RSPO New Planting Procedure

Summary Report of HCV and SEIA Assessment Findings

Proposed Roka Mini- Estate

West New Britain Province, Papua New Guinea

1. Introduction

This report provides a public summary of the High Conservation Value (HCV) assessment and Social and Environmental Impact Assessment (SEIA) undertaken for an area of *ongoing new planting* titled the Roka mini estate (ME), in West New Britain, Papua New Guinea, by New Britain Palm Oil Ltd.

The information presented herein is based on reports encompassing assessment of HCV (Bitou et al 2009) and SEIA (Lovai 2012), namely the following key reports:

- Evaluation of High Conservation Value Forest of the Proposed Roka Mini- Estate West New Britain Province. Biatus Bito, Ted Mamu and Tom Diwai Vigus – February 2009 - (The initial assessment of HCV).
- RSPO based social and environment impact assessment report on NBPOL's proposed new planting areas in WNBP. Narua Lovai. December 2012 (SEIA for various proposed new planting mini-estate area in WNB, including HCV mitigation and management of Roka areas).

Due consideration has been given to confidential or commercially sensitive data, without compromising the relevance of the information to inform the public of the proposed activities.

The information meets the requirements as stated by RSPO (*"Format for Summary Report of SEIA and HCV assessments"* – May 2010) and includes the following:

- Basic elements of the RSPO requirements for HCV and SEIA assessment.
- Summary introduction to the six HCVs and local/national references used to define HCVs (e.g. national HCV toolkit and version, other guidance).
- Background information on both the HCV and the SEIA assessment context, scope, land use manager and scale of the operations.
- Summary table of HCV status and extent.
- Brief descriptions and key maps of the HCV Areas found in the assessment area.
- Internal responsibility and sign off for assessment findings.

Both the SEIA and HCV assessments were carried out in accordance with the RSPO-PNGNI Principles and Criteria (P&C) and RSPO New Planting Procedures (NPP). The assessments have recognized the following:

- Company activity in planning and assessment commenced prior to 1st January 2010 (hence the project is classified as on-going new planting), but no land clearing or planting works had commenced at the present time.
- Apart from the hill top area, which contains intact primary forest (and is to be excluded from any new planting activity), all other areas of forest and associated vegetation have been classified as secondary forest. Land use and land change analysis determined that this clearance activity had a history commencing before November 2005.
- All areas required to maintain or enhance one of more High Conservation Values (HCV["] s) have been identified and mapped accordingly.
- There is a an area of drained swamp extending into the north-west portion of the study area, but soil assessment and classification did not identify the presence of peat soils within.
- The stakeholders involved in the process are the owners of the land and a complete FPIC process has been implemented.

Maps have been prepared and presented to identify all of the above findings.

1.1 Organisational information and contacts

New Britain Palm Oil Limited (NBPOL) is a large-scale producer of sustainable palm oil. NBPOL have over 78,000 hectares of planted oil palm plantations across Papua New Guinea and the Solomon Islands.

All NBPOL existing operations have been certified under the RSPO scheme. Many of the company's commitments to sustainable development, including the management of HCV's and associated social and environmental issues are outlined in the company's sustainability report (2011/2012). NBPOL will "... adhere to the precautionary principle for all new developments" and ensure that "... there are no plantings on peat, [and that] there is no development on land containing high conservation values" (NBPOL 2011).

West New Britain Palm (WNB) is wholly owned by the New Britain Palm Oil Limited.

All existing HCVs and social and environmental issues are managed locally by WNB Sustainability Manager, Sander van den Ende and supported by WNB General Manager, Harry Brock.

Company Address: New Britain Palm Oil Limited, PO Kimbe, West New Britain Province Papua New Guinea.

Contact Person:

Mr. Sander van denEnde ; svandenende@nbpol.com.pg

Mr. Ashley Barnes: abarnes@nbpol.com.pg

1.2 Assessor Credentials

SEIA ASSESSOR

The SEIA was undertaken by Narua Lovai, a Freelance Environment Management Consultant who is an approved assessor for EIA assessment by the department of environment.

