Roundtable on Sustainable Palm Oil

New Planting Procedures
Summary Report of Assessments

Biase Plantations Limited

(Ibiae Estate)

Biase Local Government Area
Cross River State
Nigeria

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1. Executive Summary

1.1. Summary of Assessment Findings

Wilmar International is a major agribusiness group and one of the leading global producers, processors and merchandisers of oil palm and lauric oils. The company operates in more than 20 countries located in 4 continents across the world. Wilmar operates in the entire value chain of the agricultural commodity's production and processing; from growing, processing, transportation, and branding to merchandising. As a global leader in the agricultural commodities business, Wilmar is committed to ensuring that its operations meet international best practices as well as social and environmental sustainability requirements.

As part of the company's strategy to expand its palm oil production business in Africa, Wilmar sets up Biase Plantations Limited (BPL) a fully owned subsidiary of Wilmar Africa Investment Ltd which in turn is a direct wholly owned subsidiary of Wilmar International. Biase Plantations Ltd was fully registered in the Cross River State of Nigeria and issued with a Certificate of incorporation under the Nigeria's Companies and Allied Matters Act of 1990 in 10th February 2011. The company in November 2011 acquired three Estates, Biase, Calaro and Ibiae with a total land area of 19,173 ha for oil palm plantations development. The Estates are located in the Biase Local Government Area of the Cross River State of Nigeria. These estates have long been earmarked for agricultural activities and were initially acquired by the State Government for plantations development in the early 1960s. Although the three Estates were acquired by the state government for plantations development, only Calaro and about half of the Ibiae Estates (2,540 ha) were planted with oil palm in the 1960s. The unplanted areas of Ibiae (3,054 ha) consist largely of bush fallows, farm lands and degraded woodlands as well as patches of old and unmanaged oil palm plantations. Although there are no communities on the Estate besides the ex-oil palm plantation workers who reside at the old workers' camp, a number of local farmers are actively using some parts of the Ibiae Estate for subsistence farming activities.

As a member of the Roundtable on Sustainable Palm Oil (RSPO), Wilmar and all its subsidiaries including Biase Plantations Ltd are committed to ensuring that their operations comply with the RSPO certification requirements including the New Planting Procedure (NPP). Because the entire Calaro estate was fully planted in 1960's, the NPP does not apply to this Estate and the old plantings of Ibiae estate. For the remaining two other estates, Biase Plantations Ltd engaged Proforest, a RSPO approved consultant to conduct a High Conservation Value (HCV) assessment for the Biase and Ibiae Estates and a Social Impact (SI) assessment for all three areas. This report presents a brief summary and conclusions of

the HCV and social impact assessments for the Ibiae Estate only. New planting Procedure for Biase estate will be conducted separately.

Primary forests in the assessment area

There are no primary forests within the Estate. The Estate was originally earmarked for agriculture over 50 years ago and has since been used for farming activities – both commercial oil palm plantation and to a lesser extent subsistence farming in areas closer to communities. Information from the Cross River State Forestry Commission and the observations during the field investigation of this assessment suggest that the Estate is mainly farmland with isolated stands of trees exploited by illegal chainsaw operators. However, the eastern boundary of the Estate contains areas of wooded vegetation which this assessment has recommended should be excluded from conversion given the current context in Nigeria, where almost all forest cover has been lost. This wooded area in Ibiae could thus be a very important forest with the potential to regenerate and become an important ecosystem and habitat for myriad species of fauna.

For Ibiae estate the result of the identification of HCV study showed that there are two types of HCV values, HCV 4 and HCV 5 in the estate. The total recommended strict reserve areas for HCV identified is about 500.16 hectares or 9% of total study area of 5,594 Ha. HCV element 4 was the most dominant HCV which accommodate water sources for daily use, water catchment areas, flood control and erosion areas and firebreaks. There are also areas of HCV 5 that is required to meet the basic needs of local communities especially their water resources for daily use. Both HCV 4 and 5 are found with the riparian buffers of natural water courses that run across the project.

Areas of peat soils

Reconnaissance survey by a renowned soil specialist (PARAM Agricultural Soil Surveys) confirmed that there are no areas of peat soil in the assessment area.

Local people's lands

There is basically *no local people's land within the boundaries of the Estate* although local people have in the past been using parts of the abandoned Estate for farming. Such use rights have been traditionally recognized by both local government and Biase Plantations Ltd. The privatization council that acted on behalf of the local government have appointed an external consultant that have worked out a fair compensation rates to the local farmers who uses part of the greenfield. Upon final approval of the agreed rates of compensation by the Privatization

council, the payment to individuals who have farmed the area in the greenfield will be implemented by the local government.

For this purpose the Ibiae Estate through Biase Plantation Limited have paid the consultation fees on 24 May 2012 to the four community chiefs of Ehom, Akpet, Idoma and Betem. The traditional fees were also paid on the same day to the community chief of Ehom, Idoma and Betem. Payment to Akpet will be made once the Privatization council has given the directive to proceed. The privatization council is the body representing the local government to negotiate with the respective council of chiefs that represent the community. The receipt of the consultation fees and traditional rites is a significant event that signifies that the communities have accepted the company to operate in their land. This is the social license that is required for the company to operate.

Taking the opportunity of the presence of the Council of Chief, the company has conducted a meeting and consultations with the 4 main communities of Betem, Idoma, Ehom and Akpet on the company policy, the oil palm development plan in the area, the positive and negative impact of the oil palm industry and its mitigation plan, High conservation value areas and its protections and management and Social Impact assessment. A more detailed round of consultations in regards to grievance and complaint procedures, public information, community relations will be progressively presented to the respective community in due course.

The forestry commission has also made an inspection visit to Calaro estates and Ibiae estates and given the approval on 27 Aug 2012 to fell the Old Palm Trees in the two plantations. Biase Plantations Limited has been advised to notify the Forestry Commission once Ibiae Estate is ready to commence land preparation for the balance of green field areas.

Handing over of Community Land to Local Government

The Privatization Council that is representing the local government has met with the Council of Chiefs many times over. On 9 Aug 2011, the privatization council finally concluded the meeting and the inputs of the local communities were included in the fundamental terms agreements. The fundamental terms agreement and together with the deed of conveyance executed by the council will constitute all the title documents prior to the issuance of the Certificate of Occupancy as the final title document. The Fundamental terms agreement and Deed of conveyance was signed in May 2012. The Fundamental documents will stipulate the fees for consultations and traditional rites and also that the company need to pay the annual royalty

fees for using the land at a rate determined by the State Agriculture Ministry. All these payment will be paid directly to the Chieftains in the presence of the Council of Chiefs and as reported earlier has been done on 24 May 2012.

