



# Linking Land Tenure and Use for Shared Prosperity

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## DEMYSTIFYING THE VALUATION OF CUSTOMARY LAND

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## **Abstract**

This paper breaks down the myths and mystique that surround the valuation of customary land, whilst appreciating inalienable notions of land held by the customary stewards (or guardians) are very much at odds with the commodity view of the West that emphasises individual ownership. We deconstruct the tensions associated with the valuation of customary land through a property rights approach. We develop our arguments within a realistic scenario for two villages in a hypothetical Pacific Island Nation that is confronted by many of the sustainable development challenges affecting Pacific SIDS (small island developing states). After providing a stakeholder analysis of the competing interests of land holders (customary owners), land users (tourism, forestry, agriculture and nuclear waste), state actors and agencies, and outside investors, we test the efficacy of the International Valuation Standards to ascribe economic value to the competing and overlapping property rights of the parties. The key contribution of the paper is that it demystifies the valuation of customary land by presenting clear and appropriate tools for the appraisal of a range of realistic sustainable development challenges confronting PICs, SIDS and emerging economies. It will provide a useful resource to government officers, trustees and private practitioners confronting development challenges.

## **Key Words:**

Customary Land, Valuation, Property Rights

## **Introduction**

There has evolved a mystique that it is difficult to value customary land. We suggest that this is not a mystique conjured by trained valuers, but perhaps a myth perpetuated by both those whose professional focus is on recording, registering and titling (and donors who fund them) as well as by those whose primary focus is on urbanised commercial land for investment and development. This paper breaks down the myths and mystique that surrounds the valuation of customary land, whilst appreciating inalienable notions of land held by the customary stewards (or guardians) are very much at odds with the commodity view of the West that emphasises individual ownership.

The paper is innovative in the way that we deconstruct the tensions associated with the valuation of customary land through a property rights approach. We develop our arguments within a realistic scenario for two villages in a hypothetical Pacific Island Nation that is confronted by many of the sustainable development challenges affecting Pacific SIDS (small island developing states). After providing a stakeholder analysis of the competing interests of land holders (customary owners), land users (tourism, forestry, agriculture and nuclear waste), state actors and agencies, and outside investors, we test the efficacy of the International Valuation Standards to ascribe economic value to the competing and overlapping property rights of the parties.

Our property rights analysis identifies the rights, obligations, restrictions and revenues associated with the interests of the multifarious stakeholders. In several examples there are overlapping and competing rights, obligations, and restrictions, and we deconstruct these using available valuation tools and approaches. We integrate value-focused thinking (Keeney, 1996) alongside these valuation practice tools to provide a common language about the achievement of objectives in any particular decision context. Such an approach offers a way of integrating valuation understanding into policy relevant decision-making that supports a pro-development and economic growth agenda.

## **Contribution to the literature and body of knowledge in general**

The purpose of this paper is to critically examine the *tensions* that result when customary land is used for commercial purposes. We recognise that leases over surplus customary land can represent a beneficial way of moving from an informal to a formal institutional arrangement, but only when engaged appropriately to prioritise intergenerational equity with ongoing control and fair returns for the landowners. We identify several *contradictions* in the existing literature (and practice) relating to ensuring such leases are of a length that is fit for purpose, with clarity over ownership of improvements, and with a regularly reviewed market rental (rather than relying on an inappropriate unimproved capital value base).

We identify that an equitable approach to valuing customary land is reliant on a more level playing field than is often present in developing countries. Tensions over the valuation of customary land (from a customary landowners perspective) can lead to conflict because local valuation professionals (be they government officers, trustees or private practitioners) often lack capacity compared to the legal and valuation representatives of international investors. This imbalance of capacity is not related to the valuation tools, but rather in terms of access to information/evidence and knowledge as well as a significant disparity in terms of remuneration.

The key contribution of the paper is that it demystifies the valuation of customary land by presenting clear and appropriate tools for the appraisal of a range of realistic sustainable development challenges confronting PICs, SIDS and emerging economies.

Whilst the determination of the market value of land is necessary for capitalism, capitalism is not necessary for land to have a market value. In developed Western economies land markets require a willing buyer and a willing seller, as well as the support of the state for the property rights to be transacted. Just as markets can exist with or without state prescribed institutional arrangements, so too can market values. As Adams et al. (2003) highlight ‘conflicts over the management of common pool resources are not simply material. They also depend on the perceptions of the protagonists’.

Whilst it is a common assumption that policy relating to the management of land and natural resources is self-evident, there is a need to better understand the ways that different stakeholders

understand the management problems in order to progress an effective dialogue. These values are the impressions that different individuals formulate from their individual comprehensions of the settings and circumstances in which they are situated (Bromley, 2006), and that understandably can differ from the impressions of those around them. We take this as our starting point for an exploration into the valuation of inalienable customary land.