HCV Assessor

The HCV assessment team was appointed by OPRA (Oil Palm Research Association) and a trial with WWF Melanesia and comprised of Tom Diwai Vigus, an Independent Forestry Consultant, Biatus Bito, a Professional Forester and Ted Mamu, a Biologist (marine and terrestrial).

Both Ted and Biatus were intrinsically involved with the development of the PNG HCVF Identification Toolkit. Ted is now an independent consultant and was accredited as an RSPO Assessor as at the 1st June, 2013. Biatus works with WWF.

1.3 Legal, regulatory and other relevant guidance

Rokahill Ltd. purchased the land comprising the proposed development area from Lavegi landowners in 1989, and subsequently surveyed through the Department of Lands, registered the survey plan and obtained the title over portion 2292 (Certificate of Title Registered Vol. 31 Folio 146.) in September 1992.

NBPOL has entered into an agreement with Rokahill Ltd. to lease this portion for a period of twenty years. At the completion of the sub-lease, the principals of Rokahill Ltd. will have the option to renew the lease with NBPOL or decide to manage the plantation themselves.

All relevant stakeholders including LLG[®] s were informed and included in early discussions and involved in the assessments undertaken throughput the SEIA and HCV process.

The following list of Legal documents and regulatory permits related to the areas were assessed.

- Land Title of Roka Estate
- Survey Plan of Roka Estate
- Rokahill Ltd Record of decision to enter into agreement with NBPOL

2. Context of the Assessment

The following section provides background on the proposed area of development

2.1 About the Roka mini estate

The proposed Roka ME consists of 287ha of alienated land located to the east of Malalimi Plantation at the junction of the Aum and Kapiura Rivers.

The area was selectively logged in the early 1980's; this would have caused extensive damage to the remaining vegetation as the original forest was Lowland Rainforest

dominated by *Eucalyptus deglupta, Octomeles sumatrana and Pometia pinnata.* (There was no Code of Logging Practice at this time).

If left untouched the logged over forest would regenerate and be classified as secondary forest for many years, (some estimates state that it would take up to 300 years to regain its original ecological integrity Enright, 1978, Johns, 1986, Ash, 1988.).

A small hill located at the junction of the Aum and the Kapiura Rivers is too rugged to have been logged and contains remnant vegetation.

An area of approximately twenty hectares had been planted previously as a smallholder block.

The land ownership and historical land use is detailed below in the SEIA findings (section 4.2).



2.2 Location maps

Map 1 Location of NBPOL WNB in relation to rest of Papua New Guinea.



Map 2 Proposed Roka ME area and surrounds

2.3 Time plan for new plantings

The new plantings would commence no less that 30 days after public consultation (via the RSPO website) has passed and once the assessment findings and associated management and monitoring plan has been made available to all stakeholders.

The following presents the sequence of proposed operations leading up to and following RSPO process for approved activity.

2001-2009	nd off communications with Roka Estate owners regarding their interes veloping the estate		
2009	High Conservation Value Assessment and Social and Environmental Impact Assessments conducted		
2013 August H	ICV and SEIA Report peer reviewed by RSPO accredited consultant and Summaries written		
2013 Septeml	Der HCV, SEIA and Management & Monitoring Reports validated and summarized by Certification Body		
2013 Novemb	<i>er</i> All documentation is posted to RSPO Website as per New Planting Procedures.		
2014 May	Relocate all boundary survey pegs for Roka Estate and demarcate Buffer Zones and reserve areas and erect Notices to that effect.		

Survey in-field road & avenue centre lines for full 180 ha. Demarcate Buffer Zone and HCV set aside by Clearly marking the edge of the buffer and hcv zone with a picket, brush an 8-metre swath from the edge of the buffer zone **into the plantation**, through the under growth. Divide 180 ha into 10 ha blocks and let bush-felling contracts to clear remaining area.

