

Assessment of High Conservation Values in SNL's Elele Oil Palm Estate Rivers State, Nigeria

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Our team comprises specialists in forest management, agricultural commodities such as palm oil, conservation and sustainability initiatives and certification. We have extensive experience in Africa and internationally and can work in English, French and Portuguese.

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Assessment location: Elele
Emohua Local Government Area
Rivers State, Nigeria

Dates of assessment: December, 2016 – February, 2017
Size of assessment area: 5,882 ha
Total number of hectares as HCV management areas: 158 ha
Planned land use: Existing Oil Palm Plantation
ALS Tier Rating: Tier 2
Certification scheme: RSPO

1 Introduction and background

1.1 Purpose of HCV assessment

This is a report of a full High Conservation Value (HCV) assessment commissioned by Siat Nigeria Limited (SNL) for the company's existing 5,882 ha oil palm plantations at Elele in the Emohua Local Government Area of the Rivers State of Nigeria. As a subsidiary of the SIAT Group which is a member of the Roundtable on Sustainable Palm Oil (RSPO), the HCV assessment is part of SNL's commitments under RSPO and its own environmental and social responsibility best practice requirement, including compliance with statutory legal requirements in Nigeria at both the Federal and State levels.

The purpose of this HCV assessment which was carried out within the context of the RSPO certification, is to undertake a comprehensive and participatory assessment of HCVs in the existing Elele oil palm plantation, with a view to identifying any area(s) required to maintain or enhance one or more of the six categories of HCVs and local people's land that may be located within the plantation. The main objective of this HCV assessment was to identify and document the HCVs within the established oil palm plantations of SIAT Nigeria and to provide management recommendations to the company for the maintenance and/or enhancement of the HCVs.

Specific objectives of this HCV assessment were to:

- i. identify all HCVs and potential HCVs in the plantation and in the adjoining landscape that could be impacted by all activities associated with the management of the existing oil palm plantation. The assessment was carried out in consultation with all relevant stakeholders
- ii. identify existing or potential threats to the identified HCVs in the plantation and the adjoining landscape
- iii. map all localised HCVs and their management areas
- iv. provide recommendations for the management, monitoring and protection of the identified HCVs in the plantation.

The above objectives collectively aim at demonstrating compliance with RSPO's requirements on HCVs in existing plantations (criterion 5.2) and also assist the company to implement best practices for the management of conservation values within the plantation blocks under the scope of this assessment. The process steps and activities carried out during this HCV assessment were in line with the requirements of RSPO's requirements on HCVs and those of the HCV Resource Network Assessor Licensing Scheme.

About SNL

Siat Nigeria Limited (SNL) is a wholly-owned subsidiary of SIAT Societe d'investissement pour l'Agriculture Tropicale (SIAT) Group of companies, based in Brussels, Belgium. Siat is an agro-industrial group of companies specialized in the establishment and management of oil palm and rubber plantations and allied processing and downstream industries. Currently, the group owns 40,000 hectares of oil palm plantations, 22,000 hectares of rubber plantations and a cattle ranch with 5,000 animals. SIAT Nigeria has its corporate head office at the company's Ubima Estate near Port Harcourt, River State, Nigeria. In addition to the oil palm operations in Nigeria (Presco Plc and SIAT Nigeria Ltd), other operations of the SIAT Group in Africa are located in Ghana (the Ghana Oil Palm Development Company), Cote d'Ivoire (Compagnie Hévéicole de Cavally), and Gabon (SIAT Gabon). It has operations in Cambodia (SIAT Cambodia).

SNL was established in Nigeria in December 2011 when the SIAT Group acquired from the Rivers State Government, the assets of Risonpalm, which comprise 16,000 hectares of old oil palm plantations (10,000 ha at Ubima and 6,000 ha at Elele), plus the entire social and industrial infrastructure of the oil palm complex in the Rivers State of Nigeria. The Risonpalm plantations which were established in the late 1970s are due for replanting and SIAT Nigeria is initiated a replanting programme for the estates and the company is making progress with its plans to complete the replanting of the two estates within the next 10 years. The company has established a new palm oil mill which has a capacity of 60 tons of FFB per hour, and the kernel crushing plant with a potential to absorb 60 tons of palm kernel/day.