### **Quality of methodology and analytical rigor**

Our research design is one of phenomenological transdisciplinarity, which implies our goal is to explore tools (stakeholder analysis and valuation) and frameworks to connect theory to observed reality, allowing us to inform potential policy outcomes and build local capacity. Our approach is grounded in property theory and valuation theory, contextualised through our lived experience in education, training, practice, and consultancy in Africa and the Pacific.

For the purposes of this paper, as stated, we engage a realistic scenario for two villages in a hypothetical Pacific Island Nation that is confronted by many of the sustainable development challenges affecting small island developing states and emerging economies. This provides a rich framework for us to (i) analyse current and potential land tenure conflicts, (ii) the stakeholders involved and their respective property rights, and (iii) explain appropriate valuation tools to determine the economic worth of the property rights of the parties owning and using customary land. The first stage of any disturbance of customary rights is to undertake a stakeholder analysis to provide some clarity on the power / influence / relationship / interest dimensions that arise in a particular context. There is a large body of emergent literature on stakeholder analysis (see, for example, World Bank, 2007 for a comprehensive summary). After providing a stakeholder analysis of the competing interests of land holders (customary owners), land users (tourism, forestry, agriculture and nuclear waste), state actors and agencies, and outside investors, we test the efficacy of the International Valuation Standards to ascribe economic value to the competing and overlapping property rights of the parties.

### **Links to capacity building**

The customary value of land that is used for subsistence purposes and which retains strong spiritual ties to the ancestors whilst providing sustainable stewardship for future generations is intangible. Yet in western neo-classical economic terms, which ground notions of value as economic rent, or surplus of production, such customary subsistence land has no value. There is no problem with these plural worldviews... until they meet. And where they meet, the inalienable notions of land held by the customary stewards are very much at odds with the commodity view of the West that emphasises individual ownership.

The clarity of our analysis and engagement with valuation approaches for a range of property rights on, under and over customary land will provide a useful resource to government officers, trustees and private practitioners confronting development challenges. There is currently a dearth of such resources available, and our contribution will do much to both build capacity and demystify the valuation of customary land.

## **The Scenario**

This case study is based around a scenario for two villages in a hypothetical Pacific Island Nation that is confronted by many of the sustainable development challenges affecting Pacific SIDS (small island developing states).

The area in question comprises customary owned land in a province that stretches from a hilly forested area, down to a plain that is used for agriculture production and an attractive coastal area fringed by a coral reef. There is a large inland gorge – significant in terms of both ecosystem value and cultural heritage – with ideas by an expatriate entrepreneur for building a dam and developing an irrigation scheme on the floodplain leading down to the coast for improved rice and cotton production. That proposal is opposed strongly by conservation groups and tourism operators who currently use the gorge for eco-tourism activities. A dam had been previously proposed by the State power provider for possible hydroelectric production, but was not considered economically viable in the short to medium term.

There is a village (A) located in the hilly uplands.

Several of the villagers are employed by a timber company who had negotiated a licence with the former chief to carry out logging on the customary land. They are actively involved in harvesting the forest as a prime source of income.

The older of the chiefs' sons currently lives in Australia. The younger son, who is regarded by the villagers as their acting chief or head of their clan, has been approached by the entrepreneur about the possibilities of creating a dam across the gorge, close to the village.

The proposal for the dam will cause several houses in the village, the church and two large dalo/cassava plantations used by the villagers, to go underwater. However, there is space on other higher communal land to relocate these families. They are promised sufficient funds from the dam to build better replacement homes, a new larger church, as well as school facilities.

