

Commercial Forestry: An Economic Development Opportunity Consistent with the Property Rights of Wik People to Natural Resources

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Wik people on Cape York Peninsula, Queensland, aspire to economic independence. Commercial processing of native forest timbers is seen by Wik people as a culturally appropriate engine for economic development; however, much uncertainty surrounds their property rights to this resource. The granting of native title over some traditional Wik land in 2000 and 2004 was seen as a coup by Wik people, but some economists have argued that the inalienable and communal nature of native title is an obstacle to development in indigenous communities. An assessment of Wik property rights to timber resources reveals that a commercial forestry industry is consistent with their rights. In comparison with social and cultural factors, the inalienable and communal characteristics of native title are low-order economic development constraints for Wik people.

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1. Introduction

Relative to other Australians, Wik, Wik-Way and Kugu people (referred to hereafter as Wik people) living in Aurukun Shire, Cape York Peninsula (CYP), are socioeconomically disadvantaged. They are largely excluded from the market economy and are financially dependent on government programs, including the work-for-welfare Community Development Employment Program (CDEP). Nevertheless, elders aspire for their people to be economically independent and self-reliant. While opinion varies about how to promote economic development in remote indigenous communities, there is an emerging consensus among economists and indigenous leaders that economic development is urgent and necessary to improve the welfare of inhabitants and for the survival of Australian indigenous cultures (Pearson 2000; Ah Mat 2003; Duncan 2003; Altman 2004).

Wik people are poor in terms of financial and (Western) human capital. However, the High Court judgement in *Wik Peoples v State of Queensland and Others 1996*, the granting in 2000 and 2004 of native title over portions of the Wik land claim, and legislated future changes of land tenure under the Queensland *Aboriginal Land Act 1991*, indicate that Wik people may become relatively rich in natural capital. In the late 1990s, Balkanu Cape York Development Corporation (Balkanu) representatives of Wik people identified commercial utilisation of the Darwin stringybark (*Eucalyptus tetrodonta*) native forest timber resource on traditional land as one potential engine with which to drive the elders' vision of economic independence. Venn (2004a) found that a Wik timber industry could be commercially viable.

Wik forestry opportunities will be shaped by the community's property rights to utilise native forest timber. Native title determinations have conferred inalienable and communal native title to Wik people. Economists of the private property rights tradition (e.g. Coase 1960) are of the view that alienable and secure individualised land tenure is desirable, even essential, for wealth creation, economic efficiency and ecological sustainability. The 'Tragedy of the Commons' model popularised by Hardin (1968) failed to distinguish between open access resources, for which his model is valid, and communally managed resources, including the grazing commons in his illustrative example. Economists who have followed Hardin have also typically assumed that communally managed resources can be modelled as open access. Therefore, it is not surprising that some economists and indigenous leaders have argued that the collective and inalienable nature of Australian native title property rights to land present an obstacle to the development of indigenous communities (Williams 1993; Warby 1997; Hughes and Warin 2005; Karvelas 2004; 2005). However, there are theoretical and empirical alternatives to the Hardin model. For example, Ostrom (1990) reported many examples of self-governed commons where institutional arrangements have been

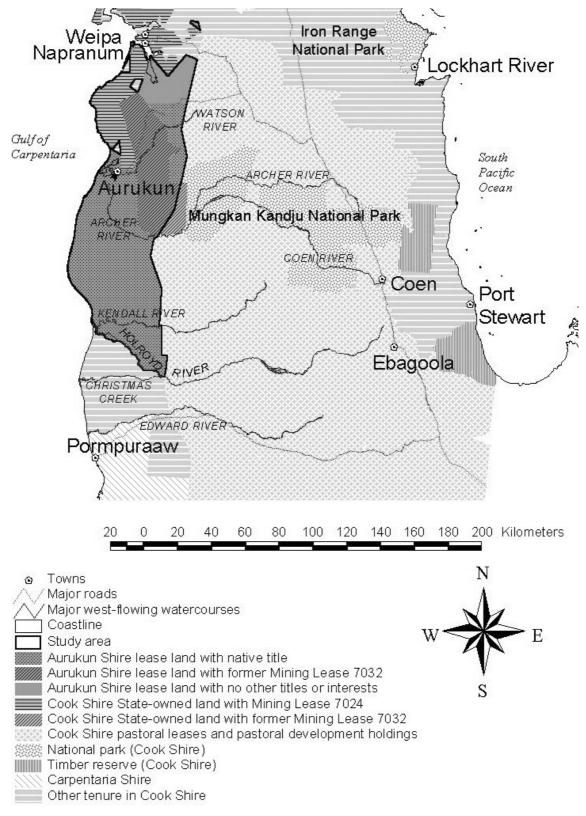
defined, modified, monitored and sustained by the users, and management outcomes have been sound. Dahlman (1980) discussed the specific case of grazing commons and concluded that they were not subject to open access.

