

Charles Darwin Symposium 2006: Prepare for Impact! When People and Environment Collide in the Tropics.

A Resilient Future for Northern Australia? People, Economics and Policy Issues¹.

Rolf Gerritsen (Tropical Savannas CRC, Charles Darwin University)

Abstract

By 2050 northern Australia will have seen significant population growth. The population will have grown from the current 600,000 (approx) to about 750,000 to 800,000. However, this population growth rate will probably be about half the rate for the rest of Australia. So northern (and central) Australia will be increasingly sparsely populated relative to the rest of the continent. Most of the population increase will be from natural increase, except in the coastal Queensland segment of northern Australia where interstate immigration will have a significant impact. However, the settlement patterns of the north will be quite different from the rest of Australia. These, when interacting with the economy of the north, will provide some unique problems. The likelihood is relative economic (and ecological) decline if current policy settings are retained.

To reverse this dismal outlook requires radically new policy initiatives and perspectives. Central to this is the need to see northern Australia (and the arid rangelands) as a total social, ecological and economic system. That recognition will suggest different solutions to the social, economic and ecological possibilities than available under current policy parameters.

¹ This paper arises from a workshop within the Tropical Savannas CRC. I acknowledge the influence of Gordon Duff, John Woinarski and Stephen Garnett, without attributing any of my analysis or conclusions to their responsibility.

Introduction

The current policy settings in northern (and central) Australia means that this area could become a serious social and economic (and ecological) liability to the rest of the nation within the next couple of decades. This is for two reasons: the nature of the region's demography and the likely nature of its linked social and economic development.

- Demographic development

By 2050 northern Australia will have seen significant population growth. The population will have grown from the current 600,000 (approx) to about 750,000 to 800,000. However, this population growth rate will be about half the rate for the rest of Australia². So northern Australia will be increasingly lightly populated relative to the rest of the continent. It will contain about 2.5% of the Australian population, down from around three per cent in 2005.

Most of the population increase will be from Indigenous natural increase, except in the coastal Queensland segment of northern Australia where interstate immigration will have a significant impact. The region will attract relatively few overseas immigrants when compared with the major capitals of eastern Australia and Perth.

However, the settlement patterns of the north will be quite different from the rest of Australia. In south east and south west Australia there is currently a degree of rural depopulation occurring that is seeing the growth of regional "soak" cities (like Albany, Shepparton, Wagga, Tamworth and Toowoomba) only slightly interrupting a steady drift of people to the major capital cities and the coastal littoral. In south eastern Australia most small rural towns are either in decline or feature population stasis. In addition as aggregation of farm properties continues, rural population densities are declining. But the population growth and settlement patterns of northern (and central) Australia will be very different.

- Settlement patterns

There will be three particular features of population and settlement patterns in the north that will set it apart from the rest of Australia:

1. The bigger cities will grow and the middle sized towns will remain static.

Between now and 2050 there will certainly be a significant drift of population to the north Queensland coast and Townsville and Cairns will probably grow from intrastate and interstate migration. Darwin is also likely to grow from 100,000 to 150,000 over the next half century, in aggregate mostly from intra (and some inter)-state migration. These larger cities will be characterised by exceptional levels (by the standards of the rest of the Australia) of in and out-migration.

² This assumes that the population of Australia will be between 28 and 30 million in 2050.

Middle sized cities and towns like Mt Isa, Kununurra and Katherine will grow slowly if at all. Small towns like Derby, Pine Creek and Croyden will not grow unless there is significant urban drift from their surrounding (mostly Aboriginal) hinterlands. Because of the way that large multinationals have altered over the past two decades, even large scale mining developments are not likely to alter this pattern (ref Gerritsen 1995).

2. The economic decline of the inland service centres and mining towns

The mid-sized and small towns of the north will stagnate. They will be characterised by out-migration of young non-Aboriginal persons. In addition, the composition of their populations will change. The proportion of Aboriginal persons normally resident in places such as Tennant Creek, Halls Creek, Cloncurry, etc will rise steadily, with significant local social and economic implications. Some of this Indigenous increase will be from natural population growth rates, some the result of in-migration from Aboriginal settlements in these towns' hinterlands.