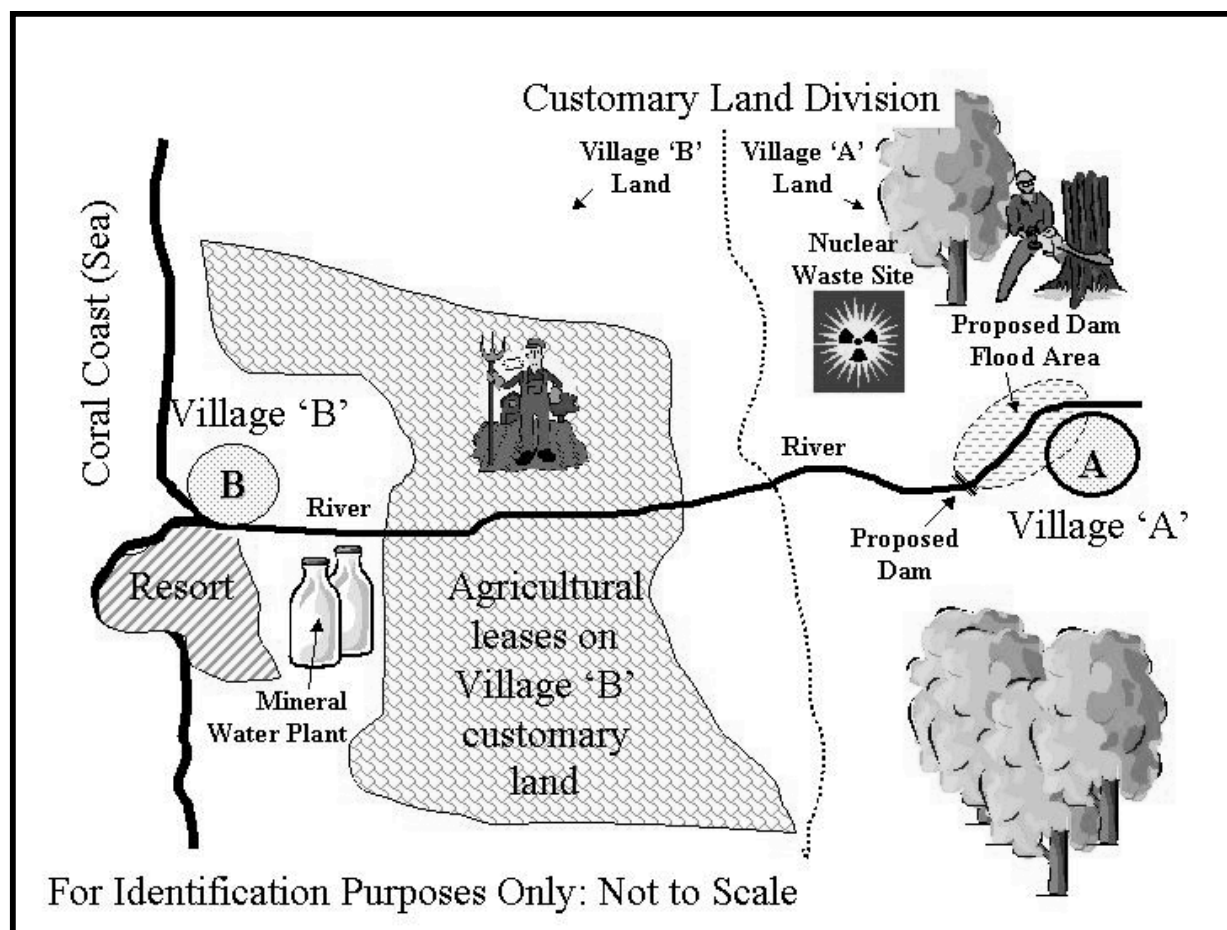
The villagers are supportive of the proposal as they feel that the promised payment for the dam will improve their economic situation and quality of life; but the acting chief's older brother has sent word from Australia that he is against the proposal.

There is another village (B) on the coastal fringe.

The customary lands on the plain leading towards the hills traditionally belong to Village B (refer to Figure 1 for schematic representation). They have leased out much of the land beyond the village on agricultural leases to farmers who are not members of the customary ownership group. The nominal rents were fixed for the duration of the thirty-year leases; government property legislation requires that thirty-year extensions be offered to sitting tenants at similar low rentals, if the customary landowners are not going to use their traditional land for their own occupation and cultivation.

However, the entrepreneur proposing the dam has approached the Village B elders offering to lease from them a large part of the land at a significantly higher rental than they currently receive, when the current leases expire. He has advised the villagers to take the leases back for their own occupation over the next three years and then he will take one large lease and be able to employ many of the villagers, once the dam is in place and he has improved the irrigation.

An international mineral water company has leased a small parcel of land from the customary owners of Village B. The company is drawing 'natural' artesian water from aquifer below. This lease is not included in the proposal for agricultural land consolidation by the entrepreneur who wants to build the dam across the gorge. The customary land owners in Village A have heard that the aquifer spreads under their land, and are arguing that they should also receive royalties from the mineral water company.



**Figure 1:** Schematic Plan of Subject Scenario

There is a growing tourism industry along the coast, which is seen as an important source of national revenue by the government. There is a parcel of freehold land near Village B that has been developed as a resort hotel. This land was supposedly gifted under colonial rule. The villagers consider that the land was inappropriately taken from their forebears, who only meant it to be a sharing for life of a communal resource. Villagers have threatened the resort manager,



even though an overseas hotel chain owns the resort. Several villagers who previously worked at the resort lost their jobs as a result of the incident. Meanwhile, the resort manager has been lobbying the Minister of Lands and the Minister of Tourism to take action over the threats from the villagers. He has also contacted both Ministers about his concerns that the proposed dam will spoil one of the major eco-tourism destinations in the area. To this end, he has also spoken to the chief of Village A to ask if he can employ more villagers to assist in the eco-tourism visits to the gorge, instead of creating a dam.