From the social impact study it can be concluded that the proposed agro-industrial oil palm plantation development will create employment and other business opportunities for the host communities and the general population in the project catchment area and beyond. The intervention will also maximize the economic potential of the land which is currently tied up with old-aged and low production oil palm plantations, thus currently denying the landlord communities and state government to realize the full economic potential of the land. This notwithstanding, implementation of the proposed intervention will potentially cause environmental and social impacts such as those detailed in this report and are generally associated with large-scale industrial oil palm plantations. This may include loss of biodiversity and their habitats, loss of riparian vegetation and local population Non Timber forest Product (NTFP) collection areas. The proposed project may also have significant impact on agricultural lands for the production of food crops which when occur could jeopardize the food security potential of the area and possible high prices of food crops. However, the expected impact on agricultural lands and food security is expected to be very low since most landlord communities in the area intimated that their farmlands are located outside of the Estates. Given that the proposed intervention would have several positive impacts which are very much needed for the development of the area in particular and for the Cross River State in general, it is recommended that authorities consider the overall cumulative impacts of the proposed intervention on the population of the host communities as well as the state and the general Nigerian economies.

From the Environmental Impact study conducted by Ibara Environs Consultants, it can be concluded that there is potential impact by the presence of Ibiae estates towards the environmental impact to the area. The possible environmental impact that can occur in this project can be divided into 4 phases of its development namely, Site preparation/Construction phase, Palm oil base/Company phase, Operation & Maintenance phase and Decommissioning phase. These impact can be broadly summarized as increased soil and vegetative cover disturbance, existence of solid and liquid effluents, reduction in water quality, reduction in air quality and increased air emission regard with combustion of all engines, increased in noise level, increased in surface run-off, increased in soil erosion and sedimentation, increased in soil fertility and finally potential for open burning.

1.2. Assessment result

The social and environmental impact assessments were detail, comprehensive and professionally carried out. The management plans have included the findings of the EIA, HCV and SIA assessments by consultants accredited and approved by the RSPO – Proforest (and for EIA, a consultant approved by the government – Ibara Environs Consultants). Biase Plantations Ltd has adhered to the RSPO New Planting Procedures and has documented the assessments and plans according to the RSPO templates issued in May 2011. SGS auditors conducted desktop study, verified all the related documents and conducted site visit from 24th to 25th September 2012. SGS Auditor confirmed that the assessment and plan are comprehensive, professional and compliant to the RSPO principles, criteria and indicators.

2. Scope of the SEIA and HCV Assessments

2.1. Organizational Information / Contact Person

Contacts details of the company are as follows:

Company Name:	Biase Plantations Limited
Address:	134 MCC Road, Calabar Sub District: Biase Local Government Area District: Cross River State Country: Nigeria
Contact Person:	Mr. Lee Kok Seng / Mr. Paul Odey
Telephone:	+2348037413050 (Mr Paul)
Email:	leeks@wilmar.co.id;
Capitals Status:	Foreign Investment Company
Status Business Land:	Country Lease
Total Area:	5,594 ha (Ibiae Estate)

2.2. Reference Documents

2.2.1. Lists of Reports

i. Social Impact Assessment of the Biase-Calaro-Ibiae oil palm Estates for Biase Plantations Ltd, Cross River State, Nigeria. April 2012, by Proforest.
ii. Assessment of High Conservation Values in Wilmar's Biase and Ibiae Estates, Biase Plantations Ltd, Cross River State, Nigeria. May 2012, by Proforest.
iii. Environmental Impact Assessment (EIA) of Biase/Ibiae oil palm plantations, Biase Plantations Ltd, Nigeria. May 2012, by Ibara Environs Consultants.
iv. Permit register.
v. Land release and compensation record from local government/privatization council.
vi. Minutes of Meetings with Communities on Public awareness of the Project (FPIC- Free

Prior and Informed Consent).

vii. Soil and Feasibility Report.

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

Legal documents

The list of legal documents reviewed includes:

- The Cross River State of Nigeria Forestry Commission Law 2010
- National Environmental (Control of Bush, Forest Fires and Open Burning) Regulations, 2011
- National Environmental (Surface and Groundwater Quality Control) Regulations, 2011
- National Environmental (Watershed, Mountainous, Hilly and Catchment Areas) Regulations, 2009
- Federal Environmental Protection Agency Act
- National Biodiversity Strategy and Action Plan
- National Minimum Wage (Amendment) Act of 2000
- National Policy on Environment 1999
- National Environmental (Sanitation and Wastes Control) Regulations 2009
- The National Environmental (Watershed, Hilly, Mountainous and Catchment Areas) Regulations, 2009
- National Land Use Act of 1978

Regulatory permits and property deeds

The regulatory permits reviewed as part of this assessment includes:

Table 1. Relevant legal documents, regulatory permits and property deeds of BPL

No.	Permits	Remarks
1	Fundamental Agreement	Cross river state council on privatization and Biase Plantations Ltd. Dated May 2012
2	Deeds of Conveyance	Cross river state council on privatization and Biase Plantations Ltd. Dated May 2012
3	Forestry Commission	Forestry Commission Dated August 2012
4	Environmental Impact Assessment (EIA) of Biase/Ibiae oil palm plantations	Final review by Federal Government of Nigeria

2.3 Location maps – both at landscape level and property level

Figure 1. Map of Western Africa with location of Nigeria and Cross River State

2.3.1. Location of the plantation (Ibiae Estate) in Cross River State, Nigeria

The Ibiae Estate is located in the Biase Local Government Area in the Southern Senatorial District of the Cross River State, South of Akpet, capital of the Biase LGA. Ibiae lies approximately 82 kilometres north of Calabar on the Calabar-Ikom highway, in the vicinity of the Cross River, with its easternmost edge at 5˚33'N and 8˚12'E (Figures 1, 2, 3). The Estate is surrounded by a number of small towns and villages including Idoma, Betem, Igbofia and Akpet Egbai (Figure 2).

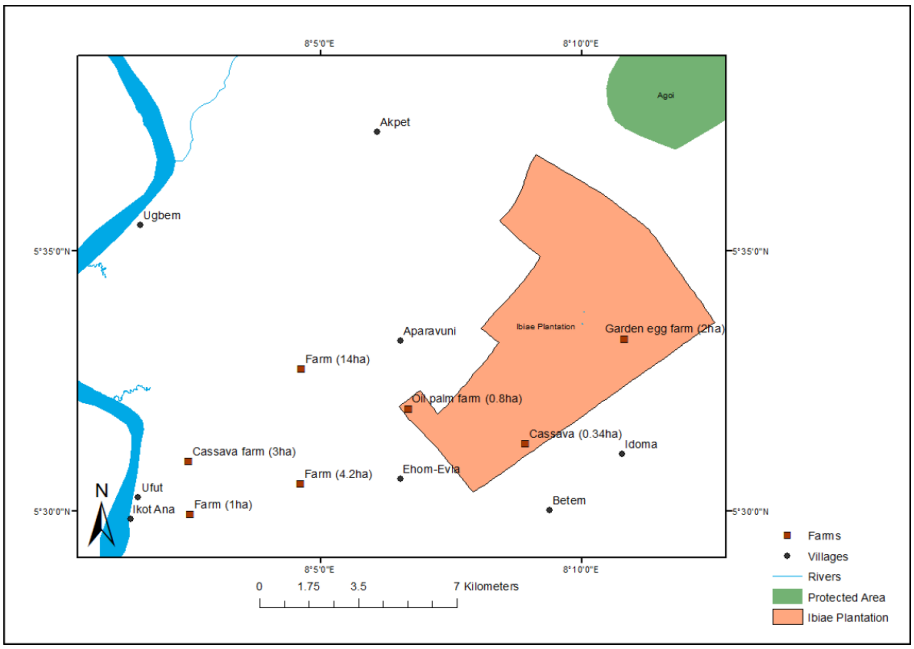


Figure 2. Map of the Ibiae Estate with locations of some of the farms identified in the field

