

# Trial Verification Report on NBPOL's Compliance with POIG Indicators

## Milne Bay Estate (MBE) and Higaturu Oil Palm (HOP)



by

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## Executive Summary

The production of palm oil creates jobs and is an engine of development in a growing number of regions. Palm oil is a heavily traded commodity, adding to national GDP and tax coffers. At the same time it is recognized as one of the leading contributors to tropical deforestation, greenhouse-gas emissions and wildlife endangerment, as well as a disruptor of indigenous traditions and livelihoods. In response to this, Western and local environmental groups have campaigned to raise consumer awareness of the role palm has in creating and externalizing its social and environmental costs. This pressure helped led to the creation of the Roundtable on Sustainable Palm Oil (RSPO), founded by major palm buyers and producers with the assistance of social and environmental NGOs. In addition to the RSPO, the Sustainable Agriculture Network (SAN) and the Roundtable on Sustainable Biomaterials (RSB) have developed principles and criteria and an auditing and certification program for palm oil and other farm products.

There is a perception that the RSPO has had limited effect, given the scale and importance of the concerns. Critics note that RSPO has low adoption rates, limited branding and marketing, insufficient enforcement, and fails to adequately address deforestation, destruction of peat soils and the resultant impact on indigenous peoples, biodiversity and climate. There are conflicts between the RSPO standard and national development imperatives and laws. In response to these perceived shortcomings, NGO stakeholders have expressed their disappointment while at the same time working to strengthen the RSPO. For example, the Worldwide Fund for Nature (WWF) issued a statement criticizing the lack of importance paid by the current iteration of RSPO principles and criteria to greenhouse gas production from the development of peat soils and deforestation.

Consumer-facing companies began to respond to these concerns by developing, largely with the assistance of the The Forest Trust (TFT), -- a Swiss-based consulting company -- so called Forest Conservation Policies (FCPs) that largely ignored the comprehensive principles and criteria approaches of the RSPO, SAN, and RSB. A series of producer company-consortium-led efforts, often involving TFT, certain prominent NGOs, and consumer-facing companies, have endorsed policy based commitments such as the Sustainable Palm Oil Manifesto (SPOM) and the Indonesian Chamber of Commerce (KADIN)-led Palm Oil Pledge (IPOP). A number of NGO observers outside of these efforts regard them warily as Trojan-horse efforts to subvert and sink the gains made in palm oil sustainability standards, and even TFT's director recently described standards as an NGO-based "religion," whose time was past.

The Palm Oil Innovations Group (POIG) aims to support continuous improvements in the RSPO. The goal of the POIG is to strengthen implementation of existing RSPO standards while addressing other critical issues where RSPO is seen as falling short. POIG looks at three thematic areas: environmental responsibility, community partnership, and corporate and product integrity. POIG is comprised of palm oil producers and NGOs. It created "Requirements and Indicators," a sort of proto-standard meant to bolster the RSPO standard.

New Britain Palm Oil Limited (NBPOL) is a founding member of POIG. This report discusses how two NBPOL estates measure up to the POIG "Requirements and Indicators" (R&I). It includes observations on the audit-ability of the POIG R&I, means of verification, how the indicators might be adapted to a Melanesian landscape, and the value-added of the POIG indicators to the RSPO Principles and Criteria.

The POIG R&I are a valuable contribution to the standards and certification movement. However, POIG does not provide guidance for interpretation and auditing or the other essential elements of a certification system. Given this limitation, POIG's founding member New Britain Palm Oil Limited (NBPOL) commissioned Rainforest Alliance, which has vast experience in standard setting, auditing and certification, to test the POIG R&I in real conditions, meant to help the POIG determine how to adapt and employ its R&I to have the most meaningful impact on oil palm sustainability.

The verification assessment found that NBPOL complies with the POIG's Requirements R&I. However, there is considerable ambiguity in some R&I, so "compliance" was in some cases necessarily subjective.

We raise a number of 'real life' dilemmas, such as how POIG considers situations where the company embraces conservation where local stakeholders do not, and to what extent a plantation company should interfere with its workers' private lives.

The POIG R&I are focused on the issues where RSPO has received the most criticism. The R&I suggest ways to tighten and enlarge the agreed (2013) RSPO criteria. We find that many POIG indicators are sensible, but others are ambiguous and need specific guidance, whilst others appear redundant. Many of the R&I, as currently written, will be difficult to operationalize as part of meaningful audits.

The verification team observed that in its mission to innovate, the Organising Committee may consider the need to move beyond setting high performance standards for growers and also consider how innovations could be introduced in certification systems that certification bodies would have to adhere to. Additionally, the question arises what obligations could be taken on by POIG's NGO membership considering that NBPOL has reached out to the NGO community but regularly struggles to mobilize and retain the NGO expertise it needs to address the issues covered by the R&I.

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# Acronyms

BOD	Biological Oxygen Demand
CAR	Corrective Action Request
CNA	Community Needs Assessment
CPO	Crude Palm Oil
CRPP	Customary Rights Purchase Parcel
DEC	Department of Environment and Conservation
FFB	Fresh Fruit Bunch
FPIC	Free, Prior and Informed Consent
FSC	Forest Stewardship Council
GHG	Green House Gas
GMO	Genetically Modified Organism
GRI	Global Reporting Initiative
Ha	Hectare
HCS	High Carbon Stock
HCV	High Conservation Value
HOP	Higaturu Oil Palm
ILG	Incorporated Land Group
ILO	International Labor Organization
IPM	Integrated Pest Management
ISO	International Standards Organization
KPI	Key Performance Indicator
LLB	Lease Lease Back
LUC	Land Use Change
MBE	Milne Bay Estate
MOFA	Milne Bay Farmer Association
NBPOL	New Britain Palm Oil Limited
NPP	New Planting Procedure (RSPO)
OPIC	Oil Palm Industry Corporation
P&C	Principles and Criteria (RSPO)
PBT	Persistent, bio accumulative and toxic substances
PNG	Papua New Guinea
POIG	Palm Oil Innovation Group
POME	Palm Oil Mill Effluent
QABB	Queen Alexandra Birdwing Butterfly
RA	Rainforest Alliance
RAI	Ramu Agri-Industries
R&I	Requirements and Indicators (POIG)
RSPO	Roundtable on Sustainable Palm Oil
SA	Social Accountability
SABL	Special Agriculture and Business Lease
SAN	Sustainable Agriculture Network
SLA	Sub Lease Agreement
SOP	Standard Operational Procedure
SPOM	Sustainable Palm Oil Manifesto
TFT	The Forest Trust
TPS	Third Party Suppliers
VSO	Volunteer Service Overseas
WNB	West New Britain



# Introduction

On 13th November 2013, the Palm Oil Innovation Group (POIG)<sup>1</sup> adopted its Charter to “demonstrate that by setting and implementing ambitious standards, the industry can in particular break the link between palm oil and deforestation, and human, land and labour rights violations.”

POIG’s mission is to support the RSPO through building on RSPO standards and commitments and by demonstrating innovation to implement RSPO existing standards as well as with additional critical issues. POIG focuses on creating innovations in the palm oil industry and the promotion of these innovations.<sup>2</sup>

Upon signing the POIG Charter in November 2013, New Britain Palm Oil Limited (NBPOL) committed to apply the requirements across all estates and the supply chain and to commission an independent study to verify compliance within 12 months. The company subsequently contributed to the formulation of the POIG Indicators, which were completed in April 2014. This quasi standard is now known as the POIG “R&I” (Requirements and Indicators”).

In October 2014, NBPOL commissioned Rainforest Alliance to lead the verification of two out of its six management units against the POIG R&I. Aidenvironment was sub-contracted by Rainforest Alliance to assist in summarizing the assessment results.

The purpose of the verification exercise was to determine whether findings in the field and from presented documentation showed that NBPOL (a) exceeded the expectations of the POIG ‘standards; (b) met the expectations of the POIG, or (c) failed to meet the expectations. Additionally, the study aims to contribute to the discussion among POIG members about the utility and value of the R&I, whether they are verifiable, and where they may be strengthened.

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<sup>1</sup> Signatories: Agropalma Brazil, DAABON Group, Forest Peoples Programme, Greenpeace, New Britain Palm Oil Ltd, Rainforest Action Network and Worldwide Fund for Nature.

<sup>2</sup> POIG website [poig.org].

# Methodology

## Preliminary meeting

Senior NBPOL sustainability managers Simon Lord and Petra Meekers met with the Rainforests Alliances' Michelle Deugd, Chris Wille, Eric Servat and Stephen Krecik in Utrecht, The Netherlands, on September 3<sup>rd</sup> and 4<sup>th</sup>, 2014, to discuss shared sustainability philosophies and the mutual vision of an improved and positive palm production. Among the items agreed on was an assessment of NBPOL's commitments to implement and evaluate the POIG R&I on its plantations.

## Selection of Sites

During the Utrecht meeting, the desire to obtain a representative sample of NBPOL's plantation network was explored. It was determined to use HOP and MBE as two plantation areas that represented NBPOL's network in terms of the size of operations, length of operation, number of smallholders, and other factors by which they represented a median, particularly to the challenges of the implementing the POIG principles.

The RA and SAN have extensive experience in certifying groups of farms that are managed under one centralized system by auditing randomly selected farms and carefully examining the group's Internal Control Systems. This methodology could serve POIG if it decides to develop and manage a credible verification program.

## Pre-Assessment Documents Review

Stephen Krecik met with Simon Lord during October 2-3 in Singapore at the offices of NBPOL, to conduct a documents review of the POIG principles operationalization on NBPOL in general, and in MBE and HOP in particular. During this time, background on the goals of the POIG were discussed to frame the assessment; the POIG was presented as an opportunity to experiment with additional practices to improve on sustainability issues raised in review of the RSPO. The overarching goal of the POIG assessment was to include several central questions:

- 1) Is there sufficient evidence that the POIG principle has been implemented?
- 2) Is this evidence in a useful form?
- 3) What gaps are perceived between the operational indicators and the intended purpose of the POIG?
- 4) Can the POIG indicators be verified?
- 5) If they can be verified, have the POIG principles been successfully implemented on each estate, either in full or partially?
- 6) Are the indicators used to measure implementation of the POIG sufficiently accurate and precise to indicate successful implementation of the POIG?
- 7) Do the POIG indicators indicate an improvement / change on the established principles and criteria of the RSPO?

## Field Observations

From October 6 through 16<sup>th</sup> RA-SAN auditor Iwan Kurniawan visited both MBE and HOP to evaluate the implementation of the POIG. Prior to departure, he was provided access to farm management Standard Operating Procedures, maps and sustainability documents in electronic format, and familiarized himself with key issues on the estates. He was provided a series of questions to ask, areas of the plantation to examine, and documents to request by

Stephen Krecik, but otherwise conducted the evaluation based on standard auditing practices in which he is trained and experienced. During this time he was assisted by NBPOL staff in obtaining documents, inspecting areas on and around the farms, and interviewing workers, land owners, and the community at large.

### **Verification**

The process employed did not use an audit format (in which a set format of items to inspect are checked off as compliant/non-compliant). The exercise had three objectives: to explore and verify whether the estates met the POIG R&I; to evaluate how verifiable are the R&I; and to identify gaps between the intent of the POIG and its operationalization / implementation.

The assessors did not use a standard checklist because the POIG R&I have not been distilled into verifiable criteria, and there is no scoring system. Thus, the level of compliance is discussed in a qualitative and comprehensive way.

### **Scope**

The focus of this assessment was on the POIG's R&I; compliance with SAN and RSPO P&C was not reviewed. The verification of the POIG took place at a policy (charter) level, as the POIG standards have not yet been operationalized into principles and criteria by a standard-setting body. The latest version of the POIG R&I (May 2014) was utilized for this verification assessment. Field verification took place at two of NBPOL's units: Milne Bay Estate (MBE) and Higaturu Oil Palm (HOP) (See Annex A).

The only significant expansion currently under consideration by NBPOL is located at Orangerie Bay (being partly a state lease as well). This new development is part of the Milne Bay area and is pending management decisions as to whether to proceed with the project. For this reason, the development proposal is considered financially sensitive and no specific reference is made to the project in this report. In anticipation of the proposed developments at Orangerie Bay, NBPOL has conducted a series of assessments based on social development needs of local peoples and of conservation stocks, including HCV, HCS and SIAE analyses. In addition, a new mill, encompassing ~200 hectares, as planned in MBE, is not included as part of this analysis.