3. The rise of Aboriginal settlements

This will provide the most marked contrast with the rest of Australia. Aboriginal fertility rates are substantially higher than the national average (at about 2.9 versus 1.7). This, coupled with slowly improving mortality rates and a very young demographic structure, will mean a relative population explosion on Aboriginal communities across northern Australia in the near future. The Aboriginal fertility rate will continue at around three for another decade or probably two. Improved technologically-led medical services will probably continue to increase life expectancy. This means that there could be up to 300-400 Aboriginal settlements with populations greater than 250 across northern Australia, and a number with populations greater than 5,000 people. This will create an unusual settlement pattern compared with the present in that the population density of northern Australia's non-urban areas will rise, in direct contrast to the declining population densities of rural southeast and southwest Australia. This effect may be masked by greatly increased circular mobility by Aborigines between their "home" settlement and nearby regional services centres.

These demographic and settlement phenomena are both a cause and a consequence of the way northern (and central) Australia are developing. They arise because the northern economy is growing but not developing.

The north: a permanently marginalised economy?

Some discussion of the economic development of Australia's tropical savannas derives from an explicit or implicitly optimistic "big picture". This thinking focuses upon the savannas' vast natural resources – water, land and minerals – and assumes that with the right leadership (especially government subsidisation of large economic projects, as in the Ord River Scheme or the Alice Springs-Darwin railway) the development potential of the north will be realised (eg. Tyrrell 2005).

By contrast I consider that northern Australia has chronic economic development

problems that will inevitably economically marginalise the region as the 21st Century proceeds. Over the next 50 years – assuming present policy settings – the region’s economic growth (especially per capita) will be less than for Australia as a whole. There may be temporary growth spurts, usually associated with large mining or oil and gas projects, but on average economic growth will be slower than for the nation as a whole. That portends continuing problems with economic opportunities in the region (as evinced by the out-migration of skilled and qualified young people) and, even more seriously, a deepening of the relative poverty and disadvantage of the region’s growing numbers of Aboriginal people. Income distribution in northern society will not be bell-curved. This promises the sort of social conflict that then reduces investment and further deepens the maldistribution of economic opportunities. And so on.

There four main features of north Australian economic marginalisation are:

1 Industry sector stasis

The industrial sector structure of northern Australia was the same in 2001 as it was in 1981. In other words, there has been economic growth but not economic development. That will continue. Unless there are radical policy changes, we cannot expect a silicon valley or even the expansion of knowledge-based businesses relative to the total number of businesses. The public sector, which has a disproportionate share of the brain workers, will not expand its contribution to economic development.

2 An encapsulated export sector

The current export sector of northern Australia is principally fish and agricultural produce, live cattle, mineral and petroleum products (and by some economic definitions) tourism. This is the “efficient” (in the terms of orthodox microeconomics) sector of the northern economy. This sector (fisheries, some tourism and agriculture aside) has poor multipliers into the northern economy. So the export sector, which drives economic upswings and defines economic downswings, makes insufficient contribution to the savannas economy to alter its basic dependent, peripheral industrial structure.

3 Public sector inefficiency

This has two aspects. Ineffective and inefficient service delivery and – in the case of the NT – public sector indebtedness (in part because of the post-self government history of inefficient subsidisation of major projects) which gradually closes off options for governments to stimulate sustainable and endogenous economic growth. The inefficiency of service delivery flows from the overlap and confusion between the funding levels of government. The ineffectiveness of government service delivery derives from the geographic centralisation of the bureaucracy and program management within the public sector over the past 15-20 years (Gerritsen 2000), as well as the poor design of services with regard to social, environmental and economic need in the savannas. With regard to the latter point, most service delivery is bedevilled by an assumption that the major Aboriginal settlements of the north are “communities” when that is not the case (cf Gerritsen & Straton, forthcoming). Basing a service delivery system on an incorrect paradigm almost guarantees that services will not produce efficient or effective outcomes.

4 Impoverishment and social problems on Aboriginal settlements

This hardly needs spelling out. But it will become more serious unless radically new perspectives on the potentials of Aboriginal development are adopted.

There are other – more strictly economic - factors that in a globalised economy portend economic marginalisation.