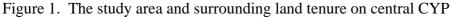
This paper examines the property rights of Wik people to native forest timber and assesses whether a forestry-based economic development strategy is consistent with their inalienable and communal native title rights. The following section describes the study area and forestry objectives of Wik people. Next, rights to natural resources conferred by native title are discussed and Wik rights to timber outlined. A discussion of the compatibility of selective logging with the inalienable and communal native title rights of Wik people follows. Several social and cultural obstacles to economic development are then summarised.

2. Study area and Wik forestry objectives

Wik people have historical and spiritual connections with land along the west coast of CYP between the towns of Napranum and Pormpuraaw and east to the Great Dividing Range (Dale 1993). During the late 19th century, encroaching settlers demanded greater control of the 'wild tribes' on CYP, which led to the establishment in 1904 of Aurukun Mission to 'settle' Wik people (Anderson 1981). Today, Aurukun town is home for about 900 Wik people, accounting for 88 per cent of the town's population (ABS 2002). The town's indigenous population is not a cohesive group of people, but a complex of 23 allied and competing clans with several distinct cultures, languages and dialects, totems and territorial affiliations, and variable status, power and authority (Dale 1993). Inter-clan cultural differences have periodically contributed to social disorder (Anderson 1981; Leveridge and Lea 1993; Voss 2000).

Balkanu defined an 841 500 ha study area for this research (approximately 30 per cent of the Wik native title claim) including Aurukun Shire and part of Mining Lease 7024 in Cook Shire. This area is highlighted in Figure 1 and is hereafter referred to interchangeably as the 'Aurukun area' or 'study area'. In 2005, the study area consisted of land with four distinct combinations of land tenure and title, namely:





Notes: AS is Aurukun Shire Special Lease land; NT is native title; and ML is mining lease. *Source*: Generated by the author using ArcView geographic information system software. Spatial data were provided by the Queensland Department of Natural Resources, Mines and Energy in 2000.

- Aurukun Shire lease land within the Wik Part A native title determination area (503 000 ha);
- 2. Aurukun Shire lease land in the Wik Part B native title determination area with no other titles or interests (69 900 ha);
- 3. Aurukun Shire lease land in the Wik Part B native title determination area and formerly covered by Mining Lease 7032 (165 200 ha); and
- Unallocated State-owned land in Cook Shire covered by Mining Lease 7024 (103 400 ha).

The study area is topographically level to gently undulating and dominated by two major vegetation groupings, namely Darwin stringybark forest and wetlands, with the former covering approximately 70 per cent of the Aurukun area. The high level of interest of Wik people and Balkanu in native forest timber harvesting is partly due to the fact that 230 000 ha of commercially valuable Darwin stringybark forest in the Aurukun area grow over valuable bauxite deposits and are situated on current and potential future mining leases (Venn 2004a). Bauxite mining by Comalco Pty. Ltd. in Darwin stringybark forest on Mining Lease 7024 near Weipa is proceeding at a rate of up to 1000 ha per annum (Mark Annandale, pers. comm., 2004). Comalco prepares land for open-cut bauxite mining by clearing vegetation with bulldozers and chains, windrowing woody debris and then burning. Wik people do not wish to see such waste of a valuable resource repeated on their traditional land.