Part of the new development areas in HOP are overlapping with the existing smallholder areas, with the actual area smaller. Certain conservation areas, such as riverine buffer zones are included in the tally for undeveloped areas. Budgetary constraints as well as FPIC procedures have contributed to lower planting rates (307 hectares of realized new plantings from the end of 2012 until 2014, falling against a targeted 1,784 ha).



Figure 1 MBE and HOP Area Statement per August 2014

<b>Company estate</b>	<b>MBE</b>	<b>HOP</b>
Mature	9,407.50	6,953.44
Immature	1,574.81	1,715.70
Total Planted	10,982.31	8,669.14
Infrastructures	669.49	490.91
Undeveloped	2,010.18	2,858.57
Total Land	13,661.98	12,018.62
New Development [ND under approved NPP]	5,351.29 0	1784.60
<b>Smallholder estate</b>	<b>MBE</b>	<b>HOP</b>
Mature	1,865.00	11,879.00
Immature	28.00	1,668.00
Total Planted	1,893.00	13,547.00
New Development	Yes	Yes

### Approach

An experienced RA/SAN auditor visited the sites for a total of 10 days accompanied by two operations sustainability managers. RA's Palm Oil Program manager spent two days reviewing the corporate-level documents. The team subsequently spent two days reviewing the auditor's findings. The review looked at not only what was on the ground and in the public domain but also assessed the indicators in the light of POIG's intentions and the ease of verification.

# 1. Environmental responsibility

## 1.1 High Carbon Stock and High Conservation Values

### 1.1.1 POIG Requirement

The link between oil palm expansion and deforestation will be broken through undertaking a High Carbon Stock (HCS) approach in addition to a High Conservation Value (HCV) assessment, and a process of obtaining Free, Prior and Informed Consent to use land. The approach combines biodiversity and carbon conservation, as well as social considerations (including community needs).

### 1.1.2 POIG Indicators

- A HCS forest approach which combines biodiversity, carbon conservation and social considerations including community needs will be conducted prior to establishing new plantations or expanding existing ones.
- HCS forest areas shall be identified and mapped.
- No new plantings shall take place on HCS areas identified for conservation after March 2014.
- Identified HCS forest areas are actively conserved as part of a participatory land use plan and the FPIC process, and an overall estate conservation plan that includes HCV areas, riparian zones, peat land areas and any other areas legally required to be conserved.
- A report of the HCS approach shall be made public.
- As part of the carbon conservation approach the RSPO report on the potential emissions and the plan to minimise them will be made public.

### 1.1.3 Verifiers

- Policy on HCS and HCV
- Public reporting

### 1.1.4 Compliance

In 2002, NBPOL was the first palm oil operation to address greenhouse gas issues systematically, and committed to reducing all emissions, including greenhouse gases. In 2011 and 2012, NBPOL published its first Carbon Footprint Reports<sup>3</sup>, which includes a commitment “towards no net carbon loss on expansion”. In June 2013, NBPOL released its Forest Policy (June 2013), which reiterates commitment to plantation expansion that does not result in deforestation, including commitment to protect HCV and HCS areas, respect customary rights and to meet community needs.<sup>4</sup>

In early 2014, NBPOL commissioned The Forest Trust (TFT) to conduct a preliminary HCS assessment over a 5,000 ha potential new development on state land in Milne Bay Province. TFT’s draft report, which maps out indicative boundaries of HCS areas, was available for review for this verification exercise. The report has not yet been made available for public review because management decisions have yet to be made on whether the development will proceed. Should a decision to proceed be made, the HCS report for this land area will be made publicly available. In the meantime, the company has committed to not clear any confirmed HCS sites identified in the study.

<sup>3</sup> The scope of these reports is limited to operations in West New Britain only.

<sup>4</sup> New Britain Palm Oils Ltd.’s Forest Policy. Environmentally and Socially Responsible Oil Palm Development that prevents Deforestation, achieves Landscape Level Forest Conservation and addresses Community Needs. June 2013.

In applying the HCS concept, a precautionary approach has been employed. In practice, the precautionary principle extends the study scope beyond the boundaries of the alienated lands to customary lands that might in turn be affected by this sort of development. This study also involved development/deforestation risk modelling for forest development, using the risk of existing road infrastructure and settlement areas. The study found that even without development of the area, some forests (HCS/HCV) are vulnerable due to local economic development or outside interests such as logging.

The company pays particular interests to social issues in the HCS approach and NBPOL's management posits that a higher threshold value (e.g. ~2x) should be invoked where the social values ("1-Hour Principle") of basic social services of clean water, schools, and clinics are not available within a 10 km radius of NBPOL's estates. In other words, the company believes that there is a social imperative that should guide development where the basic social indicators of clean water, basic education and healthcare are not available within a one-hour walking distance of settlements.

Finally, NBPOL suggested that forest stratification and the pattern of development are significantly different in PNG compared to forests in Southeast Asia. Regional adaption of forest stratification should invoke consideration that PNG's forests have lower levels of above-ground carbon than SE Asian forests, and that they are less impacted by development. These differences create an issue for the use of the Indonesian land class-based HCS / Malaysian oil palm carbon sequestration figure of 35 tons C/ha. NBPOL posits that degraded forest in PNG often is found in states that exceed 35 tons/ha because of the longer fallow periods and more extensive use of the land in traditional agro-ecosystems, when compared to Indonesian land-use systems. In addition, the more uniform state of forest species (higher numbers of marketable *Dipterocarp* sp. /ha) means that logging typically has a higher impact in Indonesia, leading to a larger extent of degraded lands <35 tons/ha, when compared to post-logging conditions of PNG forests.

During field visits in MBE and HOP, it was evident that the HCS approach requires further socializing among estate management, affected communities and other stakeholders. A number of the management staff with decision-making authority over new plantings did not completely understand the purpose or meaning of the HCS approach.

NBPOL notes that the cost of HCS assessment (USD 24/ha) makes it difficult to replicate beyond the current trial employment at Orangerie Bay and across the entire plantation's alienated lands bank and customary lands. Similarly, HCV assessment in PNG can be similarly costly (USD 21/ha). Furthermore, the responsibility of actively managing and conserving identified HCS will result in additional cost. In a context where the capacity of the company to manage and control customary lands is tenuous, the company would likely have to rent the HCS area and exercise management and governance control at additional cost.

Regarding HCV, NBPOL hires third party accredited experts to conduct these assessments -- based on the PNG HCV Toolkit -- for all company estates. Some stakeholders consider this toolkit inappropriate for application in the agribusiness industry as it was developed for landscape-level use in the forestry industry. All HCV assessment reports were available for review, except in one instance where only the full New Planting Procedure (NPP) procedure with the summary reports could be presented. At present, no HCS assessments are commissioned for individual new smallholder lots in MBE and HOP. NBPOL considers May 2014 as the 'cut off' month for HCS assessment, and it will not commission additional HCS assessments for some new developments that have already been approved through the RSPO NPP prior to May 2014.

Considering that some 30% of the company's FFB supplies originates from smallholders, and that commissioning assessments for each new development is not workable, the company is also exploring a landscape approach to HCV (and HCS) assessment.

Generally speaking in PNG it has been shown to be difficult to identify qualified HCV (and HCS) assessors whom will see through the full assignment. Furthermore, NBPOL finds it hard to identify and retain suitable staff and NGO partners to assist in managing conservation areas. NBPOL senior sustainability management have observed that co-management of HCV conservation areas tend to fail because many customary land owners do not see the purpose in maintaining carbon stock, do not receive benefit from the carbon losses avoided, and pursue economic development of HCS based on values profoundly disconnected from global climate change issues.

During field verification, one instance of encroachment in a riparian set-aside in HOP was observed in a company development area. Additionally, company staff acknowledged that company workers prefer to open up gardens in riparian set-aside areas in MBE, mainly in instances where they are located near housing areas which themselves possess limited garden areas.

The company's Carbon Footprint Reports (2011, 2012) include company and smallholder estates and incorporates HCV, but Palm GHG calculations do not (yet) include carbon sequestration from riparian buffers and other conservation areas.

CONCLUSION: NBPOL complies with the POIG R&I.

#### **1.1.5 Ease of verification**

The assessment showed that the HCS approach needs to be adjusted and adapted to areas outside of Indonesia, such as PNG. The thresholds must be made relevant to local ecological and social conditions. A protocol for applying the HCS approach to smallholder lots outside the control of the company must be developed.

The cost of HCS assessments, especially if they are added on top of the cost of the HCV and FPIC processes, may prohibit more than indicative use on sample areas. This is especially true while the HCS approach has not yet shown significant value added to the well-established HCV identification methodology. POIG should support or lead the efforts to better integrate HCS and HCV into one streamlined approach, and then integrate that approach, where possible, into the certification auditing as well as the NPP and FPIC protocols. The benefits of streamlining will go far beyond cost savings. This assessment showed, for example, that conducting an FPIC process and an HCS assessment independently may inadvertently infringe on the rights of local landowners to determine their own development path.

For future monitoring, it is recommended that maps of new development areas should be overlaid with forest cover maps, HCV and HCS maps and satellite imagery from May 2014 onward, to better assist the NPP decision-making process. NBPOL will experiment with the concept of landscape-level HCS-HCV assessments, and POIG may want to consider supporting that since one of the limitations of the standards and certification approach is that it goes farm by farm whereas the problems (and opportunities) are regional in scale.

In some areas, there is still a shortage of qualified RSPO or SAN auditors; there is an extreme shortage of HCS assessors, especially since the definitions and protocols have yet to be written. Before requiring an HCS assessment, POIG should ensure that there are adequate training programs in place to generate sufficient technicians to conduct the fieldwork.

#### **1.1.6 Innovative strength of the POIG Indicators**

The POIG R&I add value to the RSPO P&C by attempting to integrate HCV, HCS and FPIC. Considering that large swathes of secondary forest are being cleared partly because they lie outside HCV, this integration, once operationalized, may allow for additional conservation and land-use values to be captured during assessments.

In addition, given the unique context in which NBPOL operates, important lessons may be learned with regard to forest stratification and patch analysis that incorporates social aspects in the HCS approach.

With regards to conservation set-asides resulting from HCV and HCS assessments, it is recommended that the POIG community explore approaches to sustainable co-management of such areas. Additionally, it may consider the tension between available qualified HCV and HCS assessment capacity on the one hand and the cost involved on the other.

## 1.2 Peatland

### 1.2.1 POIG Requirement

- No peat clearance: All areas of undeveloped peat lands (peat of any depth) are protected and all drainage, fires or road building on peat soils is prohibited.
- Maintenance of peat lands: Water tables are managed in existing plantations on peat in order to minimize both the subsidence of the peat and the release of GHG emissions. Strategies are employed to progressively restore critical peat land ecosystems, with a preference for replanting on mineral soils, including via 'land swaps'.

### 1.2.2 POIG Indicators

- There shall be no use of fires on peat soils.
- Where there is existing planting on peat, an assessment shall be required to determine whether there are opportunities to contribute to the restoration of critical peat land ecosystems. If opportunities are identified, a strategy for restoration shall be developed and implemented. Strategies shall seek to replant on mineral soils, including via 'land swaps'.
- For existing plantings on peat, the water table should be maintained at an average of 50cm (between 40 - 60cm) below ground surface measured with groundwater piezometer readings, or an average of 60cm (between 50 - 70cm) below ground surface as measured in water collection drains, through a network of appropriate water control structures e.g. weirs, sandbags, etc. in fields, and water gates at the discharge points of main drains (Criteria 4.4 and 7.4).
- Where drainability assessments have identified areas unsuitable for oil palm replanting, including the likely GHG emissions associated with continued cultivation, plans should be in place for appropriate rehabilitation or alternative use of such areas. If the assessment indicates high risk of serious flooding and/or saltwater intrusion within two crop cycles, growers and planters should consider ceasing replanting and implement rehabilitation.
- Reporting shall include identification of total area of peat lands within the company land bank, the area of peat lands that is planted and the emissions associated with its cultivation.

### 1.2.3 Verifiers

- Fire hot spot and other reported records
- Policy on peatland management
- Management regime for existing plantings on peat (RSPO assessment reports)
- Public reporting

### 1.2.4 Compliance

NBPOL has applied a "zero-burning" policy since 1968. All new development involves mechanical land clearing. No fire is used in replanting either, and different replanting techniques are applied. Zero-burning policy for development

by smallholders was introduced in 1999. Where smallholders develop their own land, an agreement is signed between the smallholder and the Oil Palm Industry Corporation (OPIC), a government agency that provides smallholder support, stipulating that the use of fire is prohibited. Field visits confirmed that land clearing in company and smallholder estates is done mechanically, with the exception of one instance during the observation period, where a smallholder was found using fire for land preparation in Milne Bay. The person involved was aware that this is prohibited and violates the agreement with OPIC.

