

RSPO NEW PLANTING PROCEDURE

SUMMARY REPORT OF SEIA AND HCV ASSESSMENTS

HIGATURU OIL PALM

(HOP)

Popondetta, Oro Province, Papua New Guinea

Summary Report of SEIA and HCV Assessment

1. Executive Summary

The reports details the findings of a HCV and SIEA assessment related to the development of proposed mini oil palm estates by Higaturu Oil Palms (HOP) in the Popondetta Plain of Oro (or Northern) Province of Papua New Guinea.

Both the SIEA and HCV assessments are carried out in accordance with the RSPO-PNGNI Principles and Criteria (P&C) and RSPO New Planting Procedures (NPP) and following as a guidance the PNG HCVF tool kit.

HOP's main focus of operation is in the southern half of the Popondetta Plain. The latter consists of lowlands and floodplains and stretches from the eastern ranges of the Owen Stanley Range in the West to the shores of the Solomon Sea in the East, while in the South it is bounded by the volcanic peak of Mt Lamington and the Hydrographers Range. HOP currently manages four estates and the 2 mills in the Popondetta Plain (it has one more estate and mill about 60km further west and far less accessible). In addition to its own estates, the HOP mill processes the output generated from the Village Oil Palm blocks in the area. It is currently considering increasing production through the establishment of mini-estates adjacent to or near existing estates in the Plain.

The assessments have recognized the following

- There was no primary forest identified
- All areas that require to maintain or enhance one of more High Conservation Values (HCV's) have been indentified and mapped accordingly
- There are no areas of peat soils
- The stakeholders involved in the process are the owners of the land and FPIC has been followed.

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

Name	Orginal size (Ha)	Conservation (Ha)	Plantable (Ha)
Sambogo Farms	154	81	73
Vudal University	251	27	224
Joro	110	78	32

The areas involved are:

Koro	127	127	No go
Jamba	187	10	176
Horaembo	226	17	209
Kohapa	239	105	134
Houpa	263	111	152
Heturo	86	7.3	78.7
Havoheri	85	13.75	71.25
Huhuru 1	112	31.66	80.34
Huhuru 2	21.25		21.25

2. Scope of the SEIA and HCV Assessments

The scope of the assessment involved:

a) The new development follows the principles of FPIC and landowners are involved.

b) Assess if there is a presence of any area of High Conservation Value (HCV) and review the status of biodiversity/environmental and socio-economic impacts. Indentified HCV area must be management and proper steps taken to protect and maintain the indentified areas for the benefit of the environment and the people.

Organisational information and contact persons

Higaturu Oil Palm is wholly owned by the New Britain Palm Oil Limited.

Higaturu Oil Palm P.O. Box 28, POPONDETTA ORO PROVINCE PAPUA NEW GUINEA

Contact Person: Mr. Paul Maliou Sustainability Manager Phone: +675 6297177

Legal Documents

Evidence of Land Tenure (Ambogo Farm and Vudal University land) Maps and Boundary markers for all project sides

Government Departments

Eddie Malaisa - Provincial Wildlife and Environmental Officer Sebastian King – Provincial Forestry Officer

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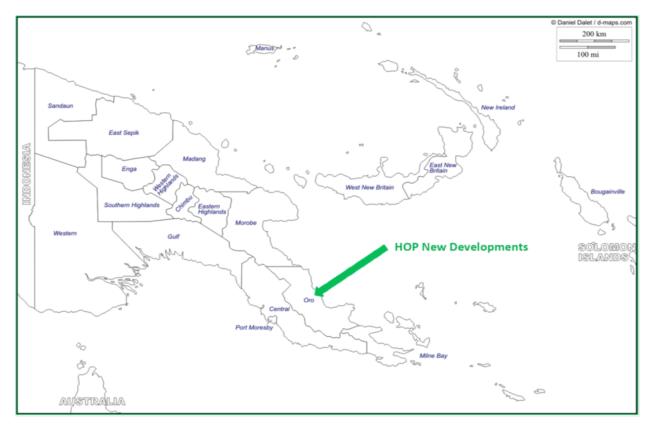
Champion Avediba – Acting Agricultural Advisor Ward Councillors and Council Officials – from Popondetta Urban LLG and Oro Bay Rural LLG

