

SUMMARY REPORT OF HCV and SEIA ASSESSMENTS

FOR

**Golden VerOleum Liberia Oil Palm Proposed Development
Area at Tarjuowon District, Sinoe County, Liberia**

Prepared by

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Executive Summary

Introduction and general background

Golden VerOleum Liberia (GVL) is a company established under the laws of Liberia, with administrative headquarters in Monrovia. GVL is a subsidiary of the Verdant Fund LP. Golden Agri-Resources Limited (GAR) is the principal investor in the Verdant Fund LP. GAR is, by hectares, the second largest oil palm plantation development company in the world and listed on the Singapore Stock Exchange.

In 2010, the Government of the Republic of Liberia (GoL) signed an oil palm plantation concession agreement with GVL to develop a large scale commercial grade oil palm operation in Liberia. The land for this agro-industrial oil palm plantations development, according to the concession agreement should be located within five counties of Maryland, Grand Kru, Rivercess, and River Gee. The concession agreement which covers a total land area of 220,000 ha allows GVL to prospect for and to identify the exact locations within the Gross Concession Area in the five Counties. In addition, the agreement requires that GVL works with the Government of Liberia to develop a 40,000 ha oil palm outgrower schemes for communities in the operational areas of GVL.

As of October 2013, GVL has only identified suitable lands in Sinoe and Grand Kru where its operations have commenced. In Sinoe, GVL has completed both High Conservation Value (HCV) assessment and Environmental and Social Impact Assessment (ESIA) and a New Planting Procedure (NPP) as required by the Roundtable on Sustainable Palm Oil (RSPO) for two areas in Butaw and Kpayan Districts with a combined area of 20,000 ha (12,000 ha in Butaw District, 8,000 ha in Kpayan District). Of the total land area that NPP has been completed, only 3,130 ha (2,530 ha and 600 ha in Butaw and Kpayan respectively) has been planted. In addition to this, GVL has completed HCV assessment, ESIA and NPP notification for an area of 28,000 ha in Trenbo and Wedabo Districts and has since developed oil palm central nurseries in Sorroken and Trenbo.

GVL is in the process of identifying the remaining lands in the five counties in fulfilment of the requirements of the concession agreement signed with the GoL. In consultation with the local communities, GVL identified a potential site with a total area of 15,482 ha (Figure 1) in Sinoe County. This proposed development area is located in the Tarjuowon Statutory District of Sinoe County in the south-east of Liberia – Figure 6. The proposed land lies between latitudes 5o17'N and 5o29' N and longitudes 8o56' W and 9o04' W. The area under consideration has largely been used for farming and other livelihood activities by the population from about 13 communities; two of which are located inside the proposed development area.

As a member of the RSPO, GVL is committed to ensuring that the company's operations comply with the RSPO certification requirements including those of the NPP. Subsequently, GVL engaged Green Consultancy, a local Liberian impact assessment company and Proforest to carry out a HCV assessment. Green Consultancy has been contracted to conduct the ESIA in the same site.

Primary forest in the assessment area

There are no primary forests in the proposed Tarjuowon development area, as the area has been previously logged on a commercial scale and contains several active and abandoned farms, as well as extensive areas of fallow lands. The 2004 National Landcover analysis and map for Liberia show that this area is a mosaic of open dense forest, agriculture degraded land, mixed agricultural and forest

area (Forest Resource Management 20041) – Figure 2. Information obtained from the Forestry Development Authority (FDA) and verified through field investigations suggest that the forests in the proposed development area have been exploited by commercial timber operators which allows the local people from the communities bordering the proposed development area to use the land for slash and burn agriculture. However, some areas towards the western side of the proposed development area contain reasonable forest cover – described by the botanical survey team as intermediate secondary forest – see Figure 3. Recommendations from stakeholders during the multi-stakeholder consultative workshop was that GVL, in collaboration with the landowning communities and the FDA, should consider setting aside the remnant secondary forest in the western corridor and excluding it from conversion activities to allow connectivity by a forest and wildlife corridor with the adjacent Krahn Bassa National Forest. The area with remnant secondary forest is shown (forest conservation in brown) in Figure 4, and the corridor is also highlighted, (as hashed area forest connectivity zone).

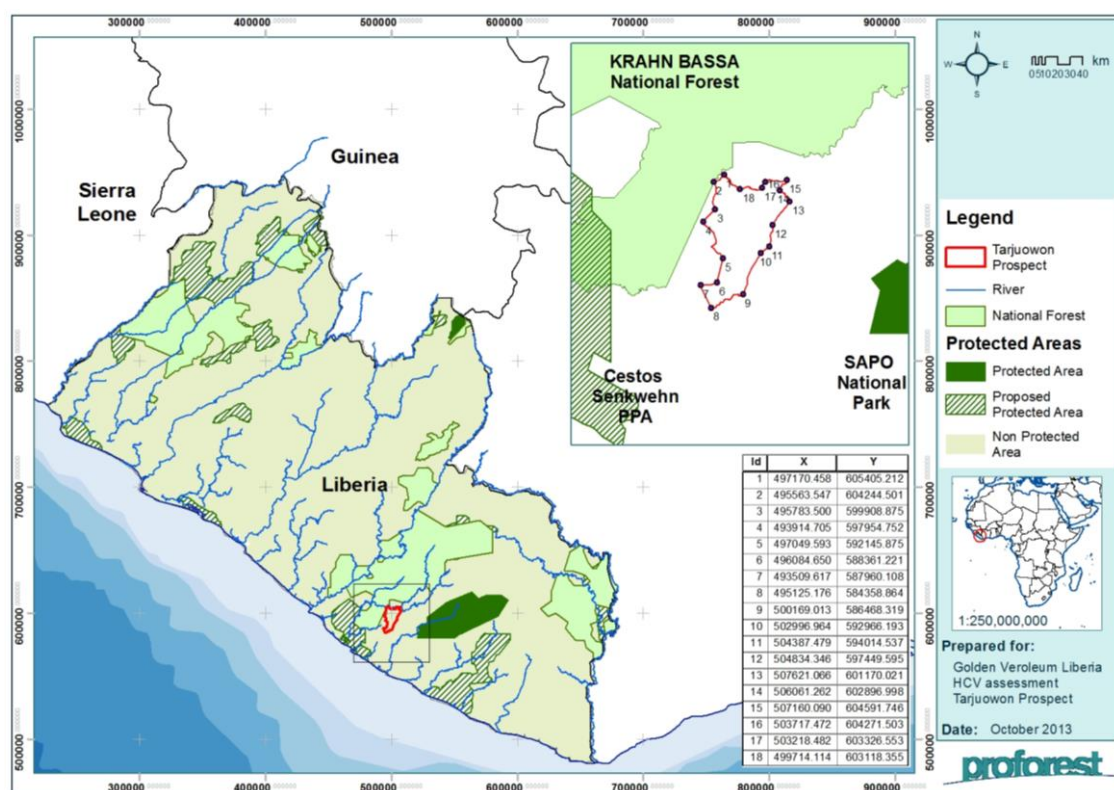


Figure 1: Location of the proposed Tarjuowon development area and protected areas in Liberia

The closest point of the eastern boundary of the proposed development area is approx. 17 km. from the Sapo National Park (dark green in Figure 1). Although the north-western corner is about 1km from the Krahn Bassa National Forest - a production forest (shown in light green Figure 1). The closest point from the western boundary of the proposed development area to the Sestos-Senkwehn proposed protected area (light-green hashed area in Figure 1) is approximately 15 km. The western boundary of the proposed development area and the north-western part of the proposed development area

¹ Forest Resources Management. 2004. *Current State of Forest Cover in Liberia*. (A report for the World Bank)

consist of a stretch of a good secondary forest with similar characteristics of the forests found in the Krahn Bassa National Forest. It is therefore recommended in consultation with national stakeholders that the stretch of secondary forest in the western boundary be set aside given its potential to regenerate naturally to become an important matured forest cover and serving as a conservation corridor between the proposed development area and the Krahn Bassa National Forest (Figure 4).

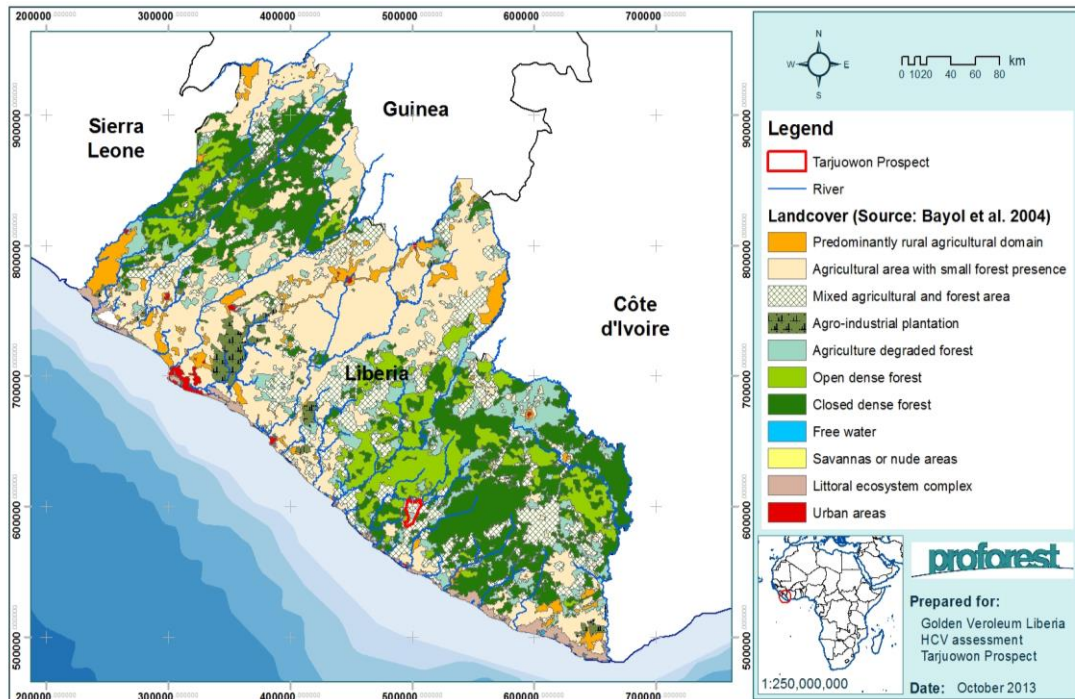


Figure 2: Landcover map of Liberia showing the location of the proposed development area

