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## EDITOR

For this second edition of ANZRSAI Sustaining Regions and Newsletter Rolf Gerritsen of Charles Darwin University has contributed an excellent article ‘Speaking Truth to Power’ on the design of regional development policy. Diana Gibbs has given permission for us to present her paper ‘Sustainability: An economic perspective for regional Australia’ on policy approaches to sustainability.

Sustaining Regions, the Newsletter of ANZRSAI invites contributions on research, policy and practice relevant to urban and regional communities. These can be commentary, articles, book reviews, and descriptions of policy initiatives. Contributions must reveal the author; they will not be refereed, and will not enjoy the copyright protection of a refereed journal. Authors seeking refereeing and copyright protection should approach Australasian Journal of Regional Studies www.anzrsai.org.

In recent times several people have suggested to me that Australian and New Zealand (division of) Regional Science Association International, a title which exactly reflects our membership of the Regional Science Association International, does not fit well with common usage of the words ‘regional’ or ‘science’.

Common usage of ‘regional’ in our part of the world is a bounded locality which is not a major city. For us regional means any bounded locality and can apply to any place. Common usage of ‘science’ in our part of the world is physical or biological science, not geography, economics, sociology or about practice and policy. For us science means inquiry, in our case inquiry into phenomena in places.

Perhaps we need a motto which would help people better to understand our interests. It needs to be short, say three words or less, and to the point. Some ideas might be ‘All About Places’, ‘Research, Practice, Place’. We invite your suggestions to anzrsai@anzrsai.org .

## CONTRIBUTED PAPERS

# *Speaking Truth to Power: Researching the future of northern and remote Australia*

Rolf Gerritsen (Charles Darwin University)

**Introduction**

A core issue that academics interested in remote and northern Australian regional development need to consider is how will this huge region be positioned for a prosperous and sustainable future. This may seem a surprising, even redundant, focus given the current hype about Australian resource industry developments; surely prosperity is guaranteed for this region? But there are paradoxes and down-sides to current developments. So for researchers to influence outcomes that provide prosperity and social sustainability, they need to have some understanding of the future and what it portends for remote Australia. This research question has two aspects: the likely economic development of the region and the separate but paradoxically continuing marginalisation and impoverishment of its Aboriginal population.

**Economic Development: The "two-speed" economy.**

In late 2010 Cameco, a large Canadian mining company, moved its Australian headquarters from Darwin to Perth. At the time it was suggested that Cameco preferred Perth because the WA government actively supported uranium mining (the NT Government had said it would prevent the development of Cameco's Angela-Pamela uranium deposit near Alice Springs). But the reality is that Perth is "Mining Central" in Australia and many companies are currently shifting there. For example, at about the same time the Canadian transport company, CHC Helicopters, also moved its headquarters to Perth, in this case from Adelaide. This move happened after CHC won a large contract - $300 million over five years, with options that could extend the contract longer and increase its value to $500 million – with Woodside Energy, the owner and/or operator of a large slice of the North West Shelf oil and gas industry. Even before the Woodside contract CHC Helicopters was probably one of the largest helicopter companies in Australia. It employed over 400 people at 22 bases in all states except Tasmania. But the Woodside contract indicated that the company was shifting its growth focus from contract search and rescue operations and emergency medical flights, which had been the mainstay of its business, to providing logistical support to the resource industry. It announced that the Woodside contract would require 150 personnel to be based at Karratha, in WA's north-west.

These examples illustrate two aspects of Australia's so-called "two speed" economy: the concentration of a growth industry's central management in a growth metropole (ie Perth) and the demand for labour at the resource-producing periphery. The third element is that much of the value added in the mining industry is now being created in Perth. Although WA only employs 36 per cent of mining and oil and gas, industry workers (Qld. employs about 27% and NSW 21%, both mostly in coal mining), WA garners over 48 per cent of the mining industry's value-added. Perth has become the epicentre of a wide range of resource extraction services companies engaged in support logistics, mining construction and design services, IT, finance, explosives, etc., etc. Some of these – such as Leighton Holdings, Orica, Worley Parsons and Incitec – are now very large companies servicing resource extraction enterprises world wide. This is arguably the most significant sectoral development in the Australian economy since the growth of protected manufacturing in the 1950s, probably even more significant than the economic restructuring of the 1980s and nineties which featured/facilitated the growth of the services sector.

This development has national implications in changing patterns of demand for skilled and professional workers. Nationally Queensland is still the preferred migration destination, but WA is competing

strongly for skilled workers. In 2010 WA lured a net 1,127 migrants from Queensland and 639 from the NT; we can safely assume that all of these were skilled and professional workers. Currently about ten per cent of the workforce in the Pilbara is commuting from outside of WA.

