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REDD+ and Forest Carbon Rights in Papua New Guinea

BACKGROUND LEGAL ANALYSIS

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SPC Secretariat of the Pacific Community

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SPC Land Resources Division

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Executive summary

Who owns the carbon in the forest? This is a question of great importance for all developing countries preparing to engage with REDD+ –- particularly in Papua New Guinea. Deforestation and forest degradation account for approximately 17% of global greenhouse gas emissions – more than the entire global transport sector. Since 2005, this has prompted the development of a new mechanism known as Reducing Emissions from Deforestation and forest Degradation **(REDD+)** under the 1992 United Nations Framework Convention on Climate Change **(UNFCCC)**. The purpose of REDD+ is to provide developing countries with a financial incentive to reduce their level of deforestation and forest degradation, and to increase their forest carbon stocks.

There is, as yet, no legislation specifically dealing with REDD+, forest carbon rights or payments for environmental services generally in Papua New Guinea **(PNG)**. However, PNG has a well-developed legal system with a number of elements which could support the creation of national framework for REDD+ and forest carbon rights.

PNG has a strong tradition of private property ownership and protection. It is often said that 97% of the land in PNG falls under customary ownership, so this forms the primary type of land ownership in PNG. Ownership and control of forest, and the carbon sequestered in the forest, derives from the customary ownership of the land on which the forest grows.

However, the conclusion reached in this Paper is that customary land tenure, as presently structured, cannot legally support a market-based approach to REDD+ which involves site-specific forest carbon projects due to the legal restrictions which customary land tenure brings and the contractual obligations that underpin REDD+ projects.

Characteristics which make it unsuitable for commercial arrangements include that:

- Customary land is unregistered in PNG, which means that it can often be difficult to clearly identify who the landowners are for a particular area and who has various customary interests in the land (usufructs), although legislation has recently been passed permitting registration of clan land (section 3.4.4).

- The boundaries of customary land are not surveyed and are often disputed.

- Customary land is governed by customary laws, which differ from place to place and are not written down.

- Customary land is inalienable, except to the State and in other very limited circumstances, and any instrument purporting to create an interest in customary land (such as a forest carbon contract) can be declared void.

- There is no suitable mechanism for customary landowner groups to join together as a legally recognised entity to hold and manage forest carbon, and to distribute benefits in an equitable, open and transparent way.

Further, approximately 12 million hectares, or 80% of production forest, has already been "acquired" by the PNG Forest Authority under the *Forestry Act*, with the PNGFA and other third parties (logging companies) holding legal rights to harvest trees from these forests.[1] This has significant implications for how forest carbon right might be allocated in PNG, as these interests will need to be reconciled with the interests of customary landowners who may wish to engage in REDD+ activities.

Legislation is required to address these issues. Set out below is a summary of the reform options relating to customary land.

Step 1: Clarify the position of forest carbon in land legislation

An amendment may be made to the *Land Registration Act* to ensure that "land" as defined in that Act includes "forest carbon rights". This would put freehold land, state lease land and registered clan land on a common footing in regards to REDD+ and any other forest carbon proposals and would provide a basis for registering any instruments dealing with forest carbon rights on the land records, if that option is preferred.

Further amendment should also be made to the *Forestry Act* to insert the same common definitions into the forest regime to ensure that consistency and integration is maintained where customary landowners have transferred their forest ownership entitlements to the PNG Forest Authority under a

[1] UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, Joint Programme Document, 2010, p. 6.

Forest Management Agreement, although this must be done in accordance with the principle of free, prior and informed consent by landowners.

Step 2: Ensure identification and recording of who owns the forest carbon rights on customary land

This will require amendments to the Forestry Act to ensure that the identity of customary land which has become subject of a Forest Management Agreement are effectively recorded and put onto a registry. The circumstances identified where there is potential for conflict between the consequences of registration as Clan Land and the Forest Management Agreement need clarification and that mechanism of clarification could be expanded to provide synthesis between the two processes based on the register maintained under the *Land Registration Act*.

Step 3 Legislating to enable REDD+ and Forestry Rights under the National Forest Plan

The forestry regime needs amendment to find an appropriate and balanced position for REDD+ and forestry harvesting in the National Forest Plan. This will mean amending the *Forestry Act* to ensure the present single purpose mandatory statutory powers and functions of the PNG Forest Authority are expanded to include REDD+ and carbon sequestration activities in the National Forest Plan and the machinery which surrounds its implementation.

Contents

Abbreviations

CBD	Convention on Biodiversity (1992)
CCBS	Climate, Community and Biodiversity Standard
CDM	Clean Development Mechanism of the Kyoto Protocol
COP	Conference of the Parties
DNA	Designated National Authority
FCPF	Forest Carbon Partnership Facility of the World Bank
FAO	Food and Agriculture Organization of the United Nations
FPIC	Free, Prior and Informed Consent
GHG	Greenhouse Gas
ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change
MRV	Measurement, Reporting and Verification
OCCD	Office of Climate Change and Development, PNG
PICs	Pacific Island Countries
REDD	Reduced Emissions from Deforestation and forest Degradation
REDD+	REDD, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks ('+')
SFM	Sustainable Forest Management
tCO_2e	Tonnes of CO_2 equivalent (a measure of greenhouse gases)
UNDRIP	United Nations Declaration on Rights of Indigenous Peoples (2007)
UNFCCC	United Nations Framework Convention on Climate Change (1992)
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and forest Degradation

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Purpose of this paper

The purpose of this paper is to:

- Explain the relevance of forest carbon rights to a national REDD+ scheme in PNG
- Explore whether the existing legal framework in PNG provides a means to determine ownership of forest carbon rights
- Identify some options for how PNG could clarify the ownership and management of forest carbon rights and obligations in its emerging national REDD+ scheme.

This Paper has been commissioned by the SPC / GIZ regional project "*Climate Protection through Forest Conservation in Pacific Island Countries*", funded by the International Climate Initiative of the German Federal Environment Ministry. It is part of a larger study on forest carbon rights in Melanesia. The other Country Papers (Fiji, Papua New Guinea and Vanuatu) can be accessed under "Country Reports", and the Synthesis Report entitled *REDD+ and Forest Carbon Rights in Melanesia*, can be accessed here.

1 Overview of REDD+ in PNG

1.1 Country context

Papua New Guinea (PNG) is one of the five Melanesian countries (along with Fiji, New Caledonia, Solomon Islands and Vanuatu) located in the South Pacific Ocean (**Map 1.1**). It has a population of in the order of 6 million, of which 88% live in rural areas. PNG has a land area of 45,286,000 hectares, with forest cover of 28,726,000 hectares, being 63% of its land area, reporting an annual deforestation rate of -0.5% over the 2000-2010 period.[2] The main drivers of deforestation and forest degradation are large-scale selective logging and subsistence and commercial agriculture.[3]

PNG is a party to the United Nations Framework Convention on Climate Change (UNFCCC) and has ratified the Kyoto Protocol.

1.2 REDD+ Readiness in Papua New Guinea

Deforestation and forest degradation account for approximately 17% of global greenhouse gas emissions – more than the entire global transport sector.[4] Since 2005, this has prompted the

Map 1.1: Location of Papua New Guinea within Melanesia (source: GIZ)

[2] All country statistics are from FAO, *State of the World's Forests*, 2011, Rome, pp. 108, 117.
[3] Readiness Preparation Proposal (R-PP) for Papua New Guinea, submitted 28 September 2012, Version 9 Working Draft, p. 30-31.
[4] IPCC Fourth Assessment Report, 2007. OCCD, PNG's R-PP reports a much higher annual deforestation rate of 1.55% between 2005 – 2010: see, Readiness Preparation Proposal (R-PP) for Papua New Guinea, submitted 28 September 2012, Version 9 Working Draft, p. 29.

development of a new mechanism known as Reducing Emissions from Deforestation and forest Degradation **(REDD+)**, under the 1992 United Nations Framework Convention on Climate Change **(UNFCCC)**.[5] The purpose of REDD+ is to provide developing countries with a financial incentive to reduce their levels of deforestation and forest degradation, and to increase their forest carbon stocks.

While the architecture for the UNFCCC REDD+ mechanism is still evolving and is not yet fully functional, funds are already flowing for individual forest carbon projects through the compliance and voluntary markets.[6]PNG has been a leading proponent of REDD+ at the international level.

A number of donors and development partners are currently supporting REDD+ readiness activities in PNG including:

- The SPC / GIZ regional project "*Climate Protection through Forest Conservation in Pacific Island Countries*", funded by the International Climate Initiative of the German Federal Environment Ministry. This Paper has been commissioned as part of this project.
- The UN-REDD Programme. PNG was one of the Programme's original "pilot" countries, and is progressing steadily with the implementation of its UN-REDD National Programme that commenced in 2010.[7]
- The World Bank's *Forest Carbon Partnership Facility*, to which PNG submitted a further draft *Readiness Preparation Proposal* on 28 September 2012.[8]

Papua New Guinea has established an Office of Climate Change and Development **(OCCD)**. It supports the whole of government National Climate Change Committee and now reports directly to the Climate Change Minister. Originally OCCD devolved from the Environment Department. Now in the present Government it shares its Ministry with the Forest Ministry.

[5] To date, the Conference of the Parties of the UNFCCC has adopted four decisions on REDD+, see: Decision 2/CP.13 on Reducing emissions from deforestation in developing countries: approaches to stimulate action (Bali); Decision 4/CP. 15 on Methodological guidance for REDD+ (Copenhagen); Decision 1/CP.16, The Cancun Agreements, Ch. III(C) on Policy approaches and positive incentives on issues relating to REDD+; Decision (Cancun); Decision - /CP.17 Guidance on systems for providing information on how safeguards are addressed and respected and modalities relating to forest reference emission levels and forest reference levels as referred to in decision 1/CP.16 (Durban).

[6] For a review of the current status of the forest carbon markets, see: Peters-Stanley, M., Hamilton, K., and Yin, D., (2012). Leveraging the Landscape: State of the Forest Carbon Markets 2012, Ecosystem Marketplace.

[7] UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, Joint Programme Document, 2010.

[8] Papua New Guinea, draft REDD+ Readiness Preparation Proposal, v 9 working draft, 28 September 2012.

Another key player in the regulation of REDD+ is the PNG Forest Authority (PNGFA). The PNGFA is responsible for administering the *Forestry Act* 1991 and its regulations.

1.3 Scale of REDD+ activities in PNG

With international support, PNG is developing a national REDD+ scheme to prepare itself to receive performance-based payments for emission reductions/removals accounted at a national level.[9] As with the other Melanesian countries, PNG has opted for a national approach to REDD+. However, given that it may take some years for the REDD+ mechanism to become functioning under the UNFCCC framework, PNG may support the development of a project-based approach in the interim, and may seek to integrate this into its national REDD+ framework at a later date.

Key documents developed to date to guide REDD+ activities in PNG include:

- The National REDD+ Project Guidelines, prepared by OCCD, March 2012. These Guidelines require a project proponent to "demonstrate that they have clear, uncontested title to the land, or provide legal documentation demonstrating that the project is undertaken on behalf of the land owners with their full consent";[10] and
- Draft Guidance to Establishing Free, Prior and Informed Consent for REDD+ Projects in PNG, 2011, published by OCCD.

1.4 Pacific Islands Regional Policy Framework for REDD+

PNG has participated in the development of the *Pacific Island Regional Policy Framework for REDD+*, which was formally endorsed by the Pacific Island Ministers for Agriculture and Forestry in September 2012.[11] The Regional Framework calls on countries to develop their REDD+ policies, strategies, action plans, guidelines, and legislation to define forest carbon rights, forest carbon financing and benefit-sharing arrangements (see Box 1.1).[12]

Box 1.1: Extracts from Pacific Island Regional Policy Framework for REDD+ regarding forest carbon rights

[9] Pacific Islands Regional Policy Framework for REDD+, Sept 2012, para. 5.
[10] PNG National REDD+ Project Guidelines (2010), Para. D6. Note: the Guidelines do not expressly refer to the need to demonstrate title to the forest carbon rights.
[11] The Pacific Islands Regional Policy Framework for REDD+ was prepared with support from the Secretariat of the Pacific Community and GIZ, and was adopted by the Heads of Agriculture and Forestry Services at its Fifth Regional Meeting in Nadi, Fiji, 24-27 September 2012.
[12] Pacific Island Regional Policy Framework for REDD+ (September 2012), p. 8, para. 4.3.2.

The Regional Framework contains the following guidance on forest carbon rights for Pacific Island countries, under the of Safeguards heading:

"Para. 4.6.3: REDD+ implementation can take place on government-owned land, freehold land, and/or customary land. Performance-based payments for REDD+ will be dependent upon clear delineation of land tenure, carbon tenure arrangements, as well as effective, equitable, and transparent benefit-sharing arrangements for REDD+ implementation activities.