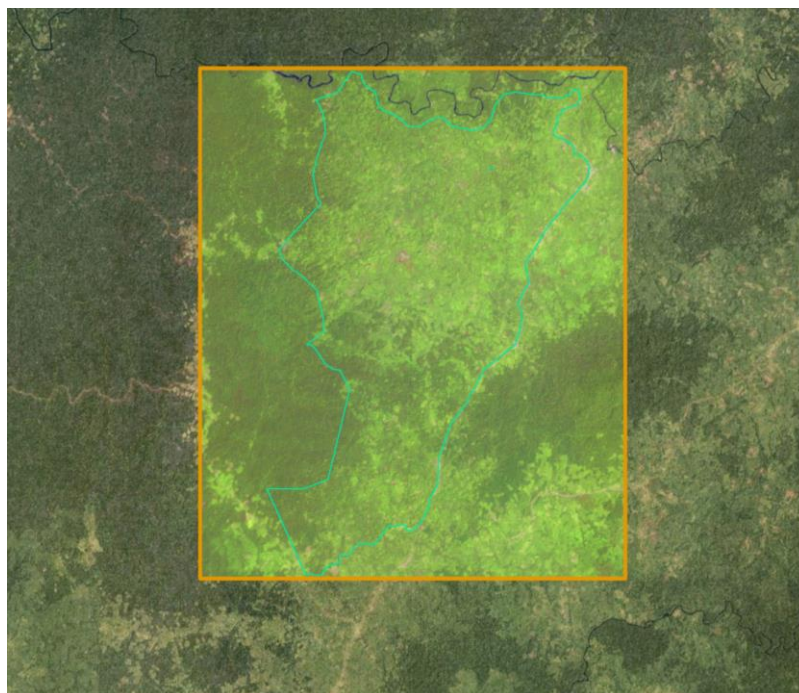


Figure 3: Landsat image (1991) showing the nature of vegetation in the development area

Areas required to maintain or enhance HCVs

During the extensive assessment process, including wide consultation with relevant stakeholders, several HCVs were identified as being present or potentially present. These were: HCV 1.2; HCV 4.1; HCV 4.2; HCV 5 and HCV 6 (present) and HCV 1.3 and HCV 1.4 (potentially present). In order to ensure that these values are maintained the HCV areas have been identified. In defining areas required to maintain or enhance HCVs, the various types of HCVs identified in the proposed development area and their locations are presented below.

HCV 1.2: Concentrations of rare, threatened or endangered species

The assessment team observed few signs of Jentink's duiker (endangered on IUCN list and protected in Liberia) in and around the forest in the south-west corner of the proposed development area. Also signs of Bongo (near threatened on IUCN list and protected in Liberian) were also observed in the proposed development area. HCV 1.2 is therefore concluded to be present and recommendations made for setting aside the block of secondary forest in the western and south-western areas of the proposed development area. These areas are to be excluded from conversion activities. Although protected, the Bongo is known to be found in almost all forests areas including degraded forests and farmland areas in Liberia. The specific areas where signs of Bongo were observed has not been classified as HCV areas given the presence of the species in almost all areas of Liberia and the fact that only few signs were observed with no observation of special habitats of the species in the proposed development area. It is therefore recommended that GVL plans its operations in a way that allows the few species of Bongos observed in the proposed development area to move through the recommended set-aside areas and potentially into the Krahn Bassa National Forest. The areas required to maintain and enhance HCV 1.2 (Concentrations of rare, threatened or endangered species) is shown in Figure 4; the brown area linking the hashed areas labelled "Forest conservation and forest connectivity zones". In addition, there may be some remnant populations of wildfire remaining in the site albeit in very low numbers that currently are found outside the forest conservation zone, therefore the assessment has recommended that any site clearing is done in such a manner as to drive any wildlife towards the conservation area and the connectivity zone.

HCV 1.3: Concentrations of endemic species

This assessment did not identify concentration of endemic species of fauna in the proposed development area. However the endemic plant *Tetraberlinia tubmaniana* is found in the proposed development area. This African pine tree, although endemic, is widespread across Liberia and was not in high concentrations in the proposed development area. It was not considered HCV 1.3 in this site. However, at the regional level there are several mammal species which are regionally endemic. They include: Jentink's duiker, Zebra duiker, and King colobus. Although these are found in the proposed development area, the very low frequency in which signs of these species were encountered during the field assessment suggests that they occur in very low numbers. Ten species of bird considered to be endemic in the West African sub-region were also sighted. Two of these species, the Black-headed Rufous Warbler and Copper-tailed Glossy Starling are effectively restricted to the Upper Guinea Forest Zone from Guinea to Ghana. Although the few signs of these species found suggest that they are not in high concentrations in the proposed development area, HCV 1.3 is considered to be potentially present. Specific locations where signs of these species were sighted have been mapped but given the low numbers and the isolated nature of these signs, specific management areas for HCV 1.3 could not be identified. However, recommendations have been made for GVL to ensure those fauna species are able to move to the set aside areas to help contribute to protection of HCV 1.3 species and conservation of biodiversity in the wider landscape has been proposed for adoption and implementation.

HCV 1.4: Areas that contain habitats temporarily used by concentration of seasonal species

This assessment did not find any areas that contain habitats temporarily used by concentration of seasonal species. Secondly, there was no information (data, reports, studies, testimonies etc.) that gave a clear indication that the site contains areas temporarily or seasonally used by concentrations of species. There is no information pertaining to migratory routes or seasonal stopovers for birds. There was neither field findings nor data to suggest that the rivers and streams are especially important as spawning grounds for fish. However, appropriate recommendations have been made for protection of these water bodies because of other unique functions they provide.

Adopting the precautionary principal and considering the fact that there is no data readily available on habitats temporarily used by seasonal concentrations of species, the assessment concluded that HCV 1.4 is “potentially” present. It is recommended that further work is carried out and due care taken during land conversion to confirm the presence or absence of habitats temporarily used by concentration of seasonal species.

HCV 4.1: Forest areas critical to water catchment

As can be observed in Figure 4 below, there are networks of water bodies in the proposed Tarjuowon development area. Most of these water bodies drain either northwards into the Senkwehn River or southwards into the Tarsue River. A significant number of these water bodies have fairly intact riparian vegetation that play crucial roles in protecting the water bodies and maintaining bank stability. The results of the communities’ consultations suggest that most of these water bodies are not only important sources of water for household use but also provide fisheries resources for human populations in the area. For this reason and the need to protect water bodies, all riparian vegetation in the proposed development areas have been identified as HCV 4.1 for this assessment. Specific management recommendations have been made for this including setting aside appropriate size of buffer on each side of a water body depending on the size of the river. This is also in line with the recommended best practice set by the Liberian Environmental Protection Agency. These buffers need to be carefully identified, demarcated and managed as riparian zones for the maintenance of HCV 4.1.

HCV 4.2: Areas critical to erosion control

The terrain of the proposed development area under the scope of this assessment is low-lying and generally flat. This assessment did not identify any high slope areas in the proposed development area and therefore does propose a specific zone for HCV 4.2. However, the draft Liberian HCV Toolkit identifies wind erosion that could destroy settlements under HCV 4.2. Additionally, all types of erosion that could affect functionality of water bodies have been classified under HCV 4.2. Because there are two cities located in the proposed development area that require adequate buffer to prevent occurrence destructive winds against settlements and the fact that there are a number of water bodies in the proposed development area that could be affected by erosion as a result of land conversion, HCV 4.2 has been identified to be present. Recommendations provided include setting aside buffer for Bestnewlue and Sonouah cities against wind erosion and excluding conversion of all vegetation on slopes above 20 degrees. It has also been recommended that erosion prevention measures (e.g. terracing, cover crops etc.) are implemented in all areas with slopes between 15 and 20 degrees. GVL is expected to set aside buffer zones for the two settlements and also evaluate all areas with gentle to high slopes carefully prior to any conversion operations.