2.3.2. Landscape map of Biase Plantations Limited (Ibiae Estate)

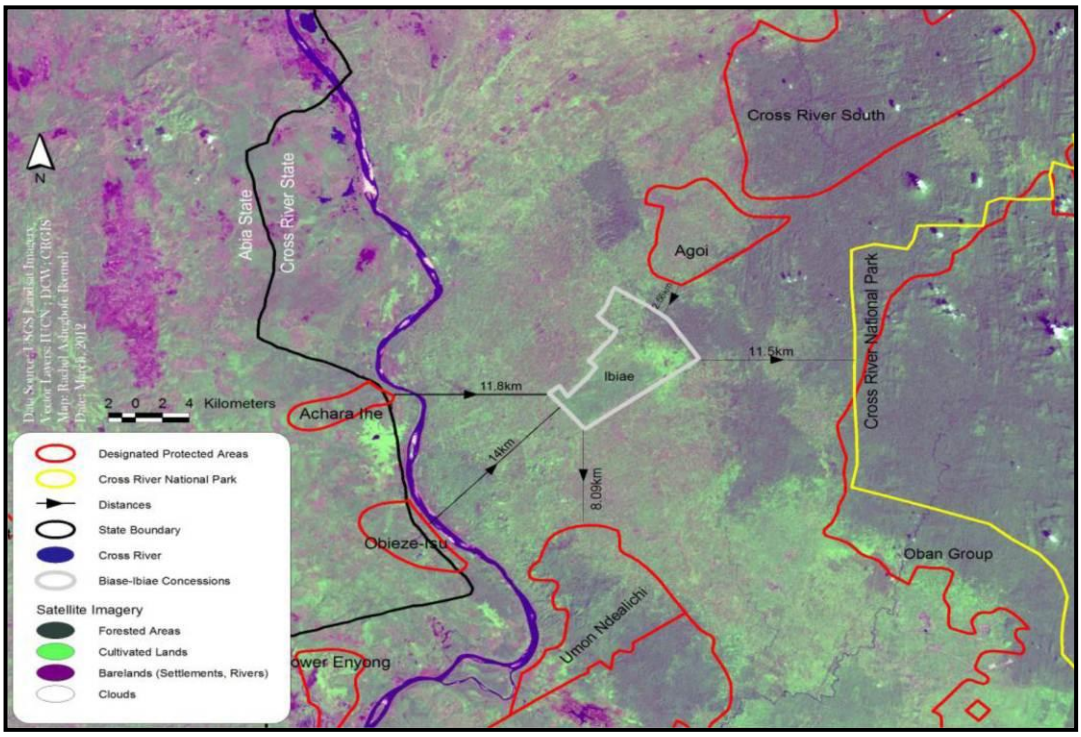


Figure 3. Map of the Ibiae Estate showing different protected areas in the landscape

2.3.3. Satellite Imagery of Biase Plantations Limited (Ibiae Estate)

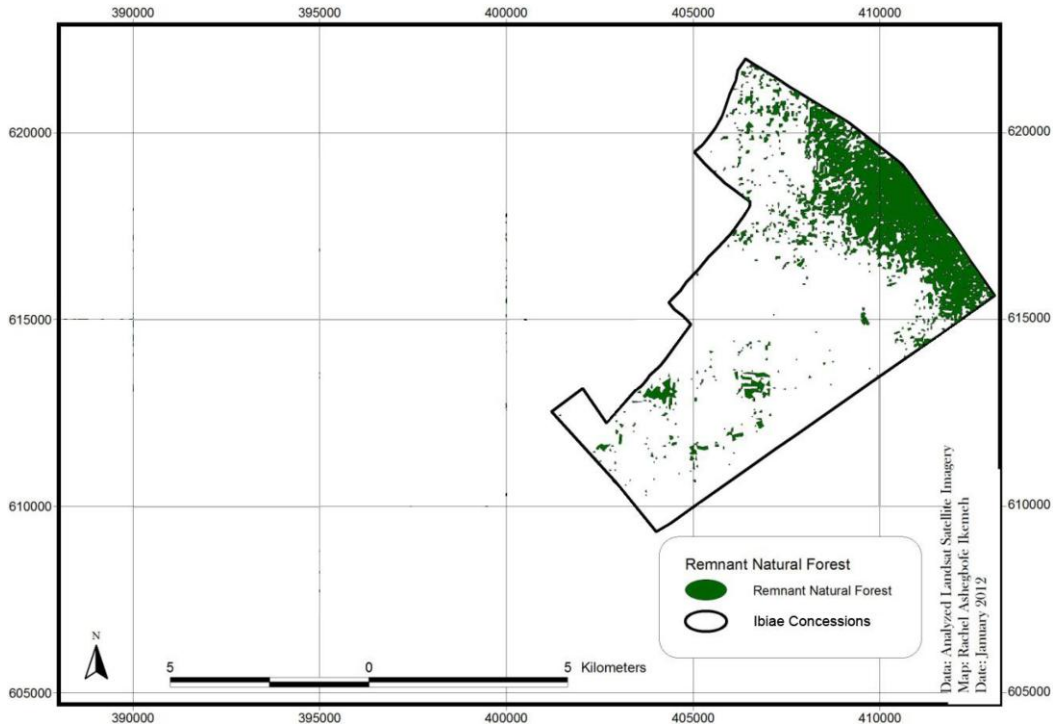


Figure 4. Satellite imagery of Ibiae Estate showing areas with forest cover

2.4. Area of new plantings and time-plan for new plantings

As defined by RSPO Procedure for New Planting Guidance document dated 12 May 2010, only the unplanted portion of the 3,054 ha or 55% of the total area of Ibiae estate of 5,594 ha will undergo the new planting procedure.

The balance of the green fields will be developed once the New Planting Procedure (NPP) is approved. The company intends to plant all the available areas within the Estate with oil palm except the identified HCV management areas and recommended buffer zone limits for water bodies.

3. Assessment Process and Procedures

3.1. HCV and Social Environmental Impact Assessors with their credentials

The HCV assessment was carried out by a team of 12 specialists and 3 technicians with diverse academic and professional background with wide range of experience appropriate to the task. The team consisted of professionals from various fields including ecology, botany, sociology, ornithology, mammalogy, forestry and GIS mapping. The list of specialist members of the team and their roles in the assessment is presented in Table 2 below.