4.63a Pacific Island countries and/or REDD+ project proponents will need to clarify land and forest carbon tenure arrangements as a key condition of REDD+ implementation.

4.6.3b Pacific Island countries already possess laws and regulations guiding the production, distribution and sale of commodities (e.g. timber, minerals) derived from natural resources. These laws and regulations can be used as a starting point for the development of laws and regulations (including taxation) guiding the production, distribution and sale of carbon assets.

4.6.3c Pacific Island countries should ensure effective, equitable and transparent distribution of benefits arising from REDD+ implementation. Benefit distribution and benefit sharing should address gender equality."

2 What are 'forest carbon rights'?

The phenomenon of climate change and the recognition by the international community that forests play an important role in reducing greenhouse gas emissions and increasing carbon removals has suddenly given value to the carbon in forests. This development has given rise to the following questions:

- Who owns the carbon in the forests (and soils)? and
- Who is entitled to the associated benefits (and risks and obligations) associated with those carbon rights?

There is currently no clear or commonly accepted definition of carbon rights under international law or the international UNFCCC policy framework for REDD+.[13] However, while the current UNFCCC framework for REDD+ makes no specific mention of carbon rights, it does 'request' State Parties to address land tenure issues when developing their national REDD+ strategies, and it does

[13] Even REDD+ commentators use different definitions throughout the literature on REDD+. For a detailed discussion of the different types of carbon rights that can exist, see Takacs (2009), *Forest Carbon – Law and Property Rights*. pp. 13 – 17.

establish some other guiding principles that are relevant to the way that countries will develop their framework for carbon rights (e.g. safeguards).[14]

For a person or group to demonstrate that they own or have control over the forest carbon rights in a certain area of land, they must be able to show:

- That they own or have legal control over the **land**
- That they own or have legal control over the **forest resource,** to the exclusion of all other competing interests, such as forestry rights, mining rights, leasehold interests or competing usufructs (e.g. competing customary rights), or through having reached agreement with those who hold competing interests
- That they can **maintain their control** over the land and forest for the required period of time (e.g. 10 – 30 years, depending on the duration of the contractual or legal obligation that is undertaken) in order to demonstrate that they can manage and protect the forest resource.

Box 2.1 Extracts of provisions on carbon rights from selected voluntary carbon standards

Verified Carbon Standard (VCS)

- Project proponent must show proof they have the "unconditional, undisputed and unencumbered" right to claim the project's GHG reductions or removals
- This can be proved by showing, *inter alia*:
    - A right established by law, regulation or decree (e.g. legislation on carbon rights)
    - A right arising from a property or contractual right in the land (e.g. a lease assigning carbon rights)
    - An enforceable and irrevocable agreement with the landowners who own the carbon rights (e.g. an ERPA).

Plan Vivo

- Smallholders/community groups must have "clear, stable and long-term land tenure, which includes the rights to climate services for all project intervention areas (Para. 1.1)

Climate, Community & Biodiversity Standard (CCB)

Project proponents must have "clear, uncontested title to the carbon rights, or provide legal

[14] UNFCCC, COP Decision 1/CP.16 (Cancun Agreements), para. 72.

documentation demonstrating that the project is undertaken on behalf of the owners with their full consent" (Para. G5)

In forest communities those seeking to bind themselves with obligations must be able to demonstrate that they have the right to exercise forest carbon rights in order to participate in a site-specific REDD+ project, and this forms a prima facie entitlement to the revenues from that project. They must also be accountable to surrender any credits if permanence of the forest carbon is lost.

2.1 Carbon pools

Forest carbon can be divided into five carbon pools (physical sub-sets of forest carbon).

The five carbon pools specified under the 2006 IPCC Guidelines are:[15]

- above-ground biomass (stems, branches and foliage, etc.)
- below-ground biomass (live roots more than 2mm diameter)
- dead wood
- litter
- organic soil carbon (including organic carbon in mineral soils. This includes live and dead roots of less than 2mm diameter. Each country can specify the depth to which it will measure soil organic carbon).

Forest carbon rights include the rights to the carbon found in these five sub-set pools of carbon.

2.2 What are the benefits, risks and obligations of carbon rights ownership?

Ownership of forest carbon rights carries with it both benefits and risks.

[15] The UNFCCC has requested that REDD+ countries estimate and report emissions and removals from five forest carbon pools when preparing their national greenhouse gas inventories. The UNFCCC has asked countries to use the most recent IPCC guidelines, as adopted or encouraged by the COP, as a basis for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks (Dec. 4/CP. 15, para. 1(c)).see IPCC 2006 Guidelines for National Greenhouse Gas Inventories, Vol. 4 on AFOLU, Ch. 1, Table 1.1 (http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html). The five carbon pools specified by the IPCC 2006 Guidelines also apply to mangroves.

2.2.1 Benefits

While it is beyond the scope of this Paper to explore the links between ownership of forest carbon rights and benefit-sharing, in principle, the owner/s of forest carbon rights who can show that they will or have generated verified emission reductions/removals will be entitled:

- Where a **project-approach** to REDD+ is taken: to receive (or control) the carbon credits that are generated by a REDD+ project ; or
- Where a **national approach** to REDD+ is taken through national accounting with a national benefit-sharing scheme (e.g. under the UNFCCC framework): to an equitable share of the REDD+ revenues that are received by the national government.

Note that under a national approach, clarification of carbon rights is not a pre-condition for benefit-sharing, as a benefit-sharing scheme could be based on a range of factors, such as paying those landowners who are actively engaged in land management activities. However if the national approach incorporates a project-based approach which directly generates carbon credits, the value of some of those credits must be returned to landowners as otherwise it would constitute a 'taking' of property which the Constitution prohibits without due compensation[16].

The Pacific Islands Regional Policy Framework for REDD+ contains some provisions that are relevant to benefit-sharing. One of the guiding principles for the Framework is that REDD+ should 'Contribute to poverty alleviation and enhance the livelihoods of Pacific Island communities' (Para. 8(v)). In particular, the Framework states that:

> *Pacific Island countries should ensure effective, equitable and transparent distribution of benefits arising from REDD+ implementation. Benefit distribution and benefit-sharing systems should address gender equality* (Para. 4.6.3c).

In this context, it is noted that benefit sharing is a complex issue in PNG. Existing mechanisms for incorporated landowner associations, known as Incorporated Landowner Groups (ILGs) have not always operated in an open and transparent manner when charged with the responsibility of disbursing funds to local communities from forest, mining and natural gas projects (see section 7 below).

[16] The Constitution, s 53.

OCCD in PNG has foreshadowed that it proposes to commission a study to explore potential models for benefit-sharing that are suitable for PNG.[17]

2.2.2 Risks and obligations associated with owning carbon rights

Ownership of carbon rights also carries obligations and risks.

The **obligations** attached to carbon rights relate to the need for the owner of the carbon rights to ensure that the forest carbon will remain sequestered in the forest for a long period of time, such as 10 – 20 years. This means that the owner of the carbon rights will need to give undertakings (promises) to the REDD+ project developer (either the Government or a private project developer) that they will manage the land in a certain way so as to protect the forest over the long term (e.g. . that they will not permit or that they will regulate logging, to clear the area of scrub to reduce bushfire risk, to monitor the area, etc.).[18]

There are also **risks** involved if the carbon stored in the forests is released into the atmosphere during the life of the project, reversing the environmental benefits of the REDD+ project.[19] This is known as 'loss of permanence' or a 'reversal'. Loss of permanence might occur through intentional release (such as by legal or illegal logging), unintended release (as a result of negligence), or through natural causes (such as a cyclone, wildfire or insect attack).

Where the forest carbon is released, the owner of the carbon rights may lose some or all of the benefits of the REDD+ project (e.g. carbon credits), and/or they may have to pay an additional penalty, depending on the terms of any carbon contract they have entered into, or depending on the structure of the REDD+ regulatory scheme.[20]

To protect against the possibility that the forest carbon might be released, voluntary forest carbon accreditation schemes (e.g. the Verified Carbon Standard) require the project proponent or the

[17] PNG draft REDD+ Readiness Preparation Proposal, 28 September 2012, at p. 62.
[18] For example, the VCS AFOLU framework requires a minimum commitment period (crediting period) of 20 years, with project proponent to reassess baseline every 10 years: see VCS Standard, Version 3.3, 4 October 2012, para. 3.8.1. AFOLU Requirements, Version 3.3, 4 October 2012, para. 3.1.10.
[19] Under the UNFCCC framework, the environmental safeguards listed in Annex I to the Cancun Agreements require countries to address the risk of reversal (loss of permanence) in their national REDD+ programme.
[20] For example, under the forest carbon scheme in Australia, if carbon is released through an intentional or negligent action by the project proponent, the proponent can be ordered to buy back an amount of carbon credits up to the total number of credits that the forest carbon project would have earned: see *Carbon Credits (Carbon Farming Initiative) Act 2011*, (Cth) s 90.

central administrator to set aside a certain number of carbon credits from the project into a buffer account in order to manage these risks ('a reversal buffer').[21]

2.3 Why define forest carbon rights?

There are two reasons for defining carbon rights:

- To inform the development of a national benefit-sharing scheme, which should take into account (but not necessarily be driven by), ownership of forest carbon rights
- To facilitate public and private investment in REDD+ projects.

Due to the low level of land registration in PNG, it is extremely difficult to clearly identify who owns the forest carbon on customary land at present (see the legal analysis of this in Section 4.7 of this Paper). Identifying the actual owner/s can be a costly and time-consuming process, and may not result in the level of certainty that a REDD+ project developer requires in order to invest in and support a REDD+ project. If forest carbon rights can be formalized within a clear policy and legislative framework, this is more likely to provide regulators, investors and landowners with clarity and certainty they require, and hopefully will reduce transaction costs in REDD+ projects.

Project developers and investors want an assurance that the carbon has not already been sold to someone else, and that it will not be sold to someone else in the future once they have 'bought' it (known as 'double-counting').

In particular, clarification is required to identify:

- who owns the carbon, eg. An individual or a landowner tribe or clan or group, and
- the boundaries of the land that will form the project area.[22]

Clarifying forest carbon rights is an important part of REDD+ readiness and should be done within the broader framework of developing a national regulatory framework for REDD+.

An informed policy discussion on forest carbon rights should be based on a clear understanding of the difference between the transfer or sale of forest carbon (property) rights, and the sale of the verified

[21] For example, the Verified Carbon Standard requires credits to be placed into an AFOLU Pooled Buffer Account. This is a single account which contains non-tradable AFOLU buffer credits for all projects in order to cover the risk of unforeseen losses in carbon stocks across the VCS AFOLU project portfolio: VCS Program Definitions, Version 3.

[22] For example, the VCS AFOLU Requirements require a project proponent to provide a map of the project area, the coordinates of the project area and boundary, the total size of the project area, and details as to its ownership: VCS AFOLU Requirements: Version 3, para. 3.4.1.

emission reductions/removals from a REDD+ project that are sold as carbon credits. There is often a misunderstanding that it is necessary to create a legal framework which enables forest carbon property rights to be separated from the title to land in order to facilitate carbon trading – which is incorrect. This distinction is explained further below in Box 2.2.

Box 2.2 What is the difference between 'carbon rights' and 'carbon credits'?

'Carbon rights' refer to the right to exploit the carbon in a forest. The holder of the carbon rights has the right to the legal or economic benefit from carbon emission reductions and removals.

'Carbon credits' are the financial instruments that are issued once it is verified that emission reductions and removals from a project (or country) have been achieved. For example, under the Verified Carbon Standard, Verified Emission Units (VCUs) are issued. These are held in an account in the name of the Project Proponent, in a carbon registry, such as the Markit carbon registry in New York.

Carbon credits are equal to one metric tonne of carbon dioxide equivalent. They are issued with a unique serial number so they can be tracked through carbon registries.

It is not necessary for a country to clarify carbon rights for *all* elements of a national REDD+ programme, only those which involve project-based activities and market funding which are indicated by the arrows in bold in **Figure 2.1**.