Darwin stringybark forests contain several commercially valuable timber species, particularly Darwin stringybark, Melville Island bloodwood (*Corymbia nesophila*) and Cooktown ironwood (*Erythrophleum chlorostachys*). A timber inventory undertaken in the study area found that the total standing volume of millable and harvestable timber is large at approximately 2.3 M m³ to 3.7 M m³ distributed over 0.4 M ha of forest (Venn 2004a). Freshwater and estuarine wetlands surround and extend south of Aurukun town along the coast to the Edward River. These have been identified by conservation groups as areas that may prove to be equivalent in biological diversity to Kakadu National Park (Smyth 1993) and are being considered for inclusion in the national park estate. Throughout CYP, most soils are deficient in macro and micro-nutrients, are weakly structured and are erosion prone following clearing of native vegetation, which limits the land's suitability for intensive agriculture (CYRAG 1997). Carrying capacities for

open-range grazing of cattle on native grasses and other native vegetation in the study area average between 21 ha and 56 ha per beast (CYRAG 1997).

According to Sutton (1988, cited in Martin 1993), for Wik people 'there is no wilderness'. Wik people have managed Darwin stringybark forests with regular burning to provide many valuable economic and cultural goods and services, including:

- native (and in recent history, exotic) plant and animal foods;
- traditional tools, arts and crafts;
- classrooms for passing on indigenous knowledge to children;
- settings for important Dreamtime stories;
- habitat for clan totem beings; and
- venues for traditional ceremonies.

Western natural resource extraction practices that can be modified to be culturally appropriate, including selective logging, are considered by Wik people to be consistent with their traditional way of life, land management objectives and conservation ethic (Venn 2004b).

The Wik have multiple objectives for a timber industry operating on traditional land (Venn 2004a; 2004b). Employment generation, not profit maximisation, is the highest priority forestry objective, particularly generation of *on country* (outside of town) employment to encourage population decentralisation, reduce social problems in Aurukun town and facilitate better connection of young people with *country*¹. As the Wik envisage ecotourism becoming a major economic activity in the future, another non-pecuniary objective is to limit logging in forests outside of mining leases, especially within the catchments of wetlands.

3. Rights to natural resources conferred by native title

Settlement of Australia proceeded as if the land was *terra nullius*². It was not until the High Court's judgement in *Mabo v State of Queensland 1992* that indigenous people

¹ When used by or in the context of Australian indigenous people, the term *country* refers to more than a geographic area. It encompasses all the land, sea, rivers, estuaries and other natural resources, sacred sites, stories, and rights and cultural obligations associated with that geographic area.

² There is a continuing debate being waged between historians about whether *terra nullius* was ever part of law relied on to justify settlement of Australia (Connor 2004; Pearson 2004).

were legally recognised as the first inhabitants of Australia and native title was introduced to Australian common law. The Federal *Native Title Act 1993* addressed many of the fundamental undecided issues of the Mabo case and established a process by which indigenous Australians could obtain native title. A key element of the *Act* is that while native title holders and claimants may surrender their native title to government under an agreement with the Federal or a state or territory government, native title cannot be transferred to someone outside the clan, group or community. In Section 223(1) of the *Native Title Act 1993*, native title or native title rights and interests are defined as:

the communal, group or individual rights and interests of the Aboriginal peoples or Torres Strait Islanders in relation to land or waters, where:

- a) the rights and interests are possessed under the traditional laws acknowledged, and the traditional customs observed, by the Aboriginal peoples or Torres Strait Islanders; and
- b) the Aboriginal peoples or Torres Strait Islanders, by those laws and customs, have a connection with the land and waters; and
- c) the rights and interests are recognised by the common law of Australia.

In another landmark High Court ruling that became known as the Wik case, the Court ruled that the granting of pastoral leases over the traditional land of Wik people (living in Aurukun town) did not necessarily extinguish all native title rights. The majority of judges found that native title rights can co-exist with the rights of a lessee, so long as those rights are not inconsistent with the rights of the pastoralist. This was a politically explosive outcome and the Howard Federal Coalition Government attempted to reduce uncertainty surrounding the judgement by passing the *Native Title Amendment Act 1998*, which many commentators perceived as reducing native title rights in favour of miners and pastoralists.

The Mabo and Wik Cases, and the *Native Title Act 1993* and *Native Title Amendment Act 1998* together established a framework for the application for native title, determining the exclusive existence or co-existence of native title on particular land tenures, protecting native title, and specifying procedures for negotiating future land uses that may affect native title. However, no *Act* or court ruling has specified exactly what rights to land and associated resources are conferred by native title. Instead, it has been left for the detail of the rights to be determined on a case-by-case basis, depending on the local law and custom of each indigenous community claiming native title.