Table 2: Assessment team members and their roles in the assessment

Name	Organization	Role
Abraham Baffoe	Proforest	Assessment team leader, RSPO approved HCV assessment team leader
Isaac Abban-Mensah	Proforest	Conservation planning specialist, RSPO approved HCV assessor
James Olabi Odey	Development in Nigeria	Socio-economic study team leader
Rachel Ashegbofe Ikemeh	Independent Consultant	Biological survey team leader
Ashikem Akomaye	Independent Consultant	Flora survey team member
Joseph Ugbe	Independent Consultant	Fauna survey team member
Patrick Ekpeyong	Independent Consultant	Flora survey team member
Magnus Okoh	Development in Nigeria	Social survey team member
Amuyou Ushuki	Development in Nigeria	Social survey team member
Mabel Peters	Development in Nigeria	Social survey team member
Thomas Odama	Development in Nigeria	Social survey team member
Sunday Atakpa	Development in Nigeria	Social survey team member
Don Inyang	Unaffiliated	Field assistant flora survey
Fidelis Edeh	Unaffiliated	Field assistant fauna survey
Ana Ekpe	Unaffiliated	Field assistant flora survey

3.2. Assessment Methods used in the HCV and Social Environmental Impact Assessment

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

The assessment methodology followed three process steps. The first was the scoping visit carried out by Proforest to have first-hand information and overview of the nature of the vegetation in the area, main socio-economic issues, possible HCVs and the key areas that the field assessment had to focus on. The next 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 Estates acquisition documents and legal requirements that must be met. The third part, which was the main assessment, consisted largely of field assessments and surveys to identify the different types of HCVs present in the two Estates and a series of stakeholder and host communities' surveys and consultations. Below is a brief summary of the main activities that constituted the methodology used for this HCV and social impact assessments.

The scoping visit:

The objective of the scoping visit was to ascertain whether the Estate consists of or contains primary forests which are required to be precluded from conversion activities under the RSPO requirements. Though very brief, this process which included ground thruthing of the Estates and interactions with the host communities and other stakeholders was also helpful in designing the HCV and social impact assessment methodologies and the resources requirements for the full assessment.

Pre-assessment:

The objective of the pre-assessment was to gather all relevant information and data for review in order to identify HCVs and potential social risks and impacts that are likely to be present in the Estate or occur if the proposed project goes ahead. This approach was very useful as it enhanced decision making on what additional expertise the team needed for the field verification of HCVs and social surveys. It also allowed the team to get a better understanding of data gaps in terms of research and mapping requirements for the area which informed decisions on changes to the methodology. The draft methodology was finalized to be used for the field assessment after discussions with stakeholders, experts and members of the assessment team. The team used the pre-assessment to study all legal requirements and legal restrictions relating to industrial oil palm plantation development in the Cross River State. During the pre-assessment, the main guiding documents for this assessment which comprised the Global HCV Toolkit and Good Practice Guidelines for HCV assessment and management were studied and critically analyzed to help the team develop criteria and checklist for this

assessment.

Field assessment

In carrying out the field assessment for flora and fauna, base maps for the GIS were created using vector layer data for roads, perennial rivers, administrative boundaries from IUCN (International Union for Nature of Conservation) database and Digital Map of the World (DCW). Paper maps on the areas' relief were provided by the Cross River Geographical Information Systems (CRGIS) and cartographic maps from the land surveyors that demarcated the areas' boundaries were made available by Biase Plantations Ltd. A combination of satellite images of the study area was utilized for the survey; public-domain Google Earth imagery was initially used in planning for the survey. Thereafter, commercially available multi-spectral WORLDVIEW-2 satellite imagery with 0.5m resolution and acquisition date in 2010 was supplied by the Wilmar's GIS department and used directly to evaluate the study area and to determine the vegetation classes in the area. In addition, public-domain imageries from the United States Geological Survey (USGS) of the years between 1986 and 2003 were used to assess changes in forest cover over time and to determine the rate of change in the areas' forest cover. Flora and fauna data was collected using predetermined sampling lines. In order to ensure a fair coverage of the entire area of the Estate, 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 Estate area taking into consideration the size, shape and layout of the Estates. A total of seven recce lines spaced from each other by an average of 3.74 km were generated. The estimated total distance of track line covered was 52 km. The generated lines ran from a north-west to south-east direction. Data collection took place using these recce lines as guided reference and following a compass bearing in a straight line or deviating at an angle of a maximum of ±30˚ either side of lines (guided by the recce protocol, IUCN-SGA/WCS Africa programme monitoring protocol by Maisels *et al*., 2008).

The field data was then analyzed to identify the different biological or social HCVs present in the Estate. The assessment methodology was based on the understanding of what is contained in the Estate following the scoping visit and the first round of stakeholder consultations.

