# Summary Report of ESIA and HCV Assessments
# SG Sustainable Oils Cameroon

## Nguti, Mundemba & Toko Subdivisions
## Republic of Cameroon

## 1. Executive Summary

SG Sustainable Oils Cameroon (SGSOC), a subsidiary of Herakles Farms, is an oil palm plantation company that operates in the Nguti, Mundemba and Toko subdivisions of the South West Region of Cameroon. As a sustainable palm oil producing company, SGSOC has conducted an Environmental and Social Impact Assessment (ESIA) and High Conservation Value (HCV) Assessment. The HCV assessor undertook three separate site visits to the concession in September 2010, June 2011 and August 2011, with each visit lasting for a minimum of one week. The ESIA was conducted by H&B Consulting USA (Cameroon Division), an accredited environmental consultancy approved by Cameroon's Ministry of Environment and Protection of Nature (MINEP).

The Establishment Convention was signed on September 17, 2009 between the Government of Cameroon and SGSOC. The total area of the concession under the convention is approximately 69,975, ha. The total plantable area has been estimated at 60,000 ha due to land set aside for buffer zones with protected areas and riparian areas, as well as for buildings, infrastructure and palm oil extraction mills. The ESIA was approved on September 19, 2011 by MINEP, and a Certificate of Environmental Conformity was issued.

The baseline flora survey and habitat assessment indicated that the vast majority of the concession is secondary and degraded forest, with few remnant patches of primary forest in inaccessible areas. This finding is consistent with the attestation issued by the Institute of Agricultural Research for Development, Ref No. 9249/IRAD/DG/CRRA-E/RCC/11/09 dated 20 November 2009 and attestation issued by the Ministry of Forestry and Wildlife Ref No. 0840/ATC/MINFOF/SG/DF/SATAF/SG dated 05 October 2010 that the concession area of SGSOC has been logged repeatedly and is covered by secondary forest. The HCV assessment report clearly indicates that the existing vegetation of the concession is predominantly a mosaic of actively cultivated farmlands, fallows, secondary forest and relic patches of evergreen forest at various stages of degradation. The concession as a whole is not and does not contain protected areas; hence, it does not constitute HCVF under criterion 1 (HCV1). However, some parts of the concession are identified as HCV under criteria 1.2, 1.3, 3, 4.1, 4.2 5 and 6.

With the exception of the four-digit toad, *Didynamipus sjostedti*, found near the village of Lipenja, classified by the IUCN Red List as Endangered (EN) and for which SGSOC is drafting a management plan, the baseline survey did not identify any high concentrations of rare, endangered and threatened species that are not widespread outside of the concession. The survey did find that the African forest elephant, *Loxodonta Africana*, listed as Vulnerable (VU) on the IUCN Red List of Threatened Species, occasionally migrates from the neighboring Banyang Mbo Wildlife Sanctuary (BMWS). Although SGSOC is adopting a management plan for the elephant in line with RSPO and WWF best practices, this area of the concession is not an area of critical temporal use. All other large mammal species were found in varied abundance in both secondary and remnant primary forest patches and all were species of least concern (LC) in IUCN Red List of Threatened Species (IUCN, 2011). Of the birds, five species were listed in CITES Appendix II, out of which one listed as near threatened (NT) and three as LC (IUCN, 2011). In case of herpetofauna, three amphibians

found were listed as NT or higher on the Red List of Threatened Species. This included the Endangered *Didynamipus sjostedti*, for which SGSOC is developing a management plan. In addition, food remains of one vulnerable lizard were found, and local informants indicated possible presence of a Cameroonian protected crocodile in the concession. SGSOC values the biodiversity in its concession and has committed to performing additional HCV assessments prior to each land clearing phase through which it can reconfirm such findings.

Approximately 6% of the total floral species recorded on the concession are on the IUCN Red List of Threatened Species, but they are all abundant in the lowland rainforest region of Cameroon, and none are endemic to the concession. None of the species found were listed on either Appendix II of the CITES list or the list of protected species under the Cameroon wildlife Law (Source: Article 2 of the Order of 14 August 1998). Eight tree species on the IUCN Red List were identified, with six being classified as VU, one EN, and one as NT. All of these species are abundant in the lowland rain forest region of Cameroon and are not endemic to the concession. In terms of global rarity, the flora species recorded included one Black Star species (*Cylicomorpha solmsii*), which is endemic to Cameroon in a monotypic genus. Six Gold Star species (*Afrostyrax lepidophyllus, Amanoa strobilacea, Cola buntingii, Dicranolepis disticha, Dasylepis racemosa and Dichapetalum tomentosum*) were recorded, but are widespread outside of the concession. The concession on the whole does not have a high concentration of globally rare plant species and is consequently low in bioquality value.

A comprehensive and participatory independent ESIA and HCV assessment which included internal and external stakeholders was completed. The results are incorporated into planning and management of SGSOC. The independent assessment identified:

- that the concession as a whole is not primary forest;
- all areas required to maintain or enhance one or more HCVs;
- no peat soils; and,
- all privately-owned land was recognized through customary arrangements and was not titled.

## 2. Scope of the ESIA and HCV Assessments

The ESIA covered the whole lifecycle of the plantation and mill development. It involved environmental sampling, aquatic studies, terrestrial studies, land-use studies, and socio-economic studies within the concession area. The assessment was based on field inspections and surveys, consultations with stakeholders and desktop literature review. The assessment provides the basis for an environmental monitoring plan. The assessment was completed by H&B Consulting USA (Cameroon Division).