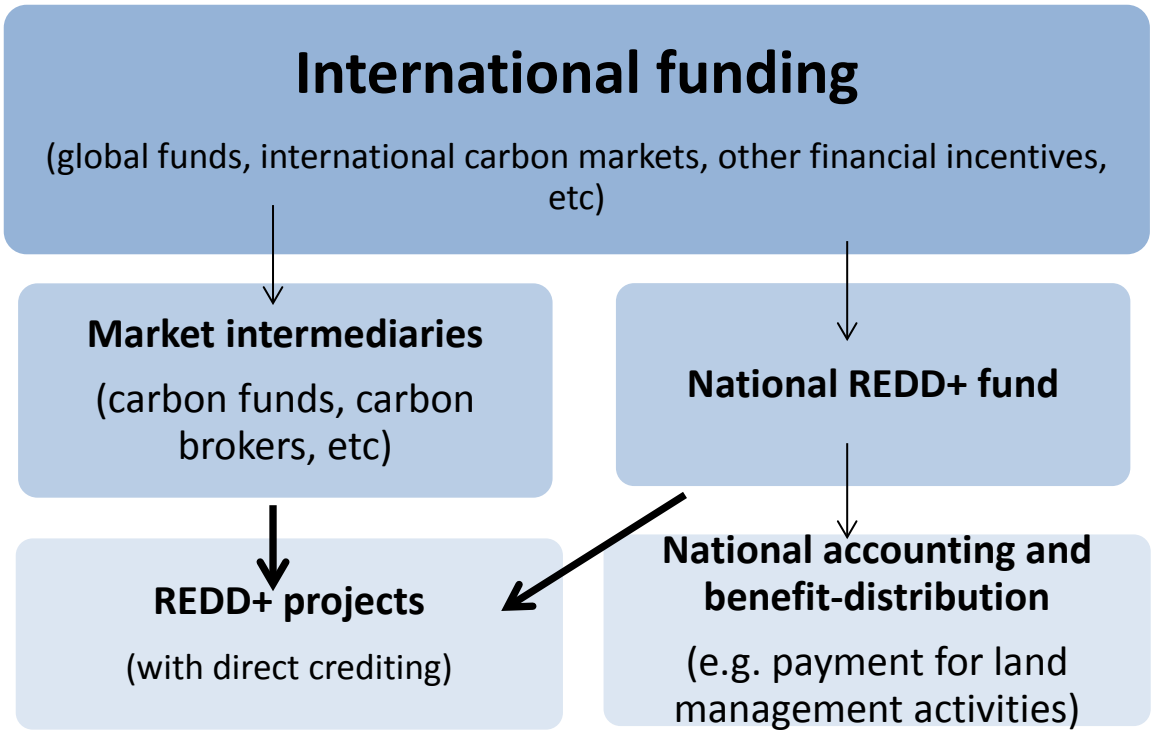

Figure 2.1: Elements of national REDD+ funding architecture for which forest carbon rights should be defined (indicated by arrows in bold)[23]

2.4 Approach and overarching principles for defining carbon rights

2.4.1 Decision-making framework

When designing a system to clarify and regulate forest carbon rights, countries will need to make some key decisions, such as whether to nationalize carbon rights or base them on land and forest ownership, and whether to allow third parties (such as logging companies, REDD+ project developers or carbon brokers) to hold or own forest carbon rights. Each of these key decisions are analysed in more detail in the sections of this Paper below. Figure 1.2 below contains a decision tree illustrating this process.

[23] Adapted from Vatn and Angelsen 2009, p.64.

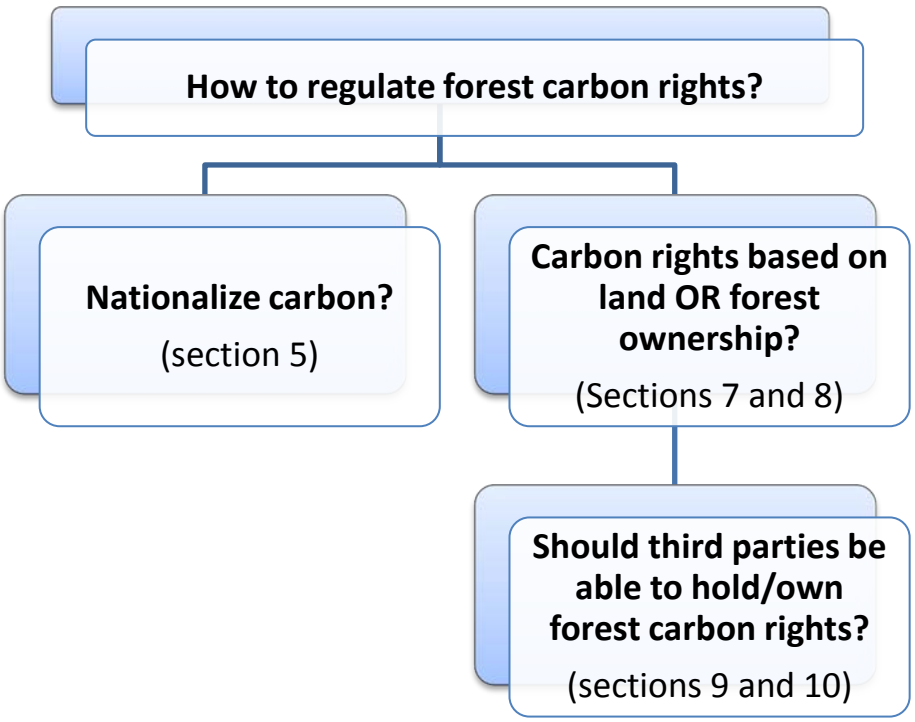

Figure 2.2: Decision tree for developing forest carbon rights

2.4.2 Consistency with PNG's constitutional framework

The framework for forest carbon rights that is adopted should be consistent with PNG's constitutional framework and international obligations.

Section 53 of *The Constitution* directly protects citizens from the unjust deprivation of property. The State may only deprive a citizen of their property under legislation where there is:

(a) a public purpose; or

(b) a reason that is reasonably justified in a democratic society that has a proper regard for the rights and dignity of mankind; and

(c) the necessity for the taking of possession or acquisition for the attainment of that purpose or for that reason is such as to afford reasonable justification for the causing of any resultant hardship to any person affected.

In all cases of compulsory acquisition by the State of property held by citizens, compensation must be made on just terms (Section 53(2)).[24]

[24] Minister for Lands v Frame [1980] PNGLR 433

It has been established that a company incorporated in Papua New Guinea is a citizen for the purposes of protection of constitutional rights and corporate citizens have constitutional rights[25].

A distinction must be drawn between a statute that provides for the State to acquire property and a statute which mandates the mandatory acquisition of property.[26] This distinction has specifically been considered in the context of forestry where the Court upheld the concept of Forest Management Agreements between customary owners and the State pursuant to section 56 of the *Forestry Act* on the grounds that there was no compulsion for the customary owners to enter into the Forest Management Agreement and in entering into such an agreement they were exercising their customary right to sell property[27].

It can also be said following the decision of the Court in *Manus Provincial Government v Tarsicius Kasou [1990] PNGLR 395* that the right of customary owners to alienate something in or on the land owned by them has been established, providing always of course to the extent such a right exists in accordance with custom and is properly authorised in accordance with custom. This latter point is very important and frequently overlooked in the rush to sign Forest Management Agreements.

2.4.3 Consistency with PNG's international legal obligations

The Pacific Islands Regional Policy Framework for REDD+ establishes safeguards which provide that REDD+ implementation must be in line with international instruments to protect the rights of indigenous peoples.[28]

The main international instruments that are relevant to the development of a framework for forest carbon rights in PNG are:

- **The United Nations Framework Convention on Climate Change (1992)**, under which the Cancun Agreements are established. The Agreements request developing countries to follow a number of safeguards when developing and implementing national REDD+ strategies, which include respect for the knowledge and rights of indigenous people, and

[25] The State v NTN Pty Ltd and NBN Ltd [1992] PNGLR 1
[26] PNG Readymixed Concrete Pty Ltd v The State [1981] PNGLR 396
[27] SC1088 Re Forestry (Amendment) Act 2005 (unreported, Papua New Guinea Supreme Court) and SCR 7 of 1992; Re Forestry Act 1991 and the East New Britain Forestry Operations Control Act 1992 [1992] PNGLR 514
[28] Pacific Islands Regional Policy Framework for REDD+, para. 4.6.4.

specifically notes the importance of the United Nations Declaration on the Rights of Indigenous Peoples.[29]

- The **United Nations Declaration on the Rights of Indigenous Peoples (2007)**, which acknowledges the right of indigenous peoples to own, use, develop and control lands and resources which they have traditionally owned and the obligation of States to give legal recognition accordingly,[30] and which incorporates the right of landowners to give or withhold their free, prior and informed consent to legislation, administrative measures and projects that may affect their land, territories and other resources.[31]

The effect of these international instruments is that PNG's framework for forest carbon rights should ensure that it protects the property rights of customary landowners and is developed in accordance with the principle of free, prior and informed consent.

2.4.4 Guiding principles for development of a carbon rights framework

In developing and analysing the Options for creating a framework for forest carbon rights, the authors have been guided by the following principles:

- **Simplicity**: to develop a carbon rights framework that is easily understood by everyone, including customary landowners, and builds on existing legal mechanisms
- **Maintaining customary connection with the land**: to develop a system that maintains landowners customary connection to the land, as much as possible
- **Transparency**: to identify options that minimize the risk of forest carbon rights being affected by fraud and corruption
- **Effectiveness**: to ensure that carbon rights are held by those who control the forest resource, in order to incentivize those people to maintain the forest
- **Establishes clear rules for all types of land tenure**, without creating complicated exceptions for some types of land tenure.

[29] The Cancun Agreements were made at COP 16 in 2010, and are set out in Dec. 1/CP.16. Para. 69 affirms that countries should promote and support the safeguards set out in Appendix I (para. 2), when developing their national REDD+ strategies or action plans.
[30] Art 26.
[31] United Nations Declaration on the Rights of Indigenous Peoples (2007), paras. 19 and 32. Of direct relevance to forest carbon rights is Article 26.2 which provides: 'Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.'

3 Land tenure in PNG

Under the existing framework, land ownership is governed by the *Land Act 1996,* which recognises the existing customary ownership of land and customary ownership is governed by Customary Law.

It is often said, that 97% of the land in PNG falls under customary ownership, so this forms the primary type of ownership in PNG. Customary land is also referred to as unalienated land. The remaining 3% is alienated land: either State owned land (through historical voluntary acquisition or compulsory acquisition), or freehold land (mainly prior existing freehold land, or rarely converted customary land) which may only be owned by a PNG citizen.

Of particular note is Section 132 of the *Land Act 1996*, which state that:

> *"Subject to Sections 10 [State acquisition by agreement] and 11 [SABL lease leaseback], a customary landowner has no power to sell, lease or otherwise dispose of customary land or customary rights otherwise than to citizens in accordance with custom, and a contract or agreement made by him to do so is void."*

Section 132 affirms the application of the underlying customary law to customary land.

The issue of ownership is complicated, both in a legal sense of determining the rights under custom, and in determining the facts to support the existence of the custom. Each specific instance of customary land requires careful consideration of the facts and legal analysis, as the situation in relation to each piece of customary land may differ in some respects. We discuss this in greater detail below.

3.1 History

The underlying history of land tenure in modern Papua New Guinea derives from whether the land is in the former British territory of Papua or the former German Imperial possession comprised in the territory of New Guinea.

Whilst the actual date on when Britain claimed Papua may be uncertain, from the time when Britain exercised power over Papua by declaring a Protectorate, Britain's representative, Erskine read a proclamation pursuant to which he stated that land under customary occupation (but not including waste and vacant land) would be protected for the citizens[32].

[32] Set out in Muroa, Amankwah & Mugambwa, Land Law in Papua New Guinea, Lawbook Co, (2001) at pg 2.

Erskine's declaration evolved into early legislation which has continued in effect until the present day which provides that it is not possible for any person other than the government to deal with customary owners for the acquisition of customary land.[33] During the period from 1884 until present times numerous pieces of land were acquired by the Administration of the Territory of Papua up until Independence 1975 and more recently the Independent State of Papua New Guinea. Although under the present *Land Act,* since 1996, acquisitions of customary land may only be for defined public purposes or with agreement of the customary owners. The authors are unaware of any attempt by the state to document or catalogue land said to be waste or vacant. It should also be noted that since the early 1900s that the colonial statutes prohibited the administration from granting freehold titles to private persons in Papua[34] so freehold land in Papua today is very rare and the titles, unless created recently under the *Land (Tenure Conversion) Act* date back usually to the early 1900s.

The Administration of the Territory of Papua kept some of the land it acquired for government and public purposes, and apart from limited freehold grants, has subjected the majority of the land to grants of (usually) 99 year leases to private individuals for specific purposes such as agriculture, housing, business etc.

On the German side, in New Guinea during the period 17 May 1885 to 1899, the Deutsch Neu Guinea Kompagnie acted as the agent for Germany in land acquisitions from customary owners and it would appear that during this period private treaty acquisitions with customary owners were permitted, but from 1899 until the assumption of Australian mandated League of Nations administration following World War One, the Treasury of the Protectorate of Neu Guinea was mandated by the Kaiser with the exclusive right to acquire land from persons determined on enquiry to be the owners. Waste and vacant land was permitted by the Prussian Imperial Ordinances to be taken following enquiry and occupied land was acquired in accordance with customary consideration following very careful enquiry as to these customs.[35]

The German acquisitions were of the whole of the interest in land and were written up in the "Grundbuch", resulting apparently in an allodial form of title.[36]

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[33] See now sec 132 of the *Land Act 1996.*

[34] See generally, Trebilcock, M., *Customary Land Law Reform in Papua New Guinea, Law, Economics and Property Rights in a Traditional Culture*, in *Adelaide Law Review*, 1983 9(1) 191-228.