In effect northern and remote Australia has become part of Perth's economic hinterland. The situation regarding Queensland is a little more complex because coal mining is serviced from a number of larger coastal regional cities, like MacKay. But Brisbane is not establishing itself as a resource extraction economic metropole in quite the same way as Perth. So, even though the Coal Seam Gas initiatives in Queensland and NSW portend large projects and massive investment, Perth-based companies (possibly via subsidiaries based in Brisbane, Gladstone etc) will still provide a substantial portion of the design construction and management skills.

The problem for remote Australia is the poor multipliers into the northern Australian region of this burgeoning resource extraction industry. Remote central and northern Australia will remain weakly coupled to the engine of Australian growth over the foreseeable future.

All this will be of some significance – socially and politically, as well as economically – if the so-called "super-cycle" of resource demand (principally created by the industrialisation of China and India ) continues over the next twenty or thirty years.

This pattern of economic development has features that necessarily impact on the governments of northern Australia. One, for example, is that the resource extraction labour force is largely supplied by Fly-In/Fly-out (FIFO) workers commuting from large towns often not even in remote or northern Australia (Queensland has a variation of this in Drive-In/Drive-Out workers commuting from coastal cities to the coal mines of the Bowen and Galilee basins). While only six per cent of workers in Perth are in the mining industry, about two-thirds of these are FIFO workers. Notwithstanding some public emoting (including by mining companies) about the "social/family" costs for FIFO workers, such FIFO arrangements are an ineluctable consequence of how mining companies have developed over the past three decades. For new "greenfields" projects, mining companies will no longer build a town to house their workers, if only because of the front-end construction costs as well as the associated exchange rate and interest rate risks. The provision of housing, education, health and other services for the workforce is left to the relevant State or Territory (and local) governments. The extra costs of running a mine with FIFO labour comes off the Commonwealth's company tax receipts. So FIFO makes eminent sense for mining companies; its only down-side (for mining companies) is that it exacerbates turnover and competition for labour. But governments have to worry about services, maintaining viable towns and relevant infrastructure; so they bear most of the social – and so fiscal - costs of resource extraction. None of this is likely to change in the near future.

**Indigenous aspects**

The economic development scenario described above will have minimal beneficial elements for the Aborigines of remote and northern Australia. Their relative poverty, poor education and disconnect from the development of the larger Australian economy will – assuming current policy settings – only get worse. Directly that is because Aborigines in remote and northern Australia generally lack the skills or aptitudes that allow them to participate in mining and resource extraction industries. They also lack the skills and aptitudes to access (let alone control) the large fiscal flows from government programs that are designed to ameliorate their disadvantage. These outlays mostly go to a legion of advisers and bureaucrats, leaving Aborigines in receipt of Commonwealth income transfer payments (welfare). In the NT, since the Intervention, even this control is qualified.

However, continuing Indigenous disadvantage will in part be because both Aboriginal society and the larger Australian polity contain paradoxes about the way forward. That is, that what is valued is internally contradictory. On the one hand there are advocates and some policies that value and privilege Aboriginal connection to and ownership of land, which has generally negative implications for access to mainstream economic opportunities. On the other hand there are public policies – usually under-resourced relative to need (eg the Northern Territory "growth towns") - that seek Aboriginal involvement in the mainstream economy. This paradox is replicated within Aboriginal society, where there is widespread recognition of a poverty that only "real" jobs can reduce, while at the same time patterns of social relatedness and demand-sharing are valued notwithstanding that they prevent the achievement of the individual advancement (social disengagement?) which is at the core of capitalist economic progress.

I am currently researching these complex matters with a view to delineating how to overcome some of these paradoxes and contradictions. Some of the results of this research portend approaches that need holistic root-and-branch reform of governmental operations and regulation. This will be needed if we are to get beyond the assimilation-versus-land rights/culture dichotomy that bedevils current debate and enervates public policy in the Indigenous sphere.