Location maps

Both at landscape level and property level including area of new plantings. Prior to development at the new concessions preliminary assessments were undertaken and soil types recorded with a view for long term suitability. Preliminary maps of soil types for new planting areas are used in HCV identification process. Topographic information is also incorporated in these maps.

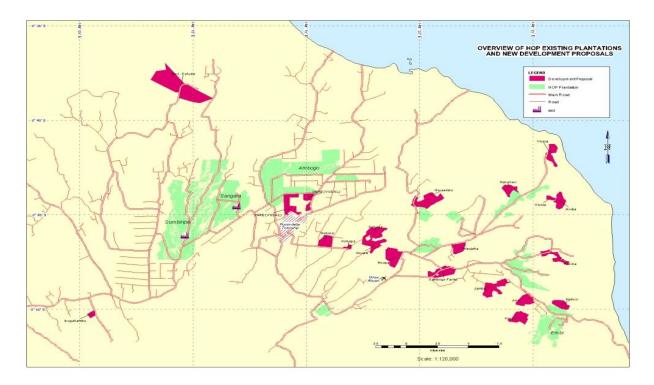
Preliminary maps of the expansion areas have been prepared and were sighted (copies of areas included in report) they include a guide for drainage plans, roads, fields and blocks. This map includes all relevant topographic information.

Detailed soil survey has been completed and all soil maps were viewed in relation to these areas. There are no peat soils in the new area to be developed.



See Maps 1 and 2.

Map 1 Location Map of Proposed New Plantings – Higaturu Oil Palm



Map 2 Location of proposed new planting: description or maps and GPS coordinates.

Time plan for new plantings

The new plantings will commence once 30 days public consultation have passed on the RSPO website for the Sambogo farm and Vudal University sides after also the assessment is made available to all stakeholders.

The other areas indentified are scheduled to commence with new plantings in 2012 but after further engagement following the recommendations in the management and monitoring report.

3. Assessment process and procedures

Assessor Credentials

SEIA ASSESSOR

Narua Lovai

Mr. Narua Lovai has a Bachelor of Science Degree in Applied Chemistry from the PNG University of Technology, a Master of Engineering Science Degree in Hydrology and Water Resources Management from the University of Adelaide, Australia and a Diploma in Professional Writing and Editing from Australian College QED, Sydney, Australia. He has worked with the PNG Department of Environment and Conservation, South Pacific Brewery, International Waters Programme (Secretariat of the Pacific Regional Environment Programme), Oil Search Limited and ExxonMobil PNG Limited.

Since 2006 he has been working as a Freelance Environment and Project Management Consultant. His expertise and skills include strategic planning, organizational, personnel and financial management, outcomes-based project management, policy formulation and revision, natural resources legislation compilation and revision, baseline environmental data collection, waste management and cleaner technology, water pollution assessment and mitigation, hydrological data acquisition and analysis, integrated catchment management, biophysical environment impact assessment, socioeconomic impact assessment, environmental compliance and audit monitoring, stakeholder engagement for community development, and professional writing and editing.

In relation to RSPO specifically he has participated in RSPO audits and assessments since 2008.

HCV ASSESSSOR

Mr A.J.F.M. Dekker

Mr Dekker his experience is related to monitoring and management of biodiversity and natural resources involving species and habitat conservation. He holds a Master degree in Biology of the university of Wageningen and has been working on various projects worldwide (south East Asia, Africa, Papua New Guinea) related to habitat management and biodiversity data collection and analysis since 1978.