The daily newspapers have today reported a leaked Cabinet paper for a major donor aid proposal from an undisclosed foreign government, identifying land close to Village A as one of four possible sites for disposing of spent low grade nuclear waste.

### Stakeholder Analysis

Our usual *modus operandi* for the above scenario is to undertake a stakeholder analysis of all issues and summarise them from the perspective of the three pillars of sustainability (Economic, Social and Environmental). A preliminary summary of the stakeholders, possible conflicts and their impacts on the three pillars of sustainable development is presented in Table 1 (and we acknowledge the responses and insights of multiple students who have tackled this question over the years).

**Table 1: Stakeholder analysis of three pillars of sustainability**

STAKEHOLDER	ECONOMIC	SOCIAL	ENVIRONMENTAL
Logging Company	<ul style="list-style-type: none"> <li>Relies on license and employees from Village A</li> <li>Compensation for trees removed</li> <li>Employment for villagers</li> <li>Manufacture of timber to supply local market</li> <li>Export timber (Raw material)</li> <li>Income from tree products</li> </ul>	<ul style="list-style-type: none"> <li>Employment opportunities for villages (if written into agreements)</li> <li>Currently maintains good relationship with Village A</li> <li>Conflict may arise when lease expires and new chief will have to be assess the present conditions</li> </ul>	<ul style="list-style-type: none"> <li>De-forestation is not an environmentally friendly practice, but proper forest management practices will ensure its survival (if appropriate penalties for non-compliance are in place and can be enforced)</li> <li>Limit dimensions of trees that can be cut</li> </ul>

Village A Residents Relocated	<ul style="list-style-type: none"> <li>• New better homes</li> <li>• Compensation</li> <li>• New larger church</li> <li>• School facilities</li> <li>• Potential impact on relationship with timber company</li> <li>• Seeking compensation for water usage from aquifer</li> </ul>	<ul style="list-style-type: none"> <li>• Higher standard of housing / living</li> <li>• Education opportunities for children</li> <li>• Impact on spiritual guardianship of ancestors whose graves are flooded</li> <li>• Changed relationship with tourism venture &amp; resort if Gorge impacted</li> </ul>	<ul style="list-style-type: none"> <li>• Customary responsibility of guardianship impacted</li> <li>• Already exposed to environmental impact from logging license</li> <li>• Loss of communal productive farm land i.e. dalo and cassava plantation</li> <li>• Concern their aquifer is being drained</li> </ul>
Village A Acting Chief	<ul style="list-style-type: none"> <li>• Resident chief wants to develop the land, improve economic situation of villagers</li> </ul>	<ul style="list-style-type: none"> <li>• Social conflict between brothers i.e. hierarchy &amp; status of resident chief &amp; absent chief</li> <li>• Who's in charge?</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on eco-system</li> </ul>
Village A absent (de facto) acting chief's older brother (in Australia)	<ul style="list-style-type: none"> <li>• Absent chief fears exclusion from economic gain</li> <li>• Sense of rights from remittances sent</li> </ul>	<ul style="list-style-type: none"> <li>• Challenge of chiefly status</li> <li>• Impact on authority related to remittances</li> </ul>	<ul style="list-style-type: none"> <li>• If dam not built and Gorge left undeveloped, eco-system survives</li> </ul>
Eco-Tourism Operator	<ul style="list-style-type: none"> <li>• Employment for villagers</li> <li>• Income for tour operators</li> <li>• Impact</li> </ul>	<ul style="list-style-type: none"> <li>• Resort manager vs. village A land-owners over gorge development</li> </ul>	<ul style="list-style-type: none"> <li>• Eco-tourism-highlights the importance of Gorge</li> <li>• Informs &amp; educates tourists about the area</li> </ul>
Entrepreneur / Govt Irrigation / Dam	<ul style="list-style-type: none"> <li>• Hydro-power for nation</li> <li>• Irrigation for farms</li> <li>• Employment associated with construction (not necessarily local)</li> <li>• Commercial farming of cotton &amp; rice for export</li> <li>• Single tenant with one large lease paying higher rental</li> <li>• Monopoly on irrigation</li> <li>• Higher income from commercial farming</li> </ul>	<ul style="list-style-type: none"> <li>• Proposal has created tension and disruption to prevailing way of life</li> <li>• Electricity to village – if villagers can afford to pay for it</li> <li>• Compulsory acquisition of customary land by Govt</li> <li>• Controlled access to water / river</li> <li>• Proposal heavily reliant on approval of dam</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on environment through flooding and habitat change</li> <li>• Implement proper waste management</li> <li>• Recycling to reduce further damage to area</li> <li>• River flow will be controlled</li> <li>• Loss of marine life and eco-system</li> <li>• Use of large quantities of fertilizers and pesticides</li> </ul>