The Mabo decision does make it clear, however, that Aboriginal tradition is not a 'fixation of the past'. As Justices Deane and Gaudron concluded, provided any changes do not diminish or extinguish the relationship between a particular tribe or other group and particular land, subsequent developments or variations do not extinguish the title in relation to that land (Bennett 1996). For example, the use of present day tools in harvesting plants and animals, including firearms, boats and nets made of present-day materials, still comprise the exercise of a traditional right, albeit in a modern way (Sweeney 1993). The High Court ruling in *Yanner v Eaton 1999* confirmed that legitimate native title holders have the right to hunt game for subsistence in the areas in which native title is held by that group or individual. But, there remains much uncertainty about whether native title in Australia includes rights to non-traditional uses of natural resources or uses of resources that had not traditionally been exploited.

Meyers (2000) and Pearson (2003) observed that where native title in Australia includes the right of occupation, this creates an interest in land or possessory native title. They have argued that possessory native title should confer a generally unencumbered right upon native title holders to manage and determine uses of the land to support their economic and cultural development, as well as diminished sovereign rights to manage the land in the same manner as holders of non-Aboriginal freehold title in Australia and indeed as holders of native title land in the United States. The issue of whether holders of native title may exercise native title rights to commercially utilise natural resources has not yet been answered conclusively in Australia and will continue to be fought over in Australia's courts.

To date, possessory native title determinations have generally excluded rights to commercial utilisation of minerals, petroleum, water, fish and all other natural resources in waters of the sea and land (including underground water). However, rights to utilise commercially other natural resources have typically been unspecified. Instead, native title determinations have included statements to the effect that natural resources must be managed in a manner *consistent* with the traditional customs, laws and connection of title holders to land. The interpretation of *consistent* is paramount. At one extreme, a

'frozen in time' interpretation of traditional laws and customs could result in only traditional hunting and gathering of natural resources being permitted. At the other extreme, accepting that managing and harvesting natural resources has been critical in the traditional subsistence economy of indigenous Australians, could see the adoption of many types of Western natural resource management practices as being consistent with traditional connection to land.

Recent High Court native title judgements, including *Commonwealth v Yarmirr 2001*, *Members of the Yorta Yorta Aboriginal Community v Victoria 2002* and *Western Australia v Ward 2002* (Mirruwung Gajerrong), have reflected a 'frozen in time' approach to indigenous laws and customs, compounding the obstacles to development faced by native title holders. For example, the Justices in Mirruwung Gajerrong concluded that the indigenous claimants did not hold a native title right to ownership or the right to use (e.g. extract and process) minerals and petroleum, because they had not demonstrated laws and customs related to the use of minerals. Pearson (2002) described the Justices anthropological rather than common law conception of native title as a 'great travesty [of justice] for Australia'. To date, no claimants have been officially granted rights by the governments or courts to commercially utilise natural resources on native title land. Nevertheless, in concordance with the assertions of Meyers and Pearson, this paper proceeds on the basis that such rights exist for possessory native title holders when they have not been explicitly extinguished.

4. Wik rights to timber in the Aurukun area

Post 1788, Wik people had no enforceable property rights to any land or other natural resources until limited rights were conferred with the establishment of the Aurukun Mission. During the life of the Aurukun Mission (1904-1978), Church administrators of Aurukun had the right to authorise the harvest and milling of timber in Aurukun Reserve for non-commercial purposes without the need for a harvesting permit from (or payment of royalty to) the Queensland Government. Under the current local government system established by the *Local Government (Aboriginal Lands) Act 1978* (Qld), Wik people and Aurukun Shire Council hold similar rights (Venn 2004a). Recent native title determinations have increased the comprehensiveness, exclusivity and duration of Wik rights to timber. However, their rights vary between land tenure-title combinations in

the study area. Further complicating the issue is that land tenure-title combinations and Wik rights will change with anticipated future native title rulings, the issuing of a new mining lease over former Mining Lease 7032 and the transfer of Aurukun Shire lease land to Aboriginal freehold tenure under the *Aboriginal Lands Act 1991* (Qld).