He lectured at the University of Wageningen in (tropical) plant taxonomy, plant geography and the classification of West and Central African plants. Mr Dekker is well versed with GIS and remote sensing techniques and design of databases to monitor and manage species and habitats.

Process and Procedures

As part of NBPOL management guidelines for new development a first step in this process is the internal review of High Conservation Value and carbon stock and is carried out to ascertain a proposed site is likely available for development, identify what

measures of protection need to be deployed and ultimately decide whether the company will go ahead with the development. This assessment is a crucial tool in the dialogue with the landowners to document and explain restrictions and other consequences on development and operation of the new development. If, after this assessment, development is still acceptable to both parties, the full HCV assessment is conducted to confirm findings and boundaries described by the internal review.

The information on the proposed sites was provided on photocopies of topographic maps. Details of roads, rivers and major streams were provided by the GIS staff of the HOPL research unit, as well as all other data on existing estates and proposed new development. The boundaries of the proposed mini-estates as provided by the same unit are reportedly based on gps surveys by HOP personnel. For most of the area Google Earth (GE) offers high resolution data, with acquisition dates somewhere between 2005 and 2010.

The assessment maps (Oct 2011 - Jan 2012) have been reviewed based on information found on the GE imagery. The information pertinent to the assessment or directly affect assessment issues, like drainage system and buffer zones, forest areas, VOP and settlements have been reviewed in detailed and mapped accordingly. The boundaries of the proposed sites have been followed as provided by the HOP research unit and follow the geographic projection.

The following Principles and Criteria of the RSPO P&C PNG NI have been taken into account as well by the HCV assessor and are reflected within contents of this report as well:

Principle and criteria: 4, 4.3, 4.4, 5, 5.2, 7.

The SEIA assessment was carried out with the scope the focus to establish baseline social and environmental conditions, predict the impacts that may be caused by the new development and devise ways to minimise the negative impacts and maximise the benefits.

The SEIA assessment included the landscape level, the environment (biological as well as the human) was carried out using secondary data, relevant information from the environment component as well as field data gathered through consultative meetings, discussions and interviews with the interim ILG committee members, ILG community members, Provincial Administration officers, Popondetta Urban and Oro Bay Rural LLG Ward Councillors and Council officials (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 Oro and other oil palm growing provinces.

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

Within Social Impact Assessment are details of all people/stakeholders contacted including names, locations and dates of any meetings

Stakeholder consultation and places visited

Local People Involved

- Guguma Village Sambogo Farms;
- Vudal University College Director and staff;
- Joro Kararata Village
- Harrington Kaki Hoturo
- Jamba Sori Village
- Horaembo Parahe Village
- Kohapa Vevehupa Clan
- Houpa Houpa Clan Bapuhi Village
- Haujaha Clan
- Havoheri Clan

As part of the wider participatory consultation for the SEIA, a number of provincial government officials were interviewed prior to a group discussion with ward councillors as well as council officials from the Popondetta Urban LLG and the Oro Bay Rural LLG.

Provincial Wildlife and Environment Officer, Mr. Eddie Malaisa, the Provincial Wildlife and Environment Officer, on the morning of Friday 30 March 2012

Provincial Forestry Officer, Friday 30 March was held with Mr. Sebastian Arthur King.

Acting Provincial Agriculture Advisor, Friday 30 March was held with provincial government official Mr. Champion Avediba.

Ward Councillors and Council Officials from Popondetta Urban LLG and Oro Bay Rural LLG :Friday 30 March Twelve Ward Councilors and three Council Officials participated in this group discussion

List of Legal, regulatory and other guidance referenced includes:

Environmental Permits for the new plantings have not yet been issued. Notification was submitted to the Department of Environment and Conservation (DEC) in September 2011.

DEC has been advised by HOP with regards to the proposed ME's and HOP has been formally cleared to proceed with land evaluation and acquisition.