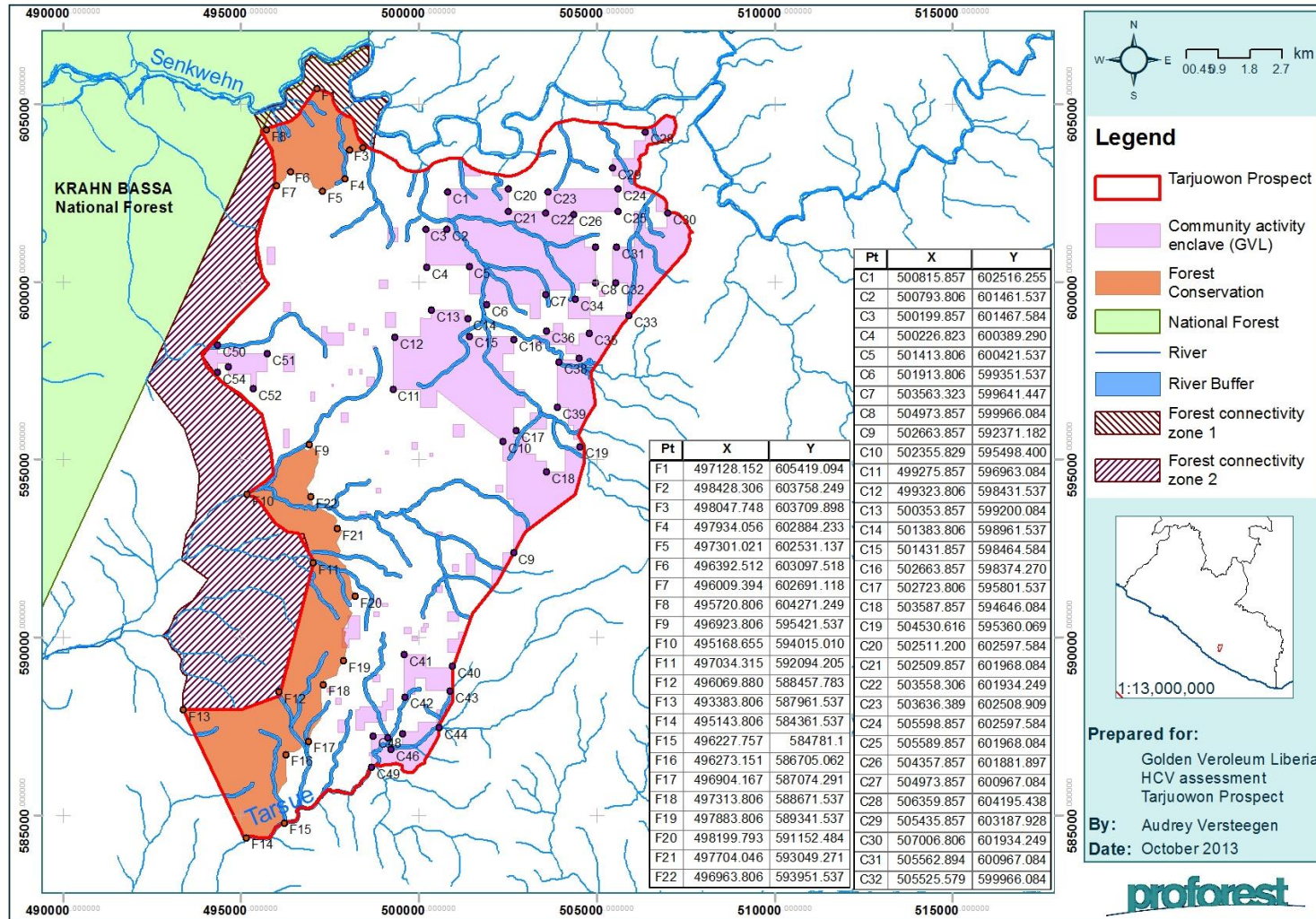


Figure 4: Map of the proposed development area showing set-aside areas, rivers and their buffers

HCV 5: Areas required to meet basic needs of local communities

As observed under HCV 4.1, the networks of water bodies in the area play a crucial role in the livelihoods of a number of communities in the project catchment area. Additionally, some communities in the areas depend on natural resources of the vegetation in the proposed development area for products such as raphia, poles and monkey vine for house constructions. HCV 5 areas have been identified and mapped (Figure 5). It has been recommended that these areas (pink) are excluded from all forms of conversion activities to enable current and future populations of the two communities to use those areas for farming, fishing, hunting, NTFP collection and other basic needs. Extensive participatory mapping exercises have been carried out in the affected communities with the identification of HCV 5 as a priority objective. Apart from the two communities in the proposed development area, the people of all the other communities outside of the proposed development area indicated that they have suitable alternative areas for meeting their basic needs, such as hunting, fishing, water, NTFP collection etc. In order to ensure an appropriate and large enough land is set aside for the two communities in the proposed development area, a joint GVL and community team have agreed to set-aside reserved areas for future community needs. These two areas are shown in Figure 5 below as NTFP reserve areas (in green spots). Besides this, a number of farms were identified in the proposed development areas. Farms encountered were mainly cassava, rice, plantain, and sugarcane, cocoa plantations with some of them being old and abandoned farms. Although farms are not HCV per se, GVL has already mapped out all farms in the proposed development area. The team has therefore recommended that the existing farms should also be excluded from conversion unless there is agreement with the individual farmers concerned that those areas can be converted to oil palm plantations. This agreement must be obtained through a free prior and informed consent (FPIC) process.

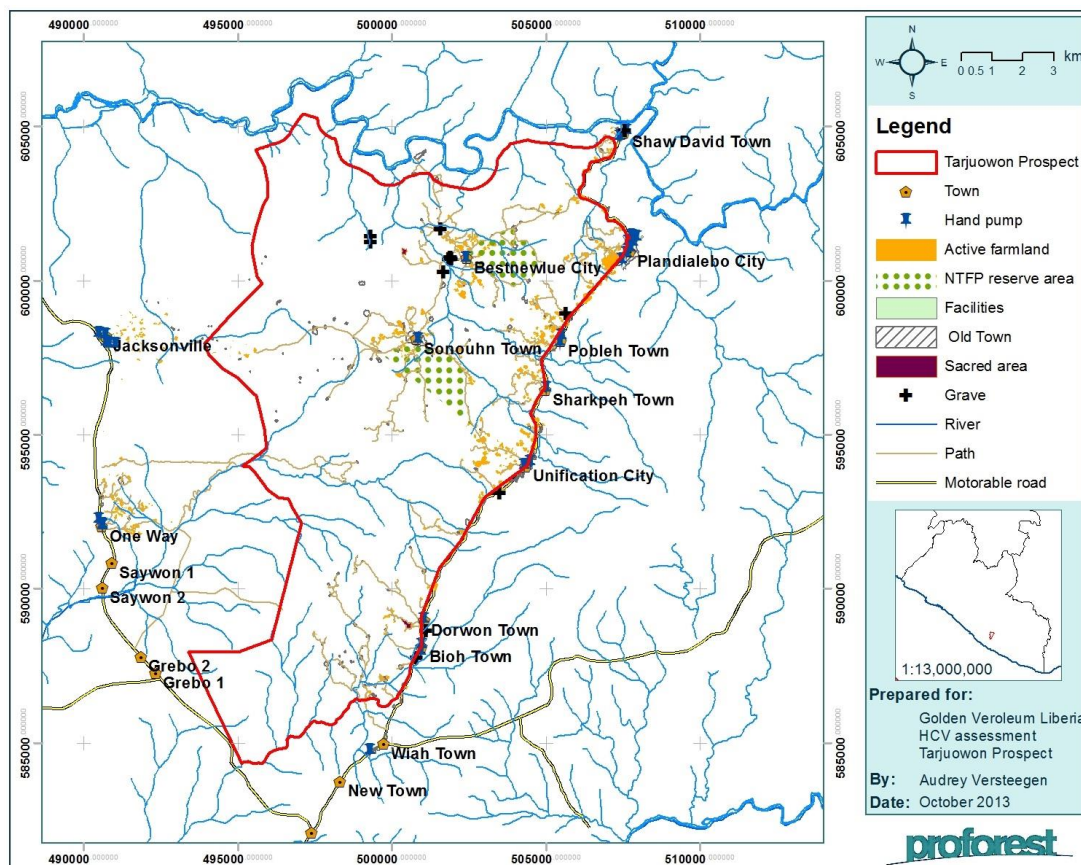


Figure 5: Map showing locations of Sonouhn and Bestnewlue cities and HCV 5 set-aside areas

HCV 6: Areas critical to cultural identity

It was identified during the assessment and the community consultations that the belief, tradition and culture of most of the villages in the landscape are strongly linked to the land, the vegetation and water bodies in the proposed development area. The population of the communities in the catchment area indicated that they have important sacred sites which they consider as critical to their cultural identity. These sacred sites are usually gravesites (for most of the communities), forests (for the people of Dorwone and Bioh Town), rivers (the Jarnian creek for the people of Plaindelebo), trees, The Town Crier Rock (for Sonouhn), a cave (Shaw David), hills which include the Tarjuwe Hill for most of the communities and Chlopuah Hill for the people of Wiah Town. All HCV 6 areas have been duly identified in collaboration with the local communities concerned. An example of HCV 6 mapping of sacred sites is shown in Figure 5 – sacred areas and graves. It has been recommended that GVL works with the local communities as part of the FPIC process in identifying HCV management areas for all of the HCV 6 that have been identified in the proposed development area.

Areas of peat soils

There are no areas of peat soil in the proposed development area in Tarjuowon District, Sinoe County in Liberia.

Local people's lands

The proposed land for the oil palm plantation development is a traditional land owned by the local people. Consultations with the traditional authorities and the general population suggest that the local people offered their land and invited GVL to use the land for agro-industrial oil palm plantation development. GVL accepted the request and currently carrying out an FPIC process with the local population to obtain written consent to cover several areas including HCV management areas and compensations for farms that would be affected by the proposed development. GVL intends to conclude the FPIC process prior to commencing land conversion.