- 2014 June Cut & form roads with bulldozers. Cut & form Avenues. Cut drains as necessary Gravel sections of roads as necessary (Should be able to start work early after the Wet Season on the pumice soils). Develop first 90 ha. The tall palms will be removed and the area replanted. Plant cover crop. Construct bridge over drain.
- 2014 July–Aug Continue cleaning area and develop second 90 ha. Transport fertiliser. Plant oil palm seedlings for full 180 ha.
- 2014 Aug Maintain plantings. Manage buffer zones and HCV set aside as per Habitat Management Plan.
- 2017 Feb Harvesting starts

3. Assessment process and procedures

In 2007, NBPOL management resolved to adhere to the Roundtable on Sustainable Palm Oil (RSPO), an oil palm industry regulatory system designed by industry participants, governments and NGOs to promote the responsible production of palm oil. The basic aim of RSPO is to reassure consumers that palm oil can be produced with negligible environmental impact and noticeable socio-economic benefits for host communities and countries.

Principle 7 of the RSPO addresses the establishment of new plantings including miniestates and has the following key criterion relevant to the HCV and SEIA assessments.

Criterion 7.1	The undertaking of a comprehensive and participatory independent social and environmental impact assessment prior to establishing new plantings or operations, or expanding existing ones, and that the results are incorporated into planning, management and operations.
Criterion 7.3	That new plantings (since November 2005) have not replaced primary forest or any area required to maintain or enhance one or more High Conservation Value.
Criterion 7.4	Extensive planting is avoided on steep terrain, and/or on marginal and fragile soils.
Criterion 7.5	No new plantings are established on local peoples' land without their free, prior and informed consent, which is dealt with through a documented system that enables indigenous peoples, local communities and other stakeholders to express their views through their own representative institutions.

Criterion 7.6 The local people are compensated for any agreed land acquisitions and relinquishment of rights, subject to their free, prior and informed consent and negotiated agreements.

RSPO Board adopted a new plantings procedure in January 2010. It outlines the process that must be followed in the identification and acquisition of new planting areas followed by their preparation and development.

The process consists of three major sequentially executed activities.

- 1. The first step is to confirm if the area was logged before November 2005 and perform a rapid assessment of its conservation status. No planting is allowed on any forested area logged after this date.
- The second activity is to carry out an in-depth evaluation of the high conservation values (HCV) in the area. The purpose of this assessment is to identify ecologically sensitive areas and species that may be affected by the development and determine the net amount of land that can be planted with oil palm with minimum environmental degradation.
- 3. The final activity is to examine the predevelopment environmental and socioeconomic situation, identify potential environmental and socio-economic impacts in the event that oil palm planting proceeds and recommend measures to mitigate, monitor and manage these impacts.

3.1 HCV Assessment process

The HCV assessment was undertaken to meet the requirement of RSPO Principles and Criteria, namely Principle 5 / Criterion 5.2;

The status of rare, threatened or endangered species and high conservation value habitats, if any, that exist in the plantation or that could be affected by plantation or mill management, shall be identified and their conservation taken into account in management plans and operations.

The assessment approach adopted sought to identify areas necessary to maintain or enhance one or more of the six High Conservation Values (HCVs), both within the study area and boarder landscape.

- **HCV 1** Species diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.
- **HCV 2** Landscape-level ecosystems and mosaics. Large landscape level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.
- **HCV 3** Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia.
- **HCV 4** Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

- **HCV 5** Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples.
- **HCV 6** Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities.

The Roka project was deemed a trial in the use of the PNG HCVF toolkit (PNG FSC Inc, November 2005) for potential oil palm developments under RSPO and the TORs included recommendations on future methodology to ensure that all future NBPOL oil palm developments were in line with RSPO Principles and Criteria.

In January 2009, a team of consultants were engaged by OPRA through WWF Melanesia to carry out a HCV evaluation and associated SEIA of the area. The team was led by Tom Diwai Vigus, and assisted by Biatus Bito and Ted Mamu.