RSPO requirements on HCVs

The RSPO Principles and Criteria (P&C) contain a set of mandatory requirements for existing oil palm plantations which aspire to be certified under the RSPO certification scheme. **Principle 5** (Environmental Responsibility and Conservation of Natural Resources and Biodiversity) consists of a set of assessments and verification activities to be conducted by growers and certification bodies (CB) that specifically provides for maintaining biodiversity and supporting local livelihoods in and around the plantation. Criterion 5.2 of the RSPO Principles and

Criteria specifically states that “the status of rare, threatened or endangered species and other High Conservation Value habitats, if any, that exist in the plantation or that could be affected by plantation or mill management, shall be identified and operations managed to best ensure that they are maintained and/or enhanced”.

Although all HCV assessments conducted from 1 January 2015 are required to be led by an independent HCV lead assessor licensed under the HCVRN ALS, RSPO requirements allow growers to conduct HCV assessments for existing plantations.

HCV overview and references used

HCVs refer to biological, ecological, social or cultural values considered outstandingly significant or critically important at the national, regional or global level and which require special measures for their maintenance and/or enhancement. The HCV concept aims to identify whether these values are present and to develop appropriate management and monitoring strategies to maintain and/or enhance the values. The concept was originally developed in 1999 by the Forest Stewardship Council (FSC) and has since been widely used in the context of FSC certification for sustainable forestry. The HCV approach was adopted by the RSPO and incorporated into the RSPO’s first P&Cs in 2005. The six categories of HCVs and their definitions are listed in Box 1.

There is currently no HCV National Interpretation (NI) for Nigeria. There are NIs for Ghana and Gabon, which could be useful for regional comparison; however, these are yet to be updated following update of the Generic Guidance document. Therefore, the process to identify HCVs and subsequent analysis and reporting has relied heavily on the following guidance documents:

- Brown, E., N. Dudley, A. Lindhe, D.R. Muhtaman, C. Stewart, and T. Synnott (eds.). 2013 (October). Common Guidance for the identification of High Conservation Values. HCV Resource Network.
<https://www.hcvnetwork.org/resources/cg-identification-sep-2014-english>
- Brown, E. and M.J.M. Senior. 2014 (September). Common Guidance for the Management and Monitoring of HCVs. HCV Resource Network.
<https://www.hcvnetwork.org/resources/cg-management-and-monitoring-2014-english>
- The HCV Assessment Manual prepared by Proforest for the HCV-RN.

Several other information sources have been used (see references) including the ZSL's Guide to Conserving HCV Species and Habitats in West African Oil Palm Landscapes. Others include an interpretation of global HCVF toolkit for use in Ghana published by WWF (Rayden et. al., 2006) and a similar version for Gabon (Stewart and Rayden, 2008).

Box 1: Summary of the 6 HCV categories

HCV 1: Concentrations of biological diversity including endemic species, and rare, threatened or endangered (RTE) species that are significant at global, regional or national levels.

HCV 2: Intact Forest Landscape (IFL) and 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.

HCV 3: Rare, threatened, or endangered ecosystems, habitats or refugia.

HCV 4: Basic ecosystem services in critical situations including protection of water catchments and control of erosion of vulnerable soils and slopes.

HCV 4: Basic ecosystem services in critical situations including protection of water catchments and control of erosion of vulnerable soils and slopes.

HCV 5: Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for example for livelihoods, health, nutrition, water), identified through engagement with these communities or indigenous peoples.

HCV 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, identified through

5 HCV Findings

This section presents an overview of the HCVs identified in the SNL Elele Estate oil palm plantation. As indicated above, the absence of a National Interpretation of HCV for Nigeria necessitated the use of globally applicable data sources and definitions used in the 2013 Common Guidance for the definitions and justifications used in assessing HCVs in the plantation. In addition, the HCV National Interpretations for Ghana and Gabon and ZSL’s guide to conserving HCV species and habitats in West African oil palm landscapes provided valuable supplementary guidance. For each of the HCVs, information is provided about their identification, current status and potential threats to their continued existence. Table 4 below summarizes the presence and absence of HCVs in the Elele oil palm plantations.