NBPOL declared its “no planting on peat” policy in 2010. This policy applies to any peat as defined in the relevant POIG Indicator. During the verification exercise, relevant soil maps for MBE and HOP were reviewed and these confirm that there are no peat soils in HOP and MBE. The group Sustainability Report for 2012/2013 reported minor carbon emissions from an 88ha peat area in West New Britain (WNB), which is reportedly maintained through best practices in water table management

CONCLUSION: NBPOL complies with the R&I.

#### **1.2.5 Ease of verification**

The R&I can be verified. For future monitoring, new development maps should be overlaid with soil maps, and fire hot spot records and satellite imagery from May 2014 onward.

#### **1.2.6 Innovative strength of the POIG Indicators**

The only POIG Requirement that goes clearly beyond the RSPO P&C is the prohibition of new development of peat, regardless of depth. The POIG Indicators on maintenance of peat lands are redundant as they are copied and pasted from RSPO’s Guidance (P&C, version 2013). With regard to fires on peat, RSPO would allow this only in exceptional circumstances.

### **1.3 Greenhouse gas (GHG) accountability**

#### **1.3.1 POIG Requirement**

Companies shall publicly report on annual GHG emissions from all sources and on the progress towards reaching targeted reductions of non-land use GHG emissions (per ton of CPO).

#### **1.3.2 POIG Indicators**

- All sources of GHG emissions, including those related to land use and non-land use activities, shall be identified and monitored using the RSPO Palm GHG methodology or equivalent
- Targeted reductions of non-land use related GHG emissions (per ton of CPO) shall be defined.
- Biennial GHG emissions from all sources and progress towards the targeted reductions of non-land use related emissions shall be publicly reported,

#### **1.3.3 Verifiers**

- Carbon disclosure report
- Availability of reduction targets
- Public-reporting.



### 1.3.4 Compliance

NBPOL published its first carbon emissions / carbon accountability reports in 2011. It reports on emissions from all sources (including smallholders) in West New Britain (WNB) and the New Britain Oils refinery in Liverpool over the period of 2008 to 2010. An update was compiled for 2012. Documentation of carbon footprint at group level over 2011 and 2012 was completed at the beginning of 2014 and reported on in the Sustainability Report 2012/2013.

Targeted reductions of non-land-use related GHG emissions (per ton of CPO) are defined in the 2011 carbon accountability report, with the main focus on methane capture projects for all main mills. NBPOL gather data at the beginning of each year for the previous year, and report on the previous year. They have had to twice adjust the model due to changes in the RSPO model.

An update for 2014 is due to be published in June 2015, in line with the requirement of bi-annual public reporting. However, the verification exercise uncovered, through examination, a minor formula error that altered the carbon emissions calculations for 2013. This estimate will need to be rechecked, as it appears to contain a formula error.

Information on the former land cover, especially for smallholder lots is not always available; in these cases, the company assumes the area as having the same above-ground carbon load equivalency as logged forest employing a precautionary principle assumption that likely overestimates carbon loss from land conversion.

Historical data of land cover on the planted areas since 1984 is available to review. The company conducted a Land Use Change or conversion (LUC) analysis in order to calculate GHG emissions. The Palm GHG Calculator (developed by the Laurence Chase and Ian Henson) was employed, and tested first at WNB. After this successful trial, the RSPO commissioned NBPOL's sustainability team to finalise the model for the RSPO Greenhouse Gas Working Group. This version was used to calculate GHG emissions for NBPOL operations. The analysis found that two-thirds of the company's GHG emissions have been attributable to land clearing since 1984. NBPOL presently aims to modify input to the calculations, based on the values for forest carbon contained in TFT's HCS report.

Budgetary constraints are reported by NBPOL to have contributed to overall lower planting rates than projected. This, in combination with more stringent limitations on new plantings by self-imposed restrictions via NBPOL's NPP has limited plantation expansion onto new lands. As a result, NBPOL's projected GHG emissions from land clearing are projected to be much lower than in previous years. In addition, NBPOL applies shorter rotation cycles on its own estates (on average 22 years) to capitalize on the long-term incremental benefit of yield gain from its' own research into palm genetics<sup>5</sup>. As the previous land-use in replanting is oil palm, rather than on newly opened forest, lower default GHG source values apply for replanting than in planting cleared lands.

The second largest source of GHG emissions (23%) is attributable to methane leakage from POME ponds. There was a plan to install methane capture, but this plan was delayed. Two ponds have been fully commissioned in West New Britain and 5 more are planned. So far there has been an implementation delay of one year at the Kula Group and for two years for West New Britain, due to budgetary constraints and limited local interest for the use of products (electrical generation, methane) from biogas projects.

NBPOL introduced additional measures to reduce GHG emissions from fertilizer use (which NBPOL terms 'precision agriculture') and field transportation. Such efforts primarily contribute to short-term economic benefits and longer-term reductions in GHG emissions (i.e. when land clearing is offset, the currently minor contributors to NBPOL's GHG balance will become relatively more important).

CONCLUSION: NBPOL complies with the POIG R&I.

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<sup>5</sup> Yields are reported to have increased a mean of 1.6% per annum as result of plant breeding research, leading to a shorter economic rotation replacement age

### **1.3.5 Ease of verification**

The POIG Indicators can be verified because the evidence is paper-based, and grounded in precise, widely reviewed, and RSPO-accepted emissions models.

### **1.3.6 Innovative strength of the POIG Indicators**

The R&I merely require companies to adopt publicly documented emission reduction targets.

Considering that POME ponds and land application represent the most significant source of GHG emissions after land use conversion, POIG may consider making methane capture or mitigation obligatory

This R&I does not require research into innovation, but rather asks members to use widely available off-the-shelf techniques for reducing emissions and increasing biomass-based GHG capture. NBPOL has exceeded its mandate in this effect, conducting thorough reviews of the use of production cycles that could minimize GHG production. One area the evaluation team noted, that was not considered, was the conversion of part of the transportation fleet to biogas, thereby reducing the transport costs of fuel delivery, and of fossil fuels themselves. The POIG may consider the value of expended effort in this area in future iterations of its R&I.

## **1.4 Pesticide use minimization**

### **1.4.1 POIG Requirement**

Highly toxic, bio-accumulative and persistent pesticides shall not be used. These include chemicals on the FSC ‘Highly Hazardous’ list and SAN prohibited pesticide list. Producers shall by preference practice natural weed and pest control and IPM, and strive to avoid the use of toxic pesticides, only using them as an absolute last resort. There shall be full transparency of any pesticide use.

### **1.4.2 POIG Indicators**

- Highly toxic, bio-accumulative and persistent pesticides (PBT) shall not be used. This includes chemicals listed by the following: World Health Organisation Class 1A or 1B, Stockholm or Rotterdam Conventions, FSC ‘Highly Hazardous’ list, SAN prohibited pesticide list and Paraquat.
- Emergency use of listed pesticides is permitted subject to POIG Organising Committee approval.
- IPM plans shall emphasize non-chemical weed and pest control, such that chemicals are only used as a method of last resort.
- Pesticide use and alternative methods used shall be included in public reporting.

### **1.4.3 Verifiers**

- Pesticide purchasing records
- Recorded cases of emergency use applications
- Public reporting

### **1.4.4 Compliance**

NBPOL employs an integrated pest management (IPM) system, following generally accepted principles of field scouting and monitoring, cultural practices, and targeted use of pesticides and bio-controls needed to maintain pest threats at economic thresholds. This was documented by the assessment of the plantations in this evaluation, through interviews with management personnel and questioning the methodology for monitoring and controlling a number of widely-known palm pests.

NBPOL has endeavored to eliminate highly toxic, bio-accumulative and persistent pesticides. As of May 2012, NBPOL had completely ended the use of Paraquat (N,N'-dimethyl-4,4'-bipyridinium dichloride) on its own plantings.

The use of pesticides is monitored by monthly reports from estate offices. Group level pesticide use is publicly reported, but for herbicides only due to their widespread and common usage in plantation management. Because of the infrequent, targeted, and limited use of insecticides, miticides, etc., reporting on these substances is limited in occurrence, and was not noted in the examination of plantation records at either site during the time periods reviewed. Based on the review of monthly reports for MBE and HOP, there is no evidence of the use of prohibited pesticides, such as Paraquat and Monitor (Methamidophos). A carve-out for emergency use of listed pesticides remains, and includes the use of Monitor where IPM procedures require its use as a population suppressant of bagworms, subject to approval in case of the POIG Organising Committee. A research note on the use of this substance, written by the Oil Palm Research Association (OPRA) was provided as indication of best management practices.

The POIG P&I emphasize non-chemical weed and pest control, such that chemicals are only used as a method of last resort. The wide-spread use of herbicides, particularly Glyphosate, was questioned by the reviewers. NBPOL revealed that the economic thresholds for mechanical weed control are limited by operational cost, particularly by a strong workers' preference for use of chemical over mechanical methods. This assertion was not verified by interviews with labour, however, the use of herbicides was observed also in smallholder practice, indicating this assertion to have merit.

Since 2010, reported overall toxicity of herbicides per hectare has dramatically declined. Paraquat use was phased out completely in May 2012. Manual weeding is applied for young plantations (<24 months), to avoid issues of Glyphosate overspray toxicity on the meristems of young palms. Chemical herbicide such as Dimethylamine salt, Glufosinate-ammonium, Glyphosate, and Metsulfuron-methyl are used for weed control in mature crop (> 24 months). Manual weeding is also applied for mature crops, as conditions mandate due to the types of weeds, to reduce the need of chemical weeding of particularly noxious weed species that could not otherwise be easily controlled.

*Brodifacoum* is applied in pest control (rats). During the audit, it was affirmed that the company warns the local community about upcoming pest control events through various outreach mechanisms. However, some workers in MBE complained that the rodenticide had killed some of their pets (dogs) when they are not being kept inside when warning has been given. It was noted that in some instances, humans also eat rats, leading to speculation that human populations might also be at risk. Consideration of application methods, such as placing rodenticide inside bamboo vessels to physically eliminate their access to larger mammals<sup>6</sup>, was not discussed.

At the request of OPIC, highly toxic, bio-accumulative and persistent chemical pesticides are not made generally available to smallholders by agrochemical dealers, due to the risk of improper handling. In HOP, it was observed that smallholders are mostly not interested in using chemical pesticides, in view of the danger involved in harming themselves or their families. The Milne Bay Oil Palm Farmer Association (MOFA) and the company are designing best practices for applying chemical pesticides in smallholder areas, considering the need to reduce crop maintenance cost. The comparison on worker capacity between manual and chemical weed control is 1 person for 0.5 ha and 1 person for 4 ha respectively<sup>7</sup>.

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<sup>6</sup> This practice is widely used by smallholders in crops such as cocoa.

<sup>7</sup> Interview with Technical Support Department manager

Operators are trained in correct fertilizer application and spraying techniques to ensure fertilizer is applied near the point of need and not spread too close to, or onto, waterways and that herbicide is only applied where necessary. Sprayer units are calibrated, and sprayer progress and chemical use is monitored to assure the correct amounts of chemicals are applied.

CONCLUSION: NBPOL complies with the R&I.

#### **1.4.5 Ease of verification**

The R&I can be fairly easily verified, through plantation records, cross-checked through interviews with plantation management staff, workers, smallholders, and through visiting local agricultural supply stores.

#### **1.4.6 Innovative strength of the POIG Indicators**

Relative to existing RSPO P&C, the POIG R&I add value in respect of dedicated policy and public reporting of agro-chemical inputs.

Prohibiting the most dangerous pesticides is only one pillar of an integrated crop management strategy and only one criterion in a standard. Lower-toxicity pesticides also can threaten human health and the environment if improperly transported, stored, mixed or applied. POIG may consider reviewing the relevant criteria in the SAN and RSPO standards to see what additional elements it may wish to add to the R&I.

## **1.5 Chemical fertilizer**

### **1.5.1 POIG Requirement**

To reduce climate and environmental impacts producers shall strive to minimize chemical fertilizer use, and preferentially use 'precision agriculture', organic fertilizers, and where possible use waste as a source of phosphorus. Phosphorus and nitrogen levels in water courses are monitored and disclosed.