**Implications**

What are the implications of all this for northern Australia? Indigenous disadvantage, particularly in economic terms, will persist and become more scandalous. Resource-based towns in northern Australia will grow, but not commensurately with the economic importance of the resource extraction industries (Perth will get the value-added). The Northern Territory will remain a relative mendicant within the Australian federation. Darwin will continue to grow but the long term driver will not be resource extraction but probably new Commonwealth governmental expenditure. A pointer to this is that the current Defence Minister has ordered a "posture review" of the defence forces (ie where we put defence stuff like ships, planes and troops). That, together with an impending repositioning of American defence forces in the Pacific and SE Asia, which could lead to "joint facilities" use of Australian bases, means that defence expenditure in the arc from the Torres Strait to Fremantle will increase greatly in real terms in the future. This will impact directly on Darwin and probably Fremantle, plus - over the longer term - at least one other place within that arc (possibly Derby?). That, more than a temporary construction bubble from the impending construction of the $35B Inpex LNG plant, means that Darwin will grow into a larger centre. It is possible that Darwin will even grow to that tipping point where it generates services for an area greater than just its own jurisdictional hinterland, though that development is moot while its housing remains too expensive (something that the NT Government can affect). In any case neither Karratha nor Port Hedland is likely to match Darwin. Notwithstanding Premier Barnett's stated intentions to make them cities of 50,000 persons each, they are both too far behind currently and have even worse housing problems than Darwin. The economics of agglomeration is against them. On the down-side, the continued growth of Darwin will exacerbate the problem of urban bias in the Territory's public policy that leads to under-funded services to Aboriginal communities.

Researching public policy in remote and northern Australia is an exciting field. Researchers can make a real contribution to more socially inclusive and sustainable economic and policy developments, but only (following Wildavsky, 1979) if they speak truth to power.

Aaron B. Wildavsky. (1979). *Speaking truth to power: The art and craft of policy analysis* New Brunswick, New Jersey: Transaction Publishers.

# *Sustainability: An economic perspective for rural Australia*

Diana Gibbs
October 1998

## Short definition of sustainability

**Sustainability means finding a way to use all resources required to support human life and aspirations in such a way that we can keep doing tomorrow what we are doing today.**

A "sustainable" level of resource use can therefore be influenced by technological advances (and to a lesser extent by new resource discoveries), but we cannot make any assumptions as to how technology might develop in the future. This basic concept of "sustainability" can therefore be applied equally to economic and social development, as well as relating to environmental and ecological sustainability. True sustainability cannot be separated into "ecological" and "economic" components - the way we live in the world is either sustainable, or it is not. Anyone who thinks that we can be economically sustainable and not also environmentally sustainable is operating within too short a time frame.

But anyway, any such separation is unnecessary - true sustainability will involve no conflict between economic and ecological goals and needs. However, if this situation cannot be achieved in the short term (within existing technical abilities), then there must be a **trade-off** between meeting human needs, and maintaining ecological resources and environmental conditions.

There are no absolutes - **balance is required**. Where that balance is set will be up to the individuals and communities concerned. An attachment to this paper describes some of the "balances" identified by one leading group of environmental economists (Turner, *et al*, 1994).

## What this means

To sustain is to support without collapse. There are as many further definitions as you may care to suggest, but I shall stick with this one for the time being. In considering man's interaction with the environment, we face a basic conundrum - on the one hand, the majority of humans on earth are deprived of basic sustenance, and it requires increased levels of economic activity to address this problem. But on the other hand, increased levels of economic activity would increase our demand for all resources, and damage the environment (if current levels of demand are not already unsustainable).

On a global scale, the problem of sustainable development is this - how do we address the problems of inequality and poverty, in ways that do not affect the environment, so as to reduce humanity's future prospects. I will attempt to provide some insights into this problem from an economist's perspective.

## 1. Background

The history of concern about the sustainability problem probably dates back to the first emergence of general "environmental" concerns, such as Rachel Carson's "Silent Spring" published in 1962. Man's relationship with nature was also being examined by some philosophers, such as John Passmore (Passmore, 1974), as the world became increasingly more concerned with the way in which humankind was placing demands on the environment.

In 1972, the Club of Rome's study entitled "The Limits to Growth" (Meadows, 1972) was published. This represented the first emergence of issues relating to sustainability into the political and public arena. This study explicitly linked concern for the natural environment to the problem of economic development in the less developed countries (LDC). As a result, there was considerable concern amongst the LDC

that environmental pressures on the part of the DC could lead to the blocking of their development priorities, in the interests of conservation.

The Limits to Growth (TLTG) study drew two main conclusions :

a) the finite nature of the environment meant a finite world - the world economic system could not expand indefinitely. There were therefore environmental limits to growth - however, collapse was not either inevitable or necessary, because
b) if actions could be taken to modify current trends, the world economic system could develop a configuration that would be "sustainable far into the future" (Meadows, 1972).

Most economists were uncomfortable with TLTG, as it was seen as being contrary to the objectives of economic growth - which was, in turn, seen as the only feasible way to alleviate world poverty. The prospect of sustainability offered by TLTG was widely unappealing - that collapse was avoidable only if there was a major redistribution of wealth and income from rich to poor. This redistribution would have to occur between, and within, nations.