Scope of the ESIA and HCV Assessment

Organisational information and contact persons

Contact details of GVL

Golden Veroleum (Liberia) Inc
17th Street, Villa Samantha (Beach Side)
Sinkor, Monrovia, Liberia
RSPO Membership: 1-0102-11-000-00, Ordinary member since 29/08/2011

Contacts:

David Rothschild, Director, david.rothschild@veroleum.com, +231 88 644 8525
Matt Karinen, Director, matt.karinen@veroleum.com, +231 8866 91676

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

Legal documents

The list of legal documents reviewed are:

Land, Forestry and Wildlife

- An Act Creating the Forestry Development Authority (1976)
- The New Forestry Reform Law of 2006
- Wildlife Law of 1988
- Draft Wildlife and Protected Area Management Law 2009
- By-laws of the Board of Directors of the Forestry Development Authority (Draft)
- Forestry Regulations Nos. 1-25 (1978-2000)
- Forest Management Plan (2000)
- National Forestry Act (2000)
- The NTFP Regulation of 2009
- The draft Landuse Policy of 2013

Environmental Protection

1. Environment Protection Law (2002)
2. Environment Protection Agency Act (2002)

Protected Areas

1. Protected Forest Area Network Law (2003): Amended the National Forestry Act of 2000 and defines a series of eight protected area types and the uses permitted and prohibitions for each.
2. Sapo National Park Act (2003): Expanded Sapo National Park (Liberia's only fully protected area created in 1983)

Regulatory permits and property deeds

The regulatory permits reviewed as part of this assessment includes:

- The GVL proposed development area agreement
- The Tarjuowon proposed development area maps

Other guidance referenced

- The Global HCV Toolkit (2003)
- The Draft Liberia HCV Toolkit (2012)
- Proforest Guidance on assessment and management of HCV

The proposed Tarjuowon development area is located in Tarjuowon Statutory District of the Sinoe County in Liberia. Tarjuowon District comprises two County Districts: Kulu-Shaw-Boe and Plahn Nyarn County Districts. There are three main clans – Kulu, Nyarn and Plahn - and seven clan sub-groupings found in the project area – see Figure 7.

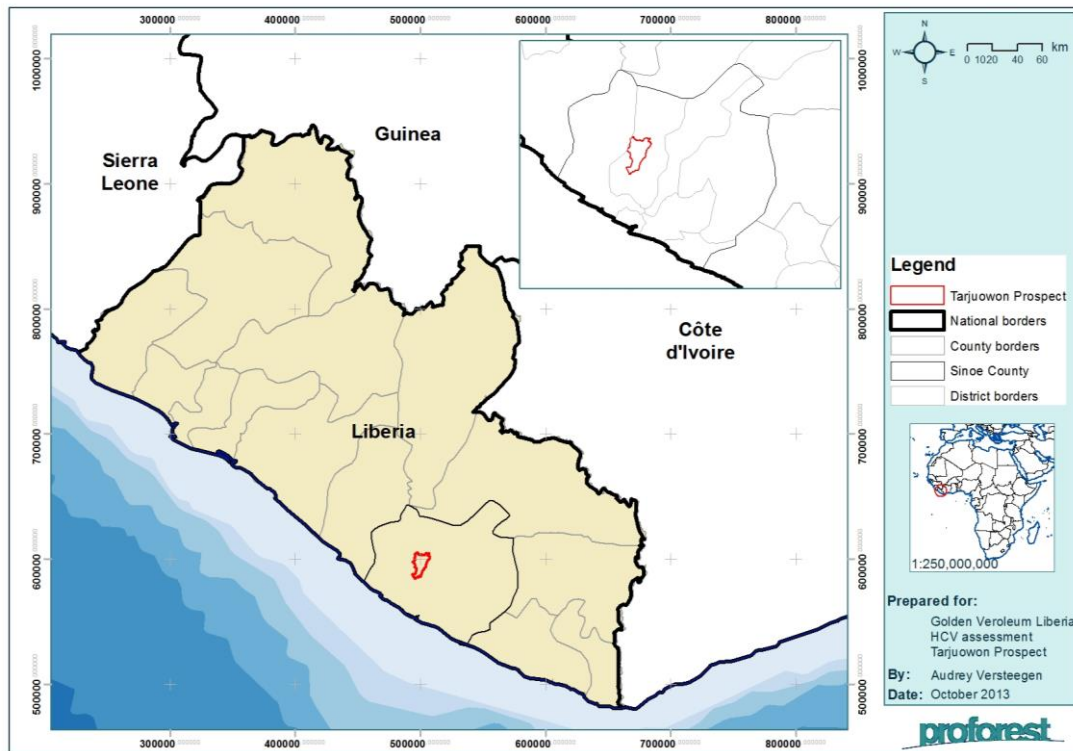


Figure 6: Map of Liberia showing location of the proposed Tarjuowon development area

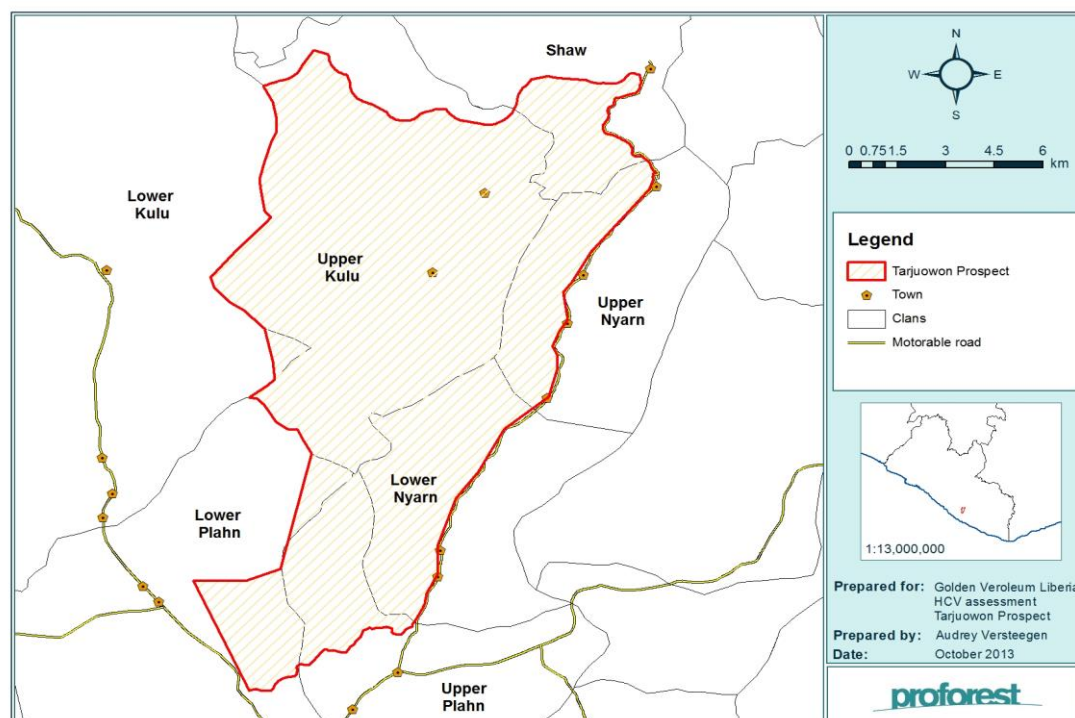


Figure 7: Map of the proposed development area and the different clan lands

Area of new plantings and time-plan for new plantings

As defined by the RSPO Procedure for New Planting Guidance document dated 12 May 2010, the entire proposed development area of 15,482 ha qualifies under new planting area under RSPO requirements. GVL intends to commence development activities during Q1 2014. The company has planned to commence land preparations for field planting during Q1 2014 with an estimated first year planting of 5,000 hectares and total estimated at around 7,500-8,500 hectares. With this planting programme, GVL expects to complete field planting of the 15,482 ha of land within two years with field planting operations estimated to be completed during 2015. The company intends to plant all areas of the proposed development area with oil palm except the identified HCV management areas (for HCV 1, HCV 4, HCV5, HCV 6), including recommended buffer zone limits for water-bodies and set-aside areas. This also includes existing farms in the proposed development areas subject to the conclusions of the FPIC process which is currently on-going.

Assessment Process and Procedures

Assessors and their credentials

The HCV assessment team consisted of 13 specialists with diverse academic and professional background and vast experiences appropriate to the task. The team consisted of professionals from various fields including biology, ecology, botany, sociology, ornithology, forestry and GIS mapping. The list of specialist members of the team and their roles in the assessment is presented in Table 1 below.

Table 1: Assessment team members and their roles in the assessment

Name	Organisation	Qualification and Role
Abraham Baffoe	Proforest	Assessment team leader. MSc Forestry and Environmental Policy. RSPO approved HCV assessment Team Leader.
David Hoyle	Proforest	Socio-economist and African conservation expert. MSc Natural Resource Management.
Audrey Versteegen	Proforest	GIS expert. PhD in biogeochemistry and climate change mitigation, and a master's degree in land reclamation and restoration.
Nana Darko Cobbina	Proforest	Natural Resource Manager. FSC lead auditor and natural resources management specialists
Abraham Tumbey	Green Consultancy	ESIA Team Leader. Candidata M.Sc-Regional Science; BSc Biology/chemistry; Certificate-Social Impact Assessment; EPA Certify Evaluator; RSPO Approved HCV Assessor.
Solomon P. Wright	Green Consultancy	ESIA Planning, Baseline studies- Forestry. Candidata M.Sc-Regional Science; BSc General Forestry; EPA Certify Evaluator; RSPO Approved HCV Assessor.
Sanco Lysander	Green Consultancy. Independent Sociologist	Socio-economic baseline studies. Candidata M.A-Peace Studies; B.A Sociology/Anthropology.
Clarence Buigbo	Green Consultancy	Ecologist. BSc Biology/Chemistry; ESIA Training; Biological survey data analysis-Fishes.
Anthony Koigbli	Green Consultancy	Botanist. BSc- General Forestry. Botanical survey
Larry Kanwee	Green Consultancy. Independent GIS expert	GIS Analysis & Mapping. BA-Sociology; Certificate-GIS.
Abraham W. Diah	SCNL-Amphibian Specialist	Amphibian Survey. BSc Biology
Alexander W. Kaye	SCNL-Sociologist	Sociologist. B.A Sociology.
Prince Soriba	SCNL- Biologist	Biologist - mammal and bird survey. Certificate-Mammal and bird identification; Biodiversity survey and identification techniques.