Local stakeholders including LLG's have been informed and included in discussions.

The MoU with the customary landowners is currently being further explained and discussed. At current moment only the MoU of Vudal has been signed and Sambogo farm land is owned by the company since many years and there is an existing lease available.

References used in the SEIA:

Bleeker, P., 1983, Soils of Papua New Guinea, CSIRO, Canberra, Australia. Douglas Environmental Services, 2007, *Environmental Assessment Report for the Smallholder Agriculture Development Project – PNG,* Report to OPIC, Port Moresby, PNG.

Haantjens, H.A., 1964, *General Report on Lands of the Buna – Kokoda Area – Territory of Papua and New Guinea*, CSIRO, Melbourne, Australia.

International Association for Impact Assessment, May 2003, *Social Impact Assessment International Principles*, Special Publication Series No.2

Interorganizational Committee on Guidelines and Principles for Social Impact Assessment 1994, '*Guidelines and principles for social impact assessment*, Impact Assessment, vol.12, no. 2, pp.107 – 152.

Koczberski, G & Curry, G.N., 2007, *Beneficiaries Assessment Report for the Smallholder Agriculture Development Project – PNG*, Report to OPIC, Port Moresby, PNG.

Koczberski, G & Curry, G.N., 2007, *Social Assessment Report for the Smallholder Agriculture Development Project – PNG*, Report to OPIC, Port Moresby, PNG.

McAlpine, J.R., 1983, Climate of Papua New Guinea, CSIRO, Canberra, Australia.

RSPO, March 2008, RSPO PNG NIWG Principles and Criteria, RSPO.

RSPO, May 2010, RSPO New Planting Procedures - Guidance Document, RSPO.

Vigus, T., 2011, Draft summary report on Rapid High Conservation Value Assessment of Proposed Mini-estates at HOP, Report to NBPOL.

4a. Summary of assessment findings (for SEIA assessments)

Both RHCV and full HCV assessments are carried out in accordance with the RSPO-PNGNI Principles and Criteria (P&C) and RSPO New Planting Procedures (NPP).

The involved landowners instigated the start of the process by informing the company about their interest of oil palm development on their customary land. This is in relation to the development on customary land. The Vudal area is on the university grounds which already is planted with agricultural crops and wants additional planting on one of their existing leases. The Sambogo farm development is on company lease which never was planted before and parts have been taken up by local farmers from the surrounding villages. This is being addressed by looking at only the available plantable area and an arrangement for the other land areas is being look into.

The awareness sessions where held by the company at all Villages within each separate area and including other stakeholders on stakeholder related matters (dispute settling, environmental issues etc.). Hereby the customary traditions were recognized by involving the communities' representatives and clan leaders. There are clans which reside or have interest in each of the expansion areas. Files are available showing the involved discussion process, decision making process and if needed a settlement process and the consent process of involved stakeholders. Established boundaries are marked physically by pegs and on maps. This is also a requirement of RSPO P & C to which HOP are currently in process of obtaining certification.

All the stakeholders are informed with regards to ongoing negotiations in regards to the proposed development of the expansion.

Records indicate that presentations were made to the Local Provincial Administrations and LLG Representatives from each separate area. This is included for all areas which will be part of the New Plantings.

There are records of meetings and includes participants from HOP and community representatives for each area. There are also records of the history of communication on the proposed development and all meetings held with the local communities. Two local LLG's from Popondetta Urban LLG and Oro Bay Rural LLG also participated in the meetings and group discussions.

A number of awareness sessions were also held with Land Groups and other local people forming the ILG from December 2010 and March 2012. Altogether a large number of members of the local communities including Land Groups attended these sessions. Both the benefits and negative impacts were discussed at each of these meetings as well as explaining the ILG Process. There are attendance lists provided for each meeting with local people in each extension area.

Observation: Copies of the meeting minutes were not included in the SIA report however the assessor has confirmed that each meeting was minuted.