[35] See for example the Imperial *Ordinance Regarding the Acquisition of Ownership and the Charging of Land in the Protectorate of New Guinea of 20 July 1887.*

[36] Acquisitions once made appear to have no ongoing obligations and appeared to approximate freehold in the English common law system.

Australian public servants allowed the "Grundbuch" and the records of the League of Nations Mandated Administration's own land dealings to be destroyed by inadequately securing the records from the risk of damage by Japanese bombing during the Second World War. Papua's records were not lost.

3.2 Evolution

As a consequence of the loss of the land records in New Guinea, following the war, a quasi-judicial Commission was established to enquire into and re-establish the authoritative public records of land ownership[37]. Over a least a decade, the Commission systematically went across the countryside conducting its enquiry and making orders reinstating the records of the titles.

Later, a similar commission was re-enacted under the *Land Titles Commission Act 1962* with powers over both the Territories of Papua and New Guinea. The statutory function of the Land Titles Commission appears from the preamble to the Act in the following terms:

> *"An Act to establish a Land Titles Commission and provide for its constitution and jurisdiction, and for other purposes.*
>
> *Whereas it is universally recognized that the expeditious and final determination of disputes as to rights in land and the registration of guaranteed rights to land are of basic importance to the well-being and development of all countries and especially of developing countries such as the Territory of Papua and New Guinea:*
>
> *And Whereas it is also universally recognized that these matters can best be dealt with by judicial authorities independent of control by the Government of the day, doing justice to all parties in accordance with the law:*
>
> *And Whereas it is proposed to make special provision in the laws of the Territory for the establishment of such an independent judicial tribunal to be known as the Land Titles Commission for the determination and protection of rights to land, and in particular to native land".*

From its establishment in 1962, the Land Titles Commission adjudicated numerous land disputes between customary owners and made findings as to the customary lineages and their customary land boundaries. The adjudicative function of the Land Titles Commission is curtailed pursuant to the *Land Disputes Settlement Act* once a Local Land Court is seized of jurisdiction. The *Land Disputes Settlement Act* also provides for a system of local mediation, Local Land Court determination and

[37] See generally *New Guinea Land Titles Restoration Act 1951.*

then Provincial Land Court review if mediation has failed to bring about an outcome. The Local and Provincial Land Courts are divisions of the District Courts presided over by magistrates.

In addition, the Land Titles Commission has particular determinative powers under the *Land (Tenure Conversion) Act* entitling it to make findings as to customary ownership entitlements to customary land as a precursor of ordering on the application of these customary owners the conversion of their customary title to registered freehold title.

It is understood that the Land Titles Commission took its role under the *Land (Tenure Conversion) Act* somewhat seriously and in accordance with its statutory powers divided the country into in order of 500 zones for the determination of customary ownership and set about forcing the determination of ownership and the establishment of records of its determinations. The Commission appears to have been too ambitious and failed administratively to deliver on the enormous workload it created for itself and the process of forced determination created some fear in the community.[38] This resulted in a law reform commission report which was critical of the Commission and the *Land (Tenure Conversion) Act.*[39]

The whole issue became too difficult to deal with and the Commission has been administratively inactive with its records deteriorating in a basement in Port Moresby. Notwithstanding that all of its legal entitlements, obligations and the public's entitlement to avail of its determinative powers remain.

3.3 Modern Position

Since the 1950s Australia administered the Territories of Papua and New Guinea in parallel, even though is some respects there were different laws applicable in each. Land law however was synthesised into a single system with comprises customary land, alienated torrens freehold land and alienated government land put over to either private leasehold use or government use or reserve.

There are two other descriptions of land which are subsets of customary land: these are known as the Special Agriculture and Business Lease (SABL) and the Registered Clan Land (which is a new and evolving form of land title only several months into operation at the time of writing).

[38] Tebilcock, M Op Cit
[39] Papua New Guinea, Commission of Inquiry in Land Matters, 1973

Category of tenure	% of all land in PNG
Customary Land (true customary land, SABLs, Registered Clan Land)	97%
Alienated Land (private freehold, government land, or land where government is the root of a leasehold title)	3% (Approx. 600,000 hectares)

3.4 Dealing with land titles

3.4.1 Freehold Land, State Owned Land and Land held under Lease from the State

This category is said to only occupy 3% of all land in PNG, and much of it is confined to residential, commercial and agriculture environments, this land is not generally likely relevant to carbon sequestration activities.

However, where such land is suitable, it may in the case of:

(a) freehold land, be directly sold, leased, or any other interest or covenant may be provided by agreement;

(b) State land, be bound in a covenant with the State if a contractual power can be found[40]; or

(c) where the state has leased the land to a person other than the State, to the extent that State Lease covenants do not prohibit such dealing any private dealing in the lessee's interest can be made by agreement.

If the interest created or dealt with by a dealing is other than a lease for a term of less than three years, the instrument recording the dealing must be registered on the freehold title or state lease. Failure to register will result in the covenant being void and unenforceable against any transferee of the land.

There are some other notorious constraints where the land is held from the State under a lease. These are:

[40] See restrictions on State contracting in the *Public Finances (Management) Act 1996.*

(i) a requirement for Ministerial Approval for dealings;

(ii) the overall term of the rights created cannot exceed the balance of the term of the State Lease left to run less one day; and

(iii) the lease will always be subject to improvement covenants which would be antagonistic in some way to the likelihood of survival of forest.

State Land which has not been subject to a lease to private persons does not appear in the register maintained under the *Land Registration Act* and therefore the principles of Torrens indefeasibility would not apply to it. It remains in the records at the Department of Lands and where administrative subdivisions of the State are allocated land for state purposes, the State issues an "occupancy certificate". It is understood that as a matter of contract law that a party (here the State) cannot contract with itself to grant an interest that it already has: therefore the State does not issue State Leases of land to itself. Occupancy certificates are issued instead.

3.4.2 Customary Land

Customary land is said to make up the balance of 97% of all land in PNG, and comprises the land that is most suitable for carbon sequestration activities.

The *Land Act 1996* provides at section 132 that:

> *"other than pursuant to sections 10 and 11, a customary landowner has no power to sell, lease or otherwise dispose of customary land or customary rights otherwise than to citizens in accordance with custom, and a contract or agreement made by him to do so is void."*[41]

Section 132 is the modern implementation of the preservation of customary land first found in Erskine's Declaration for Papua and in Wilhelm's Ordinance for New Guinea and maintained consistently ever since.

The *Land Act 1996* also contains a provision at section 12 allowing the compulsory acquisition of land by the State for public purposes. "public purposes" is defined in section 2(1). There are many classes of purpose enumerated for things such as roads, bridges, power stations, airports etc. Acquisition of forest for carbon sequestration or trading schemes could not on any proper interpretation be fitted within this category and compensation must be paid by the State for all acquisitions under the section.

[41] *Land Act 1996*, s 132.

3.4.3 Special Agriculture & Business Leases (SABL)

Section 11 of the *Land Act 1996* applies to the granting of a lease to the State of land for the purposes of the Minister granting a lease under section 102 of the *Land Act* for "Special Agriculture and Business Purposes" (SABL).

This section and the use of it to grant SABLs has come under much scrutiny in recent years and has been the subject of a Commission of Inquiry which is yet to hand down its findings.

The authors' professional observation is that this provision was included in the *Land Act 1996* to facilitate on a life of crop basis a coconut or oil palm small holder plantation. The process in its properly conceived administrative form required the State to ascertain who the customary owners were, to take a lease from them for nil consideration and to create a commercial torrens style State Lease back to the customary owners placing them back in possession of the same interest they granted to the State. Hence the name some times colloquially given to the arrangement: "lease-leaseback". During the term of the arrangements section 11(2) provides that all customary rights are suspended and on conclusion of the lease the customary rights are revived. Thus during the term of the SABL, the customary owners only have a reversionary entitlement to regain their full customary ownership rights (which they could deal with in accordance with custom).

For the scheme to work and to be legally and constitutionally valid, the rights under the Special Agricultural and Business Lease must themselves constitute customary common property subject to customary control. The benefit of creating such a Torrens style registered Special Agriculture and Business Lease is that the customary owners might be able to enter into binding plantation agreements with big corporates running nucleus agriculture activities or pledge the lease to a financier for development funding for the agricultural activity.

Instead, persons purporting to be customary owners or incorporated land groups representing customary owners have applied for and obtained SABLs often granted to third party limited liability companies. The quasi-judicial processes available from the Land Titles Commission are substituted with the administrative discretions of officers of the Department of Lands as to whom they will recognise as the customary owners.

Many SABLs granted also mandate by their express terms clear fell logging of the land and the putting over of the land into agricultural production as an improvement covenant.

Endless litigation surrounds the SABL and it is sufficient to observe that the process is a legal and administrative failure. It is also expected by the authors as more light is shed on these SABLs that

many persons will come forward asserting they are customary land owners, not the persons named on the departmental records. These persons will then seek to challenge the grant of the SABLs to reclaim their customary title.

Furthermore, as a matter of administrative law, the exercise of the statutory power to grant a SABL for other than agriculture or business purposes (such as for carbon sequestration purposes), may constitute a fraud on the administrative power to grant the lease and be susceptible to administrative challenge in the Courts. In the case of REDD+ project the facts would need to support a conclusion that sequestration was a business purpose.

3.4.4 Registered Clan Land

There is a new process under the *Land Registration (Amendment) Act 2009* which allows ILGs to register the title of their customary land as "registered clan land". Only an ILG can apply for registration. Smaller family units which might have direct control over their customary land are denied the right to make an application. Once registration of the customary land as clan land has been effected, the land ceases to be bound by customary entitlements.

Section 34N of the *Land Registration Act* provides:

> *"Land entered in the Register under this Part and the right to ownership or possession of any such land, or any right, title, or interest in or in relation to any such land shall cease to be subject to customary law."*

The ILG can then grant derivative rights and interests in the land to another person, whether on payment of rent or not. This is provided within Section 34O of the *Land Registration Act* in the following terms:

> *"(1) An Incorporated Land Group registered as the owner of clan land has power to grant derivative rights and interests in the land or portions of the land to itself, any land group unincorporated or incorporated, an individual or any entity on payment of a rent or rent free in such manner as provided in Part VI of the [Land Registration] Act.*
>
> *(2) Land Transactions, unless provided to the contrary, are deemed to be on such terms and conditions provided for in Parts VI. VII and IX of the [Land Registration] Act."*

Furthermore, Section 34P provides that the Ministerial Approval provisions for dealings under the Land Act 1996 apply to "dealings in land registered under this Part except for dealing between an incorporated land group and its members…"

From all of these provisions, we can distil that customary rights are displaced on registration as "clan land", the Incorporated Land Group becomes paramount, and any sub group or family unit entitlements which would otherwise have existed in custom are to be granted by the ILG and registered.

Carbon sequestration obligations could only be registered if the Minister approved the instrument and the instrument is a "derivative right or interest in the land".

It is doubtful whether carbon rights would constitute derivative rights and interest under the Act as their nature is more of an obligation binding the land for the benefit of a corporate third party involved in sophisticated commerce than a customary usage right being substituted from custom to the new clan land environment. We interpret the "or" in section 34P as being conjunctive and capable of being restated as "derivative right or derivative interest". This issue will not be clear until there is judicial interpretation of this provision or legislative amendment.

Furthermore, no consideration appears to have been given by the architects of this "registered clan land" as to how the Forest Management Agreements under the *Forestry Act* are to be negotiated or maintained once customary rights are extinguished.

After passage through the Parliament in 2009, these amendments laid for over three years in the Department before being signed into operation only several months ago. As the process is not in common usage, at this stage it should not be relied on to assist in promoting carbon sequestration obligations. In addition, the extent of the interest in the land, and its indefeasibility, is unknown, and it is not a perpetual right, but subject to the terms of the grant. As with the lease leaseback system, problems are bound to occur with identification of landowners and the extent and nature of the rights provided.

We predict massive quantities of litigation, not least because the land determination process maintains administrative determination by the Lands Department officers rather than a form of judicial determination. The ILG process also legally enables the disenfranchisement of 40% of the customary owners in its decision making processes[42]. These include decisions about the extent of its own authority, its own representativeness and the demarcation of the land boundaries to become the subject of its applications. These features may even make these amendments susceptible to constitutional failure.

[42] Incorporated Land Groups (Amendment) Act 2009.

3.4.5 Tenure Conversion

This is by far the most secure method of land dealing involving customary land, particularly if dealings in the nature of carbon sequestration obligations are contemplated.

