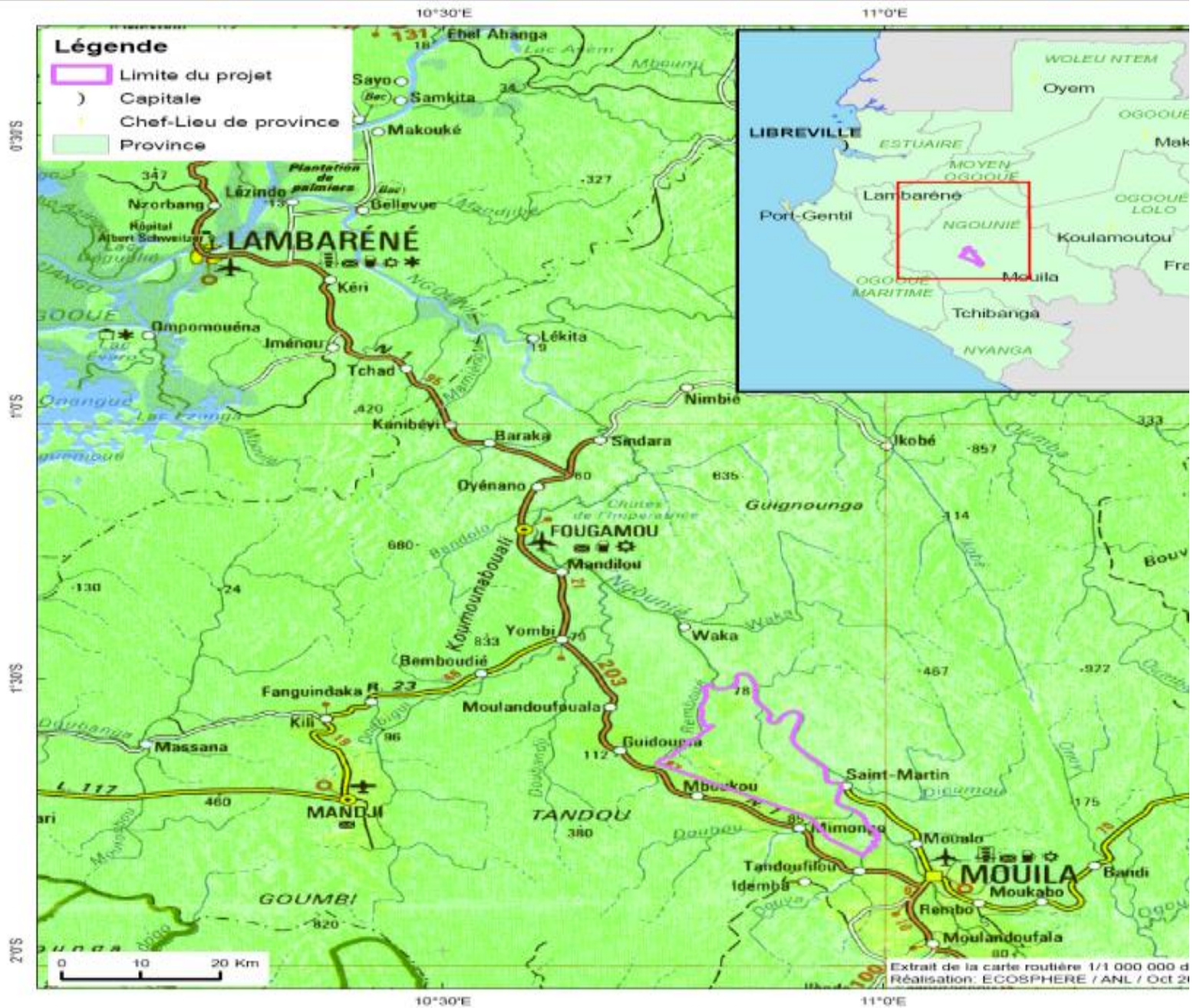
### 1. Executive Summary

Olam International Limited is committed to the sustainable production of palm in all its plantations and therefore is submitting **notice of New Planting to the RSPO in order to develop a 25 hectare pre nursery** within its 35,354 hectare concession in region of Mouila, Ngounié province, Gabon. Adhering to the RSPO New Planting Procedure requirements, Olam has commissioned an independent social & environmental impact assessment (SEIA) and high conservation value (HCV) assessment through Ecosphere, a local Gabonese consultant, and Proforest, an RSPO accredited HCV assessor, respectively. In parallel to completing an SEIA and HCV assessment, and carrying out community engagement for the entire concession, we have identified a suitable area and completed the same process for a proposed 25 hectare pre-nursery site. **Due to climatic conditions, it is important for the