Of the proposed New Planting areas two are on state land these are Vudal University and Sambogo farm all other extension areas are customary land and owned by the local clans.

All ILG's can demonstrate ownership of land being developed through history of tenure and community agreement to enter into lease-lease back arrangements once it has been decided to continue. State leases are held by both Vudal University and Sambogo farm.

Boundaries are normally natural such as Roads, Rivers and Customary land. Boundaries for each expansion are identified and are located and marked via GPS and also included in maps for all areas involved in the expansion.

There have been no known disputes with regards to the land involved in the proposed New Planting extensions.

HOP have a participatory conflict resolution method by first talking to involved parties and also recording minutes of these meetings as per 2.2.4 The Company tries to implement the conflict resolution process by the involvement of the Company Lands Officer dealing with complaints of the communities. He keeps track of the complaints and visits the ILGs to settle any dispute. When conflict resolution in relation to state land cannot be settled accordingly it becomes a process for the DLPP or the courts to settle. There have no conflicts recorded at this stage.

In all cases for ILG's it can be demonstrated that acceptable conflict resolution has taken place. Customary land owners are able to obtain legal title to their clan owned land and enter into sub-lease agreements with HOP under the Lease-Lease-Back Scheme.

Maps are available (current) showing occupied state land, vacant state land and customary land. Maps are available which indicate the extent of recognised customary rights and there are copies available of negotiated agreements detailing the process of consent in relation to the state land that was compensated for when bought by the state and with current customary land in relation to the establishment of ILG's.

HOP is in the process of negotiating with customary landowners the lease of the customary land for plantation expansion under the Lease-Leaseback process with regards to the land not under state leases. This process commenced in December 2010 and is ongoing as a sub-lease agreement has not yet been finalized and signed with each ILG. The FPIC component is integrated into the land lease process (the description of the awareness session on both positive and negative aspects of development), with cooperation of an independent neutral party in this case Local Level Government (LLG) which has been requested for their involvement in the process.

The land owners are very keen to start the process as some have expressed an interest in planting Oil Palm since 1997.

The Lease-Lease Back system is a legal process under the Land Act whereby customary landowners can form an ILG and obtain leasehold title to their land. By holding a recognised legal title the ILG can then enter into a Sub-Lease agreement with a company to develop that land. HOP has a documented procedure to assist customary landowners to obtain leasehold title to their land. The DLPP is the government department responsible for administering the Land Act and the Lease Lease Back process ensuring that the rights of the customary landowners are protected.

Since December 2010 HOP has commenced work on the Lease lease back process with the landowner groups. The initial step in the process was for the landowners to invite HOP to develop their land. HOP representatives meet with the landowners and inspect the land to ensure it is suitable for oil palm cultivation. Awareness sessions have been held with the landowners in the villages and hamlets or at a suitable location where all interested parties may attend. A number of Local Government representatives were invited to attend the awareness sessions to verify that FPIC is followed and also to explain possible negative environmental and social impacts to the landowners. Three awareness sessions are held with the ILG. Following the awareness sessions consent is given by the landowners for the company to assist in the formation of the ILG and to obtain title over the land. HOP representative provides assistance to the landowners. The SIA carried out indicated that Local communities were in favour of the expansion due to the benefits it can bring to the local community/ies.

The SEIA presented did mention some of the ongoing issues which development of Oil Palm may help to alleviate – all areas and villages to some extent have similar problems. These include poor quality housing, no fly/insect or odour control, no water tanks, poor pit latrines and suffer from a number of illnesses such as malaria, intestinal and skin infections. Most have very poor access to health facilities in the area.

The impact of a new development on customary land in terms of positive contribution is difficult to identify at this stage as NBPOL took over this area in 2010 and no new development so far has taken place under the current management. The study didn't include a Cost Benefit Analysis so far as it was difficult to determine the impacts so far. It was suggested to do a full socio – economic after the implementation of the projects to determine the positive impacts of the development.