The *Land (Tenure Conversion) Act 1963*, as amended, allows Incorporated Land Groups (ILG) and other customary groups to apply to convert customary land to freehold land. Generally, the process is as follows:

(i) a citizen (individual or ILG) makes application to the Land Titles Commission to declare their land and order conversion to freehold;

(ii) the Commission advertises, calls for objections and holds a public hearing;

(iii) if accepted, the Commission makes a Conversion Order directing the Registrar of Titles to enter the applicant's name as the owner of the land in the Register of Freehold Land;

(iv) the land then ceases to be customary land is and is regulated as freehold land in perpetuity under the *Land Registration Act 1981*.

Under this procedure, land can be applied directly to carbon sequestration purposes and the party monetising and acquiring the benefit of the carbon obligation is provided with security of a registered dealing. The land can also be leased or otherwise made the subject of a registered covenant creating an obligation running with the land for the life of the obligation.

The process also contains the unique restriction of limiting the number of persons who may appear on the title as registered owner of the freehold (as tenants in common or joint tenants) to six. The means the process forces granular determination, almost to the family level of the ownership and ensures smaller portions of land that are directly referable to persons who have the stewardship of the land. The risk of unrepresentativeness presented by the ILG structure is reduced by proceeding under the *Land (Tenure Conversion) Act* rather than the new process of registration of Clan Land by an ILG.

However, the administrative barrier comprised in the failure of government to ensure the Land Titles Commission operates and the administrative neutering of it following the CILM report in 1973 would need to be removed[43].

4 Who owns the forest carbon under existing laws?

4.1 Rights to Land

The *Constitution of Papua New Guinea* does not specifically state who owns the land. A determination of ownership must therefore be derived from *The Constitution*, the Organic Laws, Acts of Parliament, Provincial Laws and the Underlying Law (Section 9 and Schedule 2 of *The Constitution*).

The Underlying Law (now governed by the *Underlying Law Act 2000*) is generally made up of:

(a) Customary Law; and

(b) Pre 1975 English Common Law and Equity (including post 1975 English findings of the pre 1975 position).

Ownership of the land in PNG is determined by Statute and the Underlying law, subject to limitations in *The Constitution*, such as the requirement for laws to comply with the National Goals and Directive Principles, and not to be repugnant to principles of humanity.

4.2 Rights to forest and things in or on the soil, as distinct from the soil

There is no specific reference in *The Constitution* to ownership of the forests or crops or things in or on the land as distinct from the surface of the land.

The concept of forest ownership and rights of use arise in Statute and in the Underlying Law as derived from the right of ownership of, or use of, the land.

These rights in respect of use of the forest may be granted in contract in respect to alienated land or in accordance with custom in respect to customary land: subject always to regulatory intervention. In respect to the use and enjoyment of specific items such as forest, minerals or petroleum, these may be regulated by Statute. Examples of such statutes include the *Forestry Act 1991 (as amended)*, the

[43] See the historical discussion in Trebilcock, M., *Customary Land Law Reform in Papua New Guinea, Law, Economics and Property Rights in a Traditional Culture*, in *Adelaide Law Review*, 1983 9(1) at pg 196.

Mining Act 1992 (as amended), the *Oil and Gas Act 1998 (as amended)* and the *Environment Act 2000*.

Papua New Guinea law recognises (in both the case of alienated land and customary land) the whole of the rights attaching to land and things in and on it as property of the owner of the root title and the use and enjoyment of different interests in such land may be devolved to others in accordance with the law applicable to the creation of such interests.

4.2.1 Constitutional position settled

There is a significant body of received common law and locally developed case law as part of the Underlying Law, which deals with issues of ownership of land and related matters.

Of particular note, are decisions confirming that customary land tenure is corporate in nature. That is, ownership of customary land is vested in a community in which countless members are dead, living and yet unborn. Of direct relevance to REDD+ is the consequence that this places restrictions on dealings in customary land, which may affect future members of the community, whose rights cannot be taken away or fettered. Also of note are authorities that custom must be established by reference to the custom itself.

4.2.2 Effect of customary law

As stated above, customary law forms a significant part of the law of PNG, through the framework adopted by *The Constitution*, the Organic Laws, Acts of Parliament, Provincial Laws and the Underlying Law. The *Underlying Law Act 2000* (a subordinate constitutional law mandated by section 20 of the *Constitution*) specifically recognises the predominance of customary law and regulates its adoption and application.

Customary Law is defined to mean:

> "*the customs and usages of the indigenous inhabitants of the country existing in relation to the matter in question at the time when and the place in relation to which the matter arises, regardless of whether or not the custom or usage has existed from time immemorial*"[44]

Customary Law will apply to a person where that person[45]

> *"(a) is a member of a community if—*

[44] Section 1(1) of Underlying Law Act 2000.
[45] Section 1(2) of Underlying Law Act 2000.

(i) he adheres to the way of life of the community; or

(ii) he has adopted the way of life of the community; or

(iii) he has been accepted by that community as one of its members, irrespective of whether the adherence, adoption or acceptance is effective for a general or for a particular purpose; and

(b) ceases to be a member of a community under Paragraph (a) if he adheres or adopts the way of life of another community or is accepted by some other community as a member of that community."

In multi-actor contexts where two or more persons are involved, case law has clearly established that the customary law can only apply between those persons if they both adhere to the same customs in the same community. If that further requirement cannot be established, one party cannot force a customary law remedy or entitlement on the other.[46]

However, only worthy customs are received and given force of law. A significant number of customs, such as, for example, sorcery, cannibalism and payback killing are not received and accepted because they have been proscribed as criminal offences under the criminal laws and the criminal laws have constitutional validity as extinguishing any exculpatory provision in custom on the basis of social values and the unworthiness of the custom.

However custom in relation to land and usufructory entitlements are unlikely to stray into the area of unworthiness and such customs have largely survived.

Customary law – the applicability or non-applicability and content of it – must be considered in all aspects of land law and tenure in PNG.

4.3 Incidents of Land Ownership

The ownership of land in PNG extends to the airspace above the surface and everything below the surface. There is no precise authority on this point, so it said that the old common law rule expressed in the latin phrase *Cuius est solum eius est usque ad coelum et ad inferos* (the owner of land owns all the way up to heaven and all the way down to hell) applies.

[46] The State v Boas Gugu [1981] PNGLR 5.

This common law right is subject to regulatory restrictions such as for example those regulations providing for establishment of navigable airspace for aircraft[47] and the preservation of mineral and petroleum rights to the State.

By Section 5(1) the *Mining Act 1992* provides, *"all minerals existing on, in or below the surface of any land in Papua New Guinea, including any minerals contained in any water lying on any land in Papua New Guinea, are the property of the State."* Likewise the *Oil and Gas Act 1998* provides at Section 6(1) that "*all petroleum and helium at or below the surface of any land is, and shall be deemed at all times to have been, the property of the State*".

There is no reservation of forest ownership to the State in Papua New Guinea. This is discussed in the following section.

4.4 Forest ownership

Forest growing on land goes with the ownership of the land as a fixture or attachment in accordance with the common law, although the right to detach trees or use the trees in the forest may be alienated and transferred to another person.

These features hold true, regardless of whether the land is freehold land, government land, land held a lease from the government or customary land. In the case of Registered Clan Land, the right to deal with forest will run with the land and any devolution to another party to deal with the forest would need to be registered.

4.5 State Land

Forest growing on State owned land is owned by the State and can be dedicated as national forest under Section 3 of the *Forestry Act 1991*.

Once it is dedicated as national forest, the PNG Forest Authority has the authority to grant Timber Permits, Authorities, Licences or Clearance Authorities to forest industry participants for the harvesting of trees in accordance with the Forest Management Plan for that forest and as approved by the Board of the PNG Forest Authority[48].

[47] Civil Aviation Act 2000.

[48] Section 55(1) of the National Forestry Act 1991.

4.6 Freehold Land

An owner of freehold land may harvest forest of up to 500m3 of timber or having a value of less than PGK20,000 per year without coming within the forest regulatory regime.

Once proposed forest dealings exceed the threshold, the parties become "forest industry participants" and regulatory control descends over the forest on the freehold land. The owner of the freehold has a determinative authority to consent to the forest activity, and once the consent is obtained, the forest on the freehold land is put over to forest development under the *Forestry Act*. The means a Forest Management Plan administered by the PNG Forest Authority and the granting of Timber Permits, Authorities, Licences and Clearance Authorities in accordance with the *Forestry Act*.[49]

4.7 Customary Land

Forest presenting on customary land is owned by the customary landowners according to custom[50].

Most customs in PNG recognises that a plurality of usufructs can arise between complementary customary users. Theoretically, this might separate ownership of the land into a broader community group (for example defence against rival communities), and specific rights to things on or forming part of the land (such are gardening rights for particular families in the community. Therefore, ownership of the forest may be separated from ownership of the land. However, there are many different customs across PNG, and it is necessary in every case to prove the custom applying for a particular parcel of land and forest.[51]

Section 46 of the *Forestry Act 1991* states *that: "The rights of the customary owners of a forest resource shall be fully recognized and respected in all transactions affecting the resource."*

Section 56(1) of the *Forestry Act* provides a means for customary owners to alienate and dispose of their forest from their land:

> *"Subject to this Division, the Authority may acquire timber rights from customary owners pursuant to a Forestry Management Agreement between the customary owners and the Authority."*

The *Forestry Act* continues by providing in section 57(1) that where it is proposed to enter into a Forest Management Agreement over customary land:

[49] Ibid.
[50] SC1088 Re Forestry (Amendment) Act 2005 (unreported, Papua New Guinea Supreme Court).
[51] A good discussion of this appears in Trebilcock, Op Cit, p 194.

"the title of the customary owners to that land shall be—

(a) vested in a land group or land groups incorporated under the Land Groups Incorporation Act (Chapter 147); or

(b) registered under a law providing for the registration of title to customary land."

Section 57(2) of the *Forestry Act* then provides:

"(2) Where it is impractical to give effect to the requirements of Subsection (1)(a) or (b), a Forest Management Agreement may be executed on behalf of customary groups who are customary owners in respect of the land covered by the Agreement, by agents of such groups, provided that—

(a) such agents are authorized to so act in a manner which is consistent with the custom of the group they represent; and

(b) 75% of the adult members resident on the land of each such group give written consent to their group entering into the Agreement."

The scheme laid out in these provisions proceeds on an assumption that customary owners have a right to dispose of presently existing forest and where the Forest Management Agreement extends into the future, future forest, but it always remains open for:

- a member of the community to assert that in accordance with their custom trees were not sold for large scale commercial felling and were only alienated for customary purposes of the community such as housing and building canoes etc.; and
- to the extent the Forestry Management Agreement disposes of a future generations property during an prior generations life, to assert no customary right existed to dispose of the forest in that manner.

The right of a Registered Clan Land holder to enter into a Forest Management Agreement is not contemplated by the *Land Registration (Amendment) Act 2009* (but it is by the Forestry Act) and the issue appears not to have arisen in the several months the *Land Registration (Amendment) Act 2009* has been in operation.

The content of a Forest Management Agreement is mandated by section 58 of the *Forestry Act* in the following terms:

"A Forest Management Agreement shall—

(a) be in writing; and

(b) specify the monetary and other benefits, if any, to be received by the customary owners in consideration for the rights granted; and

(c) specify the estimated volume or other measure of quantity of merchantable timber in the area covered by the Agreement; and

(d) specify a term of sufficient duration in order to allow for proper forest management measures to be carried out to completion; and

(e) be accompanied by a map showing clearly the boundaries of the area covered by the Agreement; and

(f) contain a certificate from the Provincial Forest Management Committee to the effect that it is satisfied as to—

(i) the authenticity of the tenure of the customary land alleged by the persons or land group or groups claiming to be the customary owners; and

(ii) the willingness of those customary owners to enter into the agreement; and

(g) specify and other forestry related land use options, if any."

4.8 Ownership of forest carbon rights under existing law

There is nothing in the current law of PNG which recognises or differentiates carbon rights from forest ownership or any other rights derivative from the land.

4.8.1 Carbon Rights are really carbon obligations

The whole of the ownership rights in land and to forest includes the right to release the carbon stored in the forest by cutting down and burning the trees (subject to forestry regulatory requirements of the *Forestry Act 1991* once the threshold is reached).

The owner of a forest (which will always be the owner of the land unless he has already alienated forest rights) can covenant to sustain the life of the forest or to act to prevent the release into the atmosphere of carbon already sequestered in the forest.

Where such a covenant is created it has the nature at law of an obligation on the forest owner and exists as right only in the hands of the person to whom the covenant is owed.

4.8.2 Monetising obligations

There is nothing in the law of Papua New Guinea to specifically facilitate or proscribe the monetisation of a covenant not to do a particular act.

If commercial value can be ascribed to such a covenant by virtue of some overarching supranational scheme or arrangement, then the common law of Papua New Guinea will recognise in accordance with the principles of common law contract an arrangement whereby monetary consideration is paid in exchange for the obligation.

The Courts of Papua New Guinea and will enforce the contractual covenant in accordance common law and equitable principles.