The HCV assessment entailed a systematic evaluation of the conservation value of the ecological, biodiversity and cultural elements in the proposed concession for oil palm plantation using the Cameroon national HCV interpretation toolkit (2008). The assessment included field surveys, consultation with local communities and desktop studies. The assessment also relied on detailed studies carried out during the ESIA. The assessment made appropriate recommendations to safeguard the ecological, biodiversity and socio-cultural entities of HCVs identified on the concession. The assessment was completed by Augustus Asamoah of the Ghana Wildlife Society (GWS), a Roundtable on Sustainable Palm Oil (RSPO)-approved HCV Lead Assessor.

**Company Information and Contact Person**

SGSOC is the Cameroonian subsidiary of Herakles Farms**,** an American multinational, which is the investor in and the operator of the project. SGSOC is based in the city of Limbe in the South West Region of Cameroon.

| | |
|---|---|
| **Company Name** | SG Sustainable Oils Cameroon, Limited |
| **Company address** | P.O. Box 64 Limbe, No.5 Nambeke Street, South West Region, Cameroon |
| **Business permit** | Establishment Convention, September 17, 2009 |
| **Type of business** | Oil Palm Plantation and Palm Oil Mill Operation |
| **Location size** | 69,975 ha |
| **Contact persons** | Carmine Farnan |
| **Email** | farnan@heraklescapital.com |
| **Geographical location** | Nguti, Mundemba and Toko subdivisions of the South West Region |
| **Spatial reference** | East 8° 55’ 0"; 9° 35' 0"<br>North 4° 55' 0"; 5° 25' 0" |

## Legal Documents and Regulatory Permits

SGSOC has obtained the necessary legal and regulatory documents to commence plantation development, including the Certificate of Environmental Conformity, Establishment Convention and other relevant documents shown on Table 1 below.

**Table 1: Legal Documents and Regulatory Permits Obtained by SGSOC**

| Licenses and permits | Issued By | Date and Decision No. |
|---|---|---|
| Certificate of Environmental Conformity | Ministry of Environment and Protection of Nature | 19/09/2011 |
| Establishment Convention | Ministry of Economy, Planning and Regional Development | 17/09/2009 |
| Prefectural Order For Mundemba Concession | Senior Divisional Office, Mundemba | 30/06/2009<br>Ref:640/587/551/PO/SP<br>Prefectural Order No. 120/2009 |
| Prefectural Order For Nguti Concession | Senior Divisional Office, Bangem | 18/11/2009<br>No.169/PO/G.42/87/AJPAS |
| Custody receipt for Mundemba | Divisional Delegate of State Property and land tenure for Ndian | 26/06/2009 |
| Custody receipt for Nguti | Divisional Delegate of State Property and land tenure for Kupe-Muanenguba -Bangem | 06/10/2009<br>Ref. No.025/909 |
| Common Commitment Ndian | Divisional Office, Mundemba | 31/08/2011 |
| Common Commitment Kupe-Muanenguba | Senior Divisional Office, Administrative Juridical and Political Affairs Service | 15/08/2011 |
| Memorandum of Understanding | Village chiefs | 27/07/2010 |

## Location maps

The entire Project site covers approximately 69,975 ha of land and has been divided into two major blocks (Block A and Block B). Block A is situated in the Nguti subdivision of the Kupe-Manenguba Division, while Block B is located within the Mundemba and Toko subdivisions of the Ndian Division.