The minutes of meetings are being kept and are a tool to follow up on the awareness that is forwarded and to check the FPIC component. This indicates that these agreements are entered into voluntarily as minutes of any meetings are recorded. This information is to be recorded in English and Tok Pisin.

At this stage the ILG's have not been formed officially. HOP has conducted formal Land Investigation Reports (LIR's), which have been completed in conjunction with Government Lands Officers. This LIR is used as the basis for determining whether there is undisputed ownership over the Land in question or not. SEIA and HCV forest evaluations have been completed prior to the signing of sub-lease agreements. The land under evaluation for Lease Lease Back does not include significant amounts of identified HCV areas and the areas that have been indentified have been mapped and will be set aside. Any such areas are included in the HCV report.

Maps showing potential areas for Lease Lease Back have been produced. Areas of vacant State owned land are also identified on these maps.

A Social and Environmental impact Assessment has been conducted in relation to the areas of the proposed expansion areas. This was completed by an independent local assessor (Narua Lovai). This assessment was completed and report submitted by May 2012. This assessment includes a comparison of existing situation and impacts as a result of expansion.

There were a number of concerns expressed by members of each group – these included perceived unequal sharing of the income generated between HOP and the ILG'S. There were also concerns with regards to lack of improvement of living conditions. They were also worried with regards perceived social deterioration with the improvement of income and having more money available. This included use of alcohol and substance abuse near the Mini Estate.

Other issues raised included contamination of water sources used for drinking, cooking and other practices by residues from fertiliser and pesticide use.

This also included details of impacts and risks including the significance of the impacts/risks.

Through the existing RSPO system in place Environmental Aspects and Impacts are assessed and reviewed at least annually for all areas under the control of HOP.

The environmental impact assessment included the development of infrastructure such as building new roads, introducing drains and disposal of waste.

An Environmental Management plan has been prepared with regards to the submission for an application for an Environmental Permit. This was prepared as a requirement of the RSPO P & C certification process.

Social Impacts are identified in part via the grievance process, ILG's and other parties for negative impacts and through social interaction for positive impacts as reported in 6.5.

An action plan has been proposed in the SIA and actions will be taken, time frames and responsibilities and records in relation to any changes to procedures or implementation will be maintained.

As a result of the SIA the following recommendations were made with regards to mitigating potential environmental impacts.

• Conduct RSPO awareness in all ILG'S

- Ensure Buffer zones are clearly marked and left intact
- Enrich species diversity in the buffer zones
- Include cultivation of QABB vines in Buffer Zones
- Carry out water quality monitoring prior to site preparation
- Ensure proper disposal of all waste generated.

There were also recommendations with regards potential socio-economic aspects.

- Undertake full genealogy study of members of land owning clan
- Conduct base line household socio-economic survey of each community
- Verify that all clan members are kept informed of agreement negotiations (FPIC).
- Determine how clan members with VOP blocks on proposed ME will be handled
- Evaluate increases in land rental and FFB royalty rates would improve socioeconomic welfare within the ILG communities
- Ensure all members of each ILG understand the agreement prior to signing.
- Ensure priority for employment and contracts is given to the ILG community
- Investigate means of improving living conditions
- Arrange project planning and financial management training for ILG's
- Organise training and awareness on budgeting and saving
- Organise awareness sessions on alcohol and substance abuse as well as HIV for ILG and nearby communities
- Promote sporting activities within ILG and nearby communities

HOP is aware about the FPIC and transparency in relation to dealings with customary landowners and has incorporated this in its procedures.

The communities are represented by ILGs and also Local Administrators. Also the communities have given their consent based on a full understanding of the matter/proposal and sufficient information is provided.

Each ILG has appointed a spokesperson to address these issues and to discuss on behalf of the ILG.

All documents are in English (the official language of PNG) but can be translated into local languages as necessary.

