

## **People on country, healthy landscapes and sustainable Indigenous economic futures: The Arnhem Land case**

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### **ABSTRACT**

In the early 1970s, groups of Aboriginal people in remote Arnhem Land, north Australia, moved from centralised townships back to small communities called ‘outstations’ on their traditional lands. This ‘outstations movement’ reinvigorated the customary sector of the economy, which is based on wildlife harvesting. Using a sustainability framework and data collected on wildlife harvesting by Kuninjku people during fieldwork in 1979–80 and again in 2002–03, this paper examines three broad questions. First, when, how and why were these outstations established and what was the policy response to this re-occupation? Second, are outstations economically, socially and ecologically sustainable? Third, turning to the future, how sustainable and replicable might the Arnhem Land case examined here prove to be? Challenging recent doubts in public debates about the value of land rights and native title, I demonstrate that Indigenous people living ‘on country’ generate economic, social and ecological benefits at local, regional and national levels. The paper concludes that an emerging match between continuing Indigenous aspirations to manage their country and public policy concerns about Indigenous well-being, on the one hand, and healthy landscapes, on the other, should ensure sustainable Indigenous futures on country in north Australia—with appropriate institutional support and adequate resources.

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## Introduction

In Australia, there is a continuing debate about the value of land rights and native title for Indigenous people. A recent government-sponsored review (Reeves 1998) argued that there are limited Indigenous economic futures 'on country'.<sup>1</sup> In a broader public policy sense, this article challenges the Reeves view with a long-term perspective that provides economic arguments for facilitating Indigenous aspirations to live on their traditional lands in the 21st century.

In the early 1970s, groups of Aboriginal people in remote Arnhem Land, north Australia, moved from townships where they had centralised back to small communities called 'outstations' on their traditional lands. This 'outstations movement' (Coombs 1974) was associated with the reinvigoration of the customary sector of the economy, which is based on wildlife harvesting. Today, most of the mixed regional population of Arnhem Land—totalling nearly 20,000—is still concentrated in small Aboriginal and mining townships on the coast. Recent official information indicates that there are now approximately 200 discrete Indigenous communities in the hinterland that are permanently or seasonally occupied by about 4,000 Aboriginal people.<sup>2</sup> Understanding their economic futures requires the use of a framework that takes account of what has been termed the hybrid economy, with customary, market and state sectors, recognising a high degree of local and regional variability (Altman 2001). Conceptually, it is also important to superimpose local, regional and wider linkages and an acknowledgment that township-based populations participate actively in this hybrid economy—the matrix and cross-cutting links and cleavages are extremely complex.

Using a sustainability framework (Venning & Higgins 2001) and data collected on wildlife harvesting during prolonged fieldwork in 1979–80 (Altman 1987) and again during shorter periods in 2002–03 in collaboration with another anthropologist (Hinkson 2003), a group of biological scientists and a landscape ecologist from Charles Darwin University, Darwin (see Altman et al. 2002; Griffiths 2003), I examine three questions. First, when, how and why were these outstations established and what was the policy response to this re-occupation? Second, is outstation living sustainable? I address this question using economic, ecological and social elements of sustainability. More concretely, does outstation residence generate

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<sup>1</sup> See Reeves (1998). A critique of his recommendations is provided by a 'review of the review' (Australian Government 1999) and the proceedings of a conference (Altman, Morphy & Rowse 1999).

<sup>2</sup> A population estimate prepared by Michelle Cochrane based on the 2001 Census count is about 3,354 people. A survey conducted by the Australian Bureau of Statistics (ABS) for the Aboriginal and Torres Strait Islander Commission (ATSIC) in 2001 enumerates 183 discrete Indigenous communities with a total population of 3,837 persons (see ABS 2002). Roger Jones assisted me in interrogation of the unit record file from this survey.

a livelihood, is there any evidence of decline of harvested species, and are populations robust and harvesting skills transferred inter-generationally? Third, turning to the future, will outstation living remain sustainable and might the Arnhem Land case prove to be replicable in other regions? I argue that Indigenous people living on country generate ecological, economic and social benefits at local, regional and national levels. An emerging match between continuing Indigenous aspirations to manage their country and policy concerns about Indigenous well-being, on the one hand, and healthy landscapes, on the other, could ensure sustainable Indigenous futures on country in north Australia—subject to some appropriate institutional support and resourcing, as outlined here.