The Brundtland Commission report (WCED, 1987) stated that "sustainable development seeks to meet the needs and aspirations of the present, without compromising the ability to meet those of the future". It contains within it two key concepts :

a) the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given
b) the idea of limitations imposed by the state of technology and social organisation on the environment's ability to meet present and future needs.

It was a brilliant political document, which was rarely criticised. As a result, sustainable development was now on the agenda throughout the world. The contrast with the reception given to TLTG is interesting - both studies tell similar stories, and reach similar conclusions. In both, the environmental constraints to growth are identified and discussed, and both argue that current trends cannot be continued. Both studies concluded that radical change is required in the way that the world economy is operated. Perhaps the main reason that Brundtland was well received, while TLTG was rejected, is one of **timing.** In the 15 years between the two, an increased public awareness of the systems relationship between economic activity and environmental conditions has developed - largely because of the debate started by TLTG.

However, there was also a fundamental difference in the "bottom line" conclusions of the two reports. In contrast to TLTG, Brundtland **encourages economic growth to continue** in the LDC - which means that it will also continue in the developed world because of the global nature of the world economy. Indeed, Brundtland calculated that the economic growth rate required to alleviate poverty was around 3% to 4% in the industrialised countries. In the opinion of Brundtland and her fellow researchers, growth at these levels can be sustainable if:

- there is a continued shift towards less matter and energy being used in industrial processes, and
- improved efficiencies are achieved in matter and energy usage.

The Brundtland report contained some important elements, which are central to a consideration of what sustainability is. These included:

- an acceptance of the "interconnectedness" between the impacts that economic activity can have on the environment, and the resultant effects that environmental damage can have on economic activity
- the need to consider poverty levels, in terms of deprivation and inequality, at a world scale. In order to alleviate poverty, not only must there be growth in output, but also output must be redistributed.
- understanding that affluence is still an objective for the developing world, and that to meet these objectives, continued national economic growth is required.
- the realisation that sustainability is an economic problem - because economics is, essentially, the study of ways in which humans seek to use available resources to satisfy their material needs and aspirations.

The World Conservation Strategy (prepared as a lead-up to the Earth Summit in 1992) took the Brundtland conclusions a step further. It defined "sustainable development" as a set of strategies and tools which respond to five broad requirements:

1. the integration of conservation and development
2. the satisfaction of basic human needs
3. the achievement of equity and social justice
4. the provision for social self-determination and cultural diversity
5. the maintenance of ecological integrity.

Each of these items is a goal in itself, and also a condition for achieving the others - thus underlining the interdependence of the different dimensions of sustainability and the need for an integrated, multidisciplinary approach to the achievement of development which is sustainable. These features of both the Brundtland report and the Earth Summit paper therefore seem to stress the need for "systems thinking" in any approach to dealing with sustainability issues. The Australian government has also examined these relationships (ESDSC, 1992) at the time of the Earth Summit, and concluded that "a strong growing and diversified economy is a critical element in achieving ESD. Economic growth provides employment (and therefore material welfare) to all Australians. It also provides the resources needed to protect and maintain environmental amenity."

The consideration of what sustainability means would therefore appear to be essentially an economic question. Even the World Bank now accepts that there has been a fundamental change in the way governments and development agencies think - that "environment" and "development" are not mutually exclusive. The Bank (Munasinghe, 1993) recognises that a healthy environment is essential to sustainable development **and** a healthy economy.

Kenneth Boulding, a US economist, perhaps started the process on 1966, with the publication of his essay "The Economics of the Coming Spaceship Earth" - influenced by the results of the Apollo mission. This work introduced the idea that the nature of capitalism would need to change from what he termed a "cowboy economy" to a "spaceship economy", if the planet was to remain habitable. We are now midway through what Peter Ellyard calls the transition from the disappearing cowboy culture of the Modernism paradigm to the emerging spaceship culture. The paradigm of this transformation is Post-Modernism - which does not stand for anything except that Modernism must be deconstructed and replaced with something else. Ellyard is therefore continuing the use of the ideas first proposed by Boulding. Modernism views humanity as being contrary to nature, with environment and development being incompatible. A Post-Modernism viewpoint (Ellyard suggests we call it Planetism) considers humanity as a part of nature, with environment and development being totally compatible. I support this view - we can (and must) do well economically by doing ecological good.

In this case, can an economic approach provide a conceptualisation of sustainability? I will provide a few examples of the economist's perspective on the sustainability problem, which will serve (I hope) to indicate that:

- sustainability is fundamentally an economic problem
- an economic viewpoint can provide some suggestions for improving our performance
- a systems approach is required.