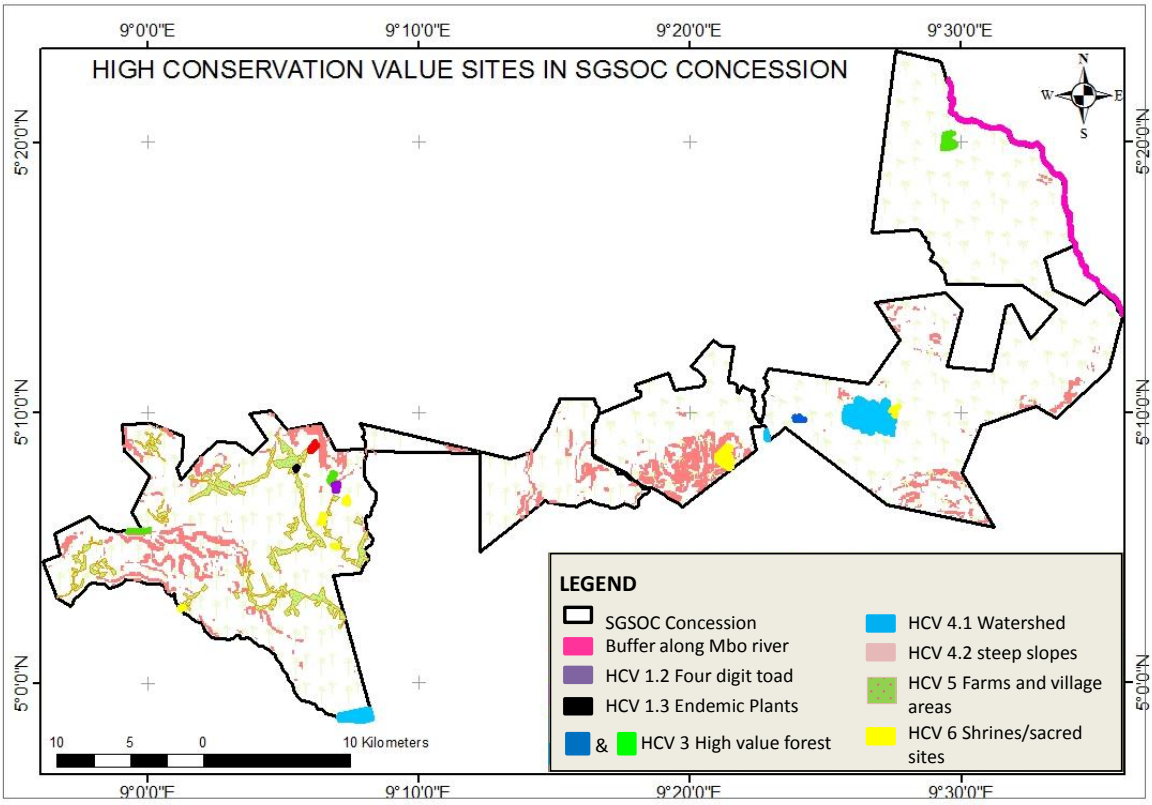


**Figure 1: Project Area**

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

The total area of the new planting is approximately 60,000 ha. The proposed concession is in the location that has been approved by the Government of Cameroon and through a Free, Prior and Informed Consent (FPIC) process with the local communities in and around the concession area. SGSOC has signed a Memorandum of Understanding (MoU) with the communities and a common commitment with the Government of Cameroon. Land preparation and planting of oil palm will be in accordance with RSPO New Planting Procedures (NPP). The management plans of the identified HCVs have been drafted.

As part of the FPIC procedure to ensure that there is community participation on all aspects of the project by SGSOC, consultation with relevant stakeholders was conducted to provide the opportunity for communication and sharing of information, opinion and suggestion between SGSOC and the affected communities in and around the concession. All farmlands within the concession are being clearly marked out through a participatory mapping process with all relevant stakeholders. This process is complete in the Mundemba block, and on-going in the Nguti block. SGSOC has developed a grievance and complaints procedure so that all problem solving processes are conducted through discussions and mutual deliberation. The land leased to SGSOC is owned by the Government of Cameroon

and involves a diverse group of additional stakeholders that include farmers who reside on the land, as well as local and international social and environmental organizations.

The new planting will commence following the completion of the RSPO public notification of 30 days for review by stakeholders. The development of the plantation will occur in four phases.

The development of the first phase of the project is detailed on the map provided in the below figure.

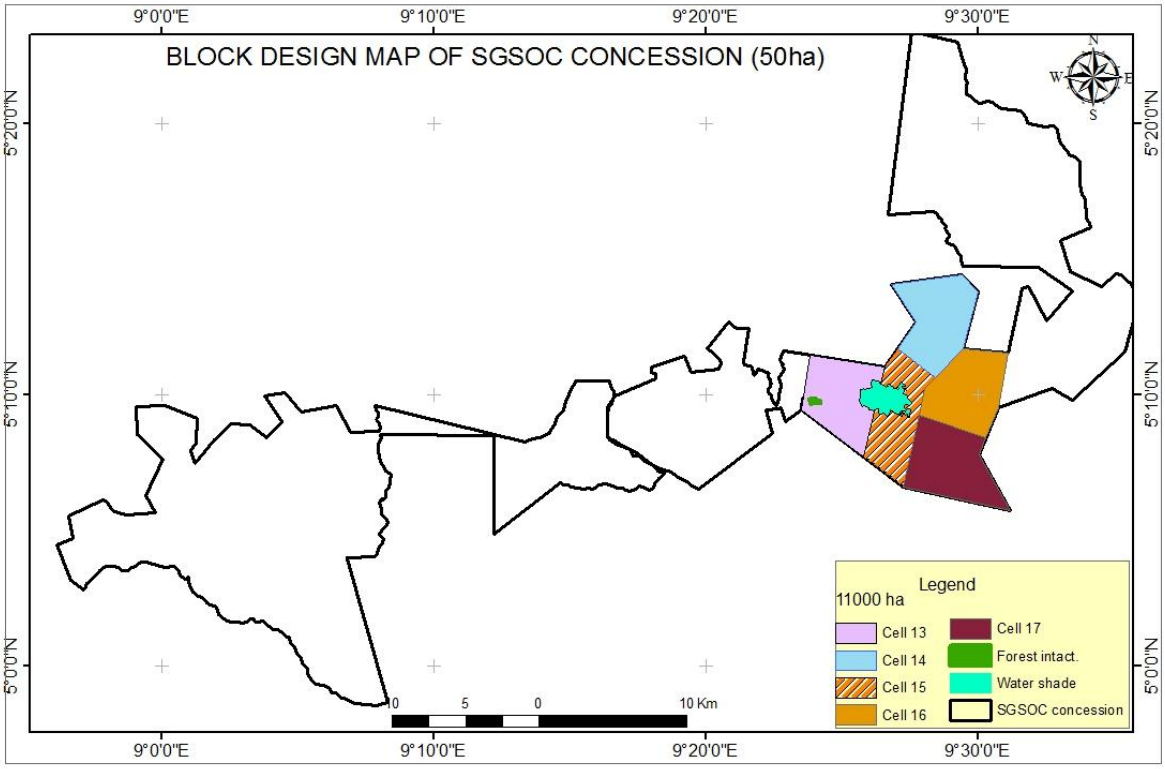


**Figure 2: Phase One of Planting Plan**

# 3. Assessment Process and Procedures

## 3.1. ESIA

### 3.1.1. Assessors and their Credentials

The Environmental and Social Impact Assessment was conducted by H&B Consulting USA (Cameroon Division), who are experts in environmental and social project support and are accredited by MINEP.