### **The outstations movement and sustainability concerns**

The last 30 years can be viewed from two perspectives: as a mere sliver of the Aboriginal ownership and management of Arnhem Land that extends back an estimated 55,000 years (Jones 1999), or as a significant segment of the century over which first ‘settler’, and then state, colonisation of this region has taken place. From 1931, all of Arnhem Land was reserved for its Aboriginal inhabitants; from 1953 they were declared wards of the state; and increasingly in the 1960s the authorities unsuccessfully tried to develop Arnhem Land commercially with cheap Aboriginal labour under white control.<sup>3</sup> This colonisation was largely limited to the coastal regions, where a series of mission and government settlements were established and where Aboriginal people increasingly congregated, abandoning the hinterland. This period of colonisation did not result in the environmental degradation, land clearing and habitat and species loss now so evident in temperate Australia (Australian State of the Environment Committee 2001)—about the most significant impact was the attempted forced suppression of customary fire regimes in places where forestry enterprise was unsuccessfully attempted.<sup>4</sup>

Many things changed after 1970, leading to a process of decolonisation that is still under way. Under the McMahon and then Whitlam governments there was a policy shift away from assimilation to self-determination that accelerated after 1972. In remote locations, the shift to self-determination found expression in a social movement called the ‘outstations movement’. This movement saw many Aboriginal people migrate from artificial administrative centres along the coast back to their traditional lands (see Coombs, Dexter & Hiatt 1980). The movement accelerated

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<sup>3</sup> Industries and ventures included forestry and sawmilling, cattle and buffalo rearing, a dairy farm, market gardens and orchards, a fishing venture, a piggery and a poultry project—all failed (Altman 1987, p. 12).

<sup>4</sup> For an early reference to this and its negative impact on northern cypress pine (*Callitris intratropica*)—paradoxically, the species to be harvested—see Haynes (1985).

after the passage of land rights legislation in 1976 and the immediate return of Aboriginal reserved lands to inalienable Aboriginal ownership and control.

This 1970s and 1980s repopulation of Arnhem Land constituted a rural exodus to much of the accessible hinterland that is probably unparalleled in Australia's prehistory and history. By the mid-1970s a region of 95,000 square kilometres was dotted with perhaps 65 outstations and 2,000 residents, traditional owners of this land (according to customary, and now also statute, law) and their families and other relations (Altman & Nieuwenhuysen 1979, pp. 79–82). At this time, the outstations movement was largely regarded as a reaction to the negative experiences of colonisation and centralised administration, with the 'inmates' escaping the total institution.<sup>5</sup> Others, like Coombs (1974), influenced by the writings of anthropologists such as Stanner (1968), recognised at the outset that people were returning to the ancestral lands with which they maintained strong spiritual and religious connections. Later in this period, economic arguments emerged to explain this return to country—by reactivating their customary harvesting economy and producing art for sale, outstation residents were able to enjoy a better standard of living than was then available in Aboriginal townships, as the ex-missions and settlements with very limited economic bases were conveniently reclassified (Altman & Nieuwenhuysen 1979; Fisk 1985; Altman 1987).

Initially, observers took a sceptical view of outstations both in relation to their social and economic durability and on the question of whether land re-occupation would prove ecologically sustainable—although there was no evidence to prompt either scepticism or concern. Social sustainability concerns were often expressed in policy discourse in terms of demography and likely longer-term population decline (Australian Government 1987). Economic sustainability was questioned because the rekindling of a customary economy predicated on wildlife harvesting was underwritten by enhanced incorporation of Aboriginal people into the Australian welfare state (see Altman & Nieuwenhuysen 1979; Altman 1987). It was erroneously thought that as in the mainstream economy, income support would only be maintained for a short time, till employment was found, but there were no jobs and there was very little labour migration.