Table 4. Summary of HCV assessment findings

HCV	Definition	Present	Potentially present	Absent
1	Species diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered (RTE) species that are significant at global, regional or national levels.	Present		
2	Intact Forest Landscapes (IFL) and landscape-level ecosystems and mosaics. 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.			Absent
3	Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia.	Present		
4	Ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.	Present		
5	Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc...), identified through engagement with these communities or indigenous peoples.			Absent
6	Cultural values. 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, identified through	Present		

engagement with these local communities or indigenous peoples.	■		
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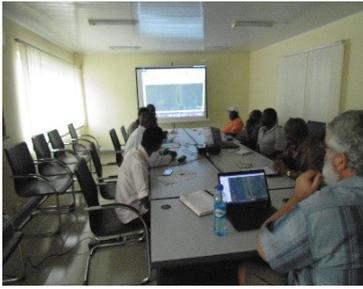


Image 8: HCV team consulting SNL management team
Photo: Michael Abedi-Lartey

6 HCV Management and Monitoring

This section includes assessment of the actual and potential threats to HCVs identified in the Elele plantation, management recommendations to ensure the maintenance or enhancement of HCVs present in the plantation. The section also provides monitoring recommendations which SNL is expected to adopt for evaluating the effectiveness of the HCV management recommendations for Elele over time.

6.1 Threat assessment

Threats to identified HCVs have been assessed through observations in the field and consultations with stakeholders including communities with due consideration for the extent of area, the severity and duration of the impact on the HCV in estimating the importance of the threat. For external threats, an attempt is made to identify indirect causes where feasible. Table 8 below details threats to identified HCVs.

Table 8. Threats to identified HCVs in the plantations and the adjoining landscape

HCV	Brief description of value present in assessment area	Main threats
1	<p>Species diversity</p> <ul style="list-style-type: none"> Presence of population of species listed as rare, threatened and endangered species at national level including the Dwarf crocodile, the Cattle egret Crested guinea fowl, Africa civet, Maxwell’s duiker, and bushbuck and the Harrier hawk, Lizard buzzard, African goshawk, Black sparrowhawk, Lowe’s monkey, Cusimanse mongoose and the Red River Hog 	<p>Existing threats</p> <ul style="list-style-type: none"> Potential clearing and burning of the two wetland forest to the south of the plantation for food crop farming Current pressure from hunting on species such as the Maxwell duiker, Africa civet, bushbuck and the Red River hog which are nationally as rare, threatened and endangered fauna species . Destruction of the habitats of the species listed nationally as rare, threatened and endangered. <p>Potential threats from the palm oil plantation</p> <ul style="list-style-type: none"> Potential conversion of wetland forest and the riparian forests Potential conversion and destruction of the habitats of the fauna species listed nationally as rare, threatened and endangered. Hunting pressure due to influx of plantation workers Potential conversion of the forest for farming by influx of plantation workers and demands for farm lands.
3	Rare, threatened or endangered ecosystems: The two swamp forests	<p>Existing threat</p> <p>Conversion of this swamp and other swamp areas for food crop farming by the local population is unlikely since the bigger of the two forests hosts the Welekebe sacred site.</p>

	<p>Besides, the swamps are located within the plantation and which makes easy for SNL to protect it.</p> <p>Potential</p> <ul style="list-style-type: none"> • Potential draining of swamp for oil palm development • Clearance of vegetation around wetlands for oil palm • Potential contamination of wetlands. The threat of converting fully or part of the swamp areas is even high given that water levels of the swamp areas recedes during the dry season which is also the land preparation period. • Potential threat of erosion from conversion given that the terrain is generally flat and low-lying. However, conversion using bulldozers and heavy machines closed to the swamp could create a risk of run-off from the plantation into the swamp area which could lead to sedimentation. • Potential contamination from agrochemical use: The swamp area could be at risk of pollution by agro-chemicals.
<p>4 Basic ecosystem services</p> <ul style="list-style-type: none"> • Maintaining the hydrological and functionalities of water bodies in the concession • Critical water catchment areas required to maintain continuous flow of water in the Welekebe wetland area 	<p>Existing threat</p> <ul style="list-style-type: none"> • Logging • Forest cover loss due to clearing for farming <p>Potential threats</p> <ul style="list-style-type: none"> • Loss of riparian forest from land conversion activities • Water pollution due to fertilizer and agrochemical use • Water pollution from domestic and field waste disposal • Reduction in fish and other aquatic life forms population due to pollution
<p>6 Areas critical to local communities' traditional cultural identity: The Welekebe shrine which is located in the wetland forest area in the concession</p>	<p>Existing threats</p> <p>None</p> <p>Potential threats</p> <p>The main threats to the identified shrines is the potential conversion of them or conversion of part of the required management areas. Given that the shrines is located in the swamp area, conversion of the riparian vegetation or any activity that could cause drying of the water in the Welekebe stream or in the swamp could be a risk to the shrines. Again, the attitude and practices by migrant workers of the future plantation might also be offensive to the traditional authorities and for this reason, it may be useful for the company to implement proactive additional measures to maintain the integrity of the shrine.</p>

6.2 HCV Management Recommendations

This section presents recommendations for managing the identified high conservation values in the plantation.