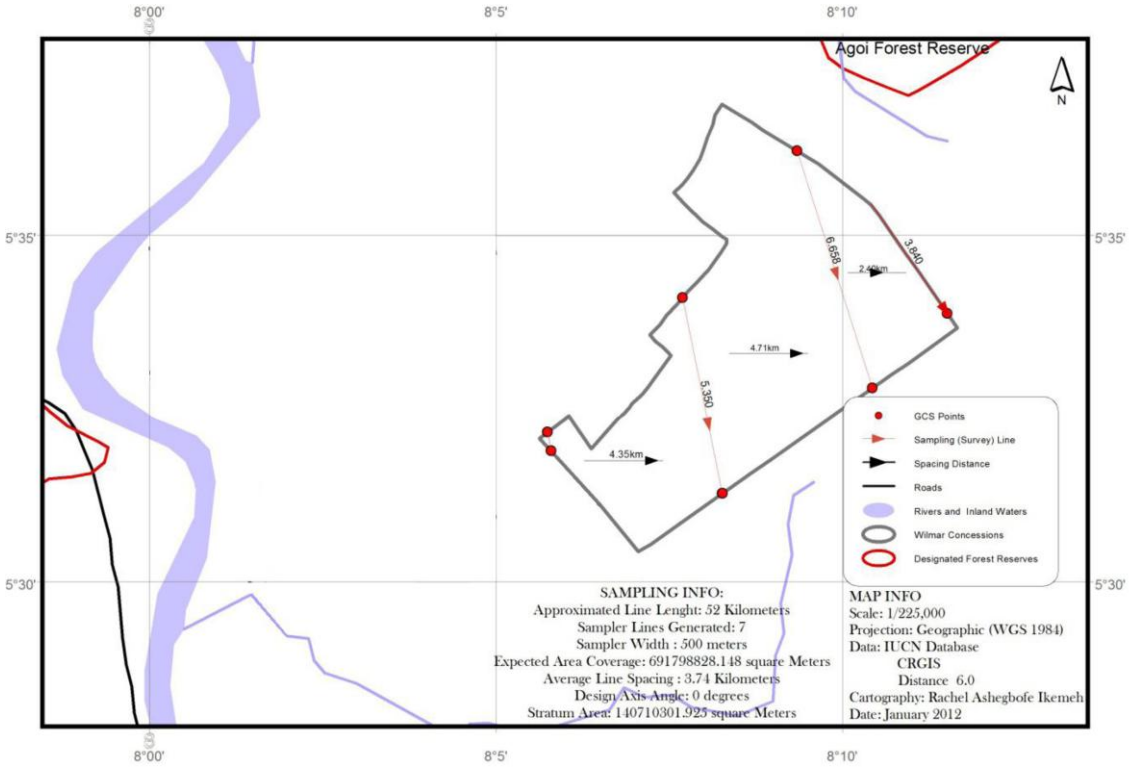


Figure 5. Map of Ibiae Estate showing transects for the flora and fauna survey

Botanical and fauna survey

Using the recce lines, spotters walked along the lines and recorded all trees and lianas above 20cm dbh, 5m from either side of the recce. Records of the tree species and their diameter at breast height (dbh) were taken. Additionally, any other features of conservation interest were recorded. Spotters looked out for and recorded fruiting trees, seed trees, hollow trees, etc. Additionally, records were taken of the vegetation sub-types, important habitat areas and other landmarks such as the presence of rocks, streams, swamps, etc. Evidence of human activities in the area such as logging tracks, signs of previous burnings, farms, stumps, snares and evidence of logging were also noted and recorded. Data gathered from the field was compared with satellite imagery to aid in a better interpretation of remotely sensed data. To get an idea of the regeneration taking place, sampling plots of 10 m x 10 m were laid after each 2 km on alternating sides of the recce lines. All tree regeneration less than 50cm in height was recorded. Additionally, descriptive information about the area was noted.

Spotters walked along the predefined tracks and recorded all signs of mammals and herpetofauna along the recce lines. Given that the survey design was only aimed at providing a qualitative description of species present, all fauna located opportunistically by both visual and acoustic encounters were also recorded. Additionally, indirect signs such as footprints,

nests, droppings, hair, feeding remains, etc were used to help identify the species present. The survey also recorded all signs of human presence in the areas (including the presence of traps, bullets, human footprints etc). Data was recorded in the field using codes adapted from Maisels et al. (2008). Observations in the field that could not be readily ascertained were photographed and described in detail for onward consultation with other specialists. Field walks were conducted simultaneously from dawn (from 07:00) until sunset (18:00) to record avifauna in the area. Records were based on visual identification using a pair of binoculars, vocalizations and opportunistic encounters.

Socio-economic and cultural survey

The HCV assessment was conducted concurrently with the social impact assessment. To prevent duplication of efforts, the SIA team was trained on the HCV concept, and data collection tools were designed to be able to also capture social HCVs in the area. The socio-economic and cultural surveys took place between December 2011 and March 2012 and covered all the 12 landlord communities. Data collection involved a series of household surveys, focus group discussions, participatory community mapping and town hall meetings.

The aim of these activities was to:

- To obtain some baseline information about the socio-economic dynamics of local communities, including information on demographics, livelihoods, household dependency on resources in the natural environment and a general description of the local economy.
- To obtain some information on resource tenure in the community and how that influences resource management.
- To identify all areas of High Conservation Values in the Estate together with the local communities and assess the threats posed to these HCVs as well as opportunities for their maintenance and possible enhancement

For each of the target communities, the socio-economic surveys began with a town hall meeting, followed with household surveys, focus group discussions and participatory mapping of resources. The town hall meetings brought together the community members for an introduction to the mission and a preliminary discussion on likely HCV and socio-cultural and traditional values that the BPL need to be aware of to ensure the development of an oil palm plantation does not unduly affect those values. The socio-economic part of this assessment was completed on 4th April 2012 at the Local Government Area Hall in Akamkpa with communities' forum where the team presented the assessment results and recommendations and solicited the local population's inputs before the report was finalized.

Household surveys

Given the paucity of information and data in the area, a household survey was carried out to generate population and characteristics of the households in the host communities. The surveys were done using a stratified random sampling approach. About 10% of households in the community were interviewed. For this study, a household was defined as a number of persons that may not necessarily live under the same roof, but share same means of livelihoods and respect the authority of a common head. Criteria for household selection were: ethnicity, migration status, gender of the household head, socioeconomic status as perceived by local team members and settlement quarters where the household resides. In preparation for household selection, the team created a sampling frame with a list of all householders in the landlord communities. The list of households created enabled the team select households for involvement in the household survey.

Focus group discussions

Discussions were held with different groups in the community to get their perspectives on the oil palm establishment, likely impacts on conservation and socio-cultural values and means of mitigating these impacts. The focus group discussions targeted Chiefs/elders, women and youth interest groups, community elites/opinion leaders (including clergy, NGOs and CBOs operating in the area), farmers, hunters and resource user groups as key informants. Participation in the FGDs was voluntary and based solely on interest. Initially, with the exception of the chiefs and elders group, the team considered setting a limit of 20 participants per FGD in the study communities. However, due to the interest from the local communities, this limit had to be removed to allow for greater participation and representation. While some FGDs (particularly chiefs and elders group) had 5-6 participants in some communities, the women's groups in some communities had over 40 participants. In carrying out the FGDs, participatory rural appraisal (PRA) techniques such as brainstorming and preference voting matrix were used.

Stakeholder consultation (stakeholders contacted, consultation notices and dates)

A series of stakeholder consultations involving wide range of stakeholders were carried out during the scoping visit through to the pre-assessment, the main assessment and after drafting of the assessment report. Each stage of the consultation process aimed at collecting specific information and data relevant for the assessment. The objective of the first round of stakeholder consultations was to inform them of the project and to solicit their inputs into the assessment methodology and the process. The second round of the consultations aimed at

informing them of the assessment findings and soliciting their comments and inputs into the recommendations for Biase Plantations Ltd.

Consultations with state institutions

Consultations with key government institutions responsible for land administration, natural resource management and environmental protection were made during the assessment process. The aim was to establish the formally designated land use of the Estate 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 Estate. Institutions consulted included the Forestry Commission, the Ministry of Agriculture, the Cross River Agricultural Development Programme and the Cross River Geographic Information System. Others included the Justice Ministry, the Ministry of Lands and Housing, and the Survey Department.

Consultations with experts and non-governmental organizations

Relevant stakeholders involved in natural resource management and planning as well as environmental and social NGOs in the Cross River State were consulted to obtain some information on key environmental and social issues that ought to be addressed during the assessment process. Organizations consulted included: Wildlife Conservation Society (WCS), Centre for Education, Research and Conservation of Primates and Nature (CERCOPAN), the NGO Coalition for the Environment (NGOCE), Drill Ranch, the Local Action on Climate Change, Concern Universal, and a number of independent consultants on agriculture and tenure within the region.

Consultations with local communities

In addition to the consultation with stakeholders, the assessment team also visited all relevant *landlord communities* who hold some form of traditional tenure over the lands in the Estate area. These are referred to here as *host communities*. The aim was to get an understanding of:

- The level of local communities' dependence on natural resources in the Estate area.
- Socio-cultural and religious values that are present in or linked to the Estate area
- 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 Estate area (if any).