Ecological issues, if mentioned, were generally expressed in terms of potentially negative impacts—there was concern that new technology might result in species decline (see discussion in Altman, Bek & Roach 1996), that manufacture of art and artefacts for sale could be ecologically unsustainable (see discussion in Griffiths, Philips & Godjuwa 2003), and even that firewood collection would result in the decline of trees near outstations (Council for Aboriginal Affairs 1976). Such views prevailed well into the 1990s. They went unchallenged because the scientific community was not

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<sup>5</sup> A Goffman-like analogy used by Long (1970).

undertaking research about this 'new' form of living, a mix of the customary and the modern; nor was it engaging with Indigenous ecological knowledge. There was no information about wildlife stocks or harvesting rates, so it was impossible to assess whether or not the modern hunter-gatherer lifestyle was ecologically sustainable.

Much of this changed in the 1990s, as some north Australian ecologists and biologists began to engage seriously with Indigenous people and their knowledge systems, and to more rigorously assess Indigenous impacts on landscape. And the tenor of the engagement changed considerably with the political growth of the Greens (Lohrey 2002) and in the aftermath of the Ecologically Sustainable Development process in Australia in the early 1990s (Hamilton & Throsby 2002). Simultaneously, there was growing evidence nationally that commercial agriculture and livestock husbandry and associated clearing (habitat loss), undervaluation of water (dryland salinity) and fire prevention (rather than management), especially in state forests and reserved national parks, were responsible for much environmental degradation (see Australian State of the Environment Committee 2001; Flannery 2003). As a result, a significant shift in thinking began, and it continues to have its effect today. Part of this shift seeks to ensure that the biodiversity loss of temperate Australia is not replicated in northern Australian landscapes; another part seeks to collaborate in this endeavour with Indigenous stakeholders.

Also in the 1990s, scientific evidence was being mustered from research in Arnhem Land and Kakadu that demonstrated that the total absence of people—uninhabited wilderness—was not an ecologically sustainable or a preferred state in modern Australia (see, *inter alia*, Rose 1995; Bowman 1998; Williams, Griffiths & Allan 2002). This was primarily because uncontrolled fire and introduced feral species and weeds needed active management. The relationship between Aboriginal customary fire regimes and biodiversity was demonstrated in a number of contexts (see Yibarbuk et al. 2001). It was also demonstrated that Aboriginal species utilisation, both for customary and commercial use, was ecologically sustainable—this was demonstrated with estimates from aerial surveys of species stocks and calculations of sustainable harvesting rates (see, for example, Koenig et al. 2003).

Today, there is growing scientific evidence that where Indigenous people repopulate the landscape, or where human presence has been maintained, ecological benefits result, not just for the natural and biological landscape, but also for the cultural landscape. The ecological concern today is not that there are too many people in the Arnhem Land landscape, but rather that the landscape is unevenly populated, with large parts of the remote Arnhem Land escarpment either unpopulated or too thinly populated (Whitehead 1999; Whitehead et al. 2002; Whitehead et al. 2003).

In summary, there is a growing recognition among scientists and social scientists that Aboriginal people on country actually contribute ecological benefits at catchment, regional, and even national scales. There have been opportunities to test this view with

scientific evaluations of decline in key indicators (cypress pine stands, for example) in unpopulated regions such as the Arnhem Land escarpment (Bowman et al. 2001).

Another key shift in the 1990s occurred at an institutional level, with the development and expansion of organisations studying landscape health. Simultaneously, a growing part of that landscape was coming under Aboriginal ownership via the land claims process, and Aboriginal organisations such as land councils started to actively represent the conservation land interests of their constituents, the land owners. These changes were the harbinger of a growing convergence of interests between western scientists with conservation objectives and Aboriginal land owners and users with an inherent interest in ensuring that their inalienable land, their major economic and cultural asset, remained ecologically intact for future generations.