4.1 Property rights of Wik people to timber resources on native title land in Aurukun Shire

For the purposes of native title determination, the 27 000 km² Wik native title claim area was split into two parts: Part A, approximately 6000 km² confined to areas that have only ever been unallocated State land or land under forms of title granted for the benefit of Aboriginal people; and Part B, the remaining 21 000 km² that incorporates seven pastoral leases and four mining titles. In 2000 and 2004, the Federal Court granted Wik people native title over all of Part A and 12 500 km² of Part B³, respectively (Pryor 2000; Gerard 2004). Both the Part A and B native title determination areas include land outside of the study area. Figure 1 illustrates native title land within the Aurukun area only.

Justice Drummond conferred upon Wik people the right to possess, occupy, use and enjoy the Part A determination area, including rights to (Federal Court of Australia 2000, Order 3):

- (e) make use of the determination area by:
- (i) engaging in a way of life consistent with the traditional connection of the native title holders to the determination area ...
- (f) take, use and enjoy the natural resources [where natural resources include forest products as defined in the *Forestry Act 1959* (Qld)] from the determination area for the purposes of:
 - (i) manufacturing artefacts, objects and other products;
- (ii) disposing of those natural resources and manufactured items, by trade, exchange or gift save that the right of disposal of natural resources taken from the waterways (as that term is defined in the *Fisheries Act 1994* (Qld) as at the date of this determination) of the determination area is only a right to do so for non-commercial purposes.

³ Negotiation is continuing over the remaining Part B Wik claim area.

The Part B judgement handed down in 2004 consisted of two schedules: an exclusive areas determination; and a non-exclusive areas determination. All Part B determination areas within the Aurukun area are exclusive areas⁴. The rights of Wik people to timber on the exclusive areas of Part B are identical to those on Part A with the exceptions that points (i) and (ii) from Order 3(f) of the Part A determination (reported above) are not included. Some rights to utilise timber may be affected by the granting of a new mining lease.

Section 45 of the *Forestry Act 1959* (Qld) includes a provision that forest products are the absolute property of the Crown 'unless and until the contrary is proved'. The Wik native title judgements have proved the contrary. Selective logging of timber appears to be consistent with the traditional utilitarian connection of Wik people to their land and the Part A determination explicitly confers the rights to manufacture artefacts, objects and other products out of 'natural resources' taken from the land, and to dispose of these manufactured items through trade, exchange or gift⁵. Wik people also appear to have been conferred a right to conduct commercial forestry on native title land within the study area without a permit from or payment of royalties to DPI Forestry. Forestry activities would be subject to legislation and codes of practice that apply to forestry operations on freehold land in Queensland.

4.2 Property rights of Wik people to timber resources on mining leases in the Aurukun area

The establishment of Mining Leases 7024 and 7032 in the study area were facilitated by the special mineral development Acts, the *Commonwealth Aluminium Corporation Pty Limited Agreement Act 1957* (Qld) and the *Aurukun Associates Agreement Act 1975* (Qld), respectively. Under the Queensland *Forestry Act 1959* and *Mineral Resources Act 1989*, control of access to commercially utilise timber resources on mining leases on

⁴ The Part B non-exclusive determination area consists mostly of pastoral leases on which Wik people have been conferred less comprehensive rights. For example, Wik people cannot engage in a way of life consistent with the traditional connection of native title holders to land, or live on or erect residences on non-exclusive native title areas. Also, Wik people have no right to control access to or use of the Part B non-exclusive determination area.

⁵ The right to produce and sell goods manufactured from the natural resources within the Part B exclusive determination area, which includes former Mining Lease 7032, is unclear.

State-owned land in Queensland is vested with the Crown. DPI Forestry can authorise commercial forestry operations on these leases provided those activities do not interfere with the rights and obligations of the lessees. All legislation applicable to forestry operations on State-owned land in Queensland are, by strict definition of the law, also applicable to forestry operations on mining leases within the Aurukun area.

Wik people hold no legal rights to timber resources on Mining Lease 7024 in Cook Shire. Wik people can apply to DPI Forestry for a permit to commercially harvest timber from forests on the lease, but are obliged to pay royalties for harvested timber to DPI Forestry. It is unclear what, if any, restrictions Comalco Pty. Ltd. (the holder of Mining Lease 7024) may place on forestry activities within their lease area. Wik rights to commercially utilise timber on land that was formerly Mining Lease 7032 are presently those conferred by the Part B exclusive areas native title determination. However, the state government has publicised its intention to call for expressions of interest in the bauxite resource (Hodge 2003; Fraser 2004) and Wik rights are likely to be affected when a new mining lease is granted.