The landlord communities consulted in relation to the Ibiae Estate were Idoma, Betem, Igbofa (Ehom) and Akpet Egbai (a group of villages consisting of Akpet Central, Akparavuni, Okwup-Eyere, Ibogo and Umai).

4. Summary of Assessment Findings

4.1. Social Environmental Impact Assessment

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

The key findings of the socio-economic study were that the proposed oil palm plantation development project will contribute to socio-economic development of the host communities in the landscape. Specific potential positive impacts include employment creation, improvement in infrastructure particularly road network and other business opportunities for the population in the project catchment area and beyond during the plantation development and processing of Fresh Fruit Bunches (FFBs). The intervention will also maximize the economic potential of the Estates which have been tied up with the existing old-aged and low production oil palm plantations, and thus denying the landlord communities and state government to realize the full economic potential of the land. This notwithstanding, implementation of the proposed intervention may potentially cause negative environmental and social impacts such as pollution and loss of NTFP collection areas. The proposed project may also have impact on agricultural lands for the production of food crops which when occur could jeopardize the food security potential of the area and could cause a rise in food crop prices.

At the state and national level, the project will contribute to enhancing the wider state economy through improved revenue from corporate and personal income tax due to the company meeting its tax obligations and employments that will be generated for the local population. The project will also be a source of revenue to landlord communities in terms of annual royalties on land that will be paid to them. Besides, it will contribute to Nigeria meeting its palm oil consumption deficit which currently stands at 421,000 tons/year. Nigeria currently imports palm oil from South-East Asia. This project has the potential to bridge this consumption-production gap which could contribute to Nigeria's policy of reducing imports to enhance its international trade balance.

Summary of key findings in respect of socio-economic impacts in respect of emergent communities (workers, suppliers, etc.)

The potential risk to local family structures and social networks could be significant if a large proportion of the plantation workers are sourced from afar and in particular outside of the project catchment area. Interaction of people of different cultures in the project area may prompt changes in values and behaviour in the local communities. This could lead to social conflicts and long-term erosion of the communities' ways of life, their cultural norms and practices. The risk could be more significant if influx of people with different culture, background and traditional practices happened in a way that their practices and behaviour overshadow those of the natives. Impacts on families and community relations may in some cases persist for a long period of time. For example cases such as prostitution, unwanted/unplanned pregnancies could occur or members of the communities infected with STDs including HIV and AIDS could persist for a long time and would have long term cumulative impacts. Influx of plantation workers could potentially put pressure on infrastructure such as schools, water supply, housing etc.

Perceived impacts on traditional environment and conservation areas

The landlord communities at Ibiae believe that the proposed operation will have a negative impact on the biological life of the environment consequently affecting conservation areas including riparian vegetation, sacred areas, useful plants and endangered species of fauna and flora in the area.

The people believe that vegetation of the area harbour rich biological resources although they also admitted that some important species of the area have been driven to extinction, while survival of some species are threatened due to hunting pressure and forest clearing. According to participants in Akpet-Egbai FGD, species of animals that could be found in the area but are now extinct include the leopard, lion, tiger and tortoise. They also reported that gorillas, chimpanzees, antelopes, porcupines, python, cobra and the cane rat cutters are threatened of extinction. Participants in Idoma FGD believe that proposed operation could affect the environment adversely. They indicated that the operation could have effect on drinking streams, sacred areas, useful plants and endangered species of animals. They thought that the operation might affect the source and watersheds of most of the streams and rivers in the area.

Potential positive impacts

The following are some of the potential positive socio-economic benefits of the proposed development of agro-industrial oil palm plantation.

- Creation of employment. The proposed project if implemented can create thousands of new jobs. The various activities including nursery development and oil palm seedling maintenance, plantation land preparation, planting and harvesting are all labour intensive activities and can also give employment to the rural communities, a potential tool for reducing rural unemployment and rural poverty.
- Introduction of high yielding varieties of oil palm and sustainable management of palm plantation practices
- Training and capacity building for employees and smallholders
- Revenue to local communities through royalties payment to landlord communities
- Tax revenue for the state government
- Rural development (support to the development of rural electrification, potable water etc.)
- Potential for smallholder schemes
- Commercial opportunities for small and medium scale enterprises including petty trading

Potential negative impacts

The potential negative impacts on environment include:

- Loss of farmlands, community conservation and NTFP collection areas
- Impacts on food insecurity and prices of food products
- Influx of plantation workers and potential impacts on family structures and social networks
- Water pollution due to agro-chemicals, sewage from worker's camps and POME
- Potential conversion of traditional conservation areas including riparian vegetation
- Pollution from hazardous substances
- Impacts on heavy vehicles and construction activities
- Noise pollution from mill and plantations machineries
- Exposure to health risks (e.g. HIV)
- Adulteration/destruction of indigenous cultural values
- The quality of life and working conditions of workers and labourers in plantations and mill factories
- Impacts on public facilities (e.g. public structures)
- Impacts of operations on infrastructure (roads, water)
- Potential for Open burning once the area is cleared during land preparation stage.

The impacts source's from the project operational and activities shows on the table below.

Table 3: Summary of Social & Environmental Impacts in the Ibiae Estate

Source of the impacts	Medium affected / Effect of impacts
OIL PALM NURSERY DEVELOPMENT PHASE	
Nursery site preparation	Biodiversity Loss of habitats
	Loss of plant species
	Water bodies and Loss of riparian vegetation
	Flooding downstream
	Turbidity of water
	Soil and Soil erosion
Nursery development and maintenance	Visual and air impacts from construction of camps
	Pollution of water bodies and soils from use of agro-chemicals
	Wastes and sewage from nursery camp
	Hazardous nursery wastes (polybags, empty chemical containers) Soil, water bodies and waste managers
OIL PALM PLANTATION DEVELOPMENT PHASE	
Site preparation, construction of roads and workers quarters	Loss of host communities' farmlands
	Water pollution due to increase in surface runoff
	Soil erosion
	Los of habitats and connectivity
Use of agrochemicals (fertilizers, pesticides, etc.)	High levels of chemicals may affect water quality and aquatic life forms
	May cause eutrophication in water bodies which may affect water use and aquatic life forms
Working in high risk areas such as brushing, chemical application, mills, etc.	Exposure to injuries and health risks of the workers and staffs
Influx of plantation workers	Destruction of local cultural values in host communities
Plantation land preparation	Loss of farmlands effected to food security in host communities
	Loss of NTFP collection areas in host communities
MILL AND PROCESSING ACTIVITIES	
Smoke and particulate Pollution from transportation of FFB and from mills	Air pollution
Emission of Methane from ponds as a result of digestion of POME	Air pollution
Discharge of untreated effluents e.g. POME	Water pollution
Working in high risk areas such as brushing, chemical application, mill, etc.	Exposure to injuries and health risks of workers and staffs
Solid wastes from workers quarters, mill, workshops, schedule waste etc.	Soil pollution