### **Some ethnographic evidence of sustainability, 1979–2003**

I shift now to my own direct engagement with this issue over the 24-year period 1979–2003. Using empirical evidence from anthropological fieldwork conducted with a community of Kuninjku-speaking outstation residents in western Arnhem Land during two periods, 1979–80 and 2002–03, I want to demonstrate the sustainability of Kuninjku engagements with their landscape. It can be argued that sustainability can only be assessed through longer-term observations such as these. Part of the discussion here relates how I became involved in shifting from a disciplinary focus on only two strands of sustainability, the economic and the cultural (although this was not the lexicon of twenty years ago), to a focus that now includes the vital third strand: the ecological. My early collaborations had included taking account of Indigenous knowledge, but it was collaboration with another discipline, biological science, that had been missing—in other words, I was not in a position to assess whether or not what I was observing was ecologically sustainable.

The first snapshot I provide here relates to 1979–80, when I undertook research at one outstation called Mumeka, with a small group (averaging about 30) of Kuninjku-speaking people, living on their traditional lands. At that time, because my interests were primarily economic and cultural, I set out to explore the relationship between these people and their landscape. Over a year-long period, I collected information on a daily basis about economic activity—the harvesting of wildlife and the production of artefacts for sale—and the significance of social security income. I quantified the Mumeka economy in a number of ways: by measuring work effort and dietary intake, and also by estimating comprehensive outstation social accounts that quantified all monetary flows, and by estimating the significance of the customary sector in market replacement dollar terms. The outcomes of this quantification supported anecdotal observation in that region: over the 1979–80 seasonal cycle, the customary sector accounted for 64 per cent of the value of the economy; the social security and wages sector for 26 per cent; and the production of art for sale for 10 per cent.

This now historical research has been documented in great detail elsewhere (Altman 1984; Altman 1987); only a few crucial observations are summarised here. First, information on mobility showed that Mumeka people ranged widely over their country in the food quest and to visit other outstations and ceremonial sites. Second, they used a wide range of flora and fauna—in 1979–80 I observed 90 animal species (including introduced species such as feral water buffalo) regularly harvested and 80 plant species consumed, while 56 plant species (most of them non-foods) were used in non-dietary ways, mainly in the manufacture of artefacts. Third, Mumeka people used fire almost continuously when the landscape was combustible, for many reasons—to clear the way, to drive game, and to signal whereabouts to others. They also left tracts of land intentionally unburnt to preserve them for later game drives.

The second snapshot that I will focus on briefly is a subsequent period of research undertaken with many of the same Kuninjku people at many of the same places—in July during the mid-dry season that Kuninjku call *yekkeb* (reported in Altman et al. 2002) and in January during the mid-wet season or *kudjawk* (reported in Altman 2003; Hinkson 2003; Griffiths 2003). The 1979–80 database—the first ‘snapshot’, collected over 296 days—provided the benchmark against which to measure this recent and more seasonally focused harvesting data. The existence of an earlier data set gathered over an entire annual seasonal cycle made shorter periods of data collection (two weeks at each of four dry season camps in July 2002 and three weeks at Mumeka in January 2003) a scientifically plausible possibility.<sup>6</sup>

This recent research has been undertaken with colleagues at Charles Darwin University and at the Australian National University, and in collaboration with a regional organisation, the Bawinanga Aboriginal Corporation (BAC), and with some funding support from the Natural Heritage Trust. It was only when I began to collaborate with biological scientists that I became convinced that it was methodologically robust to focus on shorter seasonal periods of data collection for comparative purposes. This was partly because aerial and on-ground surveys were starting to provide information on species stocks and sustainable yields (see Koenig et al. 2003).