The HCV survey methodology consisted of the following key components

- A random series of transects, followed by a forest assessment, which involved assessing the vegetation in 100 metre sections, 10 metres on either side of the transect lines; this was closely followed by the fauna reconnaissance and selection of trapping and mist net sites.
- Training of local people was also carried out to facilitate the identification of the species of different taxa groups using various local languages (local vernacular). The local informants assisted to identify various fauna species using the required text books of mammals, birds, frogs, and reptiles. The species identified by locals to be present in those forests were marked and local names written next to them. Through thorough identification of the species were reconfirmed and a list was developed for each site.
- Systematic small mammal trapping was carried out along the narrow transects cut to access rainforest.
- Trapping was conducted for four consecutive days and bait was replenished daily when animals were collected for processing. All animals caught were identified, processed and released at the site of capture.
- A total of 9 mist nets were set to capture the bats during the dusk and birds during dawn. The captures were identified and species names recorded and released. The birds were also recorded from their calls and with the aid of the pair of binoculars.
- Transects were walked every day and all footprints, caches of nuts, droppings/excreta remains, fruits on forest floor or identifiable claw marks on trees were recorded and identified. Photographs were also taken and shown to local landowners for their local knowledge to verify the record.
- Arboreal mammals were surveyed by spotlighting and listening for vocalisations at night along the transects and accessible forest edges within 500 m to 1 km of each

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survey site. During the day transects were walked and random walks taken and any mammal observed or heard was recorded.

- A debriefing session was held at the NPBOL Office on Saturday 31st January, 2009 with the assessment team's PowerPoint presentation and further discussions held with NBPOL officers and OPRA.
- A further visit to the Roka Block was held on Sunday, 1st February, whereupon Mrs Walaun agreed to stop all salvage logging until the HCVF report was finalised.

3.2 SEIA Assessment Process

The SEIA assessment comprised of a social environmental impact assessment (SEIA) was carried out on the same areafrom the 1st to 5th October 2012.

The SEIA incorporated information from the respective HCV assessment as well as participatory meetings with landowners and other stakeholders.

The two main objectives of the SEIA were:

- 1. Verify compliance with free, prior and informed consent for the proposed new planting areas, and
- 2. Examine the predevelopment environmental and socio-economic situation, identify potential environmental and socio-economic impacts in the event that the plantings proceed and recommend measures to mitigate, monitor and manage these impacts.

As an RSPO based SEIA, this exercise focussed on FPIC, land ownership, availability of land for subsistence gardening, collection of forest products and hunting for edible fauna, risk of contamination of water sources, high conservation values, environmental and socioeconomic impacts, non- existence of culturally and historically significant sites in the proposed planting sites and existing access to social services.

The environment impact component of this assessment was carried out using secondary data, the respective HCV assessment reports and the consultant's knowledge of the environmental issues associated with the development of mini-estates.

The social impact assessment component was carried out using secondary data, relevant information from the environment component as well as field data gathered through consultative meetings and discussions with the landowners, WNB Provincial Administration officers and non-government agencies (Inter-organizational Committee on Guidelines and Principles for Social Impact Assessment, 1994).

Based on the terms of reference (ToR), a literature search was conducted to collate material relating to the biophysical and human environment of the location, RSPO guidelines on new plantings and operation of MEs in oil palm growing provinces.

All the areas have been visited by the assessors to verify findings with stakeholders through interviews.

Within the Social Impact Assessment details of all people/stakeholders contacted including names, locations and dates of any meetings were recorded.

As part of the wider participatory consultation for the SEIA, a number of provincial government officials were interviewed.