Common Law remedies for breach of a covenant to preserve a forest or sequester carbon in a forest could include, on the facts, recovery of consideration which wholly failed, damages for having to reacquire the covenant from elsewhere or if action is threatened then injunctive or associated equitable relief.

The general commercial laws are also sufficiently developed to support any secondary market in such covenants which might develop.

4.9 REDD+ and mangroves

Significant amounts of carbon are stored and sequestered in coastal ecosystems of tidal marshes, mangroves and seagrass meadows. This is often referred to as 'Blue Carbon'.[52] It is therefore important to determine who owns the carbon in tidal marshes, mangroves and seagrass meadows?

In PNG, the same structure of land ownership appears for the foreshore below the high watermark as exists on land above the high watermark.

Accordingly, the 'ownership' of carbon in mangroves is likely to belong to the customary parties having the usufructory entitlements to those areas, unless the underwater area is State land subject to a state lease under the *Land Act*.

Likewise as on land above the high watermark, the *Mining Act* and the *Oil and Gas Act* apply to those activities below the high water mark.

Box 4.1 REDD+ and mangroves

[52] For a discussion of the emerging international policy frameworks for Blue Carbon, see: Herr, D., Pidgeon, E., and Laffoley, D. (eds.) (2012). Blue Carbon Policy Framework: Based on the discussion of the International Blue Carbon Policy Working Group. Gland, Switzerland: IUCN and Arlington, USA.

Although it is possible for countries to include mangrove specific activities in their national REDD+ strategies, it is not yet clear whether the emerging UNFCCC framework for REDD+ will include such activities.[53] However, in the meantime, it is possible to generate carbon credits from projects to reduce emissions and increase removals from restoring and conserving wetlands and mangroves under the following alternative standards and methodologies:

- **CDM Afforestation/Reforestation projects**, for which the Executive Board has approved a large-scale[54] and small-scale[55] methodology concerning mangroves

Verified Carbon Standard (VCS), which recently recognised Wetlands Restoration and Conservation as an eligible project category (October 2012), covering areas including mangroves, salt marsh and seagrass meadows.[56]

4.10 Binding Land in obligations

The real issue is ensuring that the person who bound themselves in the obligation not to release and to continue sequestering the carbon remains bound, and if they dispose of their interest in the forest or land on which the forest is growing, that the person to whom they have transferred the forest remains bound.

Legislative intervention in case of covenants binding land, or things attached to land will operate in the case of land subject to the *Land Registration Act* (freehold, state leasehold and possibly Clan Land, but not customary land or Government land) to require registration of the covenant to ensure indefeasibility of title principles are maintained. At least a person entering into a covenant with a forest owner to acquire the benefit of the carbon sequestration has the benefit of being able to insist on registration prior to exchanging consideration for the obligation and establishing the right.

Where land is freehold or alienated land held by or through the State, the root of ownership of the forest on the land runs with the land. Indefeasibility of title and absence of obligations to future

[53] For a discussion on the potential for this, see: Herr, D., Pidgeon, E., and Laffoley, D. (eds.) (2012). Blue Carbon Policy Framework: Based on the discussion of the International Blue Carbon Policy Working Group. Gland, Switzerland: IUCN and Arlington, USA, at pp. 13 – 14.

[54] See the methodology: Afforestation and reforestation of degraded mangrove habitats, AR-AM0014, Ver. 01.0.0.

[55] See the methodology: Simplified baseline and monitoring methodology for small scale CDM afforestation and reforestation project activities implemented on wetlands, AR-AMS0003, Ver. 02.0.0. Small-scale projects are defined as removing less than 16,000 tonnes of CO2/year and are developed or implemented by low income communities.

[56] VCS Agriculture, Forestry and Other Land Use (AFOLU) Requirements, Version 3, Requirements Document, 4 October 2012, v3.3: pp. 23 – 30.

generations mean the owner of land and any person deriving rights to the forest through him has the right to deal both in the present and to create future obligations and by registration for the land to bound by those future obligations.

The ownership of carbon in a forest on customary land is vested in the customary owner and can only be dealt with in accordance with custom. As observed above, the right to control carbon in trees in a forest includes the right to release the carbon to the atmosphere by cutting down and using the tree and this right of the future generation cannot be fettered in custom by the present generation.

This issue is resolved by removing land and the forest from customary ownership, preferably by tenure conversion to freehold or possibly by registering as Registered Clan Land under the *Land Registration (Amendment) Act 2009*, thereby providing the best means of securing land and safely dealing in carbon rights and obligations.

Where customary owners have been able to establish in accordance with custom the right to sell for commercial purposes the whole of their forest to the PNG Forest Authority pursuant to a Forest Management Agreement, it would seem they have alienated the forest from their land and the forest rights, including the decision whether to fell or preserve the forest have become that of that of the PNG Forest Authority or a Timber Permit holder from the Authority.

4.11 Forest management agreements and carbon rights

Where customary owners have alienated their forest by disposing of the right to it pursuant to a Forest Management Agreement, it is no longer their forest and as the PNG Forest Authority would be possessed of the whole of the entitlement under the Forest Management Agreement. Any moderation or restriction of that regulator's power to grant Timber Permits over the area would be a matter for entry in the public register[57].

The effect of indefeasibility principles on Forest Management Agreements resulting from customary law owners creating Clan Land under the *Land Registration (Amendment) Act 2009* over an area the subject of the Forest Management Agreement appears not to have been considered by the drafters of either legislation and there is, to our knowledge, no reported case law on the issue.

[57] A Public Register of Forestry documents issued by the National Forestry Authority is required to be maintained under section 103A of the Forestry Act.

5 The State and ownership of carbon

5.1 Could the State take ownership of forest carbon rights?

The State cannot take ownership of forest carbon rights unless compensation is paid. The legal reasons for this are set out below.

An alternative to forest carbon being owned by landowners is for the State to assume ownership of forest carbon property rights. Under this option, the rights (and liabilities) in forest carbon would be reserved exclusively for use by the State, in a similar way in which the rights to mineral resources and petroleum is reserved to the State. This is sometimes described as the 'nationalisation' of forest carbon rights.

The right to dispose of the carbon in presently existing forests and benefits which come from monetising an undertaking to preserve a forest are clearly private property pursuant to Papua New Guinea law.

Any scheme that provided for the transfer of these to the State by way of compulsion would require the State to compensate the holder of the property.[58]

A distinction needs to be made where parties transfer property voluntarily to the State either for explicitly specified consideration or consideration to be negotiated.[59] In those circumstances, the lack of an element of compulsion and voluntary nature of the arrangement means that any legislation facilitative of the acquisition is not offensive.[60]

The authors are not able to advance any coherent argument that the Papua New Guinea State should take control of forest carbon as common property held for the people of Papua New Guinea.

'Nationalisation' of carbon rights would be contrary to the Safeguards set out in the Pacific Islands Regional Framework for REDD+

[58] Section 53 of Constitution.
[59] PNG Readymixed Concrete Pty Ltd v The State [1981] PNGLR 396
[60] SCR 7 of 1992; Re Forestry Act 1991 and the East New Britain Forestry Operations Control Act 1992 [1992] PNGLR 514

5.2 Must the State 'deem' ownership of carbon rights in order to participate in the UNFCCC mechanism?

It is not necessary for a State to 'deem' itself owner of carbon rights, on behalf of the domestic owners of those rights, in order for the State to participate in intergovernmental or other international carbon finance transactions that require a national level counter party, such as the PNG Government.

For example, all carbon units created under the Kyoto Protocol are created by an act of international law, namely the ratification of the treaty. All credits are therefore owned and held by governments under international law between the countries that ratified the treaty, with the carbon credits (Certified Emission Reductions) that are generated, being owned, held and traded by the State Parties. No 'deeming' of ownership is required for this to occur. However the Kyoto Protocol clearly envisages that States may transfer their rights (credits) down to the sub-national actors who carry out CDM projects. This is done by the State Party authorizing, through its Designated National Authority, the private entities to hold, own and trade the Certified Emission Reductions generated by the project.[61] However, it should be noted that it is not yet clear whether UNFCCC will adopt the same approach in its emerging REDD+ regime.

6 Defining forest carbon rights in legislation

The first step in developing a legal framework for carbon rights is to define by legislation exactly what is being owned.

6.1 What should the definition cover?

The statutory definition should be comprehensive and should address both:

- **stored forest carbon:** the emission of which will be avoided; and
- **carbon sequestration rights**: the carbon that will be sequestered (absorbed) by carbon sinks (forests and soil) in the future.

6.2 Carbon pools

The IPCC has identified five carbon pools that constitute forest carbon under the forest land use category. Under the UNFCCC framework, countries should measure and report against each of

[61] Kyoto Protocol, Article 12(9). For a discussion on this point, see Peskett and Brodnig (2009), at p. 7. See also Wemaere M., and Streck, C., 'Chapter 3: Legal Ownership and Nature of Kyoto Units and EU Allowances', in Freestone, D., and Streck, C. (eds.), 2005. Legal Aspects of Implementing the Kyoto Protocol Mechanisms, Oxford University Press, Great Britain.

these carbon pools when reporting on the greenhouse gas emissions from their Agriculture, Forestry and Other Land Use (AFOLU) sector.

The definition of forest carbon rights should therefore also address who owns the carbon contained in the **five carbon pools**:

- above-ground biomass (stems, branches and foliage, etc.);
- below-ground biomass (live roots more than 2mm diameter);
- dead wood;
- litter;
- soil organic matter (including organic carbon in mineral soils, and includes live and dead roots of less than 2mm diameter. Each country can specify the depth to which it will measure soil organic carbon).[62]

Where voluntary REDD+ projects are concerned, the particular methodology to be used will usually specify which of these five carbon pools the Project Proponent must include and measure as part of its REDD+ project.[63]

It is therefore suggested that the legislative definition of 'forest carbon rights' includes each of the five carbon pools so that the position as to who owns the carbon in each of these carbon pools is clear.

6.3 Consistency across Melanesian countries

Melanesian countries should consider whether it is possible to have a consistent definition of forest carbon rights across PICs in order to facilitate a regional approach to REDD+ and the management of forest carbon rights, including bundling, under the Pacific Islands Regional Policy Framework for REDD+.

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[62] The Pacific Islands Regional Policy Framework for REDD+ defines 'Carbon Pool' as: 'A reservoir of carbon. A system that has the capacity to accumulate or release carbon. Carbon pools are measured in terms of mass (e.g., metric tonnes of carbon). The major carbon pools associated with forestry projects include live biomass (including above and below ground components such as roots), dead biomass, soil and wood products.': see Policy Framework Glossary. Harvested wood products constitute a carbon reservoir. Note that the 2006 IPCC Guidelines do not include 'harvested wood products' as one of the five carbon pools associated with the six land use categories, but instead suggests that the contribution that harvested wood products make to a country's annual AFOLU emissions/removals be reported separately at the national scale (see *IPCC 2006 Guidelines for National Greenhouse Gas Inventories*, Vol. 4 on AFOLU, Ch. 12 on Harvested Wood Products: http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html). The VCS treats harvested wood products as a separate carbon pool to be measured under its Approved REDD Methodology Modules (VM0007, Ver. 1.2, 31 July 2012.

[63] For example, this is a requirement under the VCS: AFOLU Requirements, Ver. 3, para 4.3.1.

6.4 Amend the definition of 'land' to include 'forest carbon rights'

To make it clear that land includes forest carbon rights, the *Land Registration Act* could be amended to:

- insert a definition of 'forest carbon rights' (see Box 6.4 below); and
- amend the current definition of land by inserting the underlined words in the existing definition:

'land' includes ….., and forest carbon rights, but does not include …..

Such a step would ensure that for all registered land circumstances, be it freehold, state leasehold or registered clan land, that forest carbon entitlements are described and dealt with consistently. These amendments would no however have any application to customary land.

Box 6.4: Proposed definition of 'forest carbon rights'

'Carbon sequestration' means the process by which land, trees or forest absorb carbon dioxide from the atmosphere.

'Forest carbon rights' in relation to land means the exclusive legal right to obtain the benefit (whether present or future) associated with the stored forest carbon and any carbon sequestered in the future, by any existing or future tree or forest on the land, and includes the carbon contained in:

- above-ground biomass
- below-ground biomass
- dead wood
- litter, and
- soil organic matter.

'Land' includes forest carbon rights.

'Soil organic matter' means the organic matter found in soil.

However the situation is more complex with customary land where ownership and/or control of land and forests can be held by different groups or clans and forest that land type would still be dealt with under the *Forestry Act* by way of a Forest Management Agreement.

Further consistent amendments would be needed to the *Forestry Act* to pick up the application of these definitions consistently into the forestry regime.

This statutory definition could also be referred to for consistency in different land transaction instruments, such as in REDD+ contracts and leases.