4.3 Property rights of Wik people to timber resources on Aboriginal freehold land

As prescribed by the *Aboriginal Land Act 1991* (Qld), Aboriginal freehold over Aurukun Shire lease land (including former Mining Lease 7032) is likely to be granted within the study area in the future. Section 43 of the *Act* provides for the reservation of forest products (and quarry materials) to the Crown, if the Crown desires. Assuming the Queensland Government transfers the rights to timber on granting Aboriginal freehold land title, the characteristics of property rights of Wik people to timber resources will be the same as for other freehold land title holders in Queensland. A Wik forestry industry would not be required to obtain a harvest permit from DPI Forestry or pay royalties for harvested timber, but would still be subject to legislation relating to vegetation management on freehold land. Existing interests in the land continue in force, i.e. the granting of Aboriginal freehold over Aurukun Shire lease land with an existing mining lease would not diminish the mining leaseholder's right to demand that forestry activities must not interfere with their rights and obligations. Presumably, to the extent of any inconsistency between native title rights and Aboriginal freehold rights, the more comprehensive rights for Wik people will prevail.

4.4 Legislative and other constraints potentially affecting the rights of Wik people to commercially utilise timber in the Aurukun Area

Legislation enacted by Australian Federal and Queensland Parliaments, regional planning policy (CYRAG 1997; Commonwealth of Australia 1998; Department of the Premier and Cabinet 2000), and industry regulations and codes of practice (EPA 2002) can affect the rights of entrepreneurs and landholders with any tenure to manage and utilise timber resources on CYP. These constraints are discussed in Venn (2004a). In summary, with the exception of the Federal Government *World Heritage Properties Conservation Act 1983*, legislation, policy and codes of practice can affect how and where forestry operations are conducted in the Aurukun area, but cannot completely prohibit selective logging in native forest.

5. Compatibility of forestry-based economic development for Wik people with inalienable and communal native title to land

Economists of the private property rights tradition have argued that the inalienable and communal nature of native title is an obstacle to economic development in remote indigenous communities. For example, Williams (1993) asserted that collective property rights reduce incentives to improve land (increase the stream of income generated by the land) and manage land in an ecologically sustainable manner. Warby (1997) argued that inalienability prevents land from being put to its economically efficient use by people who most value the land. Furthermore, he contended that, in comparison with individualised land tenure, the communal nature of native title rights increases transaction costs, thereby reducing the number of wealth generating exchanges that will take place. Duncan (2003) and Hughes and Warin (2005) have observed that inalienability limits the capacity of native title holders to raise capital by mortgaging land. Indeed, Nagy (1996) reported that traditional owners of several Aboriginal-owned pastoral leases in the Northern Territory, which have been converted to inalienable Aboriginal freehold land under the *Northern Territory Land Rights Act 1976* (Fed), were unable to raise finance to maintain and develop their pastoral enterprises.

Indigenous Australians have long been displaced (and their native title rights extinguished) from parts of Australia that are attractive for economic development, so that almost by definition, most land that has or potentially could be conferred as possessory native title is unattractive for development. In the Aurukun area, remoteness, poor soils and low cattle carrying capacity suggest that the opportunity cost of agricultural production foregone as a result of pursuing a native forest logging industry is small. The argument that inalienability of native title prevents land being put to its most economically efficient use is likely to have limited relevance to most of the continent where native title survives.

The criticism that inalienability precludes indigenous landholders from raising finance to drive economic development through mortgaging land is simplistic in that it fails to recognise the non-pecuniary objectives of indigenous enterprise development and because, in determining creditworthiness, financial lenders not only consider an applicant's collateral, but also their ability to repay the loan and their loan performance history. Wik elders envisage establishing a timber industry that maximises *on country* employment generation and fosters technical and entrepreneurial skill development, not an enterprise that maximises profits. A feature of many Australian indigenous cultures, including the Wik culture, is the obligation to share resources among extended families, which presents an obstacle to individual accumulation of capital, and hence to obtaining and servicing a bank loan. For these reasons, a Wik forestry industry will be judged as a high-risk venture by private financial lenders irrespective of whether Wik rights to land are alienable.