### **1.5.2 POIG Indicators**

- Use of chemical fertilisers shall be minimised. SOPs shall demonstrate preferential use of other methods to manage soil fertility, such as 'precision agriculture', the use of organic fertilisers and the use of organic residues as a source of nutrients, including those resulting from the processing of oil palm.
- Phosphorus and nitrogen levels in relevant watercourses shall be monitored.
- Results of phosphorous and nitrogen monitoring in water courses shall be included in public reporting

### **1.5.3 Verifiers**

- Policy on chemical agriculture inputs
- Fertilizer application records
- Water testing reports
- Public reporting

### **1.5.4 Compliance**

NBPOL environmental policy utilizes a precautionary approach for the use of agricultural fertilizers. Oil palm is planted on a variety of soils, many of them have limitations for the supply of and retention of (low cation exchange

capacity (CEC), low pH values that limit availability) plant nutrients. It is widely reported to be nearly impossible to eliminate the use of nitrogen and phosphorous additives and maintain plantation economic viability. Management tools, particularly leaf tissue analysis are highly useful in developing targeted application of the assess nutrients, while cultural techniques such as mulching increase soil CEC and decrease runoff of nutrient amendments. NBPOL has developed Management Guidelines (MGs) for fertilizers; these are written specific to the area of use (e.g. new developments, nursery, etc.).

NBPOL has a dedicated plantation management branch (CSR) to monitor and determine optimal fertilizer inputs. Fertilizer application is based on annual leaf sampling and soil sampling every five years. However, smallholder lots are not subjected to this sampling at Kula. A planned development of extension services to Kula smallholders for leaf sampling is in its initial stages of implementation.

Palm Oil Mill Effluent (POME) is applied in the plantation in addition to chemical fertilizers, but only near the CPO mill. However, research shows that POME application does not necessarily result in better yield as the BOD of the effluent applied are too low. POME is treated before application following PNG law, reducing the BOD.

Empty Fruit Bunches (EFB) are used especially for re-planting area and nurseries. During the field visit, it was observed that EFB is also employed in mature crops. NBPOL explained to the assessment team that their experience suggests that EFB application improves soil quality (organic matter, moisture retention), but does not deliver significantly higher FFB yields. Methods of combining EFB and POME in compost have been developed elsewhere, but have not been implemented at NBPOL operations.

Analysis of quarterly upstream and downstream water samples shows increments<sup>8</sup> of phosphorus and nitrogen content as water passes the plantations, albeit recorded levels generally being well below threshold standards. Different increments for different streams are observed, but no further studies into these differences are conducted because too many factors are involved. Water samples are sent to laboratories<sup>9</sup> for independent testing. Unfortunately, some laboratory readings regularly deliver outcomes that are well off the charts and inconsistent with the company's analysis, indicating issues may exist locally with chain-of-custody handing and/or instrument calibration.

NBPOL maintains standard operating procedures to take appropriate action in case water sample analysis demonstrates non-acceptable levels or in case of complaints from other parties. In 2010, for example, an accidental CPO leakage that broken bunding failed to contain at Alotau wharf resulted in a spill into the harbor area. The company took immediate remedial action in containing and cleaning up the spill, and an independent investigation showed there was no direct or indirect impact on the marine ecosystem.

Riparian buffers are employed to avoid chemical drift into water bodies. In plantations established by other parties, buffers will be phased in. Buffer areas established in NBPOL's own original plantings are generally well maintained. As clarified during the field visit, riparian zones in existing plantations will also be re-established during re-planting, as well as in smallholder lots, where applicable and according to law.

CONCLUSION: NBPOL complies with the R&I.

### **1.5.5 Ease of verification**

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<sup>8</sup> The details of N and P were mixed. In some instances, N levels and fecal coliform decreased as water left plantations, indicating the effect of other sources pollution including poor sewerage treatment on water quality.

<sup>9</sup> NARI for HOP but MBE uses also SGS for independent testing.

The R&I can be fairly easily verified. Water testing is regularly carried out, with records available for viewing. Leaf sampling and fertilizer input records are also maintained and available for review. The management staff were knowledgeable in soil fertility, fertilizer use, and water quality issues

### **1.5.6 Innovative strength of the POIG Indicators**

Relative to existing RSPO P&C, the POIG R&I add value in respect of dedicated policy and public reporting of agro-chemical inputs.

POIG should consider that oil palm growers, especially smallholders, in many areas are not using enough fertilizer – or not using fertilizer correctly -- to maintain economic viability and thus sustainability. The goal should be to “optimize” fertilizer inputs rather than simply “minimize.” Optimization requires choosing the right fertilizer blend in each time and place, applying it only when and where necessary, applying it for maximum effect (for example in smaller, more frequent doses, incorporating it into the soil, and so on), using ground cover and other methods to avoid loss via run-off, and continually training staff on how to monitor fertilizer need.

## **1.6 GMOs prohibition**

### **1.6.1 POIG Requirement**

The cultivation of GMOs in the management area is prohibited.

### **1.6.2 POIG Indicators**

No cultivation of GMOs within the management area shall be permitted.

### **1.6.3 Verifiers**

- Policy on GMOs

### **1.6.4 Compliance**

NBPOL’s Sustainability Report 2012/2013 states that the company does not conduct research into genetic modification in any of its breeding programs and it does not intend to use GMOs.

CONCLUSION: NBPOL complies with the R&I.

### **1.6.5 Ease of verification**

The R&I require a written commitment. Strictly taken, verification would require full expert review of NBPOL’s research programmes at Dami Research Station.

### **1.6.6 Innovative strength of the POIG Indicators**

The RSPO P&C do not require a ban on GMOs. The SAN standard prohibits certifying GMO crops and, at this time, prohibits certifying farms on which any GMO crops are present. Given the fact that advanced GMO research is ongoing in the palm oil industry, POIG may consider substantiating the ban GMOs (relative to its innovation agenda). POIG should note that a ban on GMOs will be seen in many quarters as reactive, not innovative. There may be more innovative ways to address GMOs in palm than a simple ban.



## 1.7 Water accountability

### 1.7.1 POIG Requirement

The quality and quantity of water is maintained with responsible water management adopted including minimization and disclosure of water use, pollution elimination, equity with other users, and consideration of catchment level impacts of irrigation.

### 1.7.2 POIG Indicators

- Water consumption across plantation operations shall be monitored.
- The water management plan shall include measures to minimise and/or reduce water consumption by plantations and mills.
- For plantations that use irrigation, the water management plan shall demonstrate that the application of water is not excessive or wasteful, by taking into account water availability and the impacts of consumption.
- Water consumption by plantations and mills shall be included in public reporting.
- The water management plan shall include measures designed to minimise and/or reduce pollution from both plantations and mills.
- The measures in the water management plan shall be designed to ensure that the needs of other users are identified and accommodated.

### 1.7.3 Verifiers

- Water management plan, including consumption and pollution reduction measures and assurance that other users are accommodated
- Evidence of water consumption monitoring
- Public reporting

### 1.7.4 Compliance

NBPOL does not yet publicly report on water consumption in estates and CPO mills, but plans to do so in the future. Water consumption by mills represents the most significant use of water. At present, water consumption is recorded in each CPO mill and monthly reported to management. NBPOL's continuous improvement plan strives to process one ton of FFB with 1 ton of water, or less. In MBE, the "1 MT of water/MT of FFB" target was achieved for January, April and May 2014, but consumption was slightly above this target for other months. In HOP the target was achieved from January to June 2014.

It was noted that the request for the water use permit at HOP was lodged 18 months ago, but to date, this is still incomplete. The process has been reported by NBPOL staff to take longer than expected due to 'institutional bureaucratic delays' rather than any failure to provide data or follow official procedures.

For water wells that supply water to the housing compounds, water consumption meters are not fully in place yet at all locations. The current practice for estimating water usage is derived by using the pumping capacity to calculate consumption at HOP and MBE. This will be adjusted over the coming years for the drinking water at the compounds. Because water is used in irrigation at the grassland palm development at RAI, water meters are available where some 1,000 ha of oil palm is irrigated.

Water consumption in nurseries is not yet being recorded. The company acknowledges the need to start monitoring water management in nurseries due to the importance of minimizing biophysical stresses on young seedlings.

Furthermore, soil tends to become compacted in nurseries under heavy water loads. Sprinklers and water guns consume a great deal of water and compost can absorb large volumes; use volumes are estimated as elsewhere by pumping capacities and time in use.

For the workers' quarters in MBE, a water supply target is set at 200 litre/person/day. This target was not achieved from January through August 2014. In HOP, the use of water in workers' quarters is not yet recorded. In both sites, the use of water for nurseries is not yet recorded in spite of significant water consumption. Open sewers in worker camps in HOP and MBE were closed after acquisition in 2010. In addition, the company has provided (drinking) water tanks to certain communities near the plantations.

Water quality sampling and testing are done on two different schedules. Domestic water quality sampling is done on monthly basis while the surface water is done on quarterly basis. Water quality analysis covering pH, dissolved solids, suspended solids, BOD, oil and grease, nitrate, and phosphate is available including the location of sample taken for industrial water use. In addition, *e. coli* and coliforms are tested for in potable water supplies. The legally binding limit for BOD discharge is 100 ppm. NBPOL strives to achieve 90 ppm, or less. New CPO mills will be designed to achieve 20 ppm. An interview with David Andrews, director of mill technology, detailed several aspects of mill improvements including the use of large roofs and water collection to minimize groundwater use.

A series of BMPs are employed in the code of practice at NBPOL plantation<sup>10</sup>, including the following measures. Each of these measures is supported by a series of Key Performance Indicators (KPIs) and in turn developed on an ongoing basis through a continuous improvement program:

#### Plantation

- Maintain road grading program
- Monitor fertilizer distribution to ensure that it is not spread directly into water courses
- Maintain buffer zones
- Improve training for frond stacking to ensure fronds are placed away from water courses
- Progressively remove palms that overhang water courses to extent that harvested fruit bunches and loose fruit fall directly into the watercourse and cannot be picked up. Removal of these palms will have no effect on out-turn (as fruit is lost in any case) and reduce utilization of fertilizer and herbicides
- Continue training of sprayers to minimize accidental overspray near buffer zones and within water courses.
- Respond promptly with rehabilitation measures in the event that erosion is observed
- Ensure landfills are placed above the water-table to avoid leaching of contaminants

#### Water usage in the Mill

- Establish baseline water consumption per ton of FFB processed
- Ensure conveyor and machinery covers are in place to minimize product loss from the process with resultant increased cleaning requirements
- Ensure no water leaks from valves or pipes
- Train staff to avoid unnecessary water use

#### Water usage in the Plant Nursery

- Training of nursery staff to stop irrigation when runoff outside of the nursery area is noticed
- Ensure irrigation is contained to only the area where it is applied.

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<sup>10</sup> Milne Bay Sustainable Water Management Plan, August 2014

- Ensure that there are no leaks occurring.

#### Water waste within the compounds

- Train people in the compounds not to waste water
- Promptly repair leaks

#### Runoff from Roads

- Roads should be properly graded to ensure that water runs off into properly constructed roadside drains with provision to relieve water from those drains at regular intervals. After grading, roads should not have a windrow of loos soil between the carriageway and the roadside drain.
- Drains should be periodically cleaned and any soil recovered and distributed through the field.

#### Consideration of Downstream Water Users

Through water testing and implantation of its code of practices, and through incident monitoring and response, NBPOL maintains a good faith consideration of the outputs of its operations.

Consideration of downstream river use is supplemented through a number of indirect, related supports: biodiversity studies of river fish populations and diversity both up- and downstream of plantations, and through support of marine ecosystem research and marine ecosystem-based NGO activities (Mahoni na dari) at West New Britain.

NBPOL Social Impact Assessments also cover the risks for agrochemical contamination of surface and groundwater quality, and of environmental degradation for downstream users. These are integrated in as well in codes of practice, the development of KPI's and in an ongoing continuous improvement program.

CONCLUSION: NBPOL complies with the R&I.

#### **1.7.5 Ease of verification**

The R&I are easily verified as they are all paper-based. POIG R&I does not quantify water consumption and pollution reduction measures and assurance with targeted discharges levels using internationally accepted standards of water quality, nor does it commit to time-bound compliance of improvements. This flexibility in the R&I confounds the efforts of the POIG and complicates assessment of it implementation.

One example of the difficulty in measuring implementation of the POIG R&I was its' use of the term "excessive or wasteful" in P&I bullet point #3. This concept is qualitative, and impossible to operationalize without further guidance. In addition, the consideration of downstream users of water resources does not contain a statement of scale or time, making it similarly difficult to implement or measure.

#### **1.7.6 Innovative strength of the POIG Indicators**

The POIG R&I go beyond RSPO's P&C in that they require integrated recording, monitoring and reporting of water consumption across all operations. However, the indicators are process based, and certain aspects are qualitative and open to interpretation. In order for this principle to have greater innovative strength, it should draw on established measure of water quality and scope of influence.