Assessment methods (data sources, data collection, dates, programme, places visited)

The methodology for this assessment followed three process steps. The first was the pre-assessment which consisted mainly of desk and web-based research aimed at gathering further information of the area and review of the proposed development areas acquisition documents and legal requirements that must be met. The second part, which was the main assessment, consisted largely of field assessments and surveys to identify the different types of HCVs present in the two proposed development areas and a series of stakeholder consultations. And thirdly field verification of assessment findings and a national level consultation through a multi-stakeholder workshop. A brief summary of the main activities that constituted the methodology used for this HCV assessment is described in subsequent sections below.

Pre-assessment

Prior to commencement of field work and stakeholder consultations in Liberia, Proforest gathered a number of documents and data including the GVL proposed development area agreement, the

proposed development area maps, forestry and wildlife laws etc., as well as studies and research reports that are relevant for this assessment. Preliminary observations made during the pre-assessment showed that the proposed development areas consisted of a mosaic of farmlands, bush fallows and degraded forest areas. This informed the design of the HCV assessment methodology, the team and expertise requirements for this assessment.

HCV field assessment

The HCV field assessment was carried out between June and October 2013 by a combined team of experts from Proforest and Green Consultancy (GreenCons). The process started with an initial joint reconnaissance visit to the site and to make initial contact with the local stakeholders and to finalise the methodologies for the various baseline studies. This was carried out at the end of June 2013.

From the end of June through to the middle of July a series of studies were conducted in the site by several teams of experts from GreenCons and Proforest. These studies included a socio-economic study of the towns and villages in and around the proposed development area, as well as floral and faunal surveys (including mammals, birds, fish and reptiles / amphibians). A brief orientation was provided to the field assessment team prior to the field data collection.

At the same point in time the assessment team made contact with several key stakeholders in Government and civil society organisations in Liberia in order to ensure that they were briefed about the planned development project, that they can input into the HCV study and provide other useful background information (e.g. data, policies, relevant laws etc.).

Upon completion of the field data collection, an initial HCV identification process began prior to a second site visit. In October 2013 the team made an extensive visit to the site to verify information garnered, to test field hypothesis and to complete the HCV identification and development of proposed management interventions. This included a visit to all the towns within and adjacent to the prospect. Further recce walks inside the different vegetation found in the site were made as part of the process of identifying areas that need to be set aside for conservation purposes.

Primary data collection methodologies

Socio-economic studies - A detailed socio-economic study was conducted by the assessment team during June and July 2013 in the communities in or adjacent to the Tarjuowon prospect. The main objective of the socio-economic impact assessment was to understand the social, economic and cultural make-up of the communities living in or adjacent to the proposed development area, including population size, demography, employment and economic livelihood, social services and utilities, customary and land use rights of local people, cultural context etc. This was also aimed at getting the perceptions of the local population on the proposed project. The Participatory Rural Appraisal (PRA) methodology was used in working with community members in the study area to better understand their interests and perspective by involving them directly in this research. A robust public and stakeholder consultations was initiated in order to inform local people and their authorities on the various activities involved in the operation and management of the proposed project. The consultations were meant to solicit views, concerns, comment and inputs regarding the project. A number of identified stakeholders and institutions were written and informed about the project.

The team employed several primary data collection techniques, including:

- Household Questionnaire Surveys
- Focus Group Discussions
- Key Informant Interviews

- Field Observations

The field teams gather additional information from direct field observations in each of the study communities. Observations such as availability and quality of infrastructure such as roads, schools, health care and community project, traditional use of resources, illegal activities, poaching etc. were taken into consideration.

Floral study - For the floral survey, data was collected using predetermined sampling lines. In order to ensure a fair coverage of the entire area of the proposed development area, a Windows based computer software; DISTANCE was used to generate an automated sampling design. This allowed for the random placement of a grid of parallel recce lines to be superimposed on the proposed development area taking into consideration the size, shape, vegetation cover and layout of the proposed development area. The objectives of the botanical study were to determine: the previous and existing vegetation types of the project site and its immediate environment; the most commonly occurring plant species and their relative abundance; and Identification of any endangered species. The botanical team used both straight line transect methodology, as well as sampling plots for the floral assessment. Six transects were cut across the prospect from east to west with a spacing of 3km between them. In total, about 50km length of transects were surveyed. The botanist was required to inventory all tree species above 20cm (dbh) along the transect (5m on both sides of the trail). Additionally, the botanical team established twenty sampling plots (25m x 25m) on alternate sides along transect at 2km intervals. In each plot the team listed all trees species that were above 10cm (dbh).

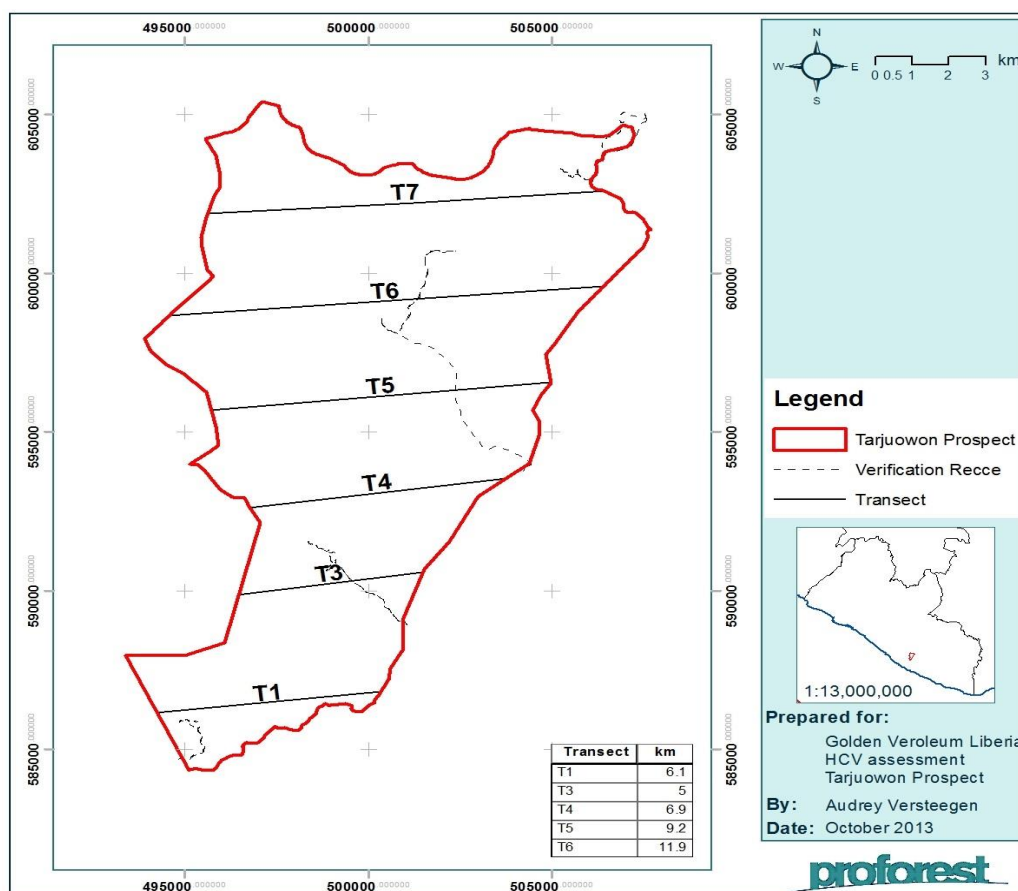


Figure 8: Map of the proposed area showing transects for the flora and fauna surveys

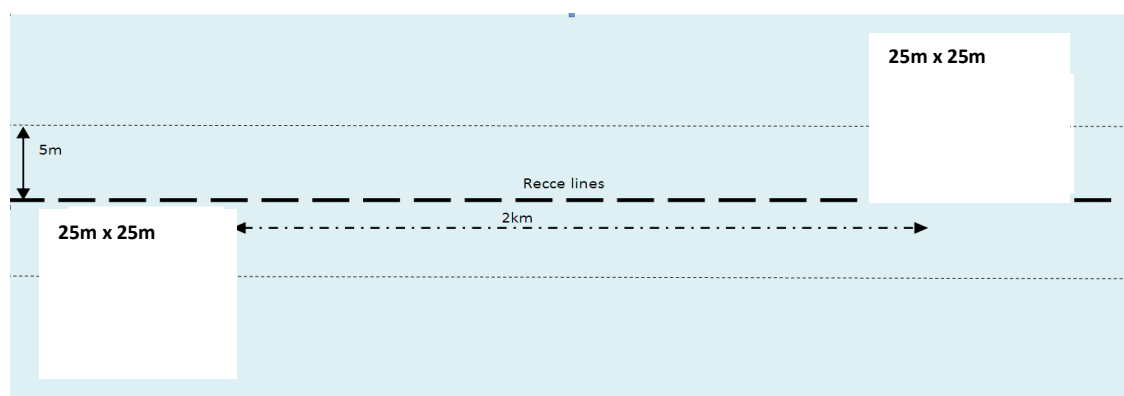


Figure 9: Diagrammatic presentation of how systematic sampling plots were identified

Fauna survey - A team of wildlife experts carried out the fauna survey in the Tarjuowon prospect in June -July 2013 to assess the faunal composition of the site. They used three main methods: observations along a straight line transect; opportunistic observations along recces and interviews with local communities. A species list was compiled for the project site. Direct/opportunistic observation involved recording any animal sightings while navigating along the six transects covering 49.8 km (as per the floral study). Observation walks along transects were undertaken to record any signs of the presence of wildlife. Recordings included any sign left by a living animal, such as feeding sites, regular pathways, tracks, footprints, fecal pellets, nests, etc. Some individuals in villages around the project site were interviewed for information about the fauna of the area. The interviews focused mainly on the identification of the various animals that commonly occurred in the area, and some indication of their abundance.