The high importance of connection with country for the social, cultural and spiritual well-being of indigenous Australians raises ethical and practical issues surrounding the alienability of native title land. Suppose Wik people were granted alienable native title and defaulted on repayments of a mortgage over their traditional land. Presumably the lender would wish to sell the property to recover the debt, but what would happen to the Wik? Eviction would be politically intolerable. Even if Wik native title land became alienable, government or philanthropic investors will be required as guarantor on a private loan or as a source of 'seed' funding to facilitate economic development.

Inalienability of land is likely to be irrelevant for most indigenous communities seeking finance to facilitate economic development⁶.

In a communal enterprise, there are likely to be 'free-riders' and 'easy riders'. Since all benefits from sound enterprise management cannot be exclusively captured by those contributing to the production effort, it has been argued that there are reduced incentives to manage natural resources to increase the flow of future benefits from the land. This is likely to be relevant when land is managed intensively for agriculture, cattle grazing or plantation forestry, because particular management practices greatly effect future financial returns and are in many cases are essential for the enterprise (e.g. timely sowing of a crop, maintaining fences and thinning plantation trees). However, this criticism of communal rights has little relevance where natural resources are managed extensively, including selective logging of native forests by Wik people over long rotations. The discounted revenues arising from native forest management practices, such as timber stand improvement, are negligible at any realistic discount rate.

In contrast to the criticism that communal native title provides disincentives for sustainable management of natural resources, this property rights regime can be consistent with economic and ecological sustainability. Various primary industry enterprises require minimum landholdings below which the operation will not be economically sustainable. For example, cattle stations in Queensland average 20 000 ha (ABARE 2003) and on CYP they are typically at least ten times that size owing to low carrying capacity. Individual native title land holdings are unlikely to be large enough to support pastoral activities, although communal holdings may be. In the case of Wik forestry, the relatively low harvestable volume of timber per hectare in the study area indicates it is unlikely that individualised native title holdings would include sufficient timber volume to supply a moderate-sized milling operation over a time period that would justify investment in necessary plant and equipment. On the other hand, establishing a forestry industry with access to a large communal timber resource would, while also facilitating a high degree of operational flexibility (e.g. provide areas for wet weather harvesting and the ability to meet orders for less common species, including Cooktown ironwood).

⁶ Altman and Cochrane (2003) and Duncan (2003) have highlighted the potential for long-term leases conferring rights to particular natural resources on native title land (as distinct from interests in the land) to be accepted by banks as security for loans. For example, Wik people could potentially raise finance using long-term leases to timber resources as collateral.

Collective decision-making associated with communal title may better internalise production externalities and thereby contribute to ecologically and economically more sustainable management outcomes. Collectively, Wik people have aspirations for a timber industry that will have limited detrimental effects on other potential economic development opportunities, including ecotourism in wetlands and forests outside of mining leases. Presently, various pieces of legislation and operational prescriptions restrict how and where timber harvesting can be undertaken on native title land, but do not prohibit logging. A profit maximising individual native title landholder in the upper catchment of a wetland area would not have any economic incentive to refrain from harvesting timber and will not account for the cost of increases in sediment loads in watercourses and subsequent damage to the ecology and ecotourism potential of wetlands on other individual native title landholdings downstream. In contrast, collective resource management on communal native title land may lead to a more socio-economically efficient outcome for Wik people, because all members of the native title claimant group can share in the benefits and costs of logging and conservation in particular areas.

Indigenous clan boundaries are well-respected by indigenous people in remote Australia and conferring rights to land and other natural resources to particular clan groups on the basis of traditional clan estates may appear uncontroversial. Some economists and indigenous leaders have argued for individual native title rights to land and other natural resources. However, devolution of rights from the whole community to clans or individuals will lead to unequal distribution of natural capital between and within clans respectively. Economic opportunities available to Wik people with traditional connection and possessory native title rights to forestland on mining leases will vary substantially from those opportunities available to Wik people with rights to wetlands of conservation significance or non-exclusive determination areas. In the culturally diverse and historically troubled social environment of Aurukun town, where, relative to nonindigenous Australians, the indigenous inhabitants have collectively been situated at the bottom of the socio-economic ladder for generations, a sudden and unequal influx of natural capital may be undesirable. Similarly, to reduce the prospect that an economic development project will be seen as favouring particular clans or families over others, government or philanthropic financial assistance, whether as 'seed' funding or as

guarantor on a private loan, is likely to be best directed towards collective projects in which all clans in the Aurukun area have a stake. This will be facilitated by communal native title. The social disbenefits associated with devolving native title may more than offset savings in transaction costs associated with communal title.