4b. Summary of assessment findings (For HCV assessments)

At each proposed mini estate, the assessment team was introduced by the Higaturu Oil Palm Ltd sustainability team and a series of questions was put to the proponents to ascertain whether there had been Free Prior Informed Consent or whether there had been pressure from any person or persons from the milling company (HOPL was previously owned by CDC, PACRIM, and Cargill before NBPOL took over in 2010).

These discussions were lead by Tom Diwai Vigus, in the Tok Pisin language, one of the three official languages (Hiri Motu and English being the other two) of Papua New Guinea and understood by all the stakeholders present.

As a matter of introduction to discussions the villagers were asked whether they had heard of RSPO and had any understanding of the implications of growing oil palm under RSPO Certification. Broadly speaking the notions of environmental and social sustainability aspects of RSPO, including the need to protect any High Conservation Value habitats, that is to exclude such habitats if present on the proposed mini estate from being converted to oil palm plantations; the need to protect any watercourses within the proposed developments (establish or maintain appropriate Buffer Zones) and the need for the assessors to gain a clear understanding that the people were the proponents of the mini-estates and that there had not been pressure from the milling companies were the main issues discussed at each meeting.

There was a question and answer session followed by a walk around the proposed area whereupon the potential HCV areas were identified by the assessors and mapped by the lead auditor, Mr Lewie Dekker.

Prior to development of the expansion areas soil surveys were undertaken and soil types recorded with a view for long term suitability. Maps of soil types for new planting areas are kept by the R&D Department. Topographic information is also incorporated in these maps.

A map of the expansion area prepared in 2012 was sighted. It includes a guide for drainage plans, roads, fields and blocks. This map includes all relevant topographic information.

There is no steep terrain in the proposed expansion areas and therefore there will be no planting over 25°.

All plantings near gullies are avoided to prevent erosion and these areas are excluded from planting activities

There are no fragile or marginal soils within the proposed new development area.

There are no peat soils in proposed lease-lease back areas.

Lewie Dekker (an approved RSPO HCV assessor) carried out an assessment of the presence of HCVs within the Expansion area and areas adjacent to the proposed new planting. The ecologists used the PNG National Interpretation of the HCV Toolkit and prepared a report on their findings.

Within the planned expansion estates some areas will not be planted and these habitats have been identified as either having fragile soils due to the slopes and the requirement of exclusion of the gully areas from planting due to the slopes in these areas. These are highlighted in regards to each separate ILG and what should be preserved.

The assessment determined that there are small parts of HCV in steep areas along rivers, creeks and gullies which will be retained as buffer zones. It has been agreed that all areas of secondary growth forests be left in reserve as these are considered "refugia" and in time will become HCV in their own right. There are areas of cultural significance within the proposed expansion area including relics from the Pacific War and there are

some plans to preserve these in some way. There are however some areas which do not have any forests at all and are mainly grass land. The assessment of HCV's has been completed in relation to the new developments (see 5.2) and which areas could be negatively affected. There is also an assessment of the local and adjacent natural ecosystems. All watercourses have been identified and including recommendations of measures to be taken to maintain the quality of these water resources including the maintaining of riparian – buffer zones alongside all water courses.

Some parts of the expansion areas already have in place forest reserves which will continue to be preserved – as is the case with the proposed Vudal University expansion.

The HCV Assessor did not identify any rare, threatened or endangered species of fauna within the proposed Expansion or adjacent areas other than the all-important the occurrence of the largest and one of the rarest butterflies in the world, the Queen Alexandra's Birdwing Butterfly, *Ornithoptera alexandrae* (hereinafter referred to as QABB). For various reasons the species was never really studied till the early 1970s, but even today many aspects of the species' life cycle and survival needs remain sketchy. In the 1980s several surveys were conducted, followed in the late 90s by the Oro Conservation Project doing many more.