## 2. An economic perspective on the sustainability problem

From the Planetist view of humanity as a part of nature, I have taken an unapologetic anthropocentric view of the problem. The classic philosophy question provides a good analogy here - "If a tree falls in the forest when there is no-one there, does it make a noise?" The debate centres around whether noise is an absolute, or only the effect of air vibrations on the ear-drum of the listener. Just as we could debate whether noise therefore requires listeners to exist, so too can we debate whether issues of sustainability would arise without humankind living on the planet. I would suggest that they would not - it is our manipulation of the natural resources of the planet in order to satisfy the requirements of life for an increasing population that creates them.

If humankind is central to the issue of sustainability, then economics is, too. Remember the origins of the words *economics* and *ecology* - both are derived from the Greek *oikos*, meaning household. Ecology is the study of nature's housekeeping, while economics is the study of housekeeping in human societies. The two are so closely linked as to be two sides of the same coin - if conflict is seen between economic and ecology, then the time frame being used is too short.

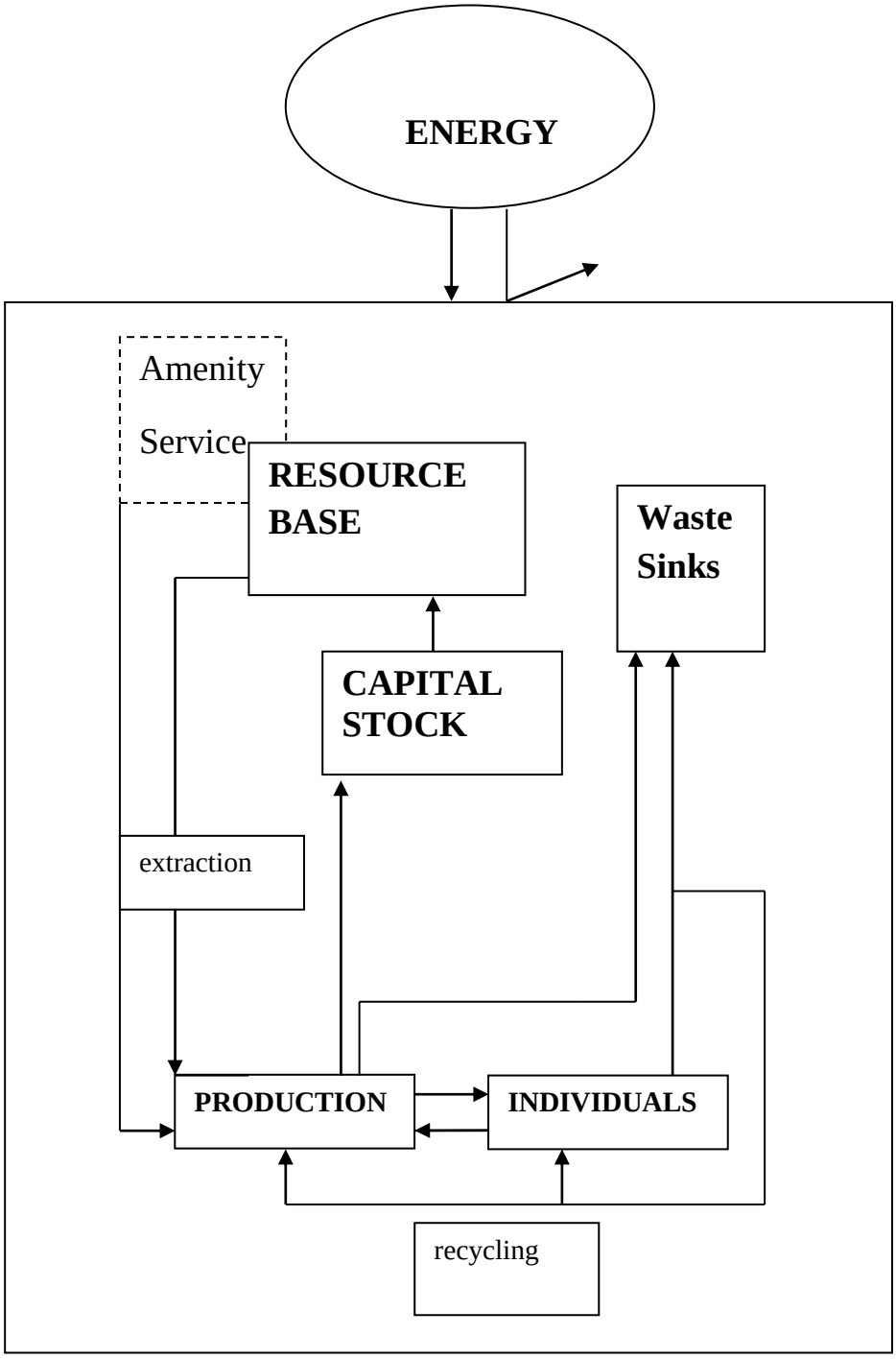
From an economic viewpoint, the "sustainability problem" is that of managing economic activity so as to address inequality and poverty in ways that do not undermine the base for future economic activity. Dealing with the problem therefore involves:

- A human dimension
- Recognition of the interconnections between "the economy" and "the environment"

Here is an economist's view of the way we use the natural environment - which provides some understanding of what is required to achieve "sustainability". In the late '60's, a seminal economic paper entitled "The Tragedy of the Commons" (Hardin, 1968) considered the economic inefficiencies which arose from a lack of property rights existing over certain fundamental resources. Resources which are considered to be a "public good" tend to be over-exploited - witness fisheries stocks, clean air, and our river systems - with Hardin using the examples of the English system of grazing on "commons", or public pastures. In the absence of private ownership (where efficient economics requires the management of a resource for maximum production), public policy must provide a framework to ensure that sustainable use of resources prevails - a use rate which equals the natural growth and/or replenishment rate of a resource. This has happened (largely) in the case of the management of public forests in Australia.

But what about finite resources? The diagram below indicates the way that economic activity occurs within the natural environment, which can be characterised as a **closed system**. Only energy is added to this system - from the sun - with all matter being contained within the system. The biosphere receives inputs of solar ration, some of which is absorbed and drives biospheric processes, and some of which is reflected back into space. No matter enters at all - apart from meteorites and the occasional spaceship.

# ECONOMIC ACTIVITY IN THE NATURAL ENVIRONMENT




The environment performs four functions in relation to economic activity:

a) a resource base
b) an amenities base
c) a waste sink
d) the provision of life support systems

These functions can be summarised (Common, 1995) to state that while economic activity basically involves production by firms, and consumption by individuals (with complementary flows of products and services between the two), a third type of input to activity involves the use of resources extracted

from the environment. Once produced, not all production is consumed - some is added to capital stock, which can also be used in production. There is also a flow of amenity services passing from the environment to individuals, without the intermediation of productive activity. Production and consumption both involve the generation of wastes, which are discharged to the environment - some of which may be recycled for re-use by production or consumption processes. The fourth function is the provision of life support services which hold the whole system together.

The linkages between economic activity and the environment are pervasive and complex - especially as all four classes of function interact with each other. Consider TLTG's conclusions - environmental limits mean that economic expansion must soon come to an end, making it necessary to plan for dealing with poverty and inequality in a no-growth world economy. Brundtland started from a similar understanding of the nature of economy-environment interactions - but came to the conclusion that growth can and must continue, in order to deal with poverty and inequality. The difference was in the form that growth would take - it would consist of **sustainable development**.

As far as I can tell, the difference between these two positions really hinges on the possibility of substitution. TLTG's position is that the potential for limiting demands on the environment and its function is limited. The sustainable development position of Brundtland takes the view that by virtue of such substitutions it is possible for the world economy to continue to grow without increasing the demands made on the environment beyond limits that it can tolerate. All that is certain is that great uncertainties exist regarding substitution possibilities - technical dimensions, the systematic implications, and identifying the critical areas where substitution is required. Our thinking has certainly changed - the critical shortage of fossil fuels that precipitated the "oil shock" of the 1970's has been replaced by the 1990's concern over excessive use of such fuels, in terms of the capacity of the atmosphere to absorb carbon dioxide.

So what is the economic perspective on this problem? If we consider resources as fixed and finite, then our problem is to slice the cake to meet the needs of all components of this closed system. But in a cake-eating world, the cake is clearly finite, and cannot therefore be consumed equally and indefinitely - if we assume an infinite time horizon. Sustainability is impossible in a cake-eating world.

But we all want to have some of the cake. One solution to this problem is offered by the so-called Hartwick rule (Common, 1995). Basically (stripped of the algebraic formulae so beloved of classical economists), this rule states that any "rent" derived from use of a resource (that is, the difference between the cost of using the resource and the price obtained for the product derived from that use) should be invested into capital stock. This means that resource rent should be allocated to productive investment, and not used for current consumption. Hartwick's rule means that "rent" is not consumed but is added to capital stock - sustainability can therefore be attained, if:

a) the increased capital stock will support future production, such as by having financial resources available for R&D, and/or for reversing the degradation of physical assets such as land and water.
b) substitution possibilities exist such that it is feasible to have constant consumption indefinitely - technology, etc., can allow sustainable development to be achieved (e.g., solar energy - directly, or indirectly via biomass).
c) the population requiring support is not growing. If we assume population increase, then the feasibility of constant resource consumption per head (i.e., sustainability) will require some additional assumptions to be made about technical progress.