6. Social and cultural obstacles to economic development in remote indigenous communities

Irrespective of native title rights to natural resources, establishing commercial indigenous businesses in Aurukun and other remote centres has proved challenging. In the Aurukun area, a plethora of economic development projects have been implemented from the earliest days of Mission activity, all of which failed when the community-based brokers who initiated them became dispirited or departed (Dale 1993; Venn 2004b). Dale (1993) highlighted several reasons for project failure, but principally the limited support and interest of Wik people in the projects, and a lack of participatory and technical planning. In recent years, CYP indigenous leaders have argued that reconciliation of social and cultural considerations with private enterprise is the main obstacle to economic development faced by indigenous people (Pearson 2000; Ah Mat 2003), an issue that has received little research attention.

For the Wik and many other Australian indigenous people, cultural differences and low Western education and skill levels have led to exclusion from the market economy labour force. With the partial exception of the CDEP, government assistance for remote indigenous communities since the 1970s has typically led to the creation of a passive welfare economy, where personal sustenance is received without the recipient being required to work or provide anything in return. On CYP, this regime coupled with alcohol and other drug addictions has corrupted indigenous social relationships, values, expectations and aspirations (Pearson 2000), making management of the transition from welfare to a market economy a formidable challenge.

Traditional custom requires Wik people to fulfill obligations such as social engagements (e.g. participation in mortuary rituals) and traditional management responsibilities within clan estates (e.g. hunting and fire management). It is sometimes impractical for these activities to be postponed until the end of the working week. For an industry to

have a chance of success in Aurukun, employment opportunities must be developed that recognise the inappropriateness of a 40-hour working week for a large proportion of the population, and the relatively low labour productivity of people with no market economy work experience and limited Western education and skills training. Arguments similar to those used to justify tariff protection for particular industries are relevant to infant indigenous industries (John Quiggin, pers. comm., 2004). Subsidising the high effective labour costs in the study area, perhaps by extending the CDEP to community-based commercial enterprises, is one policy option that could be explored.

7. Concluding comments

Given the nature of traditional Wik forest management, the selective logging regime envisaged by Wik elders can be interpreted as consistent with traditional connection to land. On possessory native title land in the Aurukun area, Wik people appear to have a relatively unencumbered right to manage and determine uses of their native title land, including rights to commercially utilise timber without a permit from and payment of royalties to the Queensland Government. However, outside of native title determination areas Wik people are legally obliged to obtain harvest permits and pay royalties to commercially harvest timber. Forestry operations within and outside the native title areas must comply with all legislation applicable to such activities on freehold and State-owned land respectively. While untested, it would appear that native forest logging is an economic development opportunity for Wik people that is compatible with their native title property rights to natural resources.

For Wik people aspiring to a native forest-based timber industry on traditional lands, the inalienable and communal characteristics of native title are not major obstacles to economic development. Indeed, owing to the presence of critical social and cultural impediments, it is unlikely that economic development in the Aurukun area would become less challenging in the event that Wik native title land became alienable and individualised. Although native title rights and interests are determined on a case by case basis, many of the arguments employed to illustrate the irrelevance of the inalienable and communal characteristics of native title as obstacles for economic development in the Aurukun area are likely to be broadly applicable to other indigenous communities with possessory native title rights to land and aspirations to establish low-

impact primary industries. Less certain is whether indigenous Australians with possessory native title would be permitted to establish intensive agriculture, cattle, agroforestry or plantation forestry industries on previously uncleared land, because these activities demand more intensive land use and modification of landscapes. It is likely that indigenous people will pursue rights to establish pastoral enterprises and other agricultural activities on native title land through negotiations with government or through the Australian legal system.

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