## 1.8 Protect and conserve wildlife

### 1.8.1 POIG Requirement

Following comprehensive biodiversity surveys to identify HCV 1-3, in addition to ensuring the protection and survival of all rare, threatened or endangered species within their concession land, concession holders also make a positive contribution to their survival in the wild in areas beyond the concession.

### 1.8.2 POIG Indicators

- Where HCV 1-3 have been identified, management plans shall include measures designed to contribute to the protection and survival of all rare, threatened or endangered species in the landscape beyond the management area.
- Positive contribution to the survival of all rare, threatened or endangered species in the wild shall extend beyond the concession and/or geographical presence.
- Management plans include measures to protect native plants and animals, especially endangered species, and prevent the poaching of endangered species in all operation areas.

### 1.8.3 Verifiers

- Existence of RTE management plans, including anti-poaching measures
- Support to projects that support RTE conservation beyond the concession boundary

### 1.8.4 Compliance

NBPOL is committed to the protection and survival of all rare, threatened or endangered species within the company's land bank and the larger landscapes in which it operates. In 2013, 11% of its titled land bank was set aside for conservation. Every conservation site is mapped and maps are placed in a central register.

With regard to wildlife management within its own land bank, the company has adopted a habitat management plan for both HOP and MBE. Despite management plans contained in HCV assessment reports and their recommendations, no further monitoring of wildlife and wildlife habitat is executed by NBPOL into occurrence, habitat, population levels, impact of company and threats; management plan; recovery plan etc.

NBPOL recognizes the need unify individual plans into a comprehensive and overarching wildlife and conservation management plan. In its Sustainability Report 2012/2013, NBPOL committed to assess how it can contribute to the protection of wildlife at a landscape level.

The company has nurseries including at HOP and MBE dedicated to native tree seedlings for rehabilitation of degraded forest/HCV areas. More than 24,000 seedlings have been replanted in riparian buffer zones and surroundings since February 2013 in MBE. All seedlings in MBE and HOP nurseries are collected from the plantation area to make sure only native and suitable species are re-planted.

Over the years, the company has supported a host of wildlife conservation research projects, targeting individual species (Queen Alexandra Birdwing Butterfly (QABB), snakes, hornbills) and habitats (coral reefs in WNB, Mullin's Bay in Milne Bay). Many of these projects are executed with NGOs and universities, with variable success as much depends on capacity within NBPOL and the partner NGOs.

In Oro, NBPOL undertook research into tissue culture to replicate the single vine species that the QABB depends on. Unfortunately, QABB conservation work is hindered by a government order that restricts access to breed in captivity. NBPOL furthermore has a research program into snake habitat and workers' risk exposure.

As noted in 1.1.4 above, the company observes that co-management of HCV conservation areas tend to fail because many customary landowners do not see the purpose. The company discourages poaching and hunting, but there is an element of FPIC to be considered where HCV set asides are located on customary land. In WNB (Silivuti), the company pays royalties over some 2,000 ha of HCV set aside.

NBPOL complies with the R&I.

### **1.8.5 Ease of verification**

It is difficult to verify the R&I because terms such as “measures” and “positive contributions” are not qualified. A requirement of “support to projects” outside the concession boundary is easy to fulfil and difficult to evaluate as “support” could mean paying dues, providing housing for researchers, donating the use of labour or heavy equipment, joining buffer zones, linking biological corridors and a long, widely varied list of things. Then there is the question of the effectiveness of the projects supported.

The SAN standard also requires this kind of undefined “support” to projects, parks and local communities, leaving it to the auditors to determine compliance. Such a criterion can be useful if the program also provides training and guidance to producers, facilitates coordination with NGOs and government agencies, and if the auditing teams include local and experienced biologists and other relevant specialists.

### **1.8.6 Innovative strength of the POIG Indicators**

Relative to the RSPO P&C, the POIG R&I appear to expect a more proactive attitude from growers in regard to wildlife conservation, particularly beyond the concession and/or geographical presence. POIG could elaborate further on these expectations, as the scope is very open ended. POIG may also consider describing the complementary contributions of conservation NGOs in these efforts. Additionally, POIG could deliberate the FPIC element in wildlife conservation: shall hunting in HCV areas that are part of customary land be prohibited?

There is a need for more guidance – grounded in conservation biology -- on how to optimize the value of set asides and improve farm management practices to enhance wildlife habitat – especially for endangered species -- on plantations and smallholder farms. The POIG could consider supporting research and experimentation in this area.

## 2. Social responsibility

### 2.1 Free, Prior and Informed Consent

#### 2.1.1 POIG Requirement

“Comprehensive FPIC is obtained for all oil palm development including in particular: full respect for their legal and customary rights to their territories, lands and resources via local communities own representative institutions, with all the relevant information and documents made available, with resourced access to independent advice, through a documented process, through a long-term two-way process of consultation and negotiation where the communities are informed and understand that saying no to development is an option, and not constrained by local legal frameworks. Newly acquired already planted plantation areas shall redress any lack of proper FPIC when the plantations were established. Lands will not be acquired through expropriations in the national interest (‘eminent domain’).”

#### 2.1.2 POIG Indicators

- As part of the process for identifying legal, customary or user rights and impacts on rights holders for new and existing operations, resourced access to independent expert advice shall be offered at each stage of an FPIC or conflict resolution process to affected communities.
- Processes of consultation and negotiation shall not be constrained by local legal frameworks.
- The acquisition or replanting of existing plantations shall include measures to ensure redress for any issues arising from inadequate FPIC processes when those plantations were established.
- Participatory surveys will identify HCV's 4, 5 and/or 6 that existed before areas were converted to oil palm.
- Land shall not be acquired through expropriations in the national interest (eminent domain).

#### 2.1.3 Verifiers

- Policy on resourced access
- Policy on handling legal frameworks in relation to consultation and negotiation
- Policy on redress for poor past FPIC processes
- Policy on land expropriation
- Existence of participatory surveys on historical existence of HCV 4-6

#### 2.1.4 Compliance

NBPOL applies the FPIC principle in all land transactions involving customary landowners.

MBE engages a third-party expert to help the genealogy and social mapping as some the previous company left processes unfinished. Also and, where possible, an independent party is engaged to observe the process. The relevant documentation (meeting minutes) are kept in storage and copies are shared with the landowners. NBPOL considers FPIC an ongoing process that is not limited to land acquisition.

Processes of consultation and negotiation are not constrained by local legal frameworks. No customary land is appropriated by the company under the banner of the national interest. Participatory surveys are conducted to redress past substandard FPIC processes only at the time of replanting. The company does not have explicit policies relating to these indicators.



The plantations under HOP and MBE were acquired in full by NBPOL in 2010. Nearly half of the plantation land is state land (Sustainability Report 12/13: “Land is primarily customary rights land”) and is managed under several State Lease arrangements. Since the acquisition, some arrangements have been consolidated into one while some remain in the process for renewal. A new state lease arrangement for a new acquisition in Milne Bay was made in July 2012.

The rest of the plantation land is customary land that is managed under Lease-lease Back (LLB) arrangements. Under the LLB scheme, the landowner(s) forms an Incorporated Land Group (ILG) as the legal entity. The related customary land will then be registered as state land under Special Agriculture and Business Lease (SABL) title and is subsequently leased back by the government to the ILG. There is no specific limitation on the size of the area can be registered as SABL (e.g. one block in MBE is 7 ha area and another 2,000 ha). The Sub Lease Agreement (SLA) is then made between the company and the ILG, granting the first rights to use the land. Not all of the LLB arrangements followed aforementioned process, as there are cases where a Memorandum of Agreement (MOA) is in place, and no SLA. In Milne Bay, no new LLB arrangements have been closed since 2010.

Smallholder lots that area located on customary land is known as Village Oil Palm (VOP). The majority of VOPs in MBE and HOP were formed before 2010. The Milne Bay Oil Palm Farmer Association (MOFA) and Oil Palm Grower Association (HOPGA) in Oro cooperate with the Oil Palm Industry Corporation (OPIC), a government entity that provides technical support to smallholders. As OPIC is known to have limited human resources, the company provides for complementary smallholder extension officers under the Smallholder Department. There are no complete documented procedures for interaction with smallholders, but it was observed that the process considers FPIC, HCV and other RSPO requirements. The inclusion of new smallholdings and re-planting involves the completion of a: Clan Land Use Agreement (CLUA) or a: Customary Rights Purchase Parcel (CRPP) for smallholder that purchase customary land (in WNB) to ensure that the current landowner has the right over the land and that there are no disputes over the land.

Some land disputes over smallholder areas are observed in both audit sites. These conflicts have become an obstacle for re-planting and OPIC and the company are required to offer facilitation and mediation, but only when requested to avoid conflict of interest. A land dispute over the area for a new mill development in MBE was observed. In this case, the plantation has facilitated and provided mediation to resolve the conflict. The conflict resolution was observed and being well accepted by all groups under dispute.

Currently, MBE engages a third party to do the genealogy and social mapping to address above mentioned situation of areas that need to finalise the process correctly. This situation was created by the previous owners.

The LLB arrangement is highly dependent on the governance of ILGs. NBPOL commenced a special program to train landowners on fiscal literacy in partnership with an NGO called Little Fishes. The partnership has been discontinued and the company now provides such trainings through its own business development officer. In 2012, NBPOL furthermore developed its “ILG Barometer”, a scorecard that helps ILGs evaluate their own performance and identify areas of improvement. These programs have not yet been rolled out in HOP. And the fiscal literacy training has started at MBE for smallholders and will extend to other landowners as well.

Measures to ensure redress for any issues arising from inadequate FPIC processes when those plantations were established are not limited to the acquisition or replanting of existing plantations, but also include support to landowners in case of intra-community conflict. Land disputes over LLB (within communities) were observed in Milne Bay. These are caused by the non-clarity of the process when the ILG first formed. Similarly in HOP, a land dispute is current over one of the new development areas. The plantation has facilitated and provided mediation to resolve the issue.

The Papua New Guinea government has announced (based on section 36, ILG (amendment) Act 2009) that all ILGs registered prior to 1 March 2012 must re-register within 5 years or until 28th February 2017. This policy aims to clarify the ownership of the SABL. The company is expected to assist the ILGs to re-register. To date, none of the ILGs in HOP and MBE have been re-registered.

NBPOL expects a rise in the number of land conflicts in 2015-2016 as a result of a number of crucial changes in PNG law as mentioned above. Because the user rights of sub-clans over customary land are no longer recognized, it is no longer possible to register or enter into SABL arrangements with sub-clan ILGs and to pay royalties to sub-clans. Consequently clan leaders will gain vast new powers and it is expected that the new ILG governance structures will trigger inter-clan conflict. NBPOL will need to revise all current contracts and agreements with ILGs before March 2017. The company is presently considering the pros and cons of options for alternative landowner registration.

In HOP, new development in customary land was initiated in August 2011, but subsequently held up due to the government regulation mentioned above. For the moment, the company and landowners use a “Development Agreement” that considers FPIC, HCV and other RSPO requirements. Development has started on the new development areas in HOP approved under the NPP done in 2012.

In relation to HCVs, FPIC can trigger dilemmatic situations. There have been several instances where customary landowners requested the company to clear and plant areas identified as HCVs. During interviews, it was observed that smallholders are aware of the requirements to not convert natural forest and riparian buffers. Some landowners complain that HCV set asides reduces access to their own land that they wish to plant. However, in general there is no planting or land preparation on area identified as HCV observed in MBE and HOP. The company is aware of the need to closely monitor encroachment in buffer areas.

NBPOL complies with the R&I.

#### **2.1.5 Ease of verification**

Relative to the demanding Requirement, the POIG Indicators are reasonably easy to verify. Many of the indicators appear to originate from problem situations in other contexts that do not apply to PNG, or at least not to NBPOL.

#### **2.1.6 Innovative strength of the POIG Indicators**

The POIG R&I complement the RPSO P&C in all respects on indicator level. However, the POIG Indicators appear to address situations based on problem cases in specific other contexts. In the PNG context, the Indicators ought to then also address the dilemmatic situation where customary landowners do not give their consent to HCV set-asides.

It should be noted that in its requirement of resourced access, POIG does not specify how such support should be paid for and how independence of any third party is guaranteed if the company pays for such support to the opposite party.

## **2.2 Food security**

### **2.2.1 POIG Requirement**

As part of the Free Prior Informed Consent process, participatory Social Impact Assessments and participatory land use planning with indigenous and local communities, food security is maintained or strengthened in order to maintain their land use choice and future food security options. This will include not undermining local control of and diversity of food production systems. There is transparency of the land allocation process.