Central Govt Nuclear Waste Site	<ul style="list-style-type: none"> <li>Substantial Aid Donation from Foreign Govt could be prejudiced if proposal not approved</li> </ul>	<ul style="list-style-type: none"> <li>National need prioritised over local impact</li> <li>Possible health risk</li> <li>Exposure to radiation</li> <li>Locals to be warned of handling material found around area</li> </ul>	<ul style="list-style-type: none"> <li>Energy before ecology concerns</li> <li>Any leakage or seepage will result in contamination</li> <li>Area will become radio-active</li> </ul>
Foreign Govt Nuclear Waste Site	<ul style="list-style-type: none"> <li>Uses its Aid program as economic leverage</li> </ul>	<ul style="list-style-type: none"> <li>Strategies to protect citizens from any health risks</li> </ul>	<ul style="list-style-type: none"> <li>Strategies to protect the environment from contamination &amp; radiation exposure</li> </ul>
Agricultural Leases (sitting tenants)	<ul style="list-style-type: none"> <li>Loss of income</li> <li>Loss of property</li> <li>Loss of employment</li> <li>Loss of crop</li> </ul>	<ul style="list-style-type: none"> <li>Loss of livelihood</li> <li>Relocation without any compensation</li> <li>Illegal eviction</li> </ul>	<ul style="list-style-type: none"> <li>Fertile land left idle</li> </ul>
Mineral Water Plant / Village A (royalty payment)	<ul style="list-style-type: none"> <li>Rely on lease from Village B to access water</li> <li>Export of water (income)</li> <li>Large investment into area</li> <li>Employment for Village B residents</li> <li>Royalty payments for Village A</li> </ul>	<ul style="list-style-type: none"> <li>Potential for increasing tension with Village A regarding aquifer source spreading under their land</li> </ul>	<ul style="list-style-type: none"> <li>Uses the environment for economic gain</li> <li>Irreplaceable source being harvested</li> <li>Possible contamination threat if nuclear waste seeps into aquifer under village A</li> </ul>
Resort Management on “Freehold” land	<ul style="list-style-type: none"> <li>Employment</li> <li>Revenue for Govt</li> <li>Tourism industry benefits from resort</li> <li>Eco-tourism employment for village A</li> </ul>	<ul style="list-style-type: none"> <li>Conflict with village B and resort management over ownership rights / Rights of Transfer relating to freehold parcel</li> <li>Inaction by both Ministers (Tourism &amp; Lands) to resolve issue – further confusion</li> </ul>	<ul style="list-style-type: none"> <li>Impact on reef from tourism activities and sewage</li> </ul>

It is important to acknowledge that the Stakeholder analysis presented in Table 1 is only a preliminary summary. Extensive commentary could be added to elaborate on each bullet point. What it does, however, is provide an example of some of the complexity involved in the overlapping interests of the State, foreign investors, and local landowners. Our next stage is usually to model the power and relationship dimensions and also consider how each of the issues stacks up when looked at using a cost-benefit analysis. A critical limitation of a cost-benefit

analysis is that it necessitates ascribing economic worth to intangible social and ecological dimensions. That provides a segue to the valuation dimension, and the importance of understanding the prevailing property rights of the parties and how they might be valued. Whilst a whole book could be devoted to the analysis of all of the property rights that exist and overlap, before looking at several examples from the scenario and reflecting on how the associated property rights might be valued, it is important to clear the air about what it is valuers value.

### **Property Rights and what valuers value**

In terms of valuation tools, the intention is to keep matters simple and utilise those that are most familiar to the valuation profession – in other words, the guidance offered by the International Valuation Standards Council (see [www.ivsc.org](http://www.ivsc.org)). It is not the purpose of this paper to elaborate on the valuation process or skillset – that has been comprehensively discussed in a related paper in the same conference session (McDermott et al., 2015) – and refer to the background UN Habitat Global Valuation Consultants Report referred therein.