7 Options for bodies which could manage performance of carbon obligations

In addition to the practical obligations of identifying who owns the land on which forest exists for the purpose of establishing an obligation to maintain and sequester forest carbon, further difficulties exist to ensure the performance of such an obligation in accordance with its terms.

7.1 Registered Freehold, Registered State Lease and Government Land

Where land is subject to freehold or registered state lease title, monitoring, enforcement and payment of the monetary consideration for the obligation being undertaken will be easily matched to the registered proprietor of the land.

The registered proprietor will be exposed to the full force of the law and enforcement obligations if the obligations are not performed and the covenants breached.

There is no need for any additional machinery as all is effectively provided by the existing legal system. This is discussed a length in section 8.1 below.

7.2 Unregistered Customary Land

To recap the observations made previously in the paper, customary land title is a usufructory entitlement in common with others which does not have any aspects of alienability or legal and equitable title.

The rights of use are derived from custom and the rights to future use must be ceded to the future generations.

As we have observed that it would not be possible in accordance with custom to covenant to bind customary land containing forest with carbon sequestration obligations, absent a Forest Management Agreement there is no utility in consideration of enforcement or distribution mechanisms for customary land.

Where in accordance with custom it is permissible to enter into a Forest Management Agreement, amendments to the Forestry Act could require carbon sequestration to be taken up as a required component of the National Forest Plan. The actual implementation of REDD+ would be worked alongside the areas set aside for sustainable harvesting of trees by the PNG Forest Authority. This is discussed more in section 7.3 below.

7.3 Clan Land and Forest Management Agreement Land

Where customary land owners have in accordance with a customary right alienated their forest to the PNG Forest Authority in accordance with a Forest Management Agreement, they will have dealt through their agents, either an Incorporated Land Group or some other recognised agent[64]. Likewise, where customary land owners have extinguished their customary title in substitution for clan land they will in each case have nominated an ILG. We have observed that the right to register derivative interests on Clan Land appears to extend only to usufructory entitlements derived in custom and not obligations in the nature of carbon sequestration in favour of foreigners, however if such an obligation ever validly arose over Clan Land, the enforcement and the financial benefit of it, would therefore as a matter of law be applicable to the registered ILG.

ILGs are well known for their poor governance, disputation as to their constitution and area of land owner representation and oppression of minority rights.

The process for establishing an ILG is not onerous and no detailed field genealogical or survey process attends to the incorporation process. Rather the main elements of due process are provided by an English language self-declaration, public advertisement in newspapers not necessarily circulating in remote areas and an objection process. The authors' professional observation is that no body of survey grade plans exists of customary land for the purpose of demarcation of land. Customary land continues to be described by reference to the banks of water courses, hilltops, large trees and other geological features.

It also needs to be emphasised that there is no requirement for a person claiming membership of a group to maintain their membership and an ILG can be said to represent a person only for long as they wish it to represent them.

[64] See Forestry Act 1991.

In the case of mining and petroleum projects, ILGs do play a role in receiving and distributing some compensation and financial benefit obligations. Those fields of endeavour need to be distinguished from forest obligations because in both cases the law clearly has established that the State owns the minerals and petroleum and the customary owners have no property in such items either because they were never recognised in custom, they were lost to the crown before independence or the state has the right to take them without compensation.

Therefore in the mining or petroleum context, the compensation payments which may distributed via ILGs are not resource rents for dealing with customary property: they are monetary compensation paid to compensate a community for disruption or simply wealth re-allocative payments to keep a community in support of an enterprise they might otherwise disrupt. This is so notwithstanding that the quantum might be based on production or styled as a royalty.

In the case of mining and petroleum area ILGs, abuse of power, misuse of money and expenditure of the clan benefits by ILG executives in Port Moresby are well documented. All of these ills will present to the extent that ILGs are involved in monetising carbon sequestration obligations (not least because these same resource ILGs may have forest entitlements). This fact should provide warning that the weaker clan members left behind in the forest will have to find a means to support themselves, which might just mean cutting down the trees bound under a preservation covenant. This presents a real enforcement issue for carbon rights seekers who deal with ILGs.

7.4 Alternatives to Incorporated Land Groups

It is known in Papua New Guinea law that interests for customary land owners may be held in trusts for classes of partly unascertained persons. These trust structures are also particularly prevalent in the petroleum and mining fields of endeavour. The mining and petroleum industries have multi-layered benefits sharing arrangements with land owners participating in projects as minority equity participants, royalty beneficiaries, grant beneficiaries and private trust beneficiaries.

In the case of petroleum, government owned but land owner governed companies act as trustee, however in the case of mining the trustees are either industry or national government controlled, usually by the mine executive with community representation.

The essential feature of these trusts is that they seek to provide some immediate benefit to the communities in which they operate by immediate distribution or investment, but they seek to sustain

investments for future generations for when the resource project has been expended. Some of these trusts have been extremely successful and some abject failures: with the success or failure clearly attributable to the discharge by the trustees of their duties.

Papua New Guinea also has a regime of financial regulation of professional trustees of retirement funds; however this does not extend to resource landowner trustee entities that might well, in the less successful cases, have benefited from the rigour of professional trusteeship.

In the context of these resource landowner trusts, the revenue comes from the earnings and imposts on the earnings of the resource activity. There is no direct linking in the nature of pay per covenant as seems to be the driver in carbon sequestration schemes. We do not believe that any link would subsist between behaviour in a forest community and benefits in a remote trust, moreso if it was a future generations' trust.

A trust would however provide a solution if, on a supra national or international basis, money were to become available to Papua New Guinea as a nation for taking or omitting to take particular conduct towards forest resources which was not linked directly to behaviour of the citizens on the forest floor and did not engage with them on an individual basis.

An example of the type of conduct to which payments to and distributions from a trust might be suitable were if Papua New Guinea agreed with the international community not to grant any more Timber Permits and modified its National Forest Plan.

7.5 Role of government bodies

The authors have identified and expressed earlier in this paper the intertwined relationship between land ownership, forest ownership and commercialisation of the forests. It has been advocated that the *Land Registration Act* (along with possibly the *Land Act*) and the *Forestry Act* should be amended.

The amendments needed to the land laws are to ensure that carbon obligations are properly bound to land tenure which is already administered by the Department of Lands. The Department of Lands is a large regulatory body with numerous complex and detailed procedures. The Department of Lands and specifically the Office of the Registrar of Titles is clearly the correct repository for the land tenure aspects of carbon obligations.

The amendments needed to the *Forestry Act* are to ensure that consistency is achieved between planning for forest preservation in carbon sequestration schemes and timber harvesting activities. These amendments need to focus on the process of development of the National Forest Plan and type of commercialisation achieved by customary land owners through their Forest Management Agreements. Third parties, called forest industry participants may have been granted rights to take timber and rights of those parties need to be addressed equitably.

It seems to the authors that some separation needs to be maintained between the carbon regime and the changes which the PNG Forest Authority would need to make to their own operations and the National Forest Plan to accommodate a world in which carbon has become a commodity.

It seems to us that a new statutory authority is required to bring together disparate threads involved in the carbon issue and to work hand in hand with integration of forest carbon initiatives such as REDD+ with the PNG Forest Authority and the Department of Lands.

8 Options for recording ownership and/or use of forest carbon rights

If forest carbon rights are exercised through a site-specific REDD+ project, there will also need to be a system which enables the land and owner of those rights to be clearly identified. This is necessary in order to minimise the risk of fraud and corruption, and to avoid the carbon being sold to multiple buyers (known as double-counting) or sold and released to the atmosphere.

The paper has previously identified that it is not possible in accordance in customary law for a party possessed of a present usufruct in the land to fetter the land and future customary owners with a carbon sequestration obligation.

Therefore, as such interests cannot be created in unregistered customary land, the range of land types for which such interests might be created include only freehold land, State land and leasehold land held from the State and potentially Clan Land.

8.1 Options for recording ownership of forest carbon rights on land titles

The *Land Registration Act* provides for a system of indefeasibility of title in respect to registered land. Title is derived by registration and the interest represented by the title is free and clear of all encumbrances other than those registered on the title in priority. It is in effect a Torrens system.

To maintain the system of indefeasibility of title, the *Land Registration Act* mandates in respect to land to which that Act applies that all interests and dealings other than leases for a term of less than three years must be registered.

Section 17 appears below:

> *"17. Status of unregistered instruments.*
>
> *(1) Subject to Subsection (4), an instrument is not effective to pass or create an estate or interest until the instrument is registered in accordance with this Act.*
>
> *(2) An instrument signed by a proprietor, purporting to pass an estate or interest for the registration of which provision is made in this Act shall, until registered, be deemed to confer on the person intended to take under the instrument a right to the registration of the estate or interest.*
>
> *(3) The reference in Subsection (2) to—*
>
> *(a) a proprietor; or*
>
> *(b) a person intended to take under an instrument,*
>
> *includes a reference to a person claiming through or under that proprietor or person, as the case may be.*
>
> *(4) Subsection (1) does not apply to a lease for a term of three years or less."*

An "*instrument*" is defined as "*includ[ing] a certificate of title and a document relating to a dealing*".

A "*dealing*" is in turn defined to mean "*a disposition of an estate or interest otherwise than by way of transmission and includes a transfer, lease, surrender, mortgage, charge, discharge, easement and similar interest, and nomination of trustees*".

Clearly any written document which contained a covenant comprising an obligation to sustain a forest growing on registered land is an instrument which must be registered on the Register maintained under the *Land Registration Act*. The consequence of non-registration is voidness of the covenant against all parties and unenforceability against subsequent owners. The consequence of registration is that the land and its owners from time to time are bound by the covenant.

A carbon sequestration covenant is no less a dealing than a transfer, lease, mortgage, grant of a 'profit a pendre' or 'red-tile' covenant.

Immediately any land was freed from its customary protection by, for example conversion to freehold or registration as Registered Clan Land, immediately the *Land Registration Act* regime would commence to respond without the need for any legislative amendments.

8.2 Specific Supervision of Carbon Sequestration Covenant Performance

Quite separate from the maintenance of a register and the interaction of carbon sequestration covenants on established land law principles, it may well be worthwhile for a second registry of these covenants to be established with a specific regulatory body mandated with the national responsibilities under Kyoto. This may have the benefit of greater clarity on what obligations have been undertaken and provide for better national record keeping.

Notwithstanding that specific legislation might be established enabling some form of supervision over national carbon sequestration, under Papua New Guinea law, enforcement of any covenant to sequester carbon made by a landholder is and will always remain enforceable directly against that landholder (and his successors to the extent they are bound) as a matter of private contract law. Purchasers of carbon sequestration obligations will get no overriding national government guarantee to improve the creditworthiness of the carbon sequestration instrument or the performance or enforceability of the sequestration obligation comprised in the covenant.

9 Competing claims to forest resources

Where forest rights exist, the creation of carbon sequestration obligations would require the forest right to be made subject to the sequestration obligation either voluntarily or by compulsion. As a general rule forest rights and any sequestration obligation are ousted in favour of the rights of mining and petroleum tenement holders.

9.1 Forest use and exploitation

As discussed in section 4.4 above, once a commercial scale of tree harvesting is proposed, the activities become subject to regulation under the *Forestry Act 1991*.

Title to the trees is gained either from the freehold or State leaseholder or in the case of customary land by the customary owners selling their trees in accordance with custom to the PNG Forest Authority.

The PNG Forest Authority is required by statute to maintain the National Forest Plan and this plan is to cover all aspects of forest regulation including preservation, harvesting of trees, replanting, operation of plantations and the interaction with agriculture.

Under PNG law, once a forestry right, such as a timber permit, is granted, the permit holder has the right to the timber in the forest under the terms of the permit. The carbon rights in the timber (including the right to release the carbon) are therefore ceded in the permit holder for the purposes of the permit. They can affect the present and future carbon in the forest through action such as tree felling and logging. At the end of the permit term, the land owner receives back the land with changed carbon content.

Whilst a forest is the subject of a Timber Permit or other rights granted under the *Forestry Act*, the person entitled to these rights could deal with them by covenanting not to release the carbon, although such an outcome might give rise to breach of the permit which is given for the purposes of earning timber and paying a royalty and taxes to the State.

The Independent State of Papua New Guinea has itself stated that as at 2009 there were 55 Timber Permits issued covering 9 million hectares of lowland forest. The Forest Management Agreement would typically be for a term of 50 years with the permits of a slightly shorter duration[65]. A further 62 Timber Authorities were issued for small scale operations involving clearance of less than 50 hectares per year.[66]

There are no provisions to allow for timber permits/logging concessions to be unilaterally cancelled, forfeited or surrendered, except where there is a material breach of the permit or concession. Therefore, cancellation can only be achieved by agreement with the permit or concession holder (e.g. section 79 of the *Forestry Act 1991* relating to surrender of timber permits).

Any action by the PNG Forest Authority to cancel a Timber Permit other than if the holder were in breach would result in an action for damages.