Bird survey - An ornithologist visited the site in June/ July 2013 to study the avifauna for the site. The objectives of this study were: to identify and characterise the avifauna of the site; to locate and investigate the distribution and status of any bird species of global conservation concern; to assess the avifaunal conservation importance of the area against standardised international criteria (e.g. the Important Bird Area Programme of BirdLife International); to determine the importance of riparian forest for any bird species of conservation concern; and to make recommendations for the mitigation of any potential adverse effects on avifauna from the proposed project. The ornithologist collected data along the same 6 transects (see Figure 8). The main bird survey techniques used were: extensive surveys along each transect, searching for species of special conservation interest, playback, point counts, and local interviews. The specialist used a point count method to determine the callings of birds at a distance interval of every 500m, during early morning (5:00-6:00am) callings of different types of birds. At every calling location coordinates were recorded of every indirect signs (foot-prints, dungs, feathers, etc.) on each or outside of each transect. A list of bird species present in the site was produced and any species of conservation concern highlighted.

Amphibian / Reptile study - An amphibian/reptile specialist visited the site during the period June / July 2013 with the objective of identifying the presence of reptiles and amphibians in the site. The expert scouted for amphibian and reptiles species in the entire proposed development area areas using both transect and recce methods. Point count methods were used to determine the presence and absence trends, species composition, and habitat analysis. A list of species identified was produced highlighting any species of conservation concern.

Fish study - A fish study was also conducted to gather baseline information for the preparation of the ESIA and HCV Assessment. In this study, a survey of fishes was carried out at three sites located on

Coonie Creek, Tarsue and Senkwehn Rivers. With the help of field guides residents were interviewed to identify fishes in the area. Fishes were identified as well as their conservation status. A species list was compiled for the project site.

GIS and Remote Sensing

Base maps and shapefiles for the map work of this assessment were obtained from various sources. Proposed development area maps, topographical and drainage maps were obtained from the GVL Geographic Information Unit. Additionally, a combination of satellite images of the study area was utilized including public-domain Google Earth imagery which together with the proposed development area maps were initially used in planning for the field survey. The team used Landsat data from 1991 and 2012 to examine the vegetation in the site. In addition, public-domain imageries from the Liberia Geographic Information Systems (LIGIS), the Forestry Development Authority, USGS, Natural Earth were also used.

Stakeholder consultation (stakeholders contacted, consultation notices and dates)

A number of consultations involving a wide range of stakeholders were carried out during the pre-assessment, the main assessment, the verification visit and after the HCV report has been drafted. Each stage of the consultation process aimed at sharing and collecting specific information and data relevant for the assessment. The objective of the first round of stakeholder consultations was to inform stakeholders of the project and to solicit their inputs into the assessment methodology and the planned process steps. The second round of the consultations aimed at informing them of the assessment findings and soliciting their comments and inputs on major decisions on HCV identifications and management recommendations.

Consultations with state institutions

Consultations with relevant government institutions responsible for land administration, natural resource management, labour and environmental protection were made during the assessment process. The aim was to establish formally designated land use of the proposed development area and also to understand the national approach towards protecting biodiversity and addressing tenure and use rights of local communities over natural resources in the area. This process was also useful in soliciting their inputs into the assessment process and to assist the assessment team to obtain an understanding of the company's legal obligation in terms of sustainable natural resource management and obligations to local communities in the catchment area of the proposed development area. Institutions consulted included the Forestry Development Authority (FDA), the Lands Commission, Ministry of Agriculture and the Ministry of Internal Affairs. Others are the Ministry of Labour, the Liberian Information and Geographic Information Systems (LIGIS) and the Department of Environmental and Occupational Health.

Consultations with experts and non-governmental organisations

All major and known organisations involved in natural resource management and planning as well as environmental and social NGOs in Liberia were consulted to obtain some information on key environmental and social issues that ought to be addressed during the assessment process. Organisations consulted included: the Conservation International, The Fauna and Flora International, the Forest Peoples Programme, Sustainable Development Institute and the Society for the Conservation of Nature, as well as SESDev, SAMFU and the Sinoe County Human and Natural Resources Right Movements (SCHNRRM).

Consultations with the local communities

In addition to the consultation with the national and county level stakeholders, the assessment team also visited all the communities who may be affected by the proposed project and or hold some form of traditional tenure over the land in the proposed development area. The aim was to get an understanding of:

- The level of local communities' dependence on natural resources in the proposed development areas area.
- Socio-cultural and religious values that are present in or linked to the proposed development areas
- General perception about the proposed oil palm plantation development and how it would alter the socio-economic and cultural landscape of the host population
- Traditional tenure systems and claims over the proposed development area areas (if any).

Table 2: Local communities consulted during this assessment and their ethnicity

	Name of Landlord community	Ethnicity
1	Unification City	Kru
2	Shaw David	Kru
3	Plaindelebo	Sapo/Sarpo
4	Pobleh	Kru
5	Sharkpeh	Kru
6	Dorwone Town	Kru
7	Bioh Town	Kru
8	Wiah Town	Kru
9	Nyefueh Town	Kru
10	Bestnewlue City	Kru
11	Sonouah Town	Kru
12	Jacksonville City	Kru
13	One-Way	Kru
14	Grebo Village 1 and 2	50% Grebo

Consultation and Validation of HCVs

The final round of stakeholder consultations for this assessment was the national multi-stakeholder consultative workshop organised in Monrovia on 14th October 2013. The draft HCV assessment findings were presented at this national stakeholder's consultative workshop. The objective of this final workshop was to present assessment findings to stakeholders and to solicit their input into the HCVs identification, conclusions and recommendations. This enlarged group included representatives from GVL, Government Ministries and Agencies including Ministry of Agriculture, Forestry Development Authority and the Environmental Protection Agency. Local, national and international non-governmental organisations including SAMFU, Sinoe County Human and Natural Resources Rights Movement, SESDev, Conservation International and the Liberia Society for the Conservation of Nature.

Table 3: Institutions and stakeholders consulted during the pre-assessment

Date of consultation	Organisation/ Institution	Name of individual consulted	Inputs/comments on assessment methodology
25/06/2013	Department of Occupational and Environmental Health	The Director, Tel: +231886669906 Email: doyeabah@yahoo.com	The Director explained that there are evidence of recent conversions destroying riparian vegetation and discharge of solid and liquid wastes into water bodies. He advised that the team identifies all water bodies in the concession and provide appropriate recommendations using international best practice requirements as a benchmark for GVL to adopt and implement. He advised that the team studies the National Policy on environmental and Occupational Health and the Integrated Water Resources management policy and ensure the assessment is informed by these national legal requirements.
25/06/2013	Society for the Conservation of Nature of Liberia	Mr. Michael F. Garbo, Director, Tel +231886573612	The proposed concession does not contain any closed canopy forest and it is also far from any protected area. The only protected area close to the concession is the Sapo NP which should be more than 10km from the concession. There is also a proposed protected area in the landscape but this is even further than Sapo. He advised that the assessors ensure local communities are adequately consulted and their concerns seriously taken in the assessment recommendations to GVL.
25/06/2013	Ministry of Agriculture	Honourable Chea B. Garley, Assistant Minister for Technical Services, Tel:+231886574465 cheabrowngarleysr@yahoo.com	The Minister explained that although government has signed concession agreement with the company (concession agreement signed Sept 2012), the communities have some traditional and use rights and therefore consultation with communities must be very strong to enable the team get a better understanding of the communities concerns and expectations and that communities concerns and issues must be taken seriously and appropriate recommendations provided for the company to implement. He also advised that the assessment team to have consultations with the Superintendent of the County, chief and district officials before commencing the field work.
25/06/2013	Environmental Protection Agency	Morris Gontor, Cecilia Kallie, Tel 0886551181 Jerry T. Toe, Earl Neblett, Edward Wingbah, Joseph G. Yeneken	The EPA team advised that the assessment team should use a robust process to assess the six HCVs and inform EPA of their field findings so the EPA can provide recommendations based on field findings. They further advised the team to ensure a good baseline data upon which the company's operations and performance over years can be assessed.
26/06/2013	Min of Labour, (Manpower Planning & Human	Deputy Minister, Tel: Tel:+23188655639	The Minister intimated that there has been several communities' issues with oil palm companies in Liberia and that the Ministry will expect a robust assessment process that can help avoid recurrence of such communities' issues and concerns.