Hartwick's rule is clearly a mathematical parable, rather than an empirical proposition. But I would suggest that this rule is of great interest to us in considering the sustainability problem, for at least three reasons:

- It is a convenient way to demonstrate how economics conceptualises the sustainability problem, albeit from an anthropocentric viewpoint, by (in effect) defining sustainability as constant consumption by humankind.
- It promotes the key role of substitution possibilities in achieving sustainability, and the important input of technology
- It makes good intuitive sense as a guide to prudent behaviour - if consumption involves the depletion of an asset, it is a good idea to build up assets in another form to replace it.

Other economists have come to the same conclusion, but described it differently. For example (Turner, *et al*, 1994) some economists suggest the concept of **capital bequests** as the answer to sustainability - compensating the future for the damage that our activities today might cause. Others propose a system of "green accounting", in which exports of exhaustible resources are not treated as income in the preparation of national accounts, but as the sale of **capital as**sets (Coombs, 1990). This would, in effect, reduce national wealth, and provide a more sustainable view of national economic "health".

This analysis has presented the natural environment of the planet as a closed system - energy is the sole addition to this system. Despite this "addition", a closer examination of **energy use** is clearly important to an understanding of the sustainability problem. Energy accounting - the analysis of energy use - can be one useful way of thinking about sustainability issues, and particularly in the context of agricultural production.

The following table (Common, 1995) presents "food provision energy accounts", and is effectively a comparison of energy use in different systems of agriculture.

*Energy in MJ per hectare per year:- across different agricultural systems*

| | *Hunter/gatherer* | *Pre-industrial*[1] | *Semi-industrial*[2] | *Industrial*[3] |
|---|---|---|---|---|
| **Labour** | 0.37 | 5650 | 460 | 20 |
| **Animals** | | 960 | 2180 | - |
| **Machinery** | | 230 | 1010 | 18590 |
| **Fertiliser** | | | 450 | 11660 |
| **Pesticides** | | | 60 | 1090 |
| **Drying** | | | | 4480 |
| **Irrigation** | | | | 29620 |
| **Total Inputs** | 0.37 | 6840 | 4160 | 65,460 |
| **Output** | 2.90 | 281,100 | 22,900 | 84,120 |
| **Output/Input** | 7.8 | 41.1 | 5.5 | 1.3 |
| **Output/Labour** | 7.8 | 49.7 | 49.8 | 4206.0 |

1.Chinese peasant farming, 1935-37. 2.Rice-growing in the Philippines 3.Rice-growing in the U.S.A.

The hunter/gatherer system of food production uses only human energy input, while pre-industrial agriculture uses animal and human labour, as well as some energy involved in making the tools used. There is a large increase in both input and output of energy. The semi-industrial system of agriculture uses limited amounts of inputs provided by an industrial sector, while an industrial system makes extensive use of industrial inputs and no use of animal energy. In the industrial system output of energy

per hectare per year is much greater than in the semi-industrial system, but lower than in the pre-industrial - although much less human labour is required.

Based on an analysis of energy use, industrial agricultural systems (such as irrigated rice production in an industrialised economy) are much less efficient food production processes than pre-industrial systems - and less efficient than hunter/gathering. Industrial agriculture is not constrained to the parameters set by the capture of solar radiation and the conversion efficiency of plants and animals, because of the high use of fossil fuels - both direct use, and indirect use via use of fertiliser and crop protection chemicals. However, industrial agriculture does give high labour and land use efficiencies.

Industrial agriculture has, to date, been dependent on the depletion of stocks of fossil fuel resources - energy accounting would suggest that this type of agriculture is therefore not sustainable. Can we do better? Yes we can - think back to the Hartwick rule, which says that the "resource rent" obtained by production should be re-invested in capital stock. This is what farmers do at an individual level, when they "invest" in the maintenance of the land and water assets on which their production is based.

Understanding energy use is important to understanding sustainability - energy is the only thing added to the closed environmental system in which we operate. Using a concept of EROI - energy return on investment - explains why alternative energy sources such as biomass (and nuclear fusion) are not yet in widespread use. More energy is required to exploit these sources than can usefully be generated from them. If more "resource rent" was invested in their development, this might change.