1 An inefficient labour market

The north Australian labour market is much less efficient than the national labour market. That means that skill shortages take longer to clear and the region has not grown its own skilled/qualified workforce but depends upon immigration. That is one reason any new large mining project will use fly-in/fly-out labour. The structure of the northern labour market also is different in ways that both reflect the suite of regional industries (eg there are proportionately more labourers in the workforce because of the dominance of the mining and construction industries and poor educational outcomes) and inhibits flexible adjustment to changing economic circumstances. For instance, to continue the example, labourers are not much use if you want to participate in a dot com-led services enterprise boom.

2 Welfare dependence reducing the local “market”

Whatever the economic scenario, strong population growth can be expected from the Indigenous segment of the northern Australian population. This group will continue to have high birth rates and increasing life expectancy. And it will continue to be welfare or income transfer dependent. It will be beyond the margins (geographically as well as in terms of qualifications/skills) of the conventional capitalist economy and current policy approaches.

That is not to say that there are not currently worthy efforts to create Aboriginal employment but to say that the scale of the problem (conventionally defined, a point to which is shall return below) is beyond the present capacities of State and Territory governments. A burgeoning Aboriginal population living in poverty will not provide the large domestic market that would drive endogenous capitalist enterprise development.

3 A lack of innovation

This is difficult to demonstrate (unless you address the very skinny data on patent applications/registrations or ABS measures of corporate spending on R&D). However, there are proxy measures for this factor. One is the per capita ICT connections. Another is business start-ups. Per capita educational achievement is a less useful measure except for the supply of skilled professionals. On all these measures the figures for northern Australia look dismal.

It is most likely that over the next fifty years, tropical savanna (and rangeland) Australia will be permanently marginalised economically unless rethinking as to what constitutes economic development leads to different outlooks and strategies from those of the past 50 years. To do that we need to reconceptualise the economy of the north.

Reconceptualising the northern economy

Rather than focusing upon industry-specific large projects, let us think of the northern economy as being within a total social, economic and ecological system. This is the human ecology approach and is scarcely a new idea (eg see Park 1936). In adapting the human ecology paradigm new possibilities suggest themselves. In presenting these, I acknowledge influences from human ecologists and Jon Altman's thesis about the hybrid economy (Altman 2006).

Suppose we consider the tropical savannas (and the arid rangelands) as part of a national estate in which all Australians have an interest, that interest being in its social and economic resilience and its ecological sustainability. Resilience and sustainability at present are not self-evident and indeed are probably threatened. If we accept that point, and its corollary that the economics, society and ecology of the north are interlinked, then we can see the region as a vast human ecological system.

That system, by incorporating the traditional/communal economy of the region's Aboriginal people, can provide more positive economic potential than if the current situation continues. If that incorporation does not occur then ecology and social institutions will suffer as the people and communities of northern Australia become less resilient, in the sense of being able to manage unplanned changes in our economic environment (Berkes & Folke 2000, p.21).

A preliminary diagrammatic presentation of the constituent elements of this new paradigm for northern economic development is presented in figure 1 below. In essence it sees the system as necessarily incorporating three economic sectors, the conventional public and private sectors, but also a communal or hybrid (Altman 2006) sector that is within the Aboriginal domain. In a sense this communal domain has echoes in other parts of the world, in the cooperative movement but especially in the management of common pool natural resources (Ostrom 1990). This is a paradigm shift because in this system, Aborigines become a constituent of future economic development and not just an economic "problem" that has to be solved.

The initial hypothesis is that economic opportunities can be or should be available across the three sectors of the economy. That means that the state, the private sector, and the communal sector should be capable of generating income producing activities for all the people of northern Australia. These income producing activities may not generate similar levels of income but that will be in part a consequence of the institutional rules by which each sector operates.

The new economic framework of northern development will structure around six production factors and the interactions between the three sectors. It does not imply that conventional "capitalist" enterprises will not continue to operate competitively within a globalised market. It merely sets the agenda for investigating if elements of public and private production systems could be enhanced by better interactions with the communal system. For example, the state (in this case the Commonwealth) could encourage Aboriginal enterprises through modification of its regulatory tax regime (Stanley 2002).