Detailed findings from this research will not be reported here, as data analysis is still under way. Some salient findings from this more recent period, and contrasts with 1980, are as follows. First, actual harvesting practices were remarkably similar, and the ages of active harvesters were as inter-generational in 2002–03 as in 1979–80. This was demonstrated by participant observation and gathering information on the ages of actual producers. This suggested inter-generational skills and knowledge transfer. Second, the quantum harvested and economic significance per capita were

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<sup>6</sup> In July 2002, Tony Griffiths and I coordinated a data collection exercise at four localities by Tony Griffiths, Jenny Koenig, Guy Pardon and Joe Morrison; in January 2003, Melinda Hinkson and I collected data at Mumeka outstation for two weeks and Tony Griffiths for one week.

significant in both periods. In terms of game harvested, in the mid-dry 2002 customary production was 1.6 kilograms of game per capita per day compared with 0.8 kilogram in 1980 (with much of the difference explained by greater exploitation of buffalo in 2002). In the mid-wet of 2003, returns were similar, at 0.4 kilogram per capita per day compared with 0.5 kilogram in 1980. And third, the number of species harvested was remarkably similar in mid-dry 1980 and 2002 (26 species), but somewhat different in the mid-wet, with 32 species harvested in 1980 versus a lower 18 species in 2003. While some decline in reptile exploitation was recorded, the observation period was too short to be able to assess whether or not the recent arrival of the introduced poisonous cane toad to the region is a significant factor in the decline of some species (see Altman, Griffiths & Whitehead 2003). Information collected on the market replacement value of this harvested game indicated that it remains of crucial economic importance and represents import substitution that frees cash and unearned cash income for other purposes (Altman et al. 2002).

From the sustainability perspective, the following observations can be made. In economic terms, the Mumeka outstation economy is as sustainable in 2003 as it was in 1979; indeed, this economy is structurally the same hybrid economy with customary (hunting), market (arts production and sale) and state (income support transfers) sectors in both periods. There have been some changes: the value of art has increased absolutely (see Maningrida Arts and Culture 2003) for Kuninjku, and income support, mainly in the form of Community Development Employment Program (CDEP) payments, is now more widely distributed. While comprehensive social accounts were not quantified in detail in 2002–03 as they had been in 1979–80, there are clear overarching similarities.<sup>7</sup> In ecological terms, it is clear that there has been no decline in the common species generally harvested, with the main exception being reptile decline that is possibly a result of the invasion of the cane toad. Furthermore, information on harvesting levels and species stocks makes it clear that harvesting is within ecologically sustainable limits. And in social terms, there has been clear inter-generational transfer of harvesting and artistic skills, evidenced by hunting participation and performance and the age profiles of Kuninjku artists, who are among the region's most prolific producers (Altman 1999). The three elements of sustainability appear robust.

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<sup>7</sup> Very preliminary analysis suggests that fuller provision of income support has increased the relative significance of the state sector to 57 per cent, with the relative value of the customary sector declining to 32 per cent and the relative value of art production for sale remaining similar at 11 per cent. Overall incomes, though, have increased. Methodologically, gathering information on all individuals' cash incomes and on all expenditures proved far more difficult during short periods of residence in 2002 and 2003 than during the prolonged period of fuller social incorporation in 1979–80. This was one obvious shortcoming, from a social sciences perspective, of short-term fieldwork.



### The institutional context 1979 and 2003

Participation in the customary sector is not just materially productive; it also speaks to the Kuninjku ideology of looking after and having a reciprocal relationship with a sentient landscape—‘caring for country’ (most clearly represented by maintaining an effective fire regime) results in productive, fecund country.<sup>8</sup> But this caring for country discourse has changed markedly over the last decade or two, even among Kuninjku, as the challenges associated with modernity—uncontrolled fires, feral animals, pests such as the cane toad, and potential introduced weeds invasions and diseases—are increasingly recognised as new ecological threats.

These challenges have generated new land management institutions. For Kuninjku, the key organisation is their regional resource agency. BAC was established in 1979 to support the outstations movement described above, so the same broad institutional umbrella has been in place for 24 years now. But BAC has grown rapidly in the 1990s to also become the parent organisation for the Djelk community ranger program and for a number of other community initiatives associated with landscape and wildlife management. Paradoxically, perhaps, BAC assists in caring for 10,000 square kilometres of country, though its public resourcing is not primarily targeted at this purpose. Its main sources of income derive from administering a CDEP scheme, and from its trading income, much of it earned as a provider of mainstream services such as shopping facilities and a fuel outlet (see BAC 2001; BAC 2003).