**Table 2: Assessors and their Credentials**

| Name | Position | Qualification | Contribution to Report |
|---|---|---|---|
| Salamatou Haman Bako | Director | MSc in Environmental Microbiology, State University of New York at Buffalo, New York, USA | Introduction Environmental Impacts Assessments and Mitigation Measures. |
| Thomas Apo Eboko | Consultant | | Safety, Description of the Process and Environmental Impacts Assessments and Mitigation Measures. |
| Luisa L. Feliciano | Consultant | Master of Public Health, Hunter College, New York, USA | Legal Framework, Environmental Impacts Assessments and Mitigation Measures and Public Consultations. |
| Chi Napoleon Forpah | Socio-economist (Consultant) | MSc. In Water Management, majoring in Environmental Protection | Public Consultations and Socio-economic and Needs Assessment Survey. |
| Dr. Nicholas Chfnue Songwe | Consultant | PhD in Forest Ecology | Flora Study. |
| Allo Andrew Allo | Consultant | PhD in Ecology | Fauna Study. |
| Shidiki Abubakar Ali | Consultant | M.Tech FBE | Public Consultations and Socio-economic and Needs Assessment Survey. |

### 3.1.2. Assessment Methods (data sources, data collections, dates, programmes and places visited)

As per the requirements of the RSPO Principles and Criteria and NPP, the ESIA was conducted following a comprehensive and participatory approach. The primary information sources used to establish the environmental and social baseline conditions were through:

- detailed site reconnaissance of the project area;
- Geographic Information System (GIS) mapping of the project area;

- Global Positioning System (GPS) mapping of farms, schools, health centres and rivers;
- review of existing data, documents and reports; and,
- participatory observation, structured and in-depth interviews, self-structured questionnaires and focus group discussions.

The questionnaires were administered to groups of community members in order to aggregate data from a broad number of sources at once, and also to create an environment in which the responses could be cross-referenced amongst participants as they were completed. Focus group discussions were held with groups such as farmers, hunters, fishermen and women in order to gain detailed relevant information.

#### 3.1.3. Stakeholder Consultation (stakeholders contacted, consultation notices and dates)

The consultation process was conducted through public hearings, open house discussions, focus group discussions, administration of village and household questionnaires, and production of participatory maps for the socioeconomic and needs assessment surveys. Relevant stakeholders that were engaged during the consultation process included affected communities, NGOs, and Government agencies, all of which provided valuable information regarding the nature and extent of potential environmental and social impacts associated with or resulting from the proposed project.

The specific objectives pursued during the public consultation were:

- provision of information to stakeholders;
- gathering of information on various environmental and social aspects;
- collection of inputs from stakeholders on the planned project, including its scale, timing, ways to reduce its potential negative impacts and ways to enhance its potential positive impacts.

**Table 3: Public Consultation Program**

| Date | Place | Stakeholders Concerned |
|---|---|---|
| September 2009 – June 2010 | Informal meetings at Douala, Kumba, and communities within the concession area | Local community representatives and chiefs |
| 27/07/2010 | Formal signing of an MoU between SGSOC and the local communities at Nguti | Chiefs and representatives of the communities within the Nguti subdivision near or within the concession area |
| 30/07/2010 | Formal signing of an MoU between SGSOC and the local communities at Mundemba | Chiefs and representatives of the communities within the Mundemba/Toko subdivisions near or within the concession area |
| 22/09/2010 | Consultation for the ESIA MINIMIDT, Yaoundé | Ministry of Industry, Mines and Technological Development (MINIMIDT) |
| 22/09/2010 | Consultation for the ESIA MINEE, Yaoundé | Ministry of Energy and Water (MINEE) |
| 22/09/2010 | Consultation for the ESIA MINSANTE, Yaoundé | Ministry of Public Health (MINSANTE) |
| 22/09/2010 | Consultation for the ESIA MINAGRI, Yaoundé | Ministry of Agriculture and Rural Development (MINADER) |
| 23/09/2010 | Consultation for the ESIA MINCOMMERCE, Yaoundé | Ministry of Commerce (MINCOMMERCE) |
| 23/09/2010 | Consultation for the ESIA MINTSS, Yaoundé | Ministry of Labor and Social Security (MINTSS) |
| 27/09/2010 | Public consultation at Chariot Hotel, Buea | Development and conservation organizations, several local traditional authorities, regional delegates of various Ministries, agro-industries (PAMOL) |
| 28/09/2010 | Public consultation at Nguti Council Hall, Koupe Manengouba Division, Southwest Region | Chiefs, notables, Mayor, Councilors, local NGOs, Gendarme officers, and politicians |
| 30/09/2010 | Public consultation at Mundemba Council Hall, for Mundemba and Toko Subdivisions, Ndian Division, Southwest Region | Chiefs, notables, Mayor, elites, Chief of Konye in Meme Division |
| 7/06/2011 | Meeting to create a Plantation Expansion Ecosystems and Livelihoods document at Kumba, Southwest Region | Open meeting involving local community leaders, chiefs, elites, government officials, and NGOs |
| July 2011 - Ongoing | Community development officers from each clan in the concession work with the communities to provide constant two way communication | Work with all communities within the concession |
| 04/08/2011 – 07/08/2011 | Government consultation and at Mundemba, Mundemba subdivision | Mundemba Land Consultative Board |
| 08/08/2011 | Public consultation at Mundemba, Ndian Division, Southwest Region | Open Consultation with Community Chiefs and Stakeholders within the Mundemba/Toko subdivisions |

| Date | Place | Stakeholders Concerned |
|---|---|---|
| 09/09/2011 | Public consultation at Nguti, Koupe Manengouba Division, Southwest Region | Open Consultation with Community Chiefs and Stakeholders within the Nguti sub-division |
| 24/08/2011 – 24/10/2011 | Public review of the ESIA in Nguit, Mundemba, and online | Open comment period for the ESIA for community members, chiefs, NGOs, etc. |