Figure 1: The New (Human Ecology) Economy of Northern Australia³

Production Factors	Economic Sector		
	State	Communal	Capitalist
Ecosystem	regulation	natural balance	sustainability vs exploitation
Technology	promoter	traditional	market (cost-benefit)
Knowledge	research/ provider	traditional	applied/ adaptive
Property rights	regulation	communal	individual
Fiscal flows	taxes & payments	dependence	market (profits)
Capital	infrastructure	communal land	market investment

The potentially productive interactions between the three sectors have to be further analysed and fleshed out. A few examples may clarify this point about productive interactions. For instance, the Aboriginal “economy” does have engagement with the capitalist economy, most notably in the area of art. As Altman (2006, pp.4-5) notes:

“The Australian nation loves Aboriginal art and associated spin-off benefits to the tourism sector and commerce, but fails to see that arts success is predicated on land rights, or that artists need a degree of cultural and geographic distancing from settlements to succeed”

Obviously Aboriginal traditional and contemporary music and eco-tourism provide potential opportunities on the scale of their arts production, but as yet they have not had the governmental support that the arts industry has had over the past 20 years. At present Indigenous music production in the NT is supported by programs in three agencies of the state, this University, the Corrections Service and the NT Music School. In addition Arts NT, through its regional festivals program, and Skinnyfish, a small private marketer, provide a “market” for Aboriginal music. An increased effort here is justified on purely economic

³ This diagram is adapted from Altman 2006 and Berkes & Folke 2000, Figure 1, p. 15.

grounds. Contemporary Aboriginal music could employ a lot of young men. The positive externalities of that include savings in law and justice and health services, as well as better outcomes from educational services. So limited support through state fiscal flows makes sense as an investment. But the policy makers need some quantification of the returns on this “investment” before they will countenance new approaches to social and economic development. Hence the research project mooted here.

I do not categorise the New (Human Ecology) Economy as a model but as a framework for analysis and research. In effect it is an agenda that will be researched over the next two to five years.

We have much research already available, mostly by anthropologists, that allows us some idea of the communal economy. Some areas, such as Aboriginal approaches to land management, are relatively well researched (eg see Baker, Davies & Young 2001). Other matters, especially in the area of Aboriginal responses to the mainstream capitalist economy and its institutions will require further work.

The basic structures for a communalised economy exist. We know that Aboriginal persons in northern (and central) Australia retain their historic connection to land, to maintaining that land and to hunting and fishing on that land (NATSISS). Organisational forms such as the CDEP provide one economic organisational platform for linking the communal economy into productive interactions with the “mainstream” economy.

Some work has already been done to incorporate the Aboriginal communal economy into land management, in particular using traditional burning practices (Dyer et al 2001, p.50-54). This is of utility not just for communally-owned lands but for privately controlled pastoral properties. So a potential market exists for traditional Aboriginal land management knowledge. Indeed this knowledge may be vital for the successful adaptive management (Holling 1978, Walters 1986) of our natural resources in northern Australia. Equally, potential markets exist for Aboriginal knowledge about flora and fauna. Securing these markets requires research and education, and possibly government regulation. Governments can intervene to assist the marketisation of Aboriginal-controlled resources (though not always positively as in the Commonwealth’s recent precipitate prevention of crocodile culling safaris).

Other more conventional markets for Aboriginal labour exist in the current industries of northern Australia. For example, the cattle industry on the tropical savannas has an annual labour force turnover rate of about 50%. Clearly that hampers efficiency. The turnover is a combination of the low rates of pay in the industry and the changes in whitefella social expectations, so that people are reluctant to live for a long time in conditions of social isolation and geographic remoteness. Because Aborigines are mostly committed to their country, young Aboriginal men would be the ideal labourforce for cattle enterprises⁴. Indeed, they have done so within relatively recent memory. However, unless they are teenage boys, these young family men are inhibited from participation in the cattle industry because of

⁴ The Kidman cattle company has recently begun a scheme to train and employ young Aboriginal jackaroos.

Commonwealth regulatory penalties with regards to family benefits and unemployment benefits. In this case the Commonwealth's regulatory rules create a marginal tax regime of 100 per cent if these men take dry season work in the cattle industry. These are problems that need to be solved.