BAC’s growth as an innovative land management agency has been bottom-up and organic, and it is now engaged in a range of natural resource management activities: weed eradication, feral animal control, maintenance of customary fire regimes and sustainable commercial wildlife harvesting; raising project funding to test the viability of a range of commercial harvesting projects based on mostly native and a few exotic species; forging and maintaining alliances with researchers (such as myself) who are monitoring the sustainability of wildlife harvesting for customary and commercial use; investing in a number of commercial wildlife harvesting initiatives; and, most recently, being the regional sponsor of a major carbon abatement proposal.<sup>9</sup>

BAC has forged a strong alliance with the Northern Land Council’s (NLC’s) Caring for Country Unit (CFCU). The NLC is a statutory authority established by land rights law to represent Aboriginal land owners in mediating land claims and in land management. In the late 1970s and 1980s, the NLC focused on land claims, but more

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<sup>8</sup> For a recent intercultural account of this reciprocal relationship, see Rose et al. (2002).

<sup>9</sup> See Altman & Johnson (2000) and Altman & Cochrane (2003) for fuller discussions of the growth and current activities of BAC. A crucial challenge that BAC faces is to mediate and integrate the interests of about 100 land-owning groups (or clans) in its region. Clan estates only average about 100 square kilometres each (with high variability in size)—small areas in catchment terms.

recently, as the land claims process is drawing to a close, it has strategically shifted to a greater engagement in land management (see Altman, Morphy & Rowse 1999). Paradoxically, today the NLC remains largely funded by the activities of mining companies operating on Aboriginal land rather than by natural resource management agencies.<sup>10</sup> Quite recently, the CFCU has emerged as a division within the NLC that assists a growing and diverse network of community-based natural resource management initiatives, of which the Djelk initiative is an early and significant example (see Storrs & Cooke 2001).

The links between local (Kuninjku), regional (BAC) and wider (CFCU) land management institutions cannot be addressed in any great detail here. But there are changes in both the development discourse and in natural resource management practices that need to be briefly highlighted. Thirty years after the beginnings of the outstations movement, people are choosing to maintain a presence on country, sometimes permanently, sometimes seasonally. This has generated an appropriate institutional response from Aboriginal representative and service organisations. They are seeking not just to support the aspiration of many to live on country, but also to engage in an ongoing dialogue about sustainable economic futures on country. The discourse about sustainable development has broadened significantly to highlight ecological issues. On the one hand, an emerging alliance with that part of the western science community that is open to the value of Indigenous knowledge and practice is altering the nature of the collaboration. On the other hand, Aboriginal people are more open to western science management and eradication options as the potential environmental threats from introduced invasive weeds, pests (such as the cane toad) and feral animals (such as pigs) intensify. Much of the dialogue is now conducted in Aboriginal English rather than biological 'academese' or Indigenous languages, and scientists are engaging more effectively by adopting the participant observation approach of anthropologists, even if only for short periods of fieldwork. There is a growing level of engagement and knowledge exchange between an increased set of stakeholders with a direct (Kuninjku) and indirect interest in sustainable and interdependent landscape use and management.

### **Some policy proposals based on the recent past**

What suite of initiatives might the Australian state consider adopting to better support Aboriginal habitation of Arnhem Land for local, regional and national benefit? And what are some of the options that might make Indigenous economic futures on country even more sustainable?

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<sup>10</sup> This link is very indirect: mining companies pay royalties to governments, who then pay the equivalent of a share of these back to the four land councils in the NT to fulfil their statutory functions.

Current Indigenous affairs public policy laments the extent of Indigenous dependence on the state and the problems associated with inactivity. Much of this discourse fails to recognise the lived reality of people who are living on country and are actively engaged in customary economic activity and associated landscape management. It also fails to recognise the current and potential spin-off benefits of such activities for remote regions and the nation. For example, much of the output of the Indigenous arts industry, a market activity that generates much tourist interest, is produced on country and uses sustainably harvested natural resource inputs; wildlife habitats on Aboriginal lands (which are the breeding grounds for many migratory species) are maintained; and customary fire regimes assist biodiversity maintenance and can abate atmospheric carbon and smoke. In short, supporting Indigenous futures on country has the potential to generate economic benefits—not just for Aboriginal people, but also for the nation—in meeting international biodiversity conservation obligations and potentially in meeting carbon abatement goals.