We would also flag, working in the Pacific over the last two decades, that the Unimproved Capital Value (UCV) method of valuation for rental determination is widely adopted in developing countries in the Pacific, but in our opinion it is highly inappropriate. It is the cause of many of the practical problems in the effective financial management of both customary owned and other (especially state) land in the Pacific, and given the level of development in the region there is, generally speaking, sufficient market evidence and transactional information (both from the formal and informal sectors) on which to ground rental and sales evidence in preparing valuations. We have elaborated on this concern about UCV extensively in our other writing (see, for example, Boydell, 2004, Boydell, 2005, Boydell, 2008, Boydell and Small, 2003, Boydell et al., 2007). Other methods for determining equitable rental arrangements exist, and they should be explored for effectiveness of application to replace the UCV approach. Two general methods merit further consideration by Pacific Island Countries (PICs), as follows:

> Market derived ground rents – This method may be more applicable in urban areas where a secondary rental market exists. It consists of analysing the rentals of leases in the secondary markets and stripping back the contribution of improvements. If this method was further developed and applied widely, it could be used to evolve an understanding of general levels of

ground rents across submarkets. This would provide consistency and equity for ground rents paid to customary landowners or the state.

> Residual method - This method has strong theoretical and practical support. It is consistent with the economic nature of land rents. It recognises the fact that in an efficient market land rent is the residual that remains from the income from land use once the non-land costs of production are removed. Since the non-land costs of production tend to have quantifiable market derived values, they can be evaluated with reasonable precision. This method would suit more complex properties where a secondary market might be too thin to be useful. It would suit many non-urban land uses. Profit participation clauses in leases are a primitive form of financial recognition of the mechanics embodied in the residual method. Already there are instances of profit sharing arrangements with customary landowners in the Pacific, such as the Guadalcanal Plains palm oil initiative and the turnover based NLTB tourism leases. It is also a common feature of western rental environments, such as retail leases within shopping centres where tenants pay a percentage of turnover to the centre owners in addition to a base rent.

Equity will also be enhanced by frequent rental reviews. Parties to a lease must recognise that it is possible for land values and rents to move both up and down, depending on unfolding circumstances.

Rental valuation needs to recognise the contribution of premiums paid to acquire leases (either for the overbid known as key money, or compensation for the increasing value of the tenants interest known as profit rent).

Where leases include the expectation that property rights in improvements made by the tenant will become the landowner's property on lease expiry, these leases should be limited in term to no more than one generation, ideally 25-30 years maximum. This is necessary to avoid the roll up of the transfer premium that has created problems in all situations in which it has been tried.

In the context of compensating customary landowners whose land is used / taken / damaged by mineral exploration, we have found that the principles of option pricing theory serve as a useful proxy for value in non-market situations (see Boydell and Baya, 2013).

We are going to premise the valuation analysis on the controversial assertion that professional valuers (appraisers in the US) do not value land and buildings. Rather what valuers ascribe value to are the property rights that are held (or owned, given that you can temporarily ‘own’ or ‘hold’ property rights associated with a lease, a licence or a freehold interest) by various stakeholders with an interest in, over or under, a particular parcel of land that may (or may not be) improved (e.g. land with a house on it, or land that has irrigation for agriculture). It is also possible for multiple stakeholders to hold varying property rights over the same parcel of land (i.e. the value of the land to a landlord versus the value of the land to the tenant, conditional on their particular property rights).

Without causing confusion, or provoking the wrath of valuers and appraisers, we do acknowledge that once we know and understand the property rights associated with legal interest we are valuing and the income stream associated with it (if, for example, it is a rental property), then the land, the improvements, the location, the competition (supply/demand) all become salient (but secondary) dimensions of the market information and risk profile to be incorporated in the value of a stakeholders interest.

So, with those sensitivities addressed, we can now look at the property rights associated with the scenario.

### **Analysis of Property Rights and Valuation Approaches**

In this section we build on the stakeholder analysis provided above, and proceed straight into the subsequent assessment of property rights associated with the parties (and these are summarised in Table 2), as this can be used as a framework for analysis in determining which valuation tools are potentially most appropriate.

**Table 2: Analysis of Stakeholder Property Rights and Interests, with associated valuation approaches**

STAKEHOLDER	PROPERTY RIGHTS	TENANT’S INTEREST	LANDLORD’S INTEREST
Logging Company	Lease or licence for logging concession arrangement with Village	The logging company could be remunerating the landowners by way of a	A fixed regular payment for the concession or licence will provide the

	<p>A (is this with ‘the village’, the ‘chief’ or ‘both’?)</p>	<p>regular payment for a licence agreement, an access rental or a concession payment. These could be agreed annual amounts, or could be based on volumetric payment for timber harvested.</p>	<p>customary landowners with income certainty, whereas a volumetric payment enhances the potential for shared economic returns for the destruction of the ecology.</p> <p>The former can be valued on an investment basis (the capitalisation of the income stream for the duration of the lease / licence agreement, whereas the volumetric amount can be based on a forecast of projected annual turnover.</p>
Village A Residents Relocated	<p>Right to compensation for loss of existing rights, plus associated disturbance and injurious affection</p>	<p>The compensation is being remunerated in part by the provision of replacement housing, which may offset some direct compensation for loss, but a payment for disturbance and injurious affection should also be made to offset psychic loss and inconvenience. This is likely to be a negotiated sum, and could incorporate one-off facilitation payments to the chief and church.</p>	
Village A Acting Chief	<p>Depending on the customary arrangements the chief may have authority to act on behalf of his clan / villagers, and may have rights to a chiefly percentage of any revenue from forestry, tourism, mineral water and hydro, plus a share of any</p>		