Conclusions

This paper is not merely to make a moral case for recognition of the traditional Aboriginal economy and its potential contribution to a new framework for economic development in the north. A moral case exists but it would never convince the hard heads that make policy within the Commonwealth Treasury. The test I would apply is the economic opportunity cost test of my approach against the costs and effects of present policy paradigms.

Let me make the point with a simple example of providing law and order within a large Aboriginal settlement. Police in remote locations are expensive (in accrual accounting terms they cost over \$100,000 per capita in a remote settlement). Police often have spouses and these frequently obtain employment on the community. This situation arises from the difficulty governments have in securing people willing to live in remote communities and so encouraging such behaviour. The net result is an expensive justice system and reduced Aboriginal employment. Alternatives based upon Community Patrols and enhanced powers for Aboriginal police would produce a better socio-economic result for each dollar of outlay.

This is not an isolated example. All Territorians are aware of the Maningrida sea rangers' success in discovering illegal fishers in coastal waters. On a per-dollar basis they are almost certainly more cost-effective than the Commonwealth's coast watch service. Altman (2006, p. 5) notes that Aboriginal natural resource management is far cheaper than for government-run national parks.

This paper makes a modest call for intensified research into the integration of the traditional communal economy into a new paradigm for economic development in northern (and central) Australia. Hopefully this research will provide the information that could provide diversified economic development for resilient communities within sustainable ecosystems.

References

- Altman, J. (2006), The Indigenous hybrid economy: A realistic sustainable option for remote communities? Canberra: ANU Centre for Aboriginal Economic Policy Research, Topical Issue No.2/2006.
- Baker, R., Davies, J. & Young, E. eds. (2001), *Contemporary Indigenous Management of Australia's Lands and Coastal Regions*. South Melbourne: Oxford University Press.
- Berkes, F. & Folke, C. (1994), Investing in Cultural Capital for the Sustainable Use of Natural Capital, in A. Jansson, M. Hammer, C. Folke & R. Costanza eds, *Investing in Natural Capital: The Ecological Economics Approach to Sustainability*. Washington, DC: Island Press.
- Berkes, F. & Folke, C. (2000), *Linking Social and Ecological Systems. Management Practices and Social Mechanisms for Building Resilience*. Cambridge: CUP (paperback edition).
- Dyer, R., Jacklyn, P., Partridge I., Russell-Smith, J. & Williams, D. (2001), *Savanna Burning: Understanding and using fire in northern Australia*. Darwin: Tropical Savannas CRC.
- Gerritsen, R. (2000), The Management of Government and its Consequences for Service Delivery in Regional Australia, in Phil McManus & Bill Pritchard eds, *Land of Discontent: The dynamics of change in rural and regional Australia*. Sydney: University of NSW Press.
- Gerritsen, R. (1995), 'Capital Logic' and the Erosion of Public Policy in Papua New Guinea, in *Mining and Mineral Resource Policy Issues in Asia-Pacific: Prospects for the 21st Century*, Donald Denoon *et al* eds. Canberra: Australian National University, Pacific and Asian History Division Monograph.
- Gerritsen, R. & Straton, A (forthcoming), Coping with a Tragedy of the Australian Aboriginal Common.
- Holling, C. (1978), *Adaptive Environmental Assessment and Management*. London: Wiley.
- NATSISS (2002), *National Aboriginal and Torres Strait Islander Social Survey*. Canberra: Australian Bureau of Statistics.
- Ostrom, E. (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: CUP.
- Park, R. (1936), "Human Ecology", *American Journal of Sociology*, 42: 1-15.
- Stanley, O. (2002), The potential use of tax incentives for Indigenous businesses on Indigenous Land. Canberra: ANU, Centre for Aboriginal Economic Policy Research, Working Paper No. 17/2002.
- Tyrrell, P. (2005), The Role of Government in Major Developments in the North, in Tess Lea & Bill Wilson eds, *The State of the North. A Selection of Papers from the 2003 Darwin Symposia*. Darwin: Charles Darwin University Press.
- Walters, C. (1986), *Adaptive Management of Renewable Resources*. New York: McGraw-Hill.