## 3.2. HCV Assessment

### 3.2.1. Assessors and Credentials

The HCV assessment was completed by Dr. Augustus Asamoah of GWS, an RSPO approved HCV assessment team leader specializing in biodiversity, hydrology/soil and social studies. He holds a Ph.D. in Biodiversity Studies from the Department of Animal Biology and Conservation Science, University of Ghana, Legon. He is a conservation ecologist with expertise in environmental research and environmental resources management. His specific areas of expertise are in natural resources management, field ornithology, habitat appraisal, conservation planning and HCV assessment, design and implementation of baseline biodiversity and environmental studies. With over 12 years of functional professional experience in conservation ecology and natural resource management, he is currently coordinator and head of all the biodiversity conservation research programs of GWS.

Dr. Asamoah was assisted by a team of appropriately qualified and experienced team members, including Dr. Andrew Allo and Dr. Nicholas Sogwe. Dr Allo holds a Ph.D. in Ecology and is an ecologist with expertise in wildlife and park management, natural resource management, conservation planning and ecotourism, project planning, design, implementation and evaluation. He is a lecturer at the Department of Environmental Sciences and Water Resource Management at the University of Bamenda, Cameroon and a visiting Professor for Virtual Biodiversity and Ecology of Personal Life at DePaul University, USA. Mr. Allo has previously worked with the non-governmental organization, WWF. Dr. Songwe holds a Ph.D. in forest ecology, with expertise in forest resource management, wildlife management and agro-forestry research.

### 3.2.2. Assessment Methods (data source, data collections, dates, programmes and place visited)

The HCV assessment took place in two phases. The first phase was pre-assessment, consisting of desk and web-based research. The main objective of the assessment was to gather relevant information and data for review in order to identify HCVs that are likely to be present within the concession. The second phase was the main assessment, and consisted of field studies to identify the different types of HCVs present in the concession through flora and fauna analysis, as well as stakeholder consultations. During field studies, each observation team was accompanied by field staff from SGSOC, consultants and community representatives who are familiar with the concession site. In addition to the field observations, the team also collected information from the local people through social

surveys. Social survey methods used included in-depth interviews, participatory mapping and public consultation.

**Flora & Fauna Survey**

Several field studies were conducted. The first were in conjunction with the development of the ESIA and took place in the second half of 2010 and early 2011. Another field assessment was later conducted from the 12th to the 25th of July, 2011. The assessments were completed in both Blocks A and B of the concession.

In the late 2010 and early 2011 studies, the research involved three basic steps and methodologies, including:

- a desktop biodiversity review;
- fieldwork (both biological surveys and local interviews) based in the concession; and,
- follow-up literature review based on results of field work.

The fieldwork was conducted between the 24th of June to the 3rd of July 2010 in the concession and surrounding areas. Research was principally conducted at three sites, although a broader local habitat survey was also carried out. For each site, the team assessed habitat types and vegetation structure, completed species inventories for mammals, birds and plants and interviewed communities proximal to each impact site on the existence of larger wildlife species. The team also reconnoitered the local area north and south of each of the sites using recce' transects to assess the local habitat condition, and to provide an understanding of habitat connectivity, wildlife migratory corridors, sites of congregation for water birds and relative importance of the sites for biodiversity.

A total of 403 vascular plant species belonging to 272 genera and 81 families were recorded in the concession. Families rich in species (e.g. represented by more than 10 species with number of species indicated in parenthesis) included *Fabaceae* (49), *Rubiaceae* (36), *Euphorbiaceae* (30), *Apocynaceae* (22), *Malvaceae* (22; including *Tiliaceae, Sterculiaceae* & *Bombacaceae*), *Annonaceae* (18), *Meliaceae* (12), *Moraceae* (11) and *Sapindaceae* (11). In contrast, 24 families had only one species recorded.

The July 2011 study was conducted by experts in GIS, mammals, avifauna, herpetology and botany (with knowledge of scientific classification as well as social, cultural, and economic knowledge about the flora). A number of local guides with knowledge of the area and experience in hunting and gathering aided the efforts. The team also included (i) a biodiversity coordinator with long-term experience and expertise on the biodiversity conservation issues in the area, (ii) a SGSOC coordinator with background in ecology and ornithology, and (iii) an ecologist with international experience in biodiversity conservation.

Factors that guided transect selection included:

- areas presumed to have primary forest patches or denser vegetation as evident in the available topographic map of the area (L'institute Nationale de Cartographie, 1971);
- Forest areas close to the already established and planned SGSOC nurseries; and,
- Forest areas distributed throughout the concession that were not surveyed before.

A total of 12 transects were laid, along which 58 sample points were sampled. A total of 58 sample points, 28 in Nguti and 30 in the Mundemba/Toko blocks, were established. At each

sample point, the point-ID, coordinates, and elevation were recorded with the GPS. Weather conditions and other relevant observations were noted, including nearness to streams, and observation on steepness of slopes. Each taxonomic expert/team collected data at each sample point.