pre-nursery to be developed during this limited window thus the need to submit a separate notice. Although the field studies for the entire site have been completed, the reports will not be available for public consultation until the end of February. Olam have, in this management plan, given due consideration to the recommendations provided in the Social and Environmental Impact and High Conservational Value assessments for the pre nursery and preliminary field data for the entire concession.**

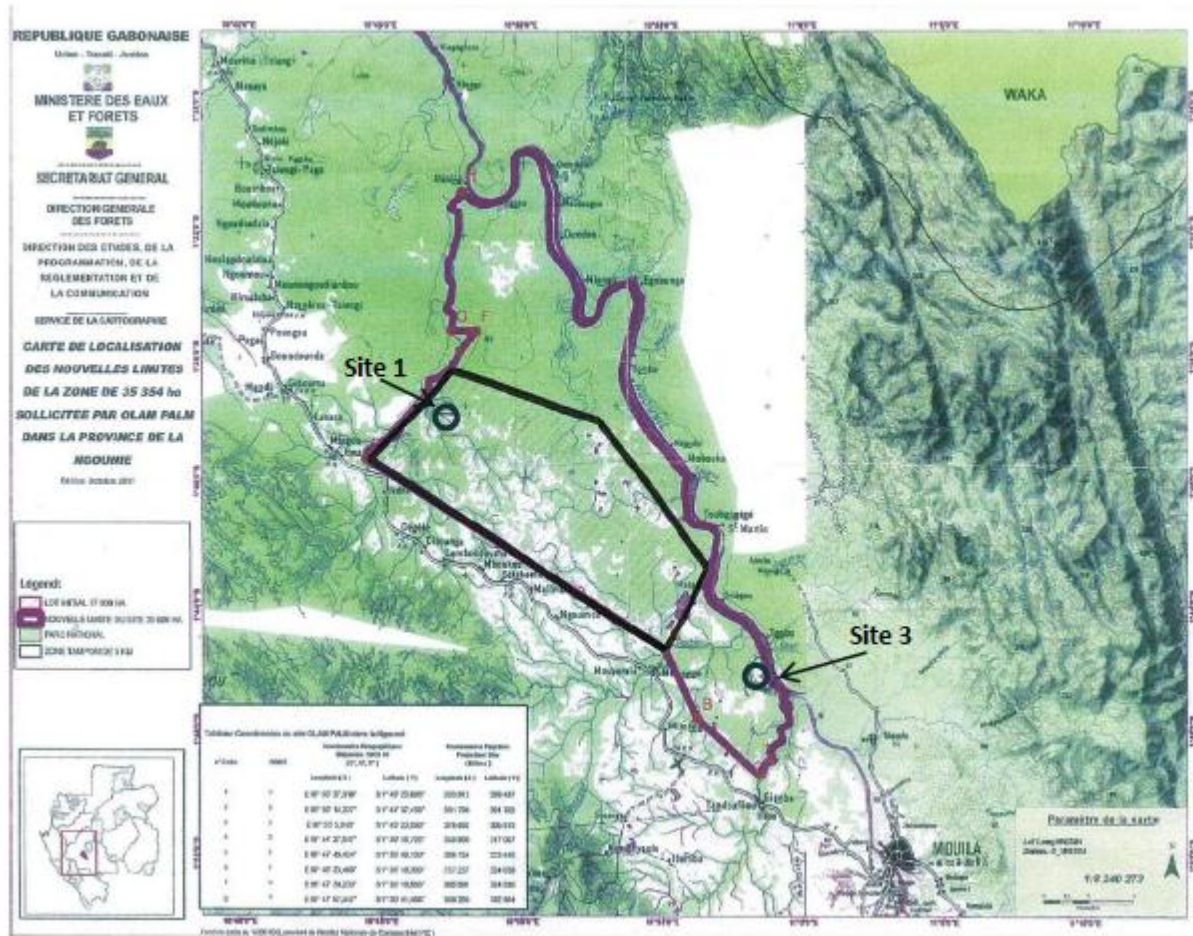
This concession is a part of Olam International's 70:30 Joint Venture Agreement with the government of the Republic of Gabon, which includes the development in Phase 1 of 50,000 hectares of palm plantations in the country. The total investment in the plantations, palm oil mills and related assets, including but not limited to infrastructure, housing, schools and clinics, is estimated at US\$236 million.