4. Summary of Assessment Findings

4.1 HCV findings

The following sections detail relevant findings as taken from the HCV assessment:

- Apart from the forest on the hill, the whole of the remaining land area of the proposed Roka Mini Estate (excluding the oil palm/ cocoa and garden areas) can be classified as "Secondary Forest", and had land disturbance and forest clearance history that commenced well before November 2005.
- In the secondary forests, light-tolerant species are common, demanding more light for their ecological requirement. Light demanding species favour more light and grow faster compared to primary species which are more shade tolerant or require less light for their growth.
- Species such as *Pometia pinnata* (Taun), *Octomeles sumatrana* (Erima) and *Anthocephalus chinensis* (Labula) are good examples that indicate the forests at Roka are mostly secondary and undergoing forest development to become primary forests.
- Many animals live and feed in secondary forests because of the environmental services it provides to them such as food, (e.g. nectar, fruits and seeds) and refuge.
- All logged over forest in PNG contain "refugia" or areas that have not been touched during the logging operation for various reasons, for example they may have no commercial size trees to harvest, they main contain species that the logger does not want or can't sell, or it may be that the logger is so inefficient that areas containing commercial sized trees of desirable species are simply missed.
- A total of 904 trees were recorded representing 33 families, 73 genera and 119 species. Sapindaceae (15%), Meliaceae (10.1), Euphorbiaceae (9.4%) Actidinaceae 93.3%), Myristicaecae (2.1%), Datiscaceae (1.8), Moraceae (1.3%), Rubiaceae (1.3%), Lauraceae (1.0%) were the dominate families in the forests (see table below).
- Observations and sampling efforts show that species that satisfied all or some of the definitions of DD, En, E, R, T, on CITES, IUCN and PNG Protected Species lists are present. Amongst all the species sampled, Blyth's Hornbill (*Aceros plicatus*), Peregrine Falcon (*Falco peregrines*), New Britain Tree rat (*Uromys neobrittanicus*), New Britain Water rat (*Hydromys neobrittanicus*), New Britain Bare-Back Bat (*Dobsonia praedatrix*) and most frog species satisfied some of the above definitions. They are the most important umbrella/flagship species in the Roka area, which act as indictors of large-scale ecological processes.
- From the 11 endemic birds, one CITES Appendix I, four PNG Protected species, and three CITES Appendix II species of birds and mammals were recorded (Table 5). Therefore, IUCN endangered and CITES Appendix I species of birds identified the forests on hill at Roka as high conservation value forest.

• The team also recorded the presence of three adult dogs, fifteen puppies and two cats belonging to a salvage logging operation occurring at the time of assessment.

The following findings taken from the SEIA assessment also support identification of potential additional HCV.

The proposed Roka Estate sits within a drainage basin surrounded by volcanic mountains to the north and the Nakanai and Whiteman's Range to the South. Original forest types range from swamp forest, low altitude forests and plains and fans, upland forests, woodlands and seral forests according to Paijmans. Due to the favorable growing conditions, the coastal areas of WNB, including those around Roka have yielded some of the most productive logging concessions in PNG's history (Telfer, personal comm.) and were thoroughly logged since the first forest inventory was undertaken in the early 1960's to early 1970s. Logging in WNB began in the mid 1960s and since then most of the accessible areas have been logged at least 2 to 3 times. The entire area around the proposed Roka Estate was issued as a Timber Rights Permit first to Thompson & Wright in the 1970s and later to Pacific Development Contractors and Stettin Bay Logging Company, which has logged its concession in the mid 1980's and again in the early 2000's.

The immediate area surrounding the proposed Roka Estate is developed to oil palm plantations, either owned or managed by NBPOL (including mini estates) or out -growers. Due to the existing access to roads, technical and financial support for oil palm and attractive prices for fresh fruit bunches, all areas near the main road are under high pressure to be converted to oil palm. In the case of the proposed Roka Estate, it is already contains a small oil palm block and is almost entire surrounded by existing oil palm.

The following map - Map 2a - gives an overview of the landscape within which the proposed Roka Estate is situated, the existing oil palm plantations and logging concessions.