The emerging combination of growing outstation populations and broader shifts in social attitudes towards environmental sustainability suggests that customary, market, and state sectors might expand in Arnhem Land in a way that matches local aspirations with national policy goals. This development scenario would generate both jobs and income for Aboriginal people on country. For example, an enhanced customary sector could enable not just higher (but still sustainable) levels of wildlife harvesting, but also increased landscape management activity. New industries might develop: industries based on greenhouse gas reduction through reduced fire-related emissions and associated carbon trading; enhanced pest eradication services, including provision of disease monitoring and bio-security; and enhanced provision of invasive weeds control services. An enhanced engagement with the market could occur through growth in the production of goods exports (of arts and harvested wildlife), services exports (such as recreational fisheries and eco- and cultural tourism) and import substitutes (such as selling fish and wild harvested game locally, if restrictive regulations could be modified and property rights in commercial species vested with Aboriginal people). And finally, an enhanced and more active engagement with the state could occur, through the provision of publicly funded contracts for the provision of both natural resource management services that aim to conserve biodiversity and some of the ecosystem services identified above.

This positive development scenario needs to overcome at least three hurdles. First, the shift from local and regional natural resource management to systematic and monitored large-scale activity (for example, in carbon abatement) will require rigorous multi-year commitment by all participants and appropriate monitoring of performance. Remote sensing technology for monitoring is now available, but the governance of new regional industries will require the development of a robust institutional structure and the acquisition of new skills to ensure coordinated action. An additional challenge will be the maintenance of flexible and workable customary

practices, while coping with the rigorous seasonal demands imposed by such new opportunities. Second, there is the issue of managing uninhabited landscapes and ensuring that appropriate support is provided to facilitate further outstation residence or more country visits. Finally, there is the question of fiscal dependence. In 1979 it was noted that ‘if the outstations movement is in general quite viable socially, long-term economic success appears more likely in the well-established Arnhem Land communities than in those in Central Australia. However, all of these communities will no doubt remain dependent for some time on government financial support’ (Altman & Nieuwenhuysen 1979, p. 100). Some 24 years later, state-provided income support still underwrites outstation (and Aboriginal township) living because the customary and market sectors of the economy are not large enough to ensure economic independence from the state—policy realism suggests that for the foreseeable future this will remain the case.

The three hurdles documented here are not insurmountable; the following strategies to overcome them are possible. First, existing institutional umbrellas, such as the CFCU community-based ranger network, could be further improved with secure recurrent funding for appropriate training, employment, and coordination of activity. In truth, equitable resourcing of Indigenous land management activity in comparison with national parks and other reserved lands (possibly on a contestable basis) would go a considerable way towards provide the ongoing and recurrent support to this network that is currently absent.<sup>11</sup> Similarly, regional organisations such as BAC could have their natural resource management activities funded like mainstream parks organisations rather than relying on the CDEP scheme. Funding is only a part of the solution here, though.

Similarly, the second hurdle can be overcome by provision of land management infrastructure that would provide capacity to work in currently uninhabited and harsh areas, often at the headwaters of catchments in the escarpment. And recognition of the role that people on country play in landscape management might also require appropriate adaptation of income support and other institutions to reflect the positive contributions of such activities.<sup>12</sup>

Overcoming the third hurdle requires recognition and resourcing. A clearer recognition of the regional and national benefits (or cost reductions) generated by people on

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<sup>11</sup> Biological scientist Peter Whitehead has estimated that about \$890 per square kilometre is spent in Kakadu National Park compared with a maximum \$140 per square kilometre in adjacent and environmentally similar Western Arnhem Land, a ratio of \$6:\$1 (Whitehead 2002). He acknowledges, of course, that Kakadu is a high-visitation World Heritage-listed region. But the two bio-regions are ecologically interdependent, especially for migratory species.