### 2.2.2 POIG Indicators

- SIA and/or HCV assessments and participatory land use planning shall include analysis of food security issues for indigenous and local communities affected by the plantation operations. The scope of the food security assessment shall include additional impacts that oil palm production operations may have on relevant requirements including land, water, labor and infrastructure as well as substitutability between income generation for food purchase and subsistence food production.
- Plans for avoidance or mitigation of negative impacts and promotion of positive impacts shall include measures to maintain or strengthen food security, including not undermining local control of and diversity of food production systems.
- Measures designed to maintain or enhance local food security shall be included in participatory planning, including transparency in any land allocation process.
- Evidence that measures identified in assessments and planning are being implemented and are effective.

### 2.2.3 Verifiers

- SIA, HCV and HCS reports
- Food security intervention plans
- Food security project activities

### 2.2.4 Compliance

NBPOL subscribes to the definition of food security, as defined by the Food and Agriculture Organization (FAO): Food security “exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”. NBPOL considers food security at three levels: at the national landscape level, at the community level, and for its employees.

So far, none of the commissioned SIA and HCV reports explicitly address “food security” in their assessment and recommendations. NBPOL does not have overall “food security” intervention plans. It does, however, incorporate the concept in a range of project activities.

For new developments, NBPOL ensures that “the one hour principle” is applied to assess rural development needs (access to 20 litres of tap fed potable water, a medical health post and a primary school within 1 hours walk). The assessment are then considered in the HCS land use decision-making process for new developments, to ensure NBPOL is meeting community needs while not causing deforestation.

At the macro level, NBPOL contributes to food security as it is the country’s largest beef and sugar producer. At the community level, the communities in HOP and MBE have access to sufficient land for ‘gardening’ (shifting cultivation) to produce food crops for subsistence use and for local market sale of surplus. In smallholder development, current and future availability of land for gardening is taken into account and subject to FPIC. Significant overcrowding issues have emerged in several government initiated land settlement projects. NBPOL provides assistance and guidance on long-term food security plans for such project areas.

The NBPOL Foundation seeks to improve the health and education of people living in the immediate area of the NBPOL operations. In 2012 and 2013 a Community Needs Assessment (CNA) was conducted by Voluntary Services Overseas (VSO) which focused on the predominant basic needs of communities in areas bordering all NBPOL operations in PNG.

NBPOL's labour force is provided with communal or individual garden plots. The company offers guidance on new ways of gardening, including composting and fertilising. This program is prioritized as not all employees have access to garden space. This appears to contribute to encroachment into riparian buffers in some areas. Encroachment is monitored and followed by intervention. NBPOL commenced a rice growing and tilapia fish-farming project for their workers in MBE. NBPOL supports a range of other measures maintain or strengthen food security, including a family planning program and food preparation classes. Trainings to assist workers and landowners to grow more food on smaller patches of land are not considered successful because local people prefer to work in larger gardens.

In 2009, NBPOL introduced its "Billum Index" which is a tool/scorecard to determine living standards. Among the criteria applied is a minimum caloric uptake of 2000/day, along with nutritious value. Three monthly surveys are conducted among local traders and shops to assess a basket of food items that are standard for each family to provide the above and based on surveys among the workers. The outcome will be looked at from an income perspective as well as from a nutrition perspective. Also the stores are being controlled on their prices in this way.

Dietary health is of emerging concern among NBPOL's work force. Obesity is on the rise. The Healthy Island project is also available in on-going progress in MBE. Work on health baseline – for new development area

NBPOL complies with the R&I.

#### **2.2.5 Ease of verification**

In the absence of specific guidance to interpreting the "food security," it is difficult to operationalize the concept for auditing.

#### **2.2.6 Innovative strength of the POIG Indicators**

The 'food security' concept is not included in the RSPO P&C. POIG may consider working with standard-setters and certifiers to agree guidance for food security "plans" and "reports." Food security, like living wage and indirect land use change, is a subject of much expert debate and experimentation in the standard and certification arena. Food security is also a subject of many academic studies and multilateral programs, such as those fostered by the World Bank and United Nations Development Programme. Yet, there is little agreement on the definition of food security or how it can best be achieved. Food security, like living wage, is site specific and affected by government programs and laws.

POIG could attempt to define 'food security' in the oil palm context, at least for concession owners if not for smallholders, and provide guidance on terms such as 'sufficient' and 'enhanced,' taking unique national and regional preferences into account. POIG could provide model plans and catalogue best practices and projects.

There is also an FPIC element to be considered: to what extent does a company have the right to interfere in what its workers eat, what they grow in their gardens or even where they plant food crops? Do the rights of local peoples to use their own or communal lands as they see fit, including to grow food crops, override the HCV and HCS elements of the RSPO and SAN standards and the POIG R&I?

NBPOL believes that oil palm expansion should not trigger food shortages, which implies that adequate land for gardening remains available. This could be considered for the indicators.

## 2.3 Effective conflict resolution

### 2.3.1 POIG Requirement

A balanced, accountable, mutually agreed and documented conflict resolution system is established that is accessible to smallholders, indigenous peoples, rural communities and other affected parties in order to deal with complaints, grievances and resolve conflicts to the mutual satisfaction of the party's. The system will include the option of access to independent legal and technical advice, the ability for complainants to choose individuals or groups to support them and/or act as observers, as well as the option of a third party mediator.

### 2.3.2 POIG Indicators

- The mutually agreed and documented system for dealing with complaints and grievances shall be accessible to all affected parties.
- The system shall be designed to resolve disputes to the mutual satisfaction of the affected parties.
- The system shall include the options of a) access to independent legal and technical advice; b) support from representatives of local communities' own choosing, and c) third party mediation.
- Evidence that where conflicts have arisen the conflict resolution mechanism is being used and is considered mutually satisfactory including by affected parties.

### 2.3.3 Verifiers

- Mutually agreed grievance mechanism
- Evidence of accessibility
- Options to mobilize external support to complainants
- Evidence of mutually satisfactory outcomes

### 2.3.4 Compliance

NBPOL recognises that any dispute resolution mechanisms must be established through a fair and transparent process of open and consensual agreements with affected parties. The company published its new Grievance Procedure for Stakeholder Issues in January 2011.

The development of the mechanism was not subject to open consultation with potential complainants. However, there is no evidence that NBPOL's stakeholders do not agree with the mechanism.

In its 2012/2013 Sustainability Report, the company reported no major grievances that were not resolved through the established processes. NBPOL had one SABL under investigation by the Commission of Inquiry related to the Lolokoru estate in West New Britain (1,750 hectare). This SABL was recognised as having followed the correct procedures. Grievances have come in from ILGs, smallholders, workers, lands officers, medical officers. Depending on the nature of the complaint, different company units handle grievances. Records are centrally recorded and updated. The grievance registers were available for review at the MBE and HOP company offices.

NBPOL's Grievance Procedure for Stakeholder Issues is also available to estate managers and LLB managers. Workers, smallholders and local communities in MBE and HOP were found to be aware of the system.

Some interviewees in HOP and MBE felt that their complaints took too long to be addressed or were even dismissed without due processing. It could not be verified whether this was a subjective opinion or the actual condition. It was

noted that the grievance register has several cases of grievances having been closed without further explanation on how the matter was handled.

The procedure does not explicitly include the options of a) access to independent legal and technical advice; b) support from representatives of local communities' own choosing, and c) third party mediation. However, following an accidental CPO spill in Alotau wharf, NBPOL commissioned (and paid for) an independent expert to assess the cause and impact of the spill. The PNG NGO community was prior informed about the assessment and selected the expert that was acceptable to them and the expert's findings were shared and furthermore reported in the 2010/2011 Sustainability Report.

NBPOL complies with the R&I.

### **2.3.5 Ease of verification**

The relevant POIG indicators can be verified, although it's worth noting that terms like "mutually agreed" and "mutual satisfaction" require some judgment to be verified.

### **2.3.6 Innovative strength of the POIG Indicators**

The POIG R&I for grievance procedures are very basic, and do not come close to reflecting the ambition of RSPO's Complaints System. POIG may consider requiring its members to adopt grievance mechanisms that are based on the United Nations Guiding Principles on Business and Human Rights. It should be noted that in its requirement of options to access external support in conflict resolution, POIG does not specify how such support should be paid for and how independence of any third party is guaranteed if the company pays for such support to the opposite party. POIG should clarify what it is trying to achieve with this R&I, why it believes the RSPO and SAN standards are not adequate (if this is the case), and what it recommends in addition to the existing standards. Otherwise, this R&I is redundant.

## **2.4 Social conditions**

### **2.4.1 POIG Requirement**

A comprehensive social programme with regular monitoring is in operation to ensure palm oil production does not result in human rights violations, trigger social conflicts, or produce 'land grabbing', and addresses key social equity issues including housing, healthcare, education and empowerment of women.

### **2.4.2 POIG Indicators**

- Social impact assessments and plans for the avoidance or mitigation of impacts shall incorporate the issues of potential human rights violations, social conflicts and land grabbing.
- Social impact assessments and plans for the avoidance or mitigation of impacts shall address key equity issues, including housing, healthcare, education, and empowerment of women.

### **2.4.3 Verifiers**

- Social impact assessments and plans

#### **2.4.4 Compliance**

Relevant social impact assessments, policies and plans are commissioned, developed and implemented for all estates, including new developments.

Social impacts of land acquisition are mapped out prior to new development. Impacts are mitigated on the basis of overall company policies and associated projects.

All policies relating to social issues are available and are displayed across different announcement boards in the plantation area.

Meeting with workers, families living in the compound and local government representative are conducted periodically. Meeting notes were available to review at the MBE and HOP offices.

Health facilities are available in each compound and free for workers and families, and anyone in the communities beyond the plantation boundary. The company has successfully developed a Memorandum of Understanding with the Milne Bay provincial government to secure access to subsidized drugs.

Both locations have schools in and around the plantations, some run by the company, some by the government. A mobile library program is available with open access to workers and communities beyond the plantation boundary.

A minor Corrective Action Request regarding workers' housing in MBE and HOP have been highlighted in the RSPO assessment reports. Despite budgetary constraints, new housing was confirmed to be under development.

To prevent overcrowding in workers' housing, the company has implemented measures, such as providing a tenancy agreement for workers living in the compound and passenger cards to make sure that visitors do not permanently stay in the compound.

There is a "Mama Card" and a "Mama Loos Fruit" program. The Mama Card is used when the woman is the matriarch loaner. She has a separate bank account so that she has access to the money. Started in WNB, 4,000 women are empowered through it today.

NBPOL has helped every smallholder to open his or her own bank account. It furthermore helped to see an ATM being installed in WNB. In the Solomon Islands, it operates a mobile bank.

CONCLUSION: NBPOL complies with the R&I.

#### **2.4.5 Ease of verification**

The R&I are non-specific, beyond "social impact assessments and plans." As such the indicators are overly easy to verify.

#### **2.4.6 Innovative strength of the POIG Indicators**

The R&I do not tangibly complement the RSPO P&C in terms of substance. Reformulation should avoid comprehensive listing of indicators and instead strive to list key areas for innovation at a level of abstraction that is still auditable. These R&I do not improve on the SAN standard. Model plans and examples of best practice would help.



## 2.5 Workers' rights

### 2.5.1 POIG Requirement

Palm Oil Producers shall respect worker's rights including the ILO requirements for 'decent work' and core conventions on child labour, forced or compulsory labour, freedom of association, and elimination of discrimination.

### 2.5.2 POIG Indicators

- A decent living wage shall be provided to workers, i.e. one that is sufficient to cover all of their basic needs.
- A comprehensive audit using the criteria in the SA8000 standard and involving worker representatives shall be conducted to assess and demonstrate compliance with international human rights norms and national labour laws on child labour, forced and compulsory labour, health and safety, freedom of association and right to collective bargaining, discrimination, disciplinary practices, working hours, and remuneration.
- A public action plan shall be developed that describes operational policies and actions consequent to the findings of the SA8000, and that references the grower's relevant operational procedures.
- There shall be no charging of recruitment fees to job-seekers by the company or by private recruitment or employment agents or brokers.
- Per 6.12.3, where temporary or migrant labourers are employed, the special labour policy and procedures shall include: a) Specific mechanisms to ensure the implementation of all ILO core convention requirements; b) A system for humane repatriation and an option to return upon giving birth for female migrant workers prohibited from giving birth in the receiving country and c) Due protection for any foreign worker found without legal documents
- A mechanism shall be in place to identify, prevent, mitigate and address any violations to the human rights of workers.
- Growers and millers conduct a risk assessment of its FFB supply chain to identify and manage forced labour, trafficking, slavery, and child labour risks.