Based on these surveys the currently known home-range of the QABB is split over three disjunct areas: the Managalase Plateau (south of Hydrographers Range), the Popondetta Plain (north of Hydrographers Range/Mt Lamington) up to the Kumusi River, and a small population in the Cape Ward Hunt area

At this point of time some areas have been identified as HCV following the precautionary principle and are likely to be set aside for temporal use for resident (migrants included) birds for nesting, roosting and breeding and the QABB. This related to some of the forested areas within the landscape. If the Aristolochia dielsiana vine is known to be present in that forest patch, then it should be considered probable QABB habitat.

Most of these remaining forests appear to have been logged at least once since the time the Forest Resources Map was created. At present, HOPL has no logging records detailing when previous logging was carried out in or around the proposed sites. The State of the Forests map (UPNG, 2008), prepared through comparison of satellite imagery from 2000-2007 with aerial photography from 1972-1975 (Australian Army data), shows most of the remaining forest to have been part of logging operations between 1980 and 1995. Tom Vigus, Forestry Officer stationed at Popondetta at the time confirms the same (Vigus, 2012).

The consultant took a precautionary approach with regards to HCV6 as it was implicit that a small portion of the expansion land area contained war relics from the Pacific War.

There were maps provided for each proposed expansion area which indicates any areas which may be sensitive with regards to Oil Palm expansion and may need to be either preserved or action taken as suggested in the HCV assessment dependent on the classification. Consequently, in the assessment of the proposed mini-estates, any forest patch containing a mix of taller and smaller trees/natural clearings, either within itself or as a group with nearby patches, are declared designated HCV type 1.2/3. In practice, this means any forested area, bar the severely degraded and colonizing/early regrowth, is a designated HCV under the RSPO criteria, with precautionary principle applicable in full.

FPIC can be demonstrated as each expansion area was visited during the HCV assessments. There were records of attendance at each meeting in each area. These meetings were held between December 2010 and August 2011.

Observation: Minutes of these meetings were not available to support conclusions made

Conclusions were made with regards the proposals as a result of these discussions.

They included the following:

- The villages, mainly clans or families where not pressured to plant oil palm but were keen to see oil palm planted on the grass lands to help increase family incomes.
- Where remnant forest was present this area is not to be converted to Oil Palm
- All villages had other grass land areas and gardening areas and therefore oil palm would not affect these areas
- A number of mini estate contained Village Oil Palm (VOP) and there was a preference for these to be incorporated into the relevant mini-estate.

A number of recommendations were made as a result of this HCV Assessment. They included the following:

That HOP collaborates with other stakeholders such as provincial administration and government, OPIC and Environmental NGO's to conduct further awareness sessions with regards to RSPO.

A list of demands requires proper explanation as to what the expansion will provide and what can be expected

All areas that should be excluded from planting (buffers, HCV areas, unplantable areas, etc) must be identified and delineated by competent HOP staff prior to any forest clearance_and be excluded from clearing contracts.

On-site supervision by HOP staff is recommended to avoid any type of "accidental" encroachment.

HCV areas and buffer zones should be strictly off-limits and enjoy complete protection, but limited, controlled access to other unplantable areas for NTFP collection and small timber extraction may be granted on a per request basis.

Additional staff be engaged by HOP in Sustainability Department to enhance communication with land owners during the development stage of the expansion

All documents are in English however they have been translated into local languages

- The PNG HCV toolkit was employed
- Decisions on HCV status and related mapping are identified in the HCV assessment along with maps indicating status of all land to be included or affected by the "new plantings".

5. Internal Responsibility

Narua Lovai SEIA Assessor



A.J.F.M. Dekker HCV Assessor

Signed for on behalf of Higaturu Oil Palm by:

Paul Maliou Sustainability Manager

This summary of SEIA and HCV Assessments has been approved by NBPOL-Higaturu Management.

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General Manager NBPOL-Higaturu

10th of December 2012