### 2. Reference Documents

- Assessment Reports
  - 'Social & Environmental Impact Assessment on the creation of a pre-nursery for the proposed development of a palm plantation in the area of Mouila', Ecosphere
  - 'High Conservation Assessment for an oil palm nursery site in Mouila, Gabon.' Proforest
- Related Legal and Regulatory permits
  - *Autorisation provisoire d'établissement d'une pépinière*, issued by the Director General of Environment and the Protection of Nature, Ministry of Housing, Urban Development, Ecology and Sustainable Development.
  - *Decision portant autorisation d'exploration d'une concession forestière d'une superficie de 35,354 hectares*, Director General of Forests, Ministry of Water and Forests
  - *'Convention portant concession de baux emphytéotiques entre la République Gabonaise et Olam Palm Gabon.'* issued by the Director General of Taxation, Ministry of Economy, Commerce, Industry and Tourism



Landscape map of the 35,354 hectare concession



Location of Site 3 in the Entire Concession

- **Area of Nursery and and time plan for new plantings**

Olam investigated 5 potential 25 hectare pre-nursery plots, and has selected one of the plots, Site 3, Ngounié, after completing SEIA and HCV assessments. Site 3 is the most suitable at this point in time for pre-nursery development given agronomic, social and environmental considerations. The site is near water, on savanna (limited vegetation), has good soil quality and quantity, and is accessible by an existing road but is the farthest from important village activity zones. More importantly the site has the least environmental impact and there are no HCVs within or adjacent to the plot.

**Development will be strictly limited to 25 hectares for the nursery and to rehabilitating the existing access road. We will engage the certification body SGS to verify this at some point prior to land preparation begins for the plantation upon successful completion of the NPP Public Consultation period.**

<b>Designation</b>	<b>Area (ha)</b>
Pre-Nursery Area	25
Access Roads	6m wide by 7 m loong
Total Concession Area	35,354

- Time plan for Nursery Development (and proposed report completion and RSPO Public Consultation for the full site)**

The development of the 25 hectare pre-nursery will begin in the end of February upon completion of the public consultation. By March the SEIA and HCV reports for the entire concession will be complete and submitted for NPP Public Consultation. Therefore, full plantation development, respecting HCV areas and relevant environmental and social considerations, will begin in late March/earlyApril 2012.

It is important to establish the pre-nursery by the end of March such that the seedlings benefit from at least 2 months of favorable weather before the dry season arrives in May.

ACTIONS	2012													
	S	O	N	D	J	F	M	A	M	J	J	A	S	O
1 <sup>st</sup> Scoping Visit														
2 <sup>nd</sup> Scoping Visit														
HCV/SEIA Field Study for potential nursery sites within the concession*														
HCV/SEIA Field Study for the concession														
FPIC														
EIA/HCV Reporting for the Pre Nursery														
EIA/HCV Reporting for the entire plantation area														
RSPO Notification period for the pre nursery														
Land Preparation and construction of basic housing for pre nursery workers														
Prenursery establishment														
RSPO Notification period for the plantation														
Land preparation for plantation/establishment of Main Nursery														
Transplanting of plants from pre-nursery to main nursery (and field planting from Feb/March 2013)														

\*The entire concession which is undergoing a parallel NPP process to the Nursery (which is located insides its boundaries) is 35,354 ha.