### 2.5.3 Verifiers

- Definition of "decent living wage"
- SA8000 audit report
- SA8000 based action plan
- Records of recruitment fees
- Policy for temporary and migrant workers
- Mechanisms for implementation of all ILO core conventions
- Repatriation policy
- Policy for 'illegal' workers
- Grievance mechanism

### 2.5.4 Compliance

NBPOL's policy is that every employee has the right to a decent, fair, safe, healthy work environment, in line with the United Nation's Universal Declaration on Human Rights and the ILO's core conventions, whether or not these are ratified by the countries where the company operates. NBPOL raises parents' awareness of potential hazards and the need for children to attend school when children work on smallholder plots. NBPOL enforces a complete ban on any form of coerced labour practices. It does not require bonds, deposits or the withholding of travel documents for any workers. NBPOL has formal procedures to avoid discrimination in recruitment and employment practices. The company experiences, however, several structural and cultural barriers to women's empowerment. A grievance

mechanism is available. During the field verification, it was found that all policies relating to workers' rights are properly posted on announcement boards in the plantation area.

NBPOL's "Billum Index" is also used to determine what comprises a "decent living wage". This tool sets a benchmark for a living wage for the company's workers. Three monthly surveys are conducted among local traders and shops to assess prices of basic foods and goods, so that corrective measures can be taken if wages are out of balance with market prices.

NBPOL commissioned VSO to do a social audit. The report is publicly available. In addition, NBPOL is a member of Sedex, which has principles and criteria based on SA8000 and ILO conventions. A Sedex audit is scheduled for December.

NBPOL does not contract employment agents or brokers. No recruitment fees are charged to any workers hired by NBPOL. The company reported that about 11% of the company work force comprises seasonal workers.

NBPOL does not employ workers below the age of 16. To verify applicant workers, birth certificates, school and church records, ID cards from previous employment, driving licenses and statutory declarations are reviewed. NBPOL and OPIC continually remind smallholders that they can't keep children out of school to work on the farms.

Currently the MBE workers union is inactive. The previous union executive was dismissed by the union management due to allegations of corruption and to date workers are not yet keen on selecting a new executive or join the union. It was observed that the plantation continues to encourage its workers to re-establish the union. In absence of the union, the communication between the company and its workers is currently done via group and individual meetings. In HOP, one third of workers are members of the workers union. Interviews revealed that many workers see no benefit in joining the union. It was observed that the company continues to encourage its workers to join the union.

A minor Corrective Action Request regarding contracts was raised in the RSPO assessment reports. The company is now in progress to resolve the issue. Non-executive staff basically has employment form describing the detail of the employee, position, wage and annual leave. All employees receipt payroll as they get paid which is clear to them.

CONCLUSION: NBPOL complies with the relevant R&I.

### **2.5.5 Ease of verification**

The POIC R&I involve a very broad set of aspects at different levels of abstraction. The indicators contain various terms that are not qualified ("decent living wage", "basic needs", "comprehensive" and "humane") and are therefore difficult to verify. As noted in the section about "food security," there is not yet agreement on how to define, let alone verify, a "living wage." The SAI, which holds the SA8000 standard, is the leader in determining what a living wage is, but SAI works primarily in factories, where there are fewer external factors. For example, farmers can grow gardens to supplement their wages, whereas most factory workers cannot. The SAN, Fairtrade Labelling Organization and other standard setters are working together with ISEAL experts to agree an approach to setting living wage thresholds in various industries and countries.

### **2.5.6 Innovative strength of the POIG Indicators**

Many of the SA8000 criteria that are relevant to agriculture are already included in the RSPO standard, and all are in the SAN standard. Requiring audits to two similar standards is not an innovative approach. It would be better to conduct a gap analysis between the two standards and determine if any important elements are missing from RSPO. The SAN and SA8000 have worked closely together in the banana and coffee sectors and can share the lessons learned from that experience.

## 2.6 Support to smallholders

### 2.6.1 POIG Requirement

Contracts with smallholders are based on a fair, transparent and accountable partnership. Smallholders are supported to improve economic, social and environmental outcomes including: increase productivity to a comparable benchmark of productivity for the region and a target of having the same productivity as the company nucleus plantation. The productivity gains shall be achieved without expansion that threatens local community food security or additional environmental impact, and support should include financial management and budgeting, logistics and FFB processing, and improved market access such as through group certification. Companies shall report on the support they have provided to smallholders.

### 2.6.2 POIG Indicators

- A smallholder support program shall be documented and monitored, which includes: a) Measures to increase the productivity of smallholders to a comparable benchmark of productivity for the region, and a target of reaching the same productivity level as company estates; b) Support relating to financial management and budgeting and c) Support relating to logistics, FFB processing and improved market access.
- Progress in implementation of the smallholder support program shall be included in public reporting.

### 2.6.3 Verifiers

- Smallholder support programme
- Evidence of monitoring support programme
- Evidence of yield increment
- Evidence of fiscal training support
- Evidence of logistical support
- Public reporting

### 2.6.4 Compliance

In its sustainability report 2012/2013, NBPOL reports on its support programme for smallholders. All of NBPOL's smallholders are RSPO-certified. WNB was the first to achieve RSPO certification – in 2008 – for the plantation and associated smallholders. The company operates, documents and monitors a smallholder program in partnership with the Oil Palm Industry Corporation (OPIC). The company provides trainings on yield improvement and finance management, fertilizers and pest and disease control. Costs are deducted from FFB delivery later on.

NBPOL strives to achieve its “Vision 30:30”, with the objective is to increase fruit yields to 30 tons per hectare and achieve 30% combined crude palm oil and palm kernel oil extraction rates per ton of fruit. This vision applies to both company estates and smallholdings. The latter have considerable room for improvement. For example, in HOP, most smallholders have very low productivity (just over 10 tons of FFB per ha) and an estimated 800 blocks produced nothing in 2013 due to poor access. NBPOL undertook a rehabilitation program whereby all maintenance of smallholder lots is handled by the company as well as ensuring that good RSPO-compliant management practices are implemented. The smallholder will receive 60% of the profit free of maintenance cost and levies. The objective of this program is to motivate the youth to be part of the process and take burden from the elderly, creating employment for the smallholder families, and increase the smallholder productivity.

Whilst it is OPIC's statutory task to provide smallholder support and conduct compliance monitoring, OIC's offices are generally under-resourced. NBPOL has for many years supported OPIC. In 2012, NBPOL commenced a programme

with support from Solidaridad to train 30 OPIC field officers and 5 company staff in conducting RSPO-compliance assessments.

In the MBE and HOP company offices, FFB pricing was available for review. The company has made sure that smallholders are aware of how pricing is determined. It was observed that some costs may not be properly explained to smallholders. One farmer questioned why their FFB sale was deducted by a re-planting levy when he is not yet doing any re-planting. Another farmer questioned why the transport cost keeps increasing.

A pilot programme is under way to reduce replanting costs and empower smallholders through better financial management. The programme runs over 28 months and is expected to be completed by the end of 2015. This is a combined program in which training is given by WNB and Solidaridad (e.g. how best to replant while keeping income streams sufficient with intercropping).

NBPOL shares any premiums received for RSPO certification with its certified smallholders. In 2013, an average of approximately US\$ 4.6/ton of FFB premiums was paid out. Pay-out is based on formula that combines FFB volumes, average extraction rates and the market value of Green Palm certificates. Due to the low price of Green Palm certificates between 2011 and 2013, the NBPOL Board approved a higher rate for the smallholders. Payments are done in the year in which re-certification is achieved to ensure there is an incentive to maintain standards.

Logistical support: how do smallholders get their FFB off their land? All the crop is transported by the company, the smallholders have nets which are picked up by trucks of the company. If the smallholders want to transport their own crop this is also possible (not many do unless they are more business minded and have bought a truck).

CONCLUSION: NBPOL complies with the relevant R&I.

### **2.6.5 Ease of verification**

Verification of the relevant indicators is difficult because the indicators are largely defined at principle level and have a procedural bias. It is not clear what constitutes acceptable measures to increase the productivity and support relating to financial management and logistics, especially when the company effectively deals with third parties.

### **2.6.6 Innovative strength of the POIG Indicators**

Not clear. All RSPO certified plantations offer different kinds of support to smallholders. In Indonesia, such support (the “plasma” system) is required by law. It is not always possible to increase yields and, anyway, it’s equally important to teach smallholders how to manage costs and contracts. RSPO is launching a new smallholder scheme; POIG should review the effectiveness of that scheme as well as the other programs managed by Solidaridad, Proforest, IDH, the Rainforest Alliance, palm oil trading companies such as Cargill, and others, and revisit this issue.

## 3. Corporate and Product Integrity

### 3.1 Anti-corruption and Transparency

#### 3.1.1 POIG Requirement

Producer companies shall publicize a commitment to prohibit any form of corruption including during the concession acquisition process and within their operations, and support efforts to establish and comply with anti-corruption legislation where this exists. In the absence of anti-corruption law, the producer company shall implement other anti-corruption measures proportionate to scale and intensity of management activities and the risk of corruption.

#### 3.1.2 POIG Indicators

- The ethical policy prohibiting all forms of corruption shall be publicly available. The ethical policy shall include: a) A respect for fair conduct of business; b) A prohibition of all forms of corruption, bribery and fraudulent use of funds and resources; c) A proper disclosure of information in accordance with applicable regulations and accepted industry practices and d) A commitment to support efforts to establish anti-corruption legislation, and to comply with existing anti-corruption legislation.
- Implementation of anti-corruption measures shall be demonstrated in order to ensure compliance with the ethical policy, proportionate to the scale and intensity of management activities and the risk of corruption.

#### 3.1.3 Verifiers

- Business Ethics and whistle-blowing policy
- Evidence of proper disclosure
- Evidence of anti-corruption measures

#### 3.1.4 Compliance

In 2011, NBPOL formalized its values through the launch of its Business Ethics Policy, which is aligned to the UK Bribery Act. It also has a whistle-blower policy.

In its 2012-2013 Sustainability Report, NBPOL publicly stated that it had not encountered non-compliances with regard to bribery over the reporting period. No cases related to sustainability have been raised in relation to the company's whistle-blower policy. NBPOL's auditor Price Waterhouse Coopers conducts half yearly financial audits and has approved the company's accounting records (NBPOL Annual Reports).

Facilitated by Transparency International (PNG), senior management gathered general managers for a workshop in 2011 to share, without reprisal, experiences with corruption. Company managers observed that some activities are stalled as consequence of following due procedure when applying for permits from the responsible authorities.

NBPOL promotes legally binding sustainability requirements for the country's palm oil industry, such as through the development of the "Palm Oil Plantation Code of Conduct". Such codes gain the status of soft legislation ("failure to comply will be regarded as a breach of a permit condition") upon adoption by the relevant statutory power, i.e. the Department of Environment and Conservation. NBPOL had also contributed to the development of the

“Environmental Code of Practice for the Papua New Guinea Oil Palm Processing Industry,” which was published in 2013.

NBPOL complies with the R&I.

### **3.1.5 Ease of verifying**

The R&I cannot be reliably verified. The indicators require written policies (easy) but also demonstration of anti-corruption measures. It is not clear what and how many measures suffice. Additionally, it is not clear how “a proper disclosure” of information should be understood.

### **3.1.6 Innovative strength of the POIG Indicators**

RSPO introduced guidance on anti-corruption in early 2013. POIG goes beyond this, where growers shall support efforts to establish anti-corruption legislation. The R&I do not specify how POIGs civil society members will contribute to POIG’s objective.

Given the fact that plantation companies are under real strain of corruption (PNG ranks lowest in the latest United Nations corruption scorecard), POIG should consider that corruption is not a one-way road. It would be innovative if POIG would require members to commit to “Publish What You Pay.”

## **3.2 Traceability**

### **3.2.1 POIG Requirement**

Within 12 months of commitment to the Charter, all supply is fully traceable from company plantation and other suppliers’ fields to their mills. Each party shall take responsibility for traceability in the components of the supply chain under their control and transparency with their supply chain partners.

### **3.2.2 POIG Indicators**

- Within 12 months, all FFB shall be fully traceable to origin either from company estates or third party suppliers. Records shall include: a) name of supplier directly supplying to mill and b) location and coordinates of origin(s)
- Measures designed to ensure that FFB is not sourced from any illegally occupied land or from any legally protected areas shall be defined and implemented, based on known levels of risk.