	Resource Development		
26/06/2013	Ministry of Internal Affairs	Mr. William Jallah, Director, Custom and Culture, 0886110447	The Director explained that the people of Liberia has a culture which must be respected by all companies operating in Liberia and that sacred sites and forests are very crucial to the local people of Liberia. He advised the team to work with the local communities, traditional leaders and superintendents of the County to ensure they understand the concerns and issues of the local people in order to give appropriate recommendations to GVL.
26/06/2013	Conservation International	Mr. Borwen Sayon, Social Agreement and Partnership Manager Tel: +23177769283	Mr Sayon explained that Liberia as a country needs to ensure land use plan is developed before large-scale concessions are allocated. He also explained that CI has not worked in that specific landscape and therefore unable to provide any useful data or recommendation prior to the field assessment. He also advised that the team ensures the assessment is robust so as to avoid issues such as those at Butaw.
03/07/2013	Fauna & Flora International	Dr. Nouhou Ms Janet Kerkulah Mr Shadrack Tel: +231886691964	The FFI team’s main concerns were that oil palm in the area will further contribute to fragmentation of the remaining forest cover in the landscape. They believe that the best approach would have been for a Landuse plan to be completed so that appropriate places could be identified for palm plantations. Nevertheless, FFI is committed to engage to ensure the oil palm development is not carried out at the detriment of conservation and sustainable landuse. The team did not have any concerns on the assessment methodology
03/07/2013	The Lands Commission	Dr. Cecil T. O. Brandy, Chairman of Lands Commission Mr Tom-Wesley Korkpor (special Assistant to Chairman	The Chairman of the Commission explained that the Land Policy has been finalised and adopted by the government of Liberia and that the government is now working on legislations to support the policy. The Commissioner advised that GVL should sign separate MoU with each clan that have a share of land in the concession. Most importantly, GVL needs to make sure those Clans have deeds over their lands after the MoU has been signed to make this legally authentic.
03/06/2013	The Forestry Development Authority	Mr Edward S. Kamara Mr Whymah M. Goyanvator Mr McCarthy B Sehwhy Mr Konikay A. Nimley	The FDA team explained that there is the potential that the proposed oil palm concession overlaps with logging concession but this can only be ascertain after the concession map is overlaid on forest concessions in the area. The FDA also concerned that although the proposed area appears to be degraded, converting that area to oil palm will put pressure in terms of demand for farmlands on the available patches of forest in the area and therefore advised the team to be aware of this during the assessment

Summary of assessment findings (for SEI assessment)

Summary of key findings in respect of socio-economic impacts to country, region, local and emergent communities

The major findings of the socio-economic study were that the proposed oil palm plantation development project will contribute to positive socio-economic development of towns and villages in the landscape.

Positive impacts and benefits are expected to include:

- Transfer of modern technology in the area of palm establishment and production to local workers by expatriates;
- The smallholders' scheme could have a highly beneficial impact on the surrounding villages and the entire district. The scheme could encourage and reinforce the local villagers' farming practices, as well as establish a local skills-base for oil palm harvesting and palm oil production;
- Employment in the area and priority employment to citizens and especially women;
- Availability of modern housing for employees at no expense to them;
- Clinic / health services to employees and communities;
- School for employee dependents, and where capacity, community dependents;
- Scholarships, sponsorships, career development opportunities, management potential;
- Individual farmers may allow active farms to be converted to oil palm on payment of MoA compensation rates, future farm areas for communities have been agreed and enclaved, protecting their future;
- Improvements in community infrastructure and emergence of industry, support services (eg repair shops, banks, cellular services);
- Burial grounds of local communities will be maintained and management as a result of HCV management and monitoring;

Potential downsides and risks are expected to include:

- Influx of job seekers, increase in competition for jobs, hunting and mining, pressure on farming and other local resources;
- Agricultural development changes livelihoods and the communities will evolve over time and can affect social stability and traditional culture;
- Air quality and water quality in some creeks may be temporarily affected as land preparation activities generate dust and turbidity. These should be minimal due to buffer zones along rivers, but if there are impacts, these are expected to settle quickly during the rain season and as regrowth occur. GVL will install or refurbish wells where there are such impacts;
- Use of fertilizers and chemicals if not well managed can lead to temporary impacts in the communities;
- In oil palm plantations, construction of roads (or other infrastructure related to traffic, such as bridges or drains) on bare soil, significantly increase soil erosion due to poor implementation and / or improper construction techniques;
- In view of the influence of drainage on the site, the risk of erosion of trails laid out across rivers is even more significant. The opening up of roads will facilitate access for poachers to areas potentially rich in species of large bodied mammals;
- The risk of trapping by wire (traditional hunting method for collecting game regardless of species or selective sorting) and hunting with firearms remains a potentially significant impact on wildlife;
- Accidents and injuries may also result from the use and handling of equipment and machinery in the plantation
- Community access to the proposed area for the purpose of collecting NTFP, hunting, fishing and agriculture production will be restricted.
- The possibility of introduction of communicable diseases from workers to workers who will be housed at the same camp sites, but of course this will be minimize as a result of the clinic and health center;

- Food security in the project area may be exacerbated since close by land which was previously used for growing crops, will be used for the oil palm plantation. Farmers will have to extend to areas that may be farther for farming purpose as population increase. This could be a major issue if the necessary measures are not taken to ensure sustainable agriculture farming practices in the area.

Summary of key findings in respect of biophysical impacts

The key findings of the environmental impact assessment in respects to negative biophysical impacts are as follows:

- The potential loss of 'natural vegetation types', namely pockets of secondary forests, riparian vegetation and wetlands in favor of monoculture palm plantation;
- Loss of fauna including some species of conservation concern;
- Potential for the temporary pollution of streams and creeks during land clearing and operation (use of fertilizers, pesticides and chemicals);
- Potential for air quality deterioration (particulate emissions) during the land clearing phase;
- Soil erosion due to vegetation clearing and soil exposure;

The impacts risks and challenges associated with the project have been identified, and recommendations proposed to address them. These recommendations include: the establishment of riparian buffer zones and biodiversity plots; wildlife conservation awareness; phasing of oil palm development; adequate planning and management for the use of inorganic fertilizers; exclusion of high erosion risks areas (areas having gradient of 25% or more)

A significant portion of the proposed oil palm plantation area is heavily degraded land having been previously cultivated by local inhabitants using traditional slash and burn methods that have proved to be inefficient. It is envisaged that these areas will be utilized more effectively with well-planned agricultural programs during the project. The protection of riparian habitats and other areas of high conservation value under the project regime will enhance these values and contribute to better ecosystem services that might not be delivered under traditional farming practices.

Issues raised by stakeholders and assessors' comments on each issue

All the landowning communities consulted during this assessment generally believe that the proposed Tarjuowon oil palm plantation project will contribute to the socio-economic development of the area and therefore embrace the project. They were however, concerned that the proposed project could impact negatively on their traditional conservation areas and other resources such as watersheds, riparian vegetation and sacred sites.

In response to the issues raised by the communities, the assessment team explained that the company is committed to implementing the RSPO requirements which include best management practices for the protection of HCVs such as social and environmental conservation values and that all the areas identified with them as HCVs will be excluded from conversion activities. It was explained that the company will consult and agree with them on an appropriate HCV management areas required for the traditional conservation areas before any conversion activities start.

The Table.4 below details the stakeholders consulted, comments or concerns raised and the HCV assessors' response.

Table 4: Stakeholders consulted, comments raised and assessors' response

Date of consultation	Organisation/ Institution and contact	Comments and contributions raised	Assessors response
June to October 2013	Local communities in the proposed development area	The local communities were excited of the GVL oil palm project because they believe the project will bring development in the area. However, almost all of them were concerned about the potential negative impact of the project on their sacred sites, compensations for crops that will be affected, potential displacement of communities and people and impacts on water bodies	The assessment team explained to the communities that GVL would like to develop the land in line with Liberian legal requirements and those of the RSPO and that ESIA and HCV assessments are intended to identify all the potential negative impact and appropriate solutions in collaboration with them so that those potential impacts are avoided or eliminated. It was also explained that GVL has committed not to displace communities and people in their oil palm development programme.
09/10/2013	Mr. Lawrence Bloh Tel:+231886141871Sin oe County Human and Natural Resources Rights Movement	Mr Bloh advised that unlike what happened at Butaw, his organisation expects that all the impact assessment are completed before land preparation commences. He also advised the team to ensure all communities' sacred sites are identified and mapped	The assessment team explained that GVL has committed itself to the RSPO requirements and therefore will ensure the assessment and the 30 day-consultation is completed before any land preparation commences.
09/10/2013	Cephus Nyanwlah, SAMFU	Mr Cephus Nyanwlah raised concerns about inadequate understanding of local people about implications of the oil palm project and advised that the assessment team through the assessment process, educate and provide information to the local population who may be affected by the project.	The team informed Mr Nyanwlah that the assessment team has already provided much information to the communities and will continue to do that throughout the assessment process. The team also explained that the concerns will be passed on to GVL who will continue the education and information dissemination beyond the assessment period.
29/06/2013	Mr. Paul Chea, Tarjuowon District Superintendent and the District government officials	They advised that the team meets all the communities to explain the project and solicit their opinion and perception on the project. The officials enquired whether GVL will displace people and communities and also what will be the source of water for the communities should GVL destroy water bodies that are sources of water for the people? The officials explained that the communities are interested in smallholder scheme and that they would like to know whether GVL is in a position to implement smallholder scheme for the people.	The team explained to the District officials that GVL does not intend to displace communities in people and that the communities themselves should enquire this from the company. The team also explained that GVL will be expected to implement all the ESIA and HCV recommendations during the operations to ensure all water bodies are protected. The team asked the officials to contact GVL on information on the company's plans for smallholder/outgrower scheme.

Summary of assessment findings (for HCV Assessments)











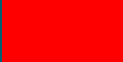
Overall HCV identification and proposed measures to maintain and enhance those identified.

Table 5 below gives a summary of HCVs present, potentially present or absent in the Tarjuowon proposed development area. The HCVs have been identified separately for the proposed development area. The status of HCVs identified has been colour coded red, yellow and green.

Key

Legend		
Status of HCVs:		
	Absent	
		
	Potentially present	Present




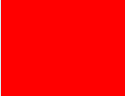
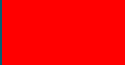

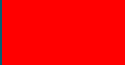
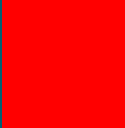






Table 5: Tabular Presentation of HCVs present in the Tarjuowon proposed development area.