Map 2a - Overview of Landscape adjacent to proposed Roka mini estate

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- Soil assessment undertaken during SEIA indicated most soils in the area are unweathered sandy volcanic soils with black to reddish brown topsoils. This classification did not correlate with the presence of peat soils within or adjacent to swamp areas, although exposed soil surfaces are susceptible to rainfall induced erosion.
- The current water sources are nearby creeks, a spring and catchment from galvanized roofing iron into water tanks adjacent to the two houses. The spring is not within the area to be developed to oil palm.
- A safe and reliable water supply system is a one of the priority needs of a ME landowning community; Roka family and workers derive theirs from the above sources.
- The landowner family derive their daily sustenance from subsistence gardening, rearing pigs and chickens and purchase of store goods.
- During the consultation as part of the HCV and SEIA assessments it was recorded that landowners have adequate land for subsistence gardening. They also maintained that the areas do not contain any current water sources as well as culturally or historically significant sites. The only exception is the HCVF hill top at the Roka Estate which is a spiritual site (Masalai Ples) for the Levege villagers.

The HCV assessment identified 81.47ha of HCV forest, 15.18ha of watercourse buffers and additional reserves, 14.83ha of existing land uses including gardens and a cocoa plot plus 175.52ha plantable with oil palm.

The assessment team initially identified three areas to contain potential High Conservation Values, but on closer inspection only one large area, adjacent to the landowners house could be justified as HCVF following the strict guidelines of the HCVF Toolkit.

The HCVF site is on a hill top to the SW of the estate area, covered predominantly by small crowned low altitude forest. The site serves as a headwater zone for several streams and creeks which discharge into Aum and Kapiura Rivers. A striking feature of the vegetation was the presence of many plant groups normally found only above 100m in lowland environments. These included species of Ericaceae, Myrsinaceae and Myrtaceae. The team also found on this site, the New Britain Bare-Backed Bat (Dobsonia praedatrix), Blackheaded Paradise Kingfisher (Haliaeetus cogaster) and Blyth's Hornbill (Acerosplicatus). These fauna are endemic to New Britain and its nearby offshore islands.

Further details for the justification for the site are given in the HCV report compiled by the team (Vigus, 2009a).

A map identifying key vegetation types, land use and proposed management areas for the project site is included in Map 3.



Map 3 Final Classification and Identification Of HCVF Proposed Roka Mini-Estate

Draft HCVF Survey proposed Roka Mini-Estate

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Table 1. HCV Identification and likelihood summary

HCV	Identification	Likelihood and scale	Management recommendation	Area (m2)
1.1 Protected areas	Absent	Low - No listed protected areas within greater study area.	* Ongoing consultation with DEC and relevant authorities for newly declared PA's. * Consider the legislating the HCVF site within the project area to be a protected area under the PNG Protected Areas Act.	0
1.2 Critically endangered (CE) species	Absent	Low - A number of native species recorded during the HCV and SEIA, but not CE listed.	* Species identification program to raise awareness amongst MBE staff and local community. * HCV registry developed to record any sightings of protected and critically endangered species.	0
1.3 Endemic species	Present	High - known endemic species; including the Black- headed Paradise Kingfisher (<i>Haliaeetus leucogaster</i>), the New Britain Bare-Backed Bat (<i>Dobsonia praedatrix</i>), and Blyth's Hornbill (<i>Acerosplicatus</i>) were observed during field assessment with likely occurrence within forested hill top HCVF area.	* Protection of HCVF hill top area as viable habitat for known endemic species. * HCV registry developed to record any sightings of HCV. * Habitat management planning.	81.47
1.4 Critical temporal use	Absent	High - Nesting trees identified in reserve buffers also located in areas adjacent to proposed site.	* No disturbance of HCVF forest protection areas.	0
2 Landscape level areas	Absent	Low	* Ongoing protection or riparian buffer zones and wildlife corridors to support landscape level connectivity and ecological processes.	0
3 Rare, threatened or endangered ecosystems	Absent	Low – An area of swam existing in the north-west portion of the study are and extends into the adjacent Malalimi swamp and has been logged at least once.	* Ongoing assessment and monitoring or use of swamp areas by endemic fauna before and during any land clearance of drainage works.	0