Table 9 below provides an outline of HCV management and monitoring recommendations that SNL must adopt and implement. A recommended implementation plan is outlined in Annex 5.

Table 9. HCV management recommendations

1	<ul style="list-style-type: none"> Over-hunting and potential increase in hunting pressure with influx of plantation workers Loss of the riparian forest/destruction of habitat Pollution of Welekebe River and the smaller wetland area to deny rare, endangered and threatened fauna species access to water 	<ul style="list-style-type: none"> A full survey should be carried to identify and assess the population of all rare, threatened and endangered species of fauna and flora at both national and global level in the two set-aside swamp areas. The outcome of this study should inform a revision of the HCV management and monitoring recommendations. Conservation and sustainable management of the entire two swap forests SNL should collaborate with local communities and appropriate authorities to implement measures to reduce or address hunting in the two swamp forest areas. SNL should ensure that the two swamp forests and the HCV management areas are appropriately mapped and clearly demarcated on the ground prior to land preparation. SNL should ensure waste products including domestic wastes are disposed of appropriately and afar from the swap areas and other water bodies in the landscape. 	<ul style="list-style-type: none"> Regular monitoring of population of rare, threatened and endangered population of flora and fauna Regular monitoring of management areas of the swamp forests which have been identified as HCV 1. 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 the forest along the two swamps Regular monitoring of water quality
3	<p>Conversion of the two wetland forests</p> <p>Pollution of the two wetlands</p>	<p>Exclude the well demarcated swamp areas from all conversion activities and ensure it is adequately buffered as recommended.</p> <p>Avoid application of agrochemicals close to the swamp and ponds and their buffer zones</p> <p>SNL should develop appropriate SOPs in consultation and input from community</p>	<p>Swamp area demarcated and regular monitoring of the area</p> <p>Ensure yearly review of effectiveness of SOPs</p> <p>Periodic review of effectiveness of workers' sensitization and awareness of the swamp area including complaints filed and</p>

		<p>leaders for effective management of the swamp area.</p> <p>Avoid application of chemicals and clear weeding in oil palm stands that fall within the buffer zone of the Welekebe wetland HCV area</p> <p>Education and sensitization of field workers on the importance of the swamp and the need to stay away from the swamp area.</p>	<p>community inputs on effectiveness.</p> <p>Periodic monitoring to ensure buffer zone areas already planted with palm are not replanted and that application of chemicals and other management activities are prohibited in those areas.</p>
4	<ul style="list-style-type: none"> Loss of riparian forest during land clearing Loss of water quality and quantity due to conversion of watersheds and riparian vegetation Pollution from agrochemicals 	<ul style="list-style-type: none"> Delineate and demarcate on the ground by marking oil palm trees at the boundaries to the tow wetlands Respect the recommended set-aside of the two wetlands Prepare SOPs that recognise all set-aside areas including riparian vegetation areas and ensure those areas are precluded from conversion activities Work with the communities to agree and implement measures to control illegal logging in the wetland vegetation Avoid application of agrochemicals within the recommended set-aside wetland vegetation, buffer zones and watershed areas. Have an SOP in place to support this. 	<ul style="list-style-type: none"> Regular sampling of rivers and streams from the wetland area for testing as part of a water quality monitoring system. The system should use a Before – After / Control – Impact design whereby upstream sampling sites are established above the area of impact and downstream sites below the area of impact, with samples collected before plantation activities begin and ongoing after development. Regular on-site monitoring of the wetland forests to check reduction of vegetation cover. Review of effectiveness of SOPs at least once a year.
6	<ul style="list-style-type: none"> Clearing of Welekebe sacred/ shrine sites 	<ul style="list-style-type: none"> Identify specific areas of the shrine, agree HCV management area with the local communities and map the area. Collaborative management of HCV 6 areas with local communities Prepare SOPs that ensure HCV 6 and their management areas in the plantation are set-aside and protected. Raising notification and/or warning sign-posts such as ‘do not shout or make noise, do not urinate here etc. 	<ul style="list-style-type: none"> Existence of collaborative management and monitoring of its effectiveness. A simplified HCV monitoring system/protocols in collaboration with local communities Regulation review of local population’s satisfaction of HCV 6 management areas

- Include evaluation of local population’s satisfaction of the management of HCV 6 areas during major periodic meetings.