	dam compensation.		
Village A absent (de facto) acting chief's older brother (in Australia)	Unclear property rights – with verification needed as to the authority within customary arrangements.		
Eco-Tourism Operator	Currently the eco-tourism operator is benefiting from the natural environment and the tourist potential of the Gorge. It is unclear (and unlikely) that any formal property rights exist, and an assumption can be made that some form of 'access' payment is made to the customary landowners (probably the chief directly) in Village A to facilitate this tourism activity over custom land.	The tourism operator is unlikely to have a formal lease or licence, so their access arrangement would not be valued on the basis of formal tenancy.	
Entrepreneur / Govt Irrigation / Dam	Currently the entrepreneur has no property rights, but is looking to obtain water property rights from the government and a large agricultural tenancy from the customary landowners of Village B.	The water property rights are likely to be part of a development agreement with the government for building the dam. The value of the water property rights can be calculated on the basis of the increased productivity of the land and increased certainty of water availability. A synergistic value calculation can be made to calculate the marriage between the agricultural	For Village B to enter into an arrangement to lease the land to the Entrepreneur, they will need to compensate the existing agricultural tenants for their lost profit rent, and then ensure that the remuneration from the Entrepreneur is sufficient to cover this loss and provide a return that is significantly better than that the nominal rent they



		land and the irrigation scheme, to demonstrate the enhanced value of irrigated farmland with a single tenant over naturally irrigated land with multiple tenants.	currently receive.
Central Govt Nuclear Waste Site	International countries locate such facilities within weaker states, and then those states tend to locate the facility where the existing landowners are relatively powerless to challenge the government's actions. The key issue here is the perceived blight on property rights and interests of all parties within influencing distance. Nuclear Waste sites are a NIMBY issue, and the only way to smooth them politically is if some sort of monetary compensation is provided to offset the blight and associated risk to those within influencing distance – whatever safety protocols are promised.	Whilst this issue is only currently the subject of media speculation, it is unlikely were it to go ahead that the government would rely on a leasehold arrangement for the storage of nuclear waste. It is more likely that the government would look to acquire an appropriate sized parcel of land, and associated infrastructure locations for roads and security facilities. This would necessitate compulsory purchase provisions be enacted to ensure security of tenure for the state, and thus initiate compensation negotiations for (i) loss, (ii) blight and (iii) injurious affection by parties impacted by the proposal.	
Foreign Govt Nuclear Waste Site	It is politically far more effective for governments to locate such facilities	The external government is likely to enter into some form of diplomatic arrangement with the host country, but given the strategic and security implications this	

Agricultural Leases (sitting tenants)	<p>offshore, and here diplomacy is used to ‘dump’ the nuclear waste on weaker states under the guise of other aid support.</p>	<p>would fall outside of normal valuation advice.</p>	
	<p>30-year leases at nominal (or UCV) rents. Govt legislation enables grant of 30-year lease extension at similar low rentals.</p>	<p>The tenants interest can be calculated as a profit rent for the remainder of the lease (second term), the profit rent being the difference between the market rent and the nominal rent currently being paid. This profit rent can be capitalised for the years remaining on the lease (i.e. a simple investment valuation). If the Govt legislation empowers the tenants to obtain a new lease, then compensation would be required to be paid by the customary landowners to the tenants (if legal to do so) if the customary landowners want to break the leases for the prospect of achieving a higher rental from the Entrepreneur who is proposing an irrigation scheme.</p>	<p>The customary landowners interest is currently the right to receive a nominal ground rent under the provisions of the current 30-year lease, with the potential that the land will be tied up for a further 30 years under agricultural lease extension provisions. The valuation of the customary landlords interest at present is based on the right to receive the ground rent until the end of the current lease and the lease extension, with a right to a reversion to perpetuity (deferred 30+years) at full market rental (assuming the government does not enact legislation for subsequent automatic renewal of agricultural tenancies – given that the informal customary rights have been transferred into a formal institutional arrangement – a lease).</p>