HCV	Description	Present	Potentially present	Absent
HCV1.1	Protected areas			
HCV 1.2	Concentrations of rare, threatened or endangered species			
HCV 1.3	Concentration of endemic species			
HCV 1.4	Seasonal concentrations of species			
HCV 2	Large landscape level forests			
HCV 3	Rare, threatened or endangered ecosystems			
HCV 4.1	Forest areas critical to water catchments			
HCV 4.2	Forest areas critical to erosion control			
HCV 4.3	Forest areas providing natural barriers to destructive fire			
HCV 5	Forest areas fundamental to meeting basic needs of local communities			
HCV 6	Forest areas critical to local communities traditional cultural identity			

Proposed measures to enhance or maintain the values

HCV Management

In order for GVL to meet the RSPO certification requirements particularly in areas related to the NPP, it is crucial that the company implements the recommendations described in this report. To ensure that the field operations follow the steps provided in this report (and also listed in the table below), GVL should designate a responsibility for the monitoring of the field implementation of the measures for protecting and maintaining HCVs in the proposed development area. This person should be given the authority, time and resources to operate and to train staff properly, prepare robust Standard Operating Procedures (SOPs) including recommendations contained in the detailed HCV report and to organise and to field activities that protect the HCVs before the conversion operations, and to monitor them in the field.

Legend					
Actions to be implemented:					
	Before conversion		During conversion		After planting
Objective	HCV ref	Action required	Timeline	Monitoring measures/expected results	
<u>Maintaining water quality and the HCVs they support</u>					
Protection of rivers	4.1	Buffering of water bodies Water bodies in the proposed development areas serve as sources of water for most host communities in the area and are therefore classified as HCV 4.1		Set aside buffer zones included in GIS database as HCV 4.1	
	ALL	Accurate mapping of all HCVs and their management areas in the proposed development areas should be carried out including mapping of steep slopes.		Availability of accurate maps of all HCVs management areas	
	ALL	Designation of a responsible person for all “HCVs” to provide training and ensuring that field workers adhere to management recommendations for HCV areas			
	1.2,1.4, 4.1	Workers and staff responsible for HCV delineate the appropriate buffer zones for all categories of water bodies		Measure river width/buffer zone width Buffer zones included in GIS database	
Protection of rivers	1.2,1.4, 4.1	Land preparation teams are trained to respect buffer zones		Evidence of training and understanding of buffer zones management and monitoring recommendations and requirements Buffer zones are respected	
		Land preparation teams are provided with maps of areas identified as protected areas			
		Land preparation teams are trained to carry out land conversion laterally to buffer zones to avoid having it destroyed by falling trees and shrubs		No impact on buffer zones	
	ALL	Regular monitoring to ensure that buffer zones requirements are respected If buffer zones are not respected, corrective actions must be taken immediately		Corrective actions record	
		Bridges and means of crossing rivers must be pre-planned			
		Bridges and means of crossing rivers must be done according to recognised best practices		Check erosion around bridges	
Erosion control	ALL	HCV or environmental management field team are trained to implement and respect erosion control recommendations		Training records and proof of application of required measures	

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	1.2,1.4, 4.1, 4.2	Areas with slopes above 20 degrees are excluded from conversion		Areas above 20 degrees are delineated on the ground and recorded in GIS database and on maps
		Areas with slopes between 15 and 20 degrees are identified and mapped. Such areas may be planted on condition that erosion control measures such as terracing is implemented.		Area delineated on the ground, recorded in GIS database and appropriately mapped.
		All areas with slopes categories are mapped in GIS database		GIS database – Slopes map
		Conversion team/Road construction team trained to implement erosion control measures		Training records and application of measures in practice
		Roads are planned prior to conversion to avoid being perpendicular to slopes and to avoid fragile soils		Road map – Contour map
		SOP for terracing is completed before conversion		Records on SOP
		Cleared vegetation is windrowed		Evidence of windrowed in the field
		Road soak-ways are built depending on downslope of road being constructed		Frequency/slope
		Silt pits are built to avoid sediments being discharges into rivers		
Erosion control	1.2,1.4, 4.1	Appropriate leguminous cover crops and native tree species that do not have invasive properties are selected for vegetating denuded buffer zones to avoid invasiveness		GVL should justify the choice of tree species and leguminous crop
		Where appropriate, cover crops are planted immediately after conversion to avoid erosion of soils during the first rains		Date of planting
Monitoring of water quality	1.2,1.4, 4.1	Annual water quality testing for major rivers and all other rivers that are sources of water for host communities		Test results
		Regular meetings with the host communities on control and prevention of water pollution		Minutes of meetings
		SOP in place for Corrective/Preventive action to be taken in case of degradation of water quality		Documented SOP
Respect and Maintain local populations basic needs				
Implementing FPIC	5 and 6	GVL to continue its FPIC process and ensure written consent of communities are secured prior to land conversion		SOP
		Discuss and negotiate with the host communities, appropriate consultation processes including frequency of community meetings		Community representative list
		Define conflict resolution procedures with local communities		SOP
		Identify appropriate management areas for all community forests identified and delineate those areas		Social HCV areas included in GIS data base and mapped

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		Negotiate management decisions for HCV areas following the company's FPIC procedures		Signed agreement with community/concerned people
Monitoring results		Regular (twice a year at the beginning of the project, minimum once a year after relation with communities are strengthened) evaluation of changes in communities needs		Minutes of meetings
<u>Fauna conservation program</u>				
Monitoring of fauna species and populations in the protected areas at the western boundaries of the proposed development area	1.2	Periodic fauna survey of the conservation area in the western boundaries of the proposed development area		Survey report
	1.2	Monitoring the population and dynamics of the Jentink's duiker and the recommended protected area		Monitoring reports
	1.2	1. Delineation of the protected area at the western boundary of the proposed development area on the ground prior to land conversion		Survey report – GIS database and maps
		Plan workers quarters/housing if possible in or closed to existing city/villages to reduce the impact of external worker hunting on wildlife		Workers quarters – GIS database
		GVL shall implement community education programme on hunting particularly hunting of RTEs and during "no hunting seasons" as stipulated by law		Records of any educational or any other programme undertaken to address issues with hunting Records of community educations conducted.
		Develop and implement "No hunting" policy for employees including the use of snares and trapping for hunting		Company policy
		GVL shall strive to prohibit hunting within its proposed development areas		Company policy
<u>Conversion operation</u>				
	N/A	Land conversion operations shall start during the dry season unless there are compelling reasons to do so during a rainy season		Records on starting dates for operations
	1.2	Land conversion should start away from the protected areas and moving gradually towards those areas		
<u>Scientific Research</u>				
	N/A	Development of partnership with relevant national institutions and non-governmental organisations		
<u>Implement recommendation in the field</u>				
	N/A	Designation of a responsible person for monitoring the field implementations of HCV management recommendations		

Documentation showing the Obtained Free, Prior and Informed Consent of any indigenous people affected by the development of the proposed development area

As indicated earlier, the landowning communities have confirmed during the communities' consultation process that they have offered to give their land to GVL for the proposed development. However, in order for GVL to ensure that the local communities, who have traditional or custodial ownership or rights over the lands for the proposed Tarjuowon development area have given their consent for the advancement of the proposed plantation, GVL initiated an FPIC process which was at an advanced stage at the time of this assessment. A number of documents that are related to the FPIC process which were reviewed by the assessment team include:

- **Community participatory maps** – The assessment team were provided with copies of both the hand drawn maps by the communities and the GIS generated community maps, each duly signed by representatives of each community. These maps were discussed with the various communities who confirmed having signed the maps.
- **Letter of invitation** from the District communities to GVL dated 6 July 2013
- **Memorandum of Understanding/Social agreement.** This was signed by key communities and over 600 Tarjuowon citizen on 9 November 2013.

HCV Toolkits used for this assessment

In conducting this assessment, the team used the following toolkit:

- The Global HCV Toolkit (2003)
- The Draft Liberia HCV Toolkit (2012)
- Proforest Guidance on assessment and management of HCV

Decision on HCV status and related mapping

HCV	Findings	Spatial presence	Status of mapping
1.2	Present in the proposed area	Few signs of African buffalos, Bongo and Royal antelope that are protected by law in Liberia were sighted in the proposed development area. The signs of these species were scattered but mainly in the mid to western boundaries of the proposed development area	Specific locations where signs of species were observed have been mapped
1.3	Potentially present	Few signs of regionally endemic bird and fauna species were sighted at different parts of the proposed development area (diffused)	Where signs of these species were observed have been mapped
1.4	Potentially present	No observation during the field survey.	No mapped
4.1	Present	All rivers in the proposed development areas	Mapped
4.2	Present	Various but diffused in the two proposed development area	Not mapped
5	Present	Assorted and diffused	Not mapped
6	Present in the proposed area	Several HCV 6 almost all the communities. These have been duly identified with the communities and appropriately mapped	Mapped

Internal Responsibility

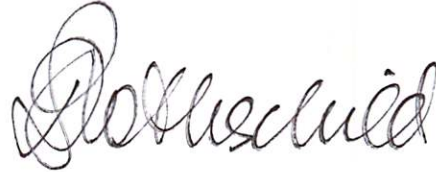
Formal signing off by assessors and company

Signed on behalf of HCV assessors

Handwritten signature of Abraham Baffoe in black ink.

Abraham Baffoe
HCV assessment team leader

Signed on behalf of GVL

Handwritten signature of David Rothschild in black ink.

David Rothschild
GVL Director