7 Synthesis

7.1 HCV management areas

The total HCV management areas for all HCVs is approximately 158 ha. These areas have been recommended as set-aside areas within the SNL existing plantations at Elele (Figure 17)

HCV 3 and HCV 4: The wetlands and the riparian forests protecting them. It is recommended that these areas be set-aside and maintained from all kinds of destructive and conversion activities. The areas measures approximately 158 ha

HCV 6: The Agbara Welekebe shrine in the plantation which is worshipped by the people of Elele Alimini and its management area which the local people estimated to be about 0.5 ha is located within the Riparian buffer in the Welekebe River. The 0.5 ha HCV management area is therefore included in the total HCV area of 158 ha.

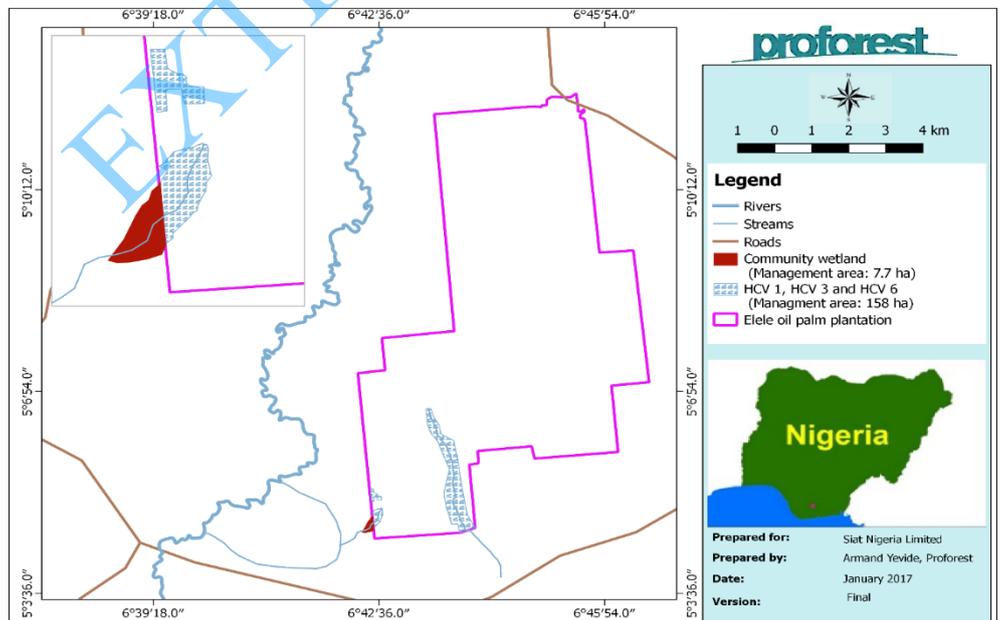


Figure 17 Map showing HCV management areas in the Elele Estate. Total area is about 158 ha).

7.2 Cross-cutting management recommendations

SOPs for HCV management and monitoring

It is extremely important and considered best practice for simplified check-lists to be provided for general plantation operations to ensure ease of reference by operational staff and field workers. Similarly, training on management of HCV management areas and monitoring protocols should be developed provided to all field workers and supervisors including providing them with checklists for their use.

Community engagement

SNL must strengthen its community engagement and consultations including engaging with all communities in a way that allows free flow and exchange of information. This must include regular meetings with the local population aimed at addressing their specific concerns particularly those relating to the land compensation to the affected families.

Training and capacity building

In order to ensure the identified HCVs are appropriately managed, SNL needs to ensure its staff and field workers have the adequate capacity to ensure effective management and monitoring of HCV management areas with the objective to maintain and/or enhance their continual existence. The capacity development effort must particularly focus on geospatial data for subsequent analysis and continued monitoring of the status of HCVs over time.

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