The GIS expert, who also kept track of and recorded the distances and the coordinates, led the team. The herpetology and avifauna experts accompanied the GIS expert so that the herpetofauna and birds could be recorded before the movements or presence of people disturbed them. The rest of the team followed with a gap of about five minutes, with the vegetation expert and the botanist heading the group, followed by the large mammal expert and the local guide. The coordinators and the international expert accompanied different groups along transects at different times. Transect locations were chosen to cover as much area within the concession during the rapid survey. Since the concession is mostly covered by secondary forests and converted land (farms, abandoned farms, areas of artisan and commercial logging etc.), priority was given where primary forests were expected. However, other habitats were not excluded, since even degraded or converted lands have large mammal species associated to them (e.g. species that feed on crops such as the red river hog, cane rat and porcupine).

Sample points were located at 200m intervals. When long stretches of forest-farms or converted habitats were encountered, the intervals were 400m. At each sample point, observations were made and data collected within a radius of 10m. Sounds of mammals beyond this distance were also considered. Transects locations (start point, end point, streams, and significant physical features) and locations of the sample points were recorded with global satellite positioning (GPS). Other interesting observations outside the transects but within the concession were considered as incidental observations.

**Social Survey**

The social survey consisted of participatory mapping exercises and in-depth interviews. In the participatory mapping exercise, a very simple and understandable map of the concession was presented to the different community groups, requesting them to indicate traditional and customary-use sites. This method helps to delineate local communities' fishing, hunting and farming areas, non-timber forest product (NTFP) harvesting sites and sacred and cultural sites.

Interviews were conducted to develop a deeper understanding about potential project impacts and community concerns. The team interviewed Chiefs, key elites, hunters, farmers (both male and youth), as well as those knowledgeable of their village boundaries and surrounding forest ecosystem in and around the concession. The approach helps to better understand which areas are to be marked out as HCVs. With regards to species identification, respondents' physical and behavioural descriptions of animals, as well as their vocal imitation of animal sounds were used. This information was checked against field guides (Kingdom, 1997; Depierre and Vivien, 1992) for confirmation.

# 4. Summary of Assessment Findings

## 4.1. ESIA – Social Assessment Findings

The objectives of the socio-economic and needs assessment survey were to:

- have a sound understanding of the potential impacts of the project and other project components on the concerned communities or villages; and to,
- assess current and potential needs of the affected communities and households so as to better understand potential strategies of addressing them as the project is gradually implemented.

**Socio-economic impacts to the country, region and local communities**

The project will provide significant benefits at the national, regional and local level, some of which include:

- direct sustainable employment for 7,000 – 8,000 individuals;
- indirect employment for several thousand other individuals operating small-and-medium sized businesses;
- decrease of the rural exodus from the South West Region;
- investment in education for surrounding communities;
- investment in healthcare and housing;
- access to clean water and electricity; and,
- tax revenues for the Government.

**Socio-economic impact in respect of emergent communities**

No resettlement of any of the communities is necessary, and a limited number of villages are found within the concession. All farmlands within the concession are being clearly marked out through a participatory mapping process with all relevant stakeholders. SGSOC has developed a grievance and complaints procedure so that all problem solving processes are done through discussion and mutual deliberation. The Grievance Committee is comprised of representatives of the company, communities and the farmers. The grievance procedure details the communication methods and contact personnel. To date, there have not been any disputes.

**Issues raised by stakeholders and assessors**

The below table illustrates issues raised by the stakeholders and responses made.

**Table 4: Stakeholder Concerns and Responses**

| Concern | Response |
|---|---|
| Land ownership issues are very complex | SGSOC recognizes legal land ownership rights, but will not attempt to establish or formalize them, as it recognizes those decisions are the priority of the local communities and Government. Demarcation activities identifying current village areas and growth zones and palm oil land will be done in close consultation with the villages and Government officials to obtain their approval and agreement. |
| SGSOC should employ the local population before the non-locals | SGSOC will have a wide range of positions for its operations which it will fill predominantly with individuals from the local population; SGSOC has already done so at the nursery sites and in its management team. To date, SGSOC has employed only 0.01% of its planned workforce, the majority of which comes from the local communities. SGSOC will not, however, make a policy of excluding workers from other parts of Cameroon. |
| Confusion in regards to the companies' names and their respective meanings (Sithe Global, Herakles Farms, and SGSOC) | The name of the local company is SG Sustainable Oils, Cameroon, Ltd. (SGSOC). SGSOC is owned by the American company, Herakles Farms. Sithe Global is related to Herakles Farms only in that it shares some of the same senior management, but it is no longer associated with SGSOC or Herakles Farms. |
| Whether or not the MOU is the ideal step towards addressing the community's needs[1] | The MOU is a strong first step for developing a long and cooperative relationship between SGSOC and the local communities in which both groups are positioned to respond to one another's needs. Community Development Officer (CDOs) through formal and informed discussions will help complement and shape the mechanisms guiding this long-term relationship. |

[1] Since these discussions and the publication of the ESIA, SGSOC has signed common commitments in both Ndian and Kupe-Muanenguba.

| Concern | Response |
|---|---|
| Overlap of SGSOC's project area with farmlands and issues of compensation | The development of the plantation will not require the relocation of existing farms or houses. The boundaries of the Project are being established in the jointly drafted demarcation plan. |
| Diseases non-locals may bring to the population | Part of SGSOC's commitment to the local communities and employees is to support a healthcare system that focuses on illness prevention and treatment, which should mitigate this concern. |

### 4.2. HCV Assessment

**Overall HCV identification and proposed measures to maintain and enhance those identified**

Although a number of large, medium and small mammals, reptiles and birds of global conservation concern and listed on the International Union for Conservation of Nature (IUCN) Red List are known to occur in the region, only one species classified as EN was encountered on the concession. The other threatened fauna species found in the concession are not in high concentrations, are not endemic and are widespread outside of the concession.