### 3. SEIA and HCV Management & Planning Personnel

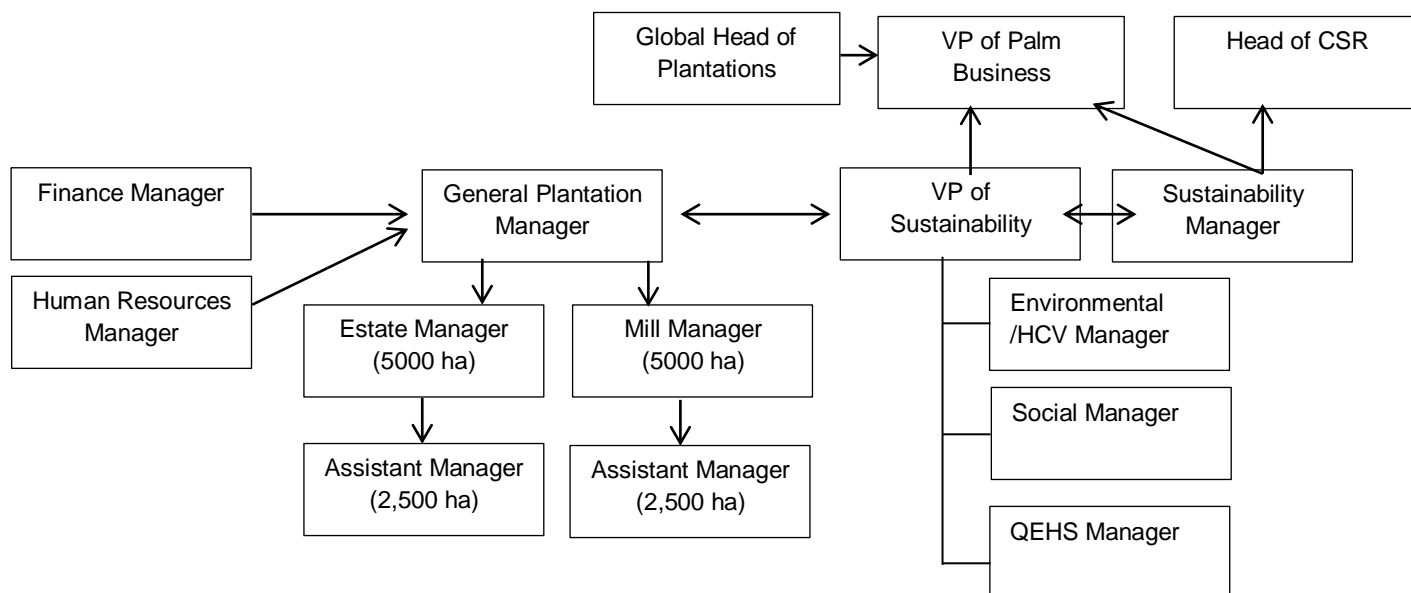
- Organizational information and contact persons

Contact Persons	Position	Entity
Gagan Gupta	Project Director	Olam Gabon
Shyam Ponnappa	Plantation General Manager	Olam Palm Gabon
Premnath Nair	Regional Plantation Manager	Olam Palm Gabon
Arun Venkataraman	Vice President-Sustainability	Olam Palm Gabon
Alexandra Booth	Sustainability Manager	Olam International Ltd.
Raphael Aouba	HCV Assistant Manager	Olam Palm Gabon
Nina Kouba	Social Manager	Olam Palm Gabon
Jean Michel Pierre	Certification Programme Manager, Social Services	Olam International Ltd

- Personnel involved in planning and implementation

The plantation area will be structured in divisions consisting of around 2,500ha each to ensure that implementation of all best practices, including training of the workers who are unfamiliar with plantation work and techniques are well supervised. Each of these divisions will be managed by an assistant manager. Suitable standard operating procedures will be established for all the field activities before commencement of the project. The General Manager and assistants will work closely with the Vice President of Sustainability, and the HCV and Social managers to ensure that practices remain in adherence to RSPO principles and Criteria.

The development and operation for the pre-nursery site will be overseen by an Environmental/HCV manager and 2 assistant social managers whom report to the social manager. A QEHS consultant will also monitor Health and Safety on the site until a full time QEHS manager is hired for the plantation in Mouila. The Environmental/HCV manager will be responsible for monitoring buffer zones between the nursery and the river as well as on-site control to ensure that there is no hunting by laborers.