### **3.2.3 Verifiers**

- Documented commitment to full traceability in 12 months
- Records of suppliers and their location
- Policy to bar FFB from illegal sources
- Demonstrated evidence of efforts to bar FFB from illegal sources

### **3.2.4 Compliance**

NBPOL’s policy with regards to traceability is well established. All FFB produced in the MBE and HOP estates, smallholders included, is fully RSPO certified and traceable from the mill gate backward to the source farm. All CPO is

fully RSPO certified and traceable to RSPO certified CPO mills. In addition, NBPOL provides one fully “Identify Preserved”<sup>11</sup> supply line for a buyer from one specific mill. All other CPO is segregated.

NBPOL has full control over its harvesting, milling, refining, transportation and shipping. It does not purchase CPO from other sources. All FFB is sourced from its own estates and registered smallholders. The locations and coordinates of all actual and potential FFB sources are mapped.

Each smallholder has an OPIC-issued identity card and must report each FFB delivery. Each production block has a number and is registered with a card. The cardholder gives the card to the FFB truck driver, who scans it into the system. This is fully automated at WNB and manual at HOP.

Across company owned and/or managed estates, measures are in place to ensure that FFB is not sourced from illegally occupied land or from protected areas. Random checks by NBPOL’s smallholder extension officers are conducted to verify that the volume of FFB on the smallholder farm prior to delivery matches the volume of related FFB received by the mill to make sure no FFB is added during transport.

NBPOL is turning down crop in WNB from smallholders that have been warned not to plant as they did not have legal access to the land.

NBPOL complies with the R&I.

### **3.2.5 Ease of verifying POIG Indicators**

The R&I are easily verified in relation to documented commitment to full traceability in 12 months and a policy to bar FFB from illegal sources. Recording of suppliers and their location requires verification. The indicator that requires demonstrated evidence of efforts to bar FFB from illegal sources is not verifiable, because it is not clear what kind of evidence and how much evidence is required.

### **3.2.6 Innovative strength of the POIG Indicators**

POIG’s R&I go beyond RSPO in that they require demonstrated legal compliance by Third Party Suppliers (TPS). However, since the POIG Charter was adopted in November 2013 several traders/refiners have introduced more far-reaching policies that require their TPS to suspend land clearing without HCV and HCS studies and halt all new development on peat, regardless of depth.

POIG’s R&I focus on FFB traceability, and do not extend into traceability of CPO and its derivatives.

## **3.3 Report on Social, Labour and Environmental Performance**

### **3.3.1 POIG requirement**

Disclose the company’s social, labour and environmental performance including the elements of the POIG Charter, and how the organization demonstrates good governance of its sustainability system using the guidance of the Global Reporting Initiative (GRI) or equivalent approach.

<sup>11</sup> Identity Preserved refers to a commodity product, segregated by both sustainability standard application and by geographic supply shed source.



### 3.3.2 POIG Indicators

- A publicly available sustainability report shall be prepared at a minimum every two years, covering as a minimum all issues relevant to compliance with this Charter. This includes relevant RSPO indicators and the additional POIG indicators.
- The public sustainability report shall include details relating to the company's governance of its sustainability systems, consistent with the GRI Sustainability Reporting Guidelines (or equivalent approach).

### 3.3.3 Verifiers

- Sustainability reports publicly available
- Reference to RSPO and POIG indicators
- Sustainability governance, according to GRI SRG.

### 3.3.4 Findings on compliance

NBPOL has publicly reported on progress with RSPO since 2006. The company commenced publishing Sustainability Reports in 2008. The reports are published every two years. The reports follow GRI's reporting formats since 2008. NBPOL's Sustainability Report for 2012/2013 is wholly structured along the Requirements set out in the POIG Charter. Governance of sustainability systems is reported, consistent with GRI's Sustainability Reporting Guidelines.

NBPOL complies with the R&I.

### 3.3.5 Ease of verification

The POIG indicators are easily verified, as the key verifiers are: "sustainability report", "every two years" and "naming of RSPO and POIG." However, a qualitative judgment is required in verifying "GRI compliant reporting." The POIG indicator suggests that GRI compliant reporting is required only in the field of governance of sustainability systems. POIG may wish to clarify "Good Governance" in operational and verifiable terms. It is not possible to verify/audit the future (reporting every two years).

### 3.3.6 Innovative strength of the POIG Indicators

Good Governance and Sustainability Reports complement the RSPO P&C. POIG should consider adding indicators that force verifiers to qualitatively assess good governance and sustainability reports, also taking into account development over time. POIG should likely wish to rephrase the indicator relating to GRI's guidelines.

## 3.4 RSPO Certification and Company Operations

### 3.4.1 POIG requirement

Producers shall meet a minimum of 50% of their plantations being RSPO certified upon commitment to the Charter, and a commitment to achieve 100% by within 2 years. This shall cover all palm oil operations, subsidiaries, acquisitions of existing plantation and fresh fruit bunch purchases from third parties, with possible alternatives to full RSPO certification for small independent producers.

Producers shall independently verify and report on compliance with this charter within 12 months of commitment to the Charter, across their operations, subsidiaries and acquisitions of existing plantation including FFB from 3rd party suppliers.

### **3.4.2 POIG Indicators**

- A minimum of 50% of the company's plantations shall be RSPO certified upon commitment to this Charter.
- A documented commitment shall be made, and progress monitored, to achieve 100% RSPO certification of the company's plantations within 2 years.
- A documented commitment shall be made, and progress monitored, to purchase 100% RSPO certified FFB within 2 years. Acceptable alternatives may be defined for independent smallholders.
- Where there are new acquisitions of uncertified plantations, these shall be RSPO certified within 2 years of acquisition.

### **3.4.3 Verifiers**

- 50% RSPO certified land bank upon entry in POIG
- Documented commitment to achieve 100% RSPO certification in two years
- Documented commitment to achieve 100% FFB traceability in two years

### **3.4.4 Compliance**

NBPOL was one of the first producer companies to become a member of RSPO and as early as 2004 committed to the process of achieving 100% certification. The RSPO standard became available in 2008, and NBPOL was the second company in the world to get certified and the first to include smallholders. NBPOL implemented for each location a time-bound plan and had the full group certified in February 2013. Due to the lead time required for the RSPO review, it took almost five months for HOP and MBE to complete the process.

After NBPOL had acquired HOP in 2010, the company requested RSPO to hold the positive certification recommendation issued by the RSPO accredited assessor as management felt that the smallholder supply base should have been included in the scope of the assessment.

New acquisitions are subjected to the RSPO New Planting Procedure (NPP) as on-going (acquisition of brownfields) or as totally new development (greenfield). New land bank, including smallholdings, is incorporated in the relevant certified supply base within two years.

NBPOL fully complies with the R&I.

### **3.4.5 Ease of verification**

The POIG indicators are easily verified, as the key verifiers are: "documented commitment," "full certification" and "full traceability" within 24 months" and "public reporting". The verifier is not required to conduct a "reality check".

### **3.4.6 Innovative strength of the POIG Indicators**

The POIG R&I are partially exclusive and particularly rigid. They will tend to exclude companies with large plantation land banks from POIG membership, on grounds of certification performance that is not necessarily under the control of the grower.

## 3.5 Responsible Supply Chains

### 3.5.1 POIG Requirement

Producers shall independently verify and report on compliance with this charter within 12 months of commitment to the Charter, across their operations, subsidiaries and acquisitions of existing plantation including FFB from 3rd party suppliers.

### 3.5.2 POIG Indicators

- Compliance with the requirements of this Charter, including relevant RSPO indicators and the additional POIG indicators, shall be independently verified within 12 months of commitment, and then on an annual basis.
- The results of the independent verification shall be publicly reported within 12 months of commitment, and then on an annual basis.

### 3.5.3 Verifiers

- Sustainability Report
- This report

### 3.5.4 Compliance

By signing up to the POIG Charter, NBPOL committed to independently verify compliance with the R&I annually, and to publish the verification findings.

NBPOL contracted Rainforest Alliance to conduct the verification. Rainforest Alliance has ample documented experience with auditing in the fields of forestry and commodities. It is not a member of RSPO or POIG.

NBPOL's compliance with the POIG Charter was verified within 12 months after November 2013. The report is made publicly available.

The verification exercise involved company group policy and reporting, but NBPOL's compliance was not verified across all operations, subsidiaries and acquisitions. NBPOL's position is that it will not commission ground verification across all its production units every year. The company intends to have two units verified annually until all have been verified in three years. The main considerations for this policy are the extra costs involved in conducting field assessments and planning constraints because of RSPO assessments. Additionally, many of the POIG R&I require policies that are made at the corporate level, not the farm level.

CONCLUSION: NBPOL complies with the R&I, but see below.

### 3.5.5 Ease of verification

The POIG indicators are easily verified, as the key verifiers are: "independent", within 12 months" and "public reporting". Minimal qualitative assessment by the verifier is required.

### 3.5.6 Innovative strength of the POIG Indicators

The POIG R&I go beyond the RSPO P&C and Certification Systems in that verification across all operations, subsidiaries and acquisitions is required. Such expectation has been unacceptable to NBPOL.

POIG may consider complementing its R&I with innovative approaches to its verification procedure in order to generate feedback for RSPO's Certification Systems. At present, POIG has set an ambitious performance standard, but offers no system as to how verification is to be conducted, how performance is to be qualified or what the consequences of non-compliance are. In the absence of an accreditation system for POIG verification, an assurance statement would be required over and above the (this) POIG verification report, to be issued by an independent third party. POIG may consider the risk of merely replicating mainstream approaches to sustainability assurance.

Given POIG's intention to engage forerunners in industry, its grower members would already have advanced sustainability reporting in place. Instead of full verification, it is recommended that POIG verification depart from a quality assessment of growers' sustainability reports on the basis of materiality, completeness and responsiveness. This assessment may then trigger verification of identified potential non-compliances.

Additionally, or alternatively, the review of sustainability reporting could also focus of a POIG member's innovative approaches to ensure compliance with the R&I. In such case, the verification effort would focus on learning from innovative efforts, rather than mere compliance.

# Annex

## Itinerary field verification

Date	Time	Location	Activities
6 Oct		Jakarta – Singapore – Port Moresby	Travel
7 Oct	05.00	Port Moresby – Aloatu	Meet Paul, Travel
	13.00	Milne Bay	Meet Peter , Travel
	13.00	Milne Bay	Planning, gathering addition documents, set appointment with stakeholders
	15.30	Milne Bay	Go to hotel, check in
8 Oct	08.30	Milne Bay	Document review, principle 1 & 3
	12.00	Milne Bay	Lunch break
	13.00	Milne Bay	Document review, principle 2
	15.30	Milne Bay	Meet OPIC and MOFA
	17.00	Milne Bay	Back to hotel
9 Oct	08.15	Milne Bay	Meet Smallholder Manager
	09.30	Milne Bay	Meet GM
	10.00	Milne Bay	Observing buffer area, meet growers
	12.00	Milne Bay	Lunch break
	12.30	Milne Bay	Meet growers, observing compound, new mill area, wildlife corridor, genealogy and social mapping
	17.00	Milne Bay	Back to hotel
10 Oct	08.15	Milne Bay	Meet Community Affair
	09.00	Milne Bay	Meet Land Officer
	10.30	Milne Bay	Meet Technical Services
	11.30	Milne Bay	Meet Human Resource
	12.00	Milne Bay	Lunch break
	13.00	Milne Bay	Meet field workers, observing nursery
	15.00	Milne Bay	Document review
	16.00	Milne Bay	Feedback session via Skype
	16.30	Milne Bay	Observing community meeting
	21.00	Milne Bay	Back to hotel
11 Oct		Milne Bay – Port Moresby - Popondeta	Travel, to the guest house
12 Oct		Higaturu	Report drafting
13 Oct	7.00	Higaturu	Document review
	8.30	Higaturu	Meet the GM
	9.00	Higaturu	Meet Human Resource
	9.30	Higaturu	Meet Technical Services
	11.00	Higaturu	Meet Land Officer
	12.00	Higaturu	Lunch Break
	13.00	Higaturu	Observing new development area

	16.30	Higaturu	Meet growers
	17.00	Higaturu	Back to guest house
14 Oct	7.00	Higaturu	Meet field workers, observing compound
	9.00	Higaturu	Meet OPIC
	10.30	Higaturu	Meet growers, meet Mill Manager, meet GIS
	12.00	Higaturu	Lunch break
	13.30	Higaturu	Observing buffer zone, conservation area (LEJO)
	17.00	Higaturu	Back to guest house
15 Oct	21.30	Higaturu	Meet the GM
		Higaturu – Port Moresby	Travel
16 Oct		Port Moresby - Singapore	Travel