GENERALIZED IMPACTS	
Exposure to health risk	Infections workers with diseases e.g. HIV AIDS
Damages to public facilities and infrastructure	Damages of roads, water, etc. caused by company's heavy duty machines
Displacement	Displacement of communities and people
Food security	Conversion of communities and people farmlands to oil palm

Issues raised by stakeholders and assessors' comments on each issue

Although the landlord communities generally believe that the proposed project will contribute to the socio-economic development of the area and therefore welcome the project, they were concerned that the proposed project could impact negatively on their traditional conservation areas and other protected areas such as watersheds, riparian vegetation, sacred sites, traditionally useful plants and endangered species of fauna and flora. They were also concerned about the impact of pollution from Palm Oil Mill Effluent (POME) and other chemicals on water bodies especially the ones they depend on for their household water need. These concerns stem from the fact that most communities in the area depend on rivers and streams for their household water needs. They were also concerned that the project may expand in the future and take up the remaining farmlands.

In response to the issues raised by the host 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 including social and environmental values and that all the areas identified will be excluded from conversion activities. It was explained that the company will consult and agree with them the management areas required for the traditional conservation areas before any conversion activities commence.

4.2. HCV Assessment

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

The table below gives a summary of HCVs present, potentially present or absent in the Ibiae Estate. The HCVs have been assessed and identified independently. The status of HCVs identified has been colour coded red, yellow and green.

Table 4: Summary of HCVs found in the Ibiae Estates

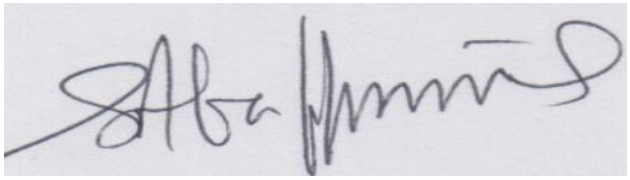
Legend			
Status of HCVs:	Present	Potentially present	Absent

HCV	Description	Present	Potentially present	Absent
HCV 1.1	Protected areas			
HCV 1.2	Concentrations of rare, threatened or endangered species			
HCV 1.3	Concentrations of endemic species			
HCV 1.4	Seasonal concentration of species			
HCV 2	Large landscape level forests			
HCV 3	Rare, threatened or endangered ecosystems			
HCV 4.1	Areas critical to water catchments (Riparian vegetation and watersheds in the Estate)			
HCV 4.2	Areas critical to erosion control			
HCV 4.3	Areas providing barriers to destructive fires			
HCV 5	Areas fundamental to meeting basic needs of local communities (Water bodies that serve as source of water for the communities)			
HCV 6	Areas critical to local communities traditional cultural identity			

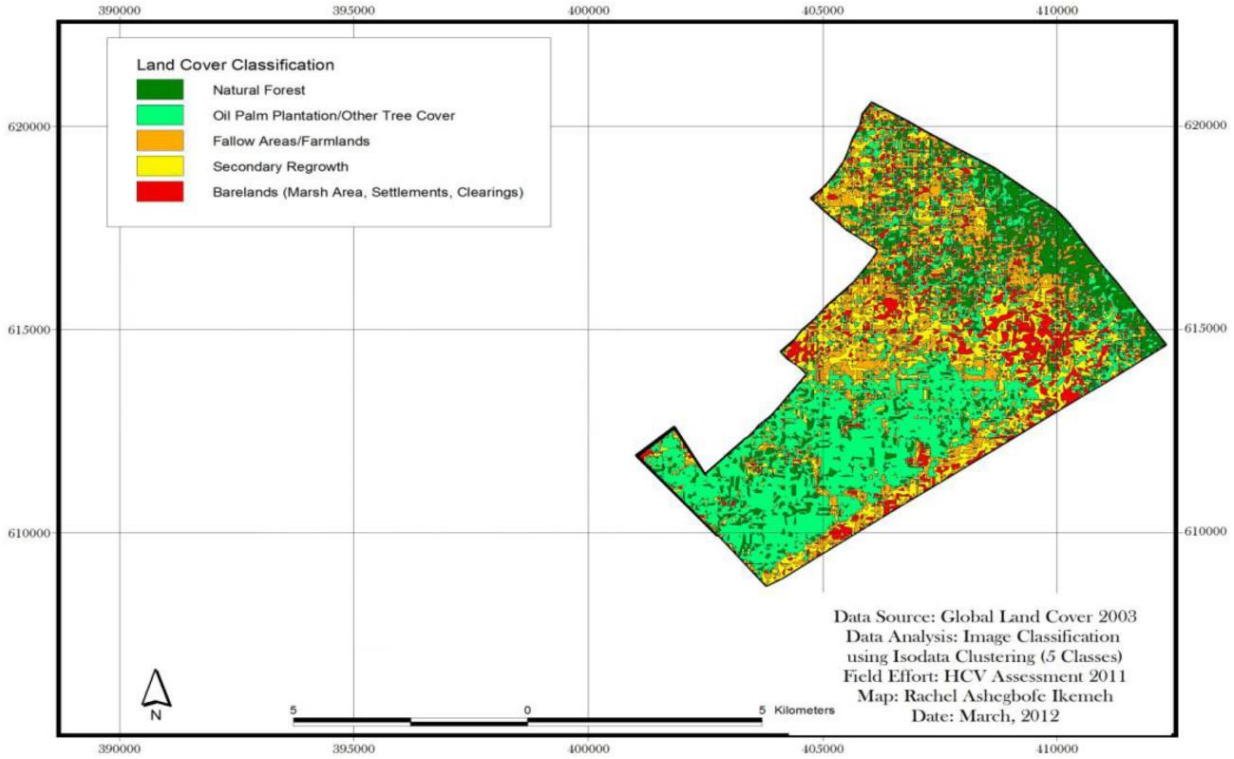
Proposed measures to maintain and enhance the identified values

In order for Biase Plantations Ltd to meet the RSPO certification requirements particularly those related to the NPP, it is crucial that the company implements the recommendations described in the HCV assessment report. To ensure that the field operations follow the steps indicated in the report, Biase Plantations Ltd will designate a person responsible for monitoring the implementation in the field of the measures for protecting and maintaining HCVs in the Ibiae Estate. This person will be given the authority, time and resources to train staff properly, prepare robust Standard Operating Procedures (SOPs) including recommendations contained in the detailed HCV report and to organize the plan activities before the conversion operations, and to monitor them in the field. Summary of the Mitigation Plan will be elaborated and adopted by Biase Plantation Ltd to ensure effective maintenance and enhancement of the identified HCVs.