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НСУ	Identification	Likelihood and scale	Management recommendation	Area (m2)
			 * implement existing riparian "buffer zone" policy and replant procedure. * Water quality monitoring of all rivers and creeks. * Signage on all water courses and protection buffer 	(112)
4.1 Water		High - Site borders Aum and Kapiura River buffer and includes their junction. * Steep hill top HCVF area forested	zones.	
catchments	Present	and important components of water catchment for area.		15.18
4.2 Erosion control	Present	- slope).* All identified rivers, creeks and streams throughout the study area and riparian area role in stabilising bank erosion.	 * Utilize existing "buffer zone" policy and replant procedure. * Avoid any new plantings on areas of high slope (including HCVF hill top protection area) by following relevant code of practise. * Maintain buffer zones on all rivers and tributaries. * Replanting of all riparian buffer zones. 	81.47 (as above for 1.3)
4.3 Barriers to destructive fire	Absent	Low - Intact forested areas including HCVF protection provides active ongoing protection against fire.	 * Maintenance of existing no fire policy. * Education of fire awareness and safety. 	0
5 Local community needs	Present	Low - Small area of gardens around house for food, and recorded use of hill top HCVF area for hunting and traditional building materials. However, does not constitute significant component of local people's subsistence.	* Minimise use of protected areas including buzzer zones for harmful activities, including hunting, fires and clearing. * Education on importance of buffer zones and protection areas.	14.83
6 Cultural values	Present	High - The Roka hill top area and cave is a Ples Masalai / sacred site for the Levege people, and also recognized as significant historical and archaeological sites.	 * Protection of HCVF hill top area to protect cultural values. * Develop "traditional use" conservation measures including special sites registry. 	81.47 (as above for 1.3)

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4.2 SEIA Findings

The findings of the SEIA include and build upon that detailed in the HCV assessment report (see above). In addition the following findings were collected and are relevant for understanding the social and economic context in which the proposed activity is being planned.

Key SEIA findings	Result
Initiating party (date)	Landowner (2006)
Plantable area (ha)	175
Clans	N/A
Council wards / LLG / District	Mosa Rural LLG, Talasea District
Status of land	Freehold land
Illegal squatters	Yes - on adjoining land
Land dispute	None
Population	7
No. of households	3
Type of housing	Permanent material housing
Water supply	Water tanks and local spring
Sanitation	Pit latrines
Electricity	Nil
Primary Education	N/A
Health care	Kimbe General Hospital
Current land use	Oil palm cultivation
Alternatives for current land use	N/A
Cultural, historical and archaeological values	One on hill top (masalei ples) SW corner
Other cash crops	None
Law & order	Trespassing by neighbours
Meetings with NBPOL	Lease Agreement signed in July 2012
Community expectations with development	* Prevention of trespassing.
	* Protection and promotion of conservation values of the area.
	* Engagement in other income generating activities.

Table 2 SEIA findings summary

• As part of this SEIA a meeting was held with the landowner, Hennie Walaun, to ascertain her reasons for entering into a ME agreement with NBPOL, the manner in which it was formulated and her future plans for the land.