In case of herpetofauna, three amphibians found were listed as NT or higher on the Red List of Threatened Species. This included the Endangered *Didynamipus sjostedti* found near the village of Lipenja. However, not much work has been conducted on amphibians in the South West Region of Cameroon. It is therefore possible that *Didynamipus sjostedti* is distributed much more widely than previously known. Consequently, additional surveys carried out in neighbouring localities would provide a better understanding of the distribution and range of *D. sjostedti*. If the species is found in the neighbouring protected areas, they could be considered as increasing the area of distribution and reducing the concession's significance as restricted range. SGSOC has commissioned an additional study along with a management plan for *D. sjostedti.* In addition to this finding, food remains of one vulnerable lizard were found, and local informants indicated possible presence of a Cameroonian protected crocodile in the Concession.

The survey did find that the African forest elephant, *Loxodonta Africana*, listed as Vulnerable (VU) on the IUCN Red List of Threatened Species, occasionally migrates from the neighboring Banyang Mbo Wildlife Sanctuary (BMWS). Although SGSOC is adopting a management plan for the elephant in line with RSPO and WWF best practices, this area of the concession is not an area of critical temporal use. There was no sign of the presence of any of the other large mammal species of global conservation concern in the concession during the baseline studies. Of the birds, five species were listed in CITES Appendix II, out of which one listed as NT and three as LC (IUCN, 2011). Most of the forest-dependent bird

species of conservation concern are associated with pristine forest habitat or relatively less degraded forest, a condition that is not common in SGSOC concession. SGSOC will reconfirm all findings with an additional HCV survey prior to each land clearing phase.

Approximately 6% of the total floral species recorded on the concession are on the IUCN Red List of Threatened Species, but they are all abundant in the lowland rainforest region of Cameroon, and none are endemic to the concession. None of the species found were listed on either Appendix II of the CITES list or the list of protected species under the Cameroon wildlife Law (Source: Article 2 of the Order of 14 August 1998). Eight tree species on the IUCN Red List were identified, with six being classified as VU, one EN, and one as NT. All of these species are abundant in the lowland rain forest region of Cameroon and are not endemic to the concession. In terms of global rarity, the flora species recorded included one Black Star species (*Cylicomorpha solmsii*), which is endemic to Cameroon in a monotypic genus. Six Gold Star species (*Afrostyrax lepidophyllus, Amanoa strobilacea, Cola buntingii, Dicranolepis disticha, Dasylepis racemosa and Dichapetalum tomentosum*) were recorded, but are widespread outside of the concession. The concession on the whole does not have a high concentration of globally rare plant species and is consequently low in bioquality value.

**Decisions on HCV status and related mapping**

The HCV assessment was based on desktop and field assessments conducted between September 2010 and July 2011. Both the initial and follow up assessment reports have been made available. The HCV assessment was guided by the Cameroon National HCV Interpretation Toolkit (2008). The HCV assessment identified both environmental and social HCVs which have been included as *biodiversity plots* that will be protected by SGSOC. Examples of some of these locations are provided in the table below.

**Table 5: Examples of HCVs Identified within the SGSOC Concession**

| Area Name | Estimated Land Area (Ha) | Description | HCV Criteria |
|---|---|---|---|
| High concentration of endemic plants | 2.82 | Forest area in relatively good condition with high concentration of the globally threatened and endemic plant *Cylicomopha solmsii*; fairly good multistory forest; undergrowth dense with climbers | HCV 1.2 & 1.3 |
| Threatened species | 21.687 | Forest area near the Lipenja nursery where the endangered four-digit toad, *Didynamipus sjostedti*, was found | HCV 1.2 |
| Shrine | 6,91 | A sacred site located at Lipenja | HCV 6 |
| Shrine | 7,45 | A sacred site located at Meta | HCV 6 |
| NTFP | 46,02 | Covered with *Gnetum Africanum*, a valuable NTFP which the community depend on for their livelihood | HCV 5 |
| Shrine | 19,73 | This sacred site is located at Esoki | HCV 6 |
| Shrine | 12,58 | This sacred site is located at Lowe | HCV 6 |

| Area Name | Estimated Land Area (Ha) | Description | HCV Criteria |
|---|---|---|---|
| Swamp Forest | 15,54 | This is a riverine forest (riparian strip), south-east of Talangaye village, bordering the SGSOC oil palm nursery with good multi-story close canopy forest | HCV 3 |
| Shrine (Gorilla Hill) | 20,25 | A forested hilly area west of Talangaye locally referred to as the Gorilla Hill; the site is traditionally regarded as a shrine by the Upper Balong Tribe | HCV 6 |
| Watershed | 20,25 | A forested hilly area west of Talangaye which is the source of several rivers and stream (e.g. River Bakebe); a steep sided forested hill | HCV 4.1 |
| Watershed | 153.409 | Near the Rumpi Hills, a hilly area as well as watershed for important river such as the Mana River and several other rivers and streams | HCV4.1 |
| Watershed | 11.687 | Bakossi Hill, hilly areas as well as watershed for several rivers and streams | HCV 4.1 |
| Watershed | 565,4 | A water source located at Mungo Ndor | HCV 4.1 |
| Shrine (Mokandiba) | 109.349 | A water source located at Mungo Ndor | HCV 6 |
| Steep slopes | 1355 | Areas above 25 degree | HCV 4.2 |