<sup>12</sup> The case for replacing income support with an on country income security program based on the Canadian James Bay model was made in the late 1980s by Altman & Taylor (1989).

country would help a recasting of the ‘despondent dependency’ perspective. The potential of carbon abatement and trading has already been mentioned. A proposal currently with the Australian Greenhouse Office, the Arnhem Land Fire Abatement project, has potential private and public sector sponsors—in informal trade can occur even in the absence of ratification of the Kyoto Protocol. Opportunity cost arguments could also loom large here. For example, recent research has indicated that smoke inhalation in Darwin associated with late dry season wildfires generates significant health costs (Johnston et al. 2002). Fire abatement could potentially reduce such costs and should be supported as a preventive health measure that may be more cost effective than later health interventions.

The recent past indicates that economic activity on country is economically, ecologically and socially sustainable, enhances participants’ well-being, and helps maintain an important ecological and cultural asset. Customary activity also connects with the market and generates biodiversity and landscape management contributions. All this suggests that facilitating residence at outstations is almost certainly preferable to residence in townships, where economic opportunity is heavily circumscribed (especially in the customary sector). State and private sector support for on country residence will generate ecological, economic and social benefits for local, regional and national interests. A challenge for 21st century Australia will be to recognise this raft of beneficial contributions and support them equitably.

## Conclusion

I began by noting that the value of Indigenous land rights remains contested in Australia. The arguments and evidence I have presented here fundamentally challenge scepticism about the significance of land rights for Indigenous Australians. Not only are there compelling social justice and human rights reasons for returning land to its original owners, but there are also compelling evidence-based arguments to support enhanced Indigenous futures living on country. This article has demonstrated that a growing body of research indicates that there are economic, ecological and social benefits realised at local, regional and national levels as a result of Aboriginal presence on country in Arnhem Land.<sup>13</sup> The outstations movement, ‘permitted’ by changes in national policy in the early 1970s, has now evolved to a stage where it fulfils meaningful, and nationally productive, roles in post-colonial remote Australia.

But major challenges remain. This population movement, even if on a second-best seasonal basis, and the landscape management activities associated with it, need ongoing and increased support. Paradoxically, at a time when there is polemical and

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<sup>13</sup> A strength of customary land tenure, now enshrined in land rights law, is that only traditional owners can speak for and manage country. This means that empty landscapes do not just need repopulation; they need repopulation by the right people.

influential discourse about the negative impacts of population growth on the environment in temperate Australia (Flannery 2003), the counter arguments—that there are under-populated and unmanaged regions in the north that need Aboriginal presence—are not being adequately articulated and heard. Similarly, there is continued scepticism about the benefits of enhanced Indigenous presence on country, although scientific evidence is increasingly challenging this scepticism. At the same time, there are sound ecological arguments to expand Aboriginal community-based land management from the Arnhem Land region (some 95,000 square kilometres) discussed here to the 500,000 square kilometres of Aboriginal-owned land in the Northern Territory, and then to other parts of the Indigenous estate, which now totals an estimated 18–20 per cent of Australia (Pollack 2001), much of it relatively intact landscapes.

Indigenous land owners and managers are clearly demonstrating how a whole-of-landscape approach that does not separate the ecological, economic and social can function in the 21st century: Indigenous practice is actually matching ‘triple bottom line’ public policy rhetoric. Future challenges remain, in particular how to scale up effective clan estate or catchment level landscape governance into robust governance of ecological services provision, such as wildfire abatement, at the regional level. And adequate resourcing remains an important problem. It is crucial that the Australian nation-state recognises the wider public benefits of Indigenous landscape management. An emerging match between continuing Aboriginal aspirations to manage their country effectively and emerging public policy concerns about Indigenous well-being, on the one hand, and healthy landscape maintenance, on the other, could facilitate robust and sustainable Indigenous futures on country in north Australia. There is a strong case for equitable resourcing of such initiatives.

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