- **Stakeholders involved**

- Ministry of Housing, Urban Development, Environment and Sustainable Development, Director General of Environment and Protection of Nature
- Ministry of Water and Forests, Director General of Water and Forests
- Ministry of Agriculture, Livestock, Fisheries and Rural Development
- Directorate of Artisanal Fisheries
- Ministry of Mines, Petroleum, and Hydrocarbons
- Ministry of Labor, Employment and Social Welfare
- World Wildlife Foundation
- Wildlife Conservation Society
- The communities of Douya, Guiamba, Mutame Sane Fumu, Doubou, Mboukou, Ditounga, Rembo, Guidouma, Mouladoufouala, Moudouma, Ningui, Apindji, Migabé

#### 4. Summary of Management and Mitigation Plans (SEIA)

##### Mitigation plans to minimize negative socio-economic impacts

<i>Activity</i>	<i>Impact</i>	<i>Mitigation Plans</i>	<i>Responsible Party</i>
Establishment of pre-nursery Maintenance of pre-nursery	Accident risk in the workplace	-Implementation & communication of QEHS Plan -Posting of Safety Signage -Provision of PPE -instructions on safe handling of chemicals, pesticides and fungicides -Presence of Doctor on-site -Registry of work-related accidents	Director, QEHS
Establishment of pre-nursery	Reduction of village activity area	-Give preference to local labor -respect 5 km agro-band along main road -promote consumption of local and regional produce -Agree on compensation mechanism with local communities.	General Manager of Plantations/Vice President of Sustainability
Establishment of pre-nursery Establishment of base camp	Social Conflict	-Engage communities in the FPIC process and agree on conflict resolution procedures -implement software system to register complaints/grievances	General Manager of Plantations/Vice President of Sustainability
Establishment of base camp	Violations of local Customs & Traditions	-Openly engage with communities on an ongoing basis through local social communicators -Identification and delineation of sacred or sensitive areas through social participatory mapping -Ensure compliance with local customs -Registry of Violations	Social Manager/ General Manager of Plantations/Vice President of Sustainability

##### Management plans to enhance socio-economic contributions

<i>Activity</i>	<i>Impact</i>	<i>Enhancement</i>	<i>Personnel Responsible</i>
Establishment of pre-nursery	Positive impact of the project by creating new jobs for civil engineering, transport or otherwise.  Positive impact of the project by increasing household incomes through the sale of fresh produce (fruits and vegetables) to base camp	Promote consumption of local and regional fruits and vegetables  Promote local products through some advertising  Set up a process to recruit local staff	General Manager, Plantations, Vice President Sustainability



**Management to promote positive environmental effects and Mitigation Plans for negative environmental effects**

<i>Category</i>	<i>Impact Source</i>	<i>Impacts</i>	<i>Mitigation Measures</i>	<i>Personnel Responsible</i>
Soil and sub-soil	Opening of the access road and development of the nursery  Clearing, civil engineering activities, etc..	Modification of the soil profile  Erosion and land subsidence  Storm water run off	Strictly adhere to the area to be cleared (pre-nursery 25 ha, access roads : 6 m wide and 7 km long for site 3 and 15.3 km long for the site 1)  Establish drainage system  Reuse soil stripped to protect banking of roads and for filling of nursery bags	General Manager of Plantations, Vice President of Sustainability, HCV Manager
	Circulation of vehicles, trucks and maintenance	Soil pollution by effluents from maintenance of equipment, vehicles and equipment, waste oils and other fuels	Maintain machinery and equipment in good working condition to prevent leakage of oil, fuel or other pollutant.  Maintain a maintenance record.  Determine an area dedicated to storage of chemicals and maintenance of equipment etc.	General Manager of Plantations, Vice President of Sustainability
Water (surface-water, runoff and ground water)	Management of the pre-nursery	Contamination of surface water by runoff  Alteration of water quality by chemicals (fertilizers, herbicides and fungicides)	Sustainable management of surface water and collection sites  Avoid spraying chemicals while watering plants  Establishment of a buffer zone between the nursery and the rivers  Implementation of a piezometer to monitor the level of the water table through water sampling	General Manager of Plantations, Vice President of Sustainability, HCV Manager