#### 4.2.1. Threats to the identified HCV areas

Potential threats to the HCVs within SGSOC concession are indicated in the below table:

**Table 6: Major threats to HCVs within the SGSOC concession**

| HCV | THREAT |
|---|---|
| HCV 1.2, 1.3 | i) Illegal hunting or poaching by SGSOC workers and the local community members could threaten these species and areas.<br>ii) Habitat degradation and/or loss through farming, logging, firewood and NTFP harvesting could threaten these species and areas.<br>iii) Disturbances associated with the initial land clearing and planting phase of the plantation development could threaten these species and areas. |
| HCV 3 | i) Habitat degradation can occur through plantation development.<br>ii) Farming can damage these areas.<br>iii) Although a very rainy climate, fire outbreaks could occur.<br>iv) Canal systems that could cause the area to drain could be a threat. |
| HCV 4.1& HCV 4.2 | i) Early stage plantation activities such as land clearing and infrastructure development can threaten these areas.<br>ii) Substances used on the plantation such as agrochemicals could contaminate water sources. |

| HCV | THREAT |
|---|---|
| | iii) Land clearing for plantation development<br>iv) Logging along steep slopes<br>v) Farming cultivation on steep slopes<br>vi) Increased farming and logging activities could threaten these areas. |
| HCV5 | i) The plantation development could take place on such land, thereby reducing the availability of important resources.<br>ii) Unsustainable harvesting or poaching by workers and communities could deplete important NTFPs such as these, as well as alter the ecosystem.<br>iii) Depletion of or contamination of water sources from plantation activities and presence could threaten these areas. |
| HCV 6 | i) The plantation development could take place on such land, thereby destroying cultural significance.<br>ii) Unauthorised entry and human activities such as timber harvesting, hunting and harvesting of NTFPs can desecrate the site. This could occur due to the introduction of workers to the area of other cultural backgrounds. |

**General Recommendation for HCV Management**

The SGSOC oil palm plantation neighbours four protected areas. It is therefore imperative that measures are put in place to preserve and conserve the wildlife and their ecological habitat. The following measures have therefore been proposed as management interventions. SGSOC is committed to complying with the RSPO Principles and Criteria for the conservation of threatened species and avoidance of human-wildlife conflict and will include in its environmental policy the following general measures:

i. maintenance of adequate buffers along the boundaries with protected areas and banks of rivers and streams;

ii. establishment and maintenance of biodiversity and HCV plots at ecologically and socially sensitive areas, as well as at areas not suitable for oil palm cultivation in the concession;

iii. phased land clearing in a manner that will allow fauna species to flee and take refuge in non-activity areas;

iv. support for the local communities to maintain their livelihoods and adequate sources of critical resources;

v. training of employees and contractors in the comprehensive HCV Management Plan; and,

vi. maintenance of a no-hunting policy within the SGSOC concession and among employees.

**Establishment of Biodiversity and HCV Plots**

All of the identified HCV areas are being clearly delineated from the rest of the concession by external boundary lines using GPS coordinates. These plots will be clearly set aside from the areas to be planted, and with the exception of community lands (which communities will manage themselves), they will be maintained as biodiversity plots. Each biodiversity plot will be properly labelled with the ecological and socio-cultural importance associated with it. The plot label should clearly spell-out human activities that are prohibited from the plots.

Each biodiversity plot will be managed as an integral part of the oil palm plantation, with the prime objective of safe-guarding its ecological, landscape and socio-cultural importance. These areas will also be managed to enhance the fauna and flora diversity of the area by serving as refuge for wildlife. As part of the management of the biodiversity plots, a monitoring scheme will be put in place to monitor and evaluate measurable habitat conditions such as vegetation structure and fauna composition. The periodic monitoring results will help enhance changes in management interventions.

## 5. Internal Responsibility

**Formal signing off by assessors and the company**

This document is a summary of High Conservation Value (HCV) and Environmental and Social Impact Assessment (ESIA) findings in the SGSOC concession and has been approved by the management of SGSOC.

On behalf of the company, I acknowledge the responsibilities of the company to implement the management and mitigation plans which are principally to ensure that the conservation areas are fully identified prior to land clearance and that they are fully monitored and protected after planning.

Signed on behalf of the Company 

Name: Carmine Farnan Date: February 2012

Designation: Senior Vice President Company: Herakles Farms

On behalf of the assessment team, I acknowledge that the HCV assessment was done independently and all potential HCV sites have been identified and mapped. A pre-cautionary approach has been taken, and management and monitoring guidelines have been provided to enable the company to undertake site management. The assessment is subjected to the following constraints, remoteness, data availability and time allocated.

Signed on behalf of HCV Assessment Team: 

Name: Augustus Asamoah Date: February 2012

Designation: Lead Assessor Company: Ghana Wildlife Society

On behalf of the assessment team, I acknowledge that the ESIA assessment was done independently, and all potential impacts have been identified and assessed. A pre-cautionary approach has been taken and management and monitoring guidelines have been provided to enable the company to undertake site management. The assessment is subjected to the following constraints, remoteness, data availability and time allocated.

Signed on behalf of ESIA Assessment Team: 

Name: Salamatou Bako Date: February2012

Designation: Director Company: H & B Consulting USA (Cameroon Division)