If legislative changes were brought about which provided for the taking back of timber permits or logging concessions by compulsion, the State would become liable to pay to the holders of these concessions compensation in accordance with the constitutional protections in section 53 of the Constitution (unless of course they were foreigners).

[65] The explanatory note to the PNG Forest Authority Proforma Forest Management Agreement describes this as being so to enable longer term sustainable management of the forest.

[66] REDD Readiness Preparation Proposal (R-PP), Papua New Guinea, Submitted 10 August 2012 to Forest Carbon Partnership Facility (FCPF), UNREDD, p 31.

In the case of customary land where a Timber Permit is cancelled during the term of a Forest Management Agreement, the right to the forest and to release the carbon comprised its trees vests back in the PNG Forest Authority and can be subject to re-grant of a new Timber Permit or surrender back to the customary owners to the extent permitted by the Forest Management Agreement.

9.2 SABLs and forest carbon rights

The true position of the exposure of the forests cannot be judged by regard to official statistics of forest put over to harvesting under the National Forest Plan.

Regard must be had to the frenetic granting of SABLs during the latter years of the last decade. Whilst these leases are still the subject of a Commission of Inquiry which has not delivered its findings, the findings themselves can go no further than make recommendations about what should now occur to remedy what occurred.

The purpose for which the majority of these recent SABLs have been granted would appear to enable the holders to apply for a forest clearance authority under the *Forestry Act* to clear fell land for agriculture schemes which do not exist in actuality.

The Minister under the *Lands Act* has a power to forfeit a SABL for breach of covenant and where a lease has been granted in breach of authority or by a fraud on a power to grant the lease the lease is susceptible to being declared void at law by the Courts.

Under the SABL, a good and indefeasible title passes from the State to the lessee, and all customary rights in the land, except those reserved in the lease, are suspended (Section 11 of the *Land Act 1996*). Therefore, where land is subject to a SABL, the ownership of the forest on the land and the right to deal in the carbon would pass from the customary owners to the State and on to the lessee from the State for the term of the lease. Any trees remaining on the land or carbon not released to the atmosphere at the end of the term of the SABL would pass back to the customary owners when their reversion revived their full customary ownership interests.

9.3 Mining and Petroleum Operations

9.3.1 Mining

Mining rights are granted by the State through exploration licences, mining leases and ancillary mining tenements, as set out in the *Mining Act 1992*. The Mineral Resources Authority has primary

responsibility for mining regulation in PNG, but compliance with the *Environment Act 2000* is necessary.

Under Section 154 the holder of a mining tenement, is liable to pay compensation in respect of the entry and occupation of the land, and for all loss and damage suffered of foreseen.

By Section 41 & 51 of the *Mining Act 1992*, the holder of a mining lease has exclusive occupation of the land in which the mining lease is granted. The holder of an exploration tenement has the right to enter land for the purpose of exploration. This extends to the right to release carbon comprised in any forest on the mining tenement.

Commercial mining activities in Papua New Guinea have historically focussed on hard rock minerals and tend to be site specific and quite contained. Likewise, customary land owning mining rights are exercisable only to alluvial minerals on or near the surface using hand tools. Whilst the mining rights would override forest rights and other carbon sequestration obligations at those specific sites, the process of granting a Mining Lease or Special Mining Lease would require the position of all rights holders to be resolved as part of the grant process by bi-lateral negotiation. The authors' are certain that the Mineral Resources Authority would require that as part of the work up to the grant of the Mining Lease or Special Mining Lease, although that would occur by way of administrative concomitance rather than any express legal obligation.

Mineral Exploration activities are however slightly different, and whilst they also convey a legal right to destroy trees and release carbon to the atmosphere, they have the feature of requiring half of the area to be surrendered back to the State each two years.

9.3.2 Petroleum

Again, as in the case of mining tenements, petroleum tenements take precedence over other land uses pursuant to the *Oil and Gas Act 1998*. The tenements are in the nature of a licence to occupy land and subject to the *Environment Act 2000*, it is permissible for a tenement holder to utilise, release or preserve carbon contained in a forest on the petroleum tenement.

Whilst it was observed in relation to mining that mining activities tend to be site specific, the size of petroleum tenements is directed to the area of the underground reservoir which can be very large. Notwithstanding that the reservoir might be large, the actual surface area subject to forest clearance is likely to be somewhat limited to a small area associated with the wellhead and access infrastructure.

A significant risk however is posed to forests by the petroleum Exploration Licence. The areas over which these may be granted is large and with a term of six years they provide the holder with the

ability to clear forestry not having regard to the constraints of the National Forest Plan under the *Forestry Act*.

There are no provisions that allow for mining or petroleum tenements to be cancelled, forfeited or surrendered, except where there is a breach of the conditions of the licence or lease.

As to the order of application, it is a matter of administrative concomitance to ensure that the state does not grant completing obligations. A number of cases have held that where a mining lease exists over government land or whether there is expectation of the grant of one over government land, the State cannot grant under other legislation a State Lease to a third party for agriculture purposes.[67]

9.4 Recommendation for carbon rights

The authors recommend that interaction between mining leases/special mining lease applications and petroleum development licence applications and existing carbon sequestration covenant holders be undertaken on direct bi-lateral basis as part of the grant review process with the expectation that the mining or petroleum licence would retain its paramountcy, but the financial investment in carbon sequestration obligations ought to be protected by compensation paid by the miner or driller. This appears reasonable as the mining or petroleum activity would be site specific over a relatively small area of a much larger REDD+ subject forest area.

The position in relation to the exploration licences is not so clear, however it would not be unreasonable that if an investment had been made by a party in a sequestration obligation that an explorer seeking to negate that sequestration should pay compensation to the holder of the rights represented by the sequestration obligation.

The authors note that genuine exploration activities are not likely to have a large forest footprint, whilst fraudulent exploration activities comprising tree harvesting disguised as exploration would be discouraged by the cost.

10 Options for clarifying forest carbon rights

10.1 How to manage carbon rights

The underlying legal structures of land and forest ownership in Papua New Guinea are so well established that the creation of carbon sequestration obligations and rights that derive from them must integrate into that established legal structure.

[67] See Ramu Nickel Limited v Honourable Dr Puka Temu MP (2007) unreported N3116.

The essential touchstones which have emerged from the preceding discussion are that:

(a) Forest and things that derive from the forest are private property of persons in Papua New Guinea and cannot be taken by the State without compensation.

(b) Forest ownership derives from land ownership, although the right to the forest may be severed.

(c) In the case of non-customary land, devolution of forest or carbon sequestration obligations / rights must be registered on the land title or it is void.

(d) In the case of customary land, forest can be disposed to the government pursuant to a Forest Management Agreement to enable regrant of the right to harvest the forest to a timber industry participant in accordance with the National Forest Plan. In this role the State is acting almost as a statutory agent for the landowners.

(e) Where a Forest Management Agreement exists, timber permits must be granted to applicants at law in accordance with the requirements of the National Forest Plan and there is presently no basis for carbon sequestration projects.

(f) On customary land without a Forest Management Agreement, there is no basis for the creation of carbon sequestration obligations or the enforcement of the right to the performance of the obligation against future customary owners.

10.2 How may carbon ownership be better linked to rights to land or forest

The authors' view is that any specific legislation seeking to clarify carbon as a class of property is unnecessary and unhelpful.

Legislation could however circumscribe the fundamental requirements for creation of nationally recognised carbon sequestration obligations and for participation in a carbon market. Legislation could also provide for clarification of the complexities identified elsewhere in this paper.

For example:

- the registrability over Clan Land could be clarified;
- migration paths from customary sale of trees under a Forest Management agreement to freehold title under the *Land (Tenure Conversion) Act*;
- the re-empowerment of the Land Titles Commission to perform it statutory duties could also be revived;
- classes of value directly referable to the quality of the enforcement right could be created (eg. a covenant over freehold land which is directly referable to six of less people could be

more valuable than a covenant by an ILG or the PNG Forest Authority over recovered Forest Management Agreement acreage); and

- compliance with national accounting and supra-national markets.

In addition to these matters, the co-ordinating functions could also be provided.

All of these matters could be achieved by legislation passed by the Parliament in a simple majority.

10.3 Should third parties be able to hold/own forest carbon rights?

Examples exist in some jurisdictions that legislation might be passed to create a separate new object of property called "carbon" or "carbon rights".

Some Australian States have passed legislation seeking to create a new item of property called "carbon rights".[68] Following careful legal analysis, the authors conclude that these provisions are really statutory equivalents of the grant of a private right to the forest trees or carbon: something equivalent to a common law *profit a prendre*, but in a neutral sense of not engaging the right to remove the trees, but the right to enjoy the preservation of the carbon comprised in the trees. Other Australian States leave the matter up to the parties to construct their own carbon instruments. In all Australian states registration over the land is required to maintain the fundamental tenets of Torrens indefeasibility.

The author's professional view is that seeking to recast in statute as a separate item of property something which already exists would result in an immediate legal challenge that the existing property right had been taken away and substituted with something else.

The real issue for Papua New Guinea is how to refine the forest regulatory regime to ensure that carbon sequestration obligations can be integrated with the forest harvesting regulatory regime and a system of comprehensive registration of instruments compliant with the requirements of the *Land Registration Act* and the *Forestry Act*.

11 Establishing a national REDD+ registry

If forest carbon rights are to be created and carbon credits traded, there will need to be a means of systematically recording who has exercised their carbon rights, and where, in order to avoid forest carbon being sold twice (double counting): see Box 11.1 on the VCS and double counting. REDD+ projects must also be registered on a database which tracks all forest carbon emission reduction

[68] Eg. Victoria and Western Australia.

programmes, including national measures and REDD+ projects. In addition, an approval process is required to ensure that proposals for REDD+ project are properly vetted prior to their commencement.

11.1: VCS and double counting of emission reductions and removals

VCS and double counting of emission reductions and removals

The Verified Carbon Standard has rules on Double Counting. In non-Annex B countries (developing countries) double counting can occur as double selling. 'Double selling' occurs when a single greenhouse gas emission reduction or removal is sold to multiple buyers.[69] For example, a carbon credit might be sold twice, or a singular emission reduction might be certified under two different REDD+ programmes (e.g. a national programme and a voluntary project) and sold under each.

National REDD+ programmes can address this risk through oversight procedures, e.g. clear regulatory structures to register REDD+ projects.

Each REDD+ country will eventually require a national REDD+ registry, to be held electronically.

The purpose of a national REDD+ registry is to centrally record and track:

- emission reduction programs at both the national and project-level; and
- the issue of REDD+ units or results-based payments (e.g. carbon credits, whether issued nationally or through the voluntary market).

Tracking of activities and validation are essential to ensure environmental integrity across different national REDD+ initiatives and to promote transparency in benefit-sharing with stakeholders.[70] Ultimately the registry will be linked with the country's MRV system. Given that it is likely to take many years to develop a fully-functioning registry, in the interim countries are relying on international registries that support the voluntary market, such as the Markit Environmental Registry.

12 Proposed course of action

We advocate that the appropriate course is to pass legislative amendments effectively:

[69] See VCS Program Definitions, Ver. 3 'Double Counting', and VCS *Policy Brief, Double Counting: Clarification of Rules*, 1 February 2012.

[70] For a detailed description of the role of national REDD+ registries, and how they can be developed, see: Scholl, J., (ed.) 2001. *National REDD+ Registries: An Overview of Issues and Design Options*. KfW Entwicklungsbank, Germany.

- clearing up uncertainties about carbon ownership and entitlement of parties to bind themselves to sequestration obligations;
- ensuring that a system is established for transparently showing the existence of the obligations;
- ensuring that regulatory consistency is maintained with the discharge by the PNG Forest Authority of their obligation to implement and manage the National Forest Plan;
- laying the foundation for a system of clearly defined enforcement when obligations to sequester carbon are created.

These amendments would effectively stitch carbon sequestration obligations into the land tenure and forestry regimes by clarifying amendments to the *Land Registration Act*, the *Forestry Act* and possibly the *Land Act*. Amendments to the *Land Act* might not be necessary, but that is a matter for more careful consideration at a later point in time. In all cases, these could be achieved by a simple omnibus Act of the National Parliament.

Clarifying forest carbon rights should include a clear system for resolving conflicts between competing land uses and setting land usage policies.

High on the agenda would be the need to haul back land subject of forest rights which have not been developed. If forest participants have valid rights, there would need to be either compulsory taking of these for compensation or voluntary sell back into carbon sequestration scheme (for a price) and a renewed binding of the land and trees to preservation covenants.

The National Forest Plan under section 54 of the Forestry Act would need to identify areas to be put over to forest sequestration under REDD+.

Significant conflict could exist between any carbon sequestration scheme and the operation of the forestry regime and rules might need to be made to deal with this.

The interplay between REDD+, the Mining and the Petroleum tenement regimes needs to be addressed along the lines proposed above.

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