			Regular analysis of any surface water directly adjacent to the site	
	Maintenance of machinery, vehicles and equipment	Pollution of surface water, groundwater and runoff through waste oils, fuels and other pollutants to surface water contamination by water for cleaning	Treat waste water to accepted water quality levels prior to discharging Establish procedures for using and storing chemicals, fuels, and oil to limit the risk of leakage and pollution	General Manager of Plantations, Vice President of Sustainability, HCV Manager
Air	Opening of the access roads and management of the pre-nursery  Land clearing, civil engineering activities	Air pollution by dust  Air pollution by exhaust gases containing nitrogen oxides, sulfur oxides, carbon monoxide, particulates, volatile organic compounds (VOCs), etc..	Reduced number of vehicles that will enter the site  Using filters which minimize air emissions  Limit Speed to between 20 and 40 km/h	General Manager of Plantations, Vice President of Sustainability
Noise, vibration and light effects	Opening of the access roads and management of the pre-nursery  Land clearing, civil engineering activities	Changing the behavior of animals  Increased noise levels may affect the wildlife living there	Limit the operation of engines to hours of work  Do not leave engines running when not in use	General Manager of Plantations, Vice President of Sustainability
Fauna	Opening of the access roads and management of the pre-nursery.  Land clearing, civil engineering activities	Poaching Disturbance and flight of animals	Ban all hunting of game and fishing by all Olam Palm Gabon Staff and contractors  Establish surveillance plan for the site	General Manager of Plantations, Vice President of Sustainability, HCV Manager

## 5. Summary of Management and Mitigation Plans (HCV)

### Plan for HCV monitoring and regular review of data

There are no HCVF areas within the 25 ha of pre-nursery. However Olam Palm Gabon will still include the pre-nursery area in its larger HCVF monitoring programme that will be designed once the ESIA for the entire concession area is completed. In the meantime, we will fully enforce the recommendations provided in the Environmental and Social Management Plan developed by Ecosphere for the pre-nursery site to ensure that there is minimum social and environmental impact in the surrounding landscape. Our Vice President of Sustainability and the HCV manager will oversee an environmental management team that will be responsible for placing the appropriate signage and markers for set aside areas within the proximity of the pre-nursery area. Workers and contractors will be advised on our regulations regarding prohibition on hunting and respecting riparian buffer zones. To provide further control, we will establish

temporary guard stations at entries to the pre-nursery site to monitoring the entry and exit of individuals and ensure that there is no trafficking of timber or animals.

### Management and mitigation plans for threats to HCV areas

Although there are no HCV areas in or bordering the pre-nursery site, Olam Palm Gabon will give due consideration to the management recommendations provided by our HCV assessors regarding biodiversity and social aspects.

Biodiversity & Social Considerations	Mitigation/Enhancement Activities
Forest loss and cutting of protected or endemic tree species	The pre-nursery site will be developed in savanna and no forest with exception for small patches of scrubby regeneration within the savanna will be cut.
Water quality and aquatic species	No pollution of water catchments Retention of buffer zones of 150 m from any permanent water courses Careful and controlled use of agrochemicals including pesticides, herbicides and fertilisers Safe handling and cleaning of agrochemical spraying equipment Controlled disposal of waste water Safe storage and disposal of chemical containers
Decline in wildlife species	Implementation of a strict “No Hunting” policy for employees No hunting or transport of bushmeat in company vehicles
Access rights of local people to fishing camps along the rivers	Free right of passage to local communities to fishing camps along rivers/streams
Human-elephant conflict	Implement an elephant management strategy

In addition to the above, in our larger efforts to ban hunting in the entire concession area, we will ensure that no hunting takes place within the 25 ha pre-nursery area and will monitor hunting and trap/snare setting within the surrounding area. Consistent with the Management Plan, to avoid disturbing or changing the behaviour of animals, Olam Palm Gabon will:

1. Minimize vehicle transit and noise in and around the pre-nursery area
2. Limit operations to working hours to ensure that animals are not unduly disturbed particularly at night

Furthermore, recognizing the importance of the rivers to local people, we will continue to provide access to local communities who carry out fishing activities in these water courses. Additionally, where appropriate we will retain the forest/savannah buffer zone to prevent contamination by or leaching of pesticides in rivers or streams. The parameters of the buffer zones will be as follows:

Type	Width	Buffer Zone (m)
Small streams	<5 m	10
Rivers	>5 m <20m	50
Big rivers	>20m	150

## 6. Internal Responsibility

I hereby sign off on the above Summary Report of Planning and Management. The above may be amended and clarified for improvement during the development of the pre nursery, but it will remain in accordance with RSPO Standards and Principles. The management considerations put forth in this document will be included in the management plan for the entire plantation site upon development of the same drawing on the recommendations from the Social and Environmental Impact and High Conservation Value assessment reports for the plantation.

Signed on January 18, 2012:

A handwritten signature in black ink that reads "Alexandra N Booth". The signature is written in a cursive style with a large, stylized initial 'A'.

Alexandra N Booth  
Sustainability Manager, Olam International