- It was confirmed that the land was legitimately acquired from the Levege villagers who were the original landowners. This transaction was done in the traditional way through customary adoption of Februar Walaun (Annie's father now deceased) by the Levege people and the exchange of some cash payment. As the heir of the land, Annie is accepted as a member of the Levege community and her rights to the land are recognised (Vigus, 2009a).
- NBPOL had dealt with Februar Walaun on two occasions in the past. One was in 1987 when he obtained seedlings to plant 13ha of oil palm and the other was in relation to the drainage for Malalimi Plantation which had to be directed through Roka estate land. The oil palms planted then are now overdue for replacement and the drain on Roka estate land needs urgent maintenance.
- Sedimentation has built up in this portion of the drain and as a result water has backfilled and flooded a section of Roka estate.
- After struggling to deter trespassers on her land and maintain harmony with an uncooperative neighbour, Annie decided to adopt the recommendations of the Vigus led HCV/SEIA team and negotiate an ME agreement with NBPOL. This move is consistent with her late father's intention to secure the ME agreement before he passed away in 1996. Mrs Walaun was fully aware of the standard terms and conditions of an ME before resolving to pursue partnership discussions with NBPOL.
- Throughout the entire negotiation phase, FPIC requirements were observed and there was no undue influence on Mrs Walaun when she signed the agreement with NBPOL in July 2012.
- The ME lease agreement places the management of the area including reserved areas in the hands of NBPOL which has the resources to develop and manage it so that the conservation values of the land are enhanced and it yields FFB for processing in the company's mills.
- The Waluan family are eager to enter into an ME development agreement to generate a regular and improved level of income and secondly to demarcate, once and for all, the property boundary and prevent squatters and trespassers.
- The initiation of the ME proposal and the manner in which NBPOL has responded and interacted with the Walaun family in accordance with RSPO FPIC requirements.
- Most stakeholders accept that oil palm is an attractive crop in WNBP because
 of the presence of local processing facilities and the relatively higher price per
 unit weight. Some argue that the FFB price is incommensurate with the
 amount of labour required to achieve a good yield and harvest the crop for
 cartage to the mill.
- Most stakeholders believe that the landowners should be given all the information about the positive and negative aspects of oil palm cultivation as well as alternative cash crops before they make their decision on what land use or cash crop to adopt. Such information can be provided by local NGOs

and WNBPA officials. These officials could be invited to at least one community meeting prior to a final decision on what direction the people would like to pursue. Wherever this arrangement does take place it will further strengthen the FPIC status of the project.

• Some stakeholders are convinced that agrochemical residues from the plantations are contaminating the local terrestrial freshwater and marine ecosystems. NBPOL is advised to demonstrate to the public in WNBP that agrochemical usage is strictly managed and the alleged contamination unfounded. If the water quality monitoring program detects any contamination above the stipulated standards appropriate remedial action can be taken.

5. Recommendations for management and monitoring

A plan of management and summary of recommendations for planning and monitoring of management measures for key HCV, environmental and socioeconomic impacts has been detailed in a separate summary report.

6. Internal Responsibility

There are essentially two proponents working in a joint venture.

- a.) Rokahill Limited as registered Company operating in PNG
- b.) b.) New Britain Palm Oil Ltd (NBPOL)

NBPOL will undertake and finance all works as per the Management Guidelines and in accordance with the Terms and Conditions of the Lease Agreement with Rokahill Ltd. All works are detailed in the Management Guidelines and responsibilities are described in detail within the Term and Condition of the Lease Agreement and are implemented as per the Organization and persons detailed below:

Project phase	Department	Role	Contact
Initial contact	Lands Department	Establish unsolicited contact. Explain basic conditions. Assess initial viability	Ashley Barnes, Head of Lands Department
Preliminary investigation	Sustainability Department	of project. Preliminary HCV Preliminary SEIA	Sander van den Ende, Sustainability Manager
Signing of Lease agreement	Company Secretary and Lands Department	Formalize agreement between the parties	Teup Goleduh, Company Secretary and Ashley Barnes
New Planting Procedure	Lands and Sustainability	Full HCV and SEIA by accredited RSPO assessors	Ashley Barnes and Sander van den Ende
New Planting Procedure	Lands and Sustainability	Management and Monitoring Report	Ashley Barnes and Sander van den Ende
New Planting Procedure	Lands and Sustainability	Validation and Summaries of HCV,	Ashley Barnes and Sander van den

Table 3. Organisational personnel involved in planning andimplementation.

		SEIA and Management and Monitoring Report by CB	Ende
New Planting Procedure	Lands and Sustainability	Posting of Public Summaries and Notification onto RSPO website	Ashley Barnes and Sander van den Ende
Implementation of Project	Plantation and Sustainability	Develop project and ensure Management & Monitoring Plan is implemented	Group Manager, Malilimi Sander van den Ende

This summary of SEIA and HCV Assessments has been approved by NBPOL, and WNB Management assume responsibility for implementing report recommendations.

Sustainability Manager

Sander van den Ende

General Manager

Harry Brock

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