Mineral Water Plant / Village A (royalty payment)	There is also scope to separately value an alternative property rights scenario, based on a higher rental from the Entrepreneur proposing an irrigation system... but this would require compensating the existing tenants for their loss of profit rent over the next 30+years. As with the current income and reversion, these interests can be simply calculated using the rental capitalisation (investment valuation) approach.		
	The Mineral Water company has formal property rights by way of a lease from Village B for the land associated with the extraction and bottling plant. What is less certain are their rights associated with water extraction, as this is a shared natural resource.	The Mineral Water company is currently paying a nominal rental for customary land that they are using and there is no mention of any extraction royalty. This is likely to come to the fore during the current lease term, given that Village A have highlighted that the subterranean water resource is also, in part, 'owned' by them. In valuing the tenants interest, there is currently a significant profit being generated from not paying	Currently Village B appears to only be receiving revenue for the land leased for a mineral water plant. This can be valued on an investment basis capitalising the current rental income for the term of the lease then calculating the reversionary interest to full market value in perpetuity. Over time there will be a realisation by Village B that they could be receiving more from the Mineral Water company, given that they are

		<p>for the resource, which will likely change in the short term. Moreover, there is a production risk that another water company could commence an operation in direct competition. Both tenant and landowners risk losing any return in the eventuality of a Nuclear Waste facility being developed in the vicinity.</p>	<p>draining the shared natural resource of the aquifer – and should be pushing for a synergistic value from their interest. Given the attention this issue is now receiving from Village A, this will potentially have to be resolved in the short term prior to expiration of the current lease.</p>
<p>Resort Management on “Freehold” land</p>	<p>The resort management hold a freehold interest and are the property rights holders. The fact that it is contested means that it may be subject to a native / customary title claim. Whilst this places an added level of uncertainty for any prospective investors, such a risk has to be analysed for its veracity and the potential efficacy for any claims of restitution to the custom owners</p>		<p>Currently as this land is freehold and occupied by the freeholder there is not a subsidiary tenancy to be valued. However, the freeholder does have the potential to create a subsidiary interest, and this potential could be used as the basis of an investment valuation as a check method against profits and turnover approaches applied to hotel properties. The risks associated with a potential customary title claim and land restitution will be consistent with the risks in comparator countries, and have to be considered in adjusting the risk in line with such comparators, as do adjustments for climate risk, political risk and currency risk when considering the overall investment.</p>

## Conclusions

As the analysis demonstrates, despite the apparent complexity of the hybrid scenario, there are no particularly complicated aspects associated with undertaking a valuation of the multiple

overlapping property rights associated with the customary land. All of the valuation tools required are currently available. Once they have been identified and clarified, having a clear understanding of the property rights of respective parties makes the valuation process relatively straightforward. The skill of the valuer is required where judgements about risk and uncertainty have to be made, especially where, for example, there is political risk or climate risk associated with the property rights. It has to be remembered that when a valuer is commissioned to ascribe economic worth to the property rights of a particular rights holder, what is being paid for is a collection of professional judgements upon which a client, or clients, can then act (be it in sale, purchase, leasing, investment, development or compensation in the examples provided in the current scenario).

Where development initiatives impact on multiple parties, such as the dam and associated irrigation scheme, there is scope to value the respective interests of the parties synergistically. This marriage value of interests has been discussed in detail in our ongoing work on resource compensation over customary land (see Boydell and Baya, 2012, Boydell and Baya, 2013) where we use option-pricing theory as a potential basis of valuation. A differentiation has to be made between the determination of ‘market value’ (as elaborated on in discussions about unregistered land in this conference session - see McDermott et al., 2015) and a synergistic valuation as the basis of negotiation between customary landowners, the state and a mining company. Likewise, in the current scenario, the entrepreneur who wants to dam the gorge, produce hydro-power and irrigate farmland has a range of investment decisions running in parallel that will require feasibility studies, investment analysis and synergistic valuations that run far beyond the limitation of mere ‘market value’.

In our earlier work on land resource compensation, we also discuss in more detail notions of Special Indigenous Value and *solatium*. Whilst Myers and Shah (2004) have suggested that native land may be worth less than freehold land, we would contest this. Rather, the intangible dimensions of customary land have to be compensated where customary property rights are being extinguished, in the loss associated with the dam and associated flooding of Village A – or the acquisition of land for a nuclear waste facility - and this can (or should) result in a value for customary land that is higher than commoditised freehold land.

The purpose of this paper is to start a conversation, rather than to be definitive. As other papers in this conference session highlight, there is a need to provide examples with scenarios and possible solutions to promote discussion and debate amongst valuers involved in dealing with apparently complex advisory situations. There is a dearth of papers or discussion documents associated with the valuation of customary land, and this in part is why myths have arisen about customary land being difficult to value. Valuers operate with a collection of tools within a framework of professional rules. However, once the complexity of any given scenario is deconstructed into the level of property rights, it becomes relatively straightforward for the valuer to provide judgements based on the property rights, risk assumptions and income potential of customary land.

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## **Biodata**

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