5. Internal Responsibility

Signing off by HCV & SIA Assessors	**Acknowledgement of internal responsibility by Biase Plantations Limited**
 **Abraham Baffoe** **Proforest**	I the undersigned, being the legal representative of the inspected company, agree with the contents of this report  **Simon Siburat** **Title: Group Sustainability Controller**

Appendix 1. Land covers classification of Ibiae Estate



Appendix 2. Institutions and stakeholders consulted during the pre-assessment

Date	Key contact	Organization	Purpose of meeting
Oct. 19, 2011	Dr Ada	Advisor to the state government	To understand the state's socio-economic and development policies and their implications for the proposed oil palm project.
	Mr. Moses Agbor	CRS Forestry Commission	To discuss the assessment methodology and to solicit inputs
	Mr. Andrew Dunn	Wildlife Conservation Society (WCS)	To discuss the methodology and to get a better understanding of conservation issues in the landscape that should be considered during the assessment
	Ms. Amy Baxter	CERCOPAN	To get a better understanding of conservation issues in the landscape that should be considered during the assessment
Oct. 20, 2011	Mr. Jerry Akparawa	Local Action on Climate Change	To get a better understanding of the State policies and programmes on climate change and their implications for the project.
	Mr. Tony Bassey	CRS Agricultural Development Programme	To get a better understanding of the state's agricultural programmes and what should be considered during the assessment.

	Chief Edwin	NGO Coalition for the Environment (NGOCE)	To get a better understanding of environmental and social issues in the landscape that should be considered during the assessment
	Dr Uche Umalu James Odey Damian Agom	University of Calabar Development in Nigeria (DIN) University of Calabar	To discuss the socio-economic survey methodology and to get a better understanding of social issues in the host communities
Dec. 13, 2011	Mr. Ekponta Bassey	Independent Consultant and Ex-Director of the Min of Agric	To get a better understanding of issues related to oil palm expansion in the state and what the team should consider during the assessment
	Mr. Obi Ubana	Agric Officer in charge of the state agricultural projects, Ministry of Agric	To get a better understanding of the state agricultural policies and their implications for the proposed project
	Barrister Ikona	Director of Public Litigation, Min of Justice	To get a better understanding of the legal issues related to Estate acquisition in the state
	Mr. Nelson Tos	Director of Lands	To get a better understanding of the Estate acquisition process and to check whether the company followed the process
	Mr. Odigha Odigha	Chairman of the Cross River State Forestry Commission	To get a better understanding of the state forest policy and to check with conservation issues that should be considered during the assessment
	Dr. A U Ogogoh	Cross River State Forestry Commission	To find out forest sector issues that is relevant and should be considered during the assessment.
	Mr. Timothy O Worger	Cross River State GIS/Survey Department	To cross check with Estate boundary

Appendix 3. Stakeholder forum held on 3rd April 2012 to discuss findings and issues raised

Institution/organization	Comments, suggestions and contributions	Assessors response
NGO Coalition on Environment	Chief Edwin reminded the forum that Federal Environmental Protection Agency has recently been replaced by National Environmental Standards and Regulation Enforcement Agency (NESRA) as the new regulatory body for environment in Nigeria. He also commended the consultation process and suggested that stakeholders are involved in the implementation of the recommendations proposed in the report. He finally recommended that individuals who lose their land to the project should be compensated for their land.	Edwin's correction on change of the Nigeria's Environmental body's name to NESREA was well taken. His recommendations were also taken. Regarding loss of farmlands, the team responded that the company is carrying out an FPIC process to reach consensus with farmers with farms on the land before any conversion activity is carried out.

Cross River National Park	Caroline requested the team to explain whether health facilities of the host communities were surveyed as part of the assessment. She suggested that recommendations on employment should be rephrased to mean that where communities have no manpower, such can be employed from outside the catchment area. Additionally, she recommended that recommendations on safe transport of workers should be reworded to include respect and compliance with state transportation laws.	The team's response was that yes, all social amenities including health facilities of the host communities were surveyed. Her suggestions on employment and transport of workers were considered.
Cross River State Forestry Commission (CRSFC)	Sylvanus wanted to know what measures are in place to ensure that Biase Plantations Ltd. adopt and implement the recommendations in practice.	The team's response was that the company is committed to meeting RSPO requirements and that when completed, the assessment report will be part of the documents that will be reviewed to assess whether the company complied with all requirements before any RSPO certificate is issued.
Rainforest Resource & Development Centre (RRDC)	Odey commended the assessment process and suggested that the data generated during this assessment will help in solving the data gap that exists in the State. He recommended that the recommendations for the management of buffer zones should be adopted for springs. He cautioned Biase Plantations Ltd. to ensure that the company follows the due process in the land acquisition. He finally recommended that compensations to farmers and property owners should be properly paid through a neutral medium such as the micro-finance banks or NGOs. He also suggested that Biase Plantations Ltd. should consider value addition to the old palm trees when they fell them or allow the local people to process the felled palm trees. He finally recommended for an independent monitoring body to ensure proper implementation of the management recommendations being proposed.	All the suggestion and recommendations were discussed and considered.
Cross River State Ministry of Agriculture	Mr. Bassey suggested that a recommendation should be made on how the set aside areas will be appropriately managed including but not limited to collaboration with state and local institutions in managing those areas. He also suggested that a mechanism is put in place to manage potential raised expectations in the communities. If the company intends to engage the services of contractors in implementing some of its projects, there is a need to develop a minimum protocol for the contractors to	These recommendations and proposals were considered.

	follow because most companies take this approach to ensure that there is no trade unionism. He further suggested that there is a need to establish linkages between the project and on-going initiatives in-country. For instance, in Cross River State, some crops (oil palm, cassava, cocoa) have been selected for special attention for production and value addition. Finally, Tony suggested that opportunities should be explored for micro-enterprise initiatives to be processing by-products from palm oil production. This will ensure that several benefits are derived from palm products	
Cross River State Forestry Commission	it is important for the company to involve the Forestry commission to carry out tree inventory when clear felling for palm plantation is to be carried out and compensations should be paid accordingly	The response was that the company is aware of this legal requirement and has planned to officially invite the Forestry Commission to carry out the inventory once the FPIC process is completed.
CERCOPAN	Nicolien suggested copies of the SIA reports available to stakeholders to make additional inputs.	The team explained that the summary report will be on the RSPO website for stakeholders to comment both on the assessment and the report. RSPO website address was provided to the participants

Appendix 4. List of legal, regulatory and other guidance referenced

Legal documents

1. The Cross River State of Nigeria Forestry Commission Law 2010
2. National Environmental (Control of Bush, Forest Fires and Open Burning) Regulations, 2011
3. National Environmental (Surface and Groundwater Quality Control) Regulations, 2011
4. National Environmental (Watershed, Mountainous, Hilly and Catchment Areas) Regulations, 2009
5. National Minimum Wage (Amendment) Act of 2000
6. National Policy on Environment 1999
7. Nigeria National Biodiversity Strategy and Action Plan
8. National Environmental (Sanitation and Wastes Control) Regulations 2009
9. The National Environmental (Watershed, Hilly, Mountainous and Catchment Areas) Regulations, 2009
10. Land Use Act of 1978

Regulatory permits and property deeds

1. Certificate of Occupancy for the Estates
2. Estate maps