We need to recognise that energy is the potential to do work - it is therefore a characteristic of a thing, and not a thing itself. Entropy, which is the measure of unavailable energy, is constantly increasing following the second principle of thermodynamics (heat moves from a hotter to a colder body). This conversion of energy to an unavailable form is not reversible despite the first principle of thermodynamics (energy is neither created nor destroyed, only converted).

Some economists have considered the second principle as the "taproot of economic scarcity" - if energy conversion processes were 100% efficient, a lump of coal could last forever. Some industrialists are now profiting from investment in energy saving devices - installing such devices at vastly reduced cost for customers, who benefit from reduced power bills, and at the same time "selling" the saved power to the utility under a contract to "produce" power. A good example of economics and sustainability being achieved in harmony.

## 3. Implications for future of rural Australia

Since we cannot fully define what we mean by "sustainability", then it follows that we have no fully satisfactory methods of measuring it. A lack of sustainability may be easier to identify, as it may be indicated by observable phenomena such as declining productivity. Equally, collapse may come suddenly and without warning - in China, 3000 people have died in recent floods which were largely blamed on man-made causes (AFP, September 26, 1998), as China struggles to feed 22% of the world's population with less than 10% of the world's arable land.

Sustainability - which I consider to be simultaneously economic and ecological - is not a well-defined state to be attained by following some simple rules. Rather, it is the requirement that the resilience of the system be maintained through time. I do not consider the "precautionary principle" - certainly not as often misinterpreted - to be of much use in dealing with the uncertainty that attends sustainability issues.

While we cannot predict all the future consequences of our actions, a "do-nothing" approach does not offer much in the way of guidance as to how to deal with the problem.

What is required is not a better definition of sustainability, but a cultural and attitudinal change in the way we operate within the global environment, towards a more sustainable approach. There is a range in the "degree" of sustainability required, which is entirely influenced by our attitude to the environment. A group of economists working with David Pearce in the UK (Turner, *et al*, 1994) have identified this range, and the attitudes involved. While a greater expansion on the details of these categories is provided in the table attached to this paper, a summary is provided in the following table.

| | **Technocentric** | | **Ecocentric** | |
|---|---|---|---|---|
| | Cornucopian | Accommodating | Communalist | Deep Ecology |
| **Ethics** | Traditional ethical reasoning, rights of humans, nature is of value to humans | Ethical reasoning, concept of equity introduced | Interests of collective more important than individual | Bioethics, interests of biosphere overide humans, intrinsic value of nature |
| **Sustainability** | **Very Weak** | **Weak** | **Strong** | **Very Strong** |

A good example of the range of attitudes held is provided by a discussion of the values that are placed on native forests - *A forest is different things to different people. A forest is the habitat of wild animals, the dwelling place of magic and enchantment, the residence of building materials and fuel. Personal perspectives loom large in the study of forests. Each individual perspective is significant, yet each is limited, too. There is as much variety among people's perceptions of the forest as there is within the forest itself.* (Raphael, 1981). A nice summary of diversity.

Turner and his colleagues identify two broad ideological "camps" in attitudes towards the environment, which differ in terms of a primary focus towards our ability to control nature (technocentrism) or towards the rights of nature to exist without interference (ecocentrism). Further variation exists between these extremes - and there is a wide range of moral and ethical principles involved, as well as alternatives for economic management.

I have attempted to provide an economic perspective on the issues relating to sustainability, and in so doing to explore what "the sustainability problem" might mean for the way we live and the way we operate all our activities within our environment. Humankind is a part <u>of</u> the environment, not <u>apart from</u> nature - but with our interference with environmental systems, and exploitation of the resources available from the environment, we would not be faced with these problems. But to "stop" these activities (even if it were possible) is no answer - the absolute size of the world's population, and the continued increase in numbers, makes it imperative to use all resources so that growth is achieved. If we wish to improve equity and alleviate poverty, we must find a way to make this essential growth sustainable.

So what lessons can we draw for our own future here in Australia ?

<u>Lesson 1</u> - I think it demands <u>leadership</u> for rural Australia to make the changes required to ensure that our systems of production consider long term sustainability. Recently, an economist concerned with the way we assume the "free" input of environmental resources into economic production (Cairncross, 1991)

proposed a "checklist" for companies. Suggestions for improving the environmental performance of activities included:

- put the most senior person possible in charge of environmental policy
- draft a policy and make it public
- measure
- institute a regular audit to check on what is happening
- communicate
- consider ways to reduce the range of materials you use that could do environmental harm
- think about the materials in your product
- remember that you may be able to make a business opportunity out of disposing of your product when the customer has finished with it
- if you invest in a country where environmental standards are low, do not expect them to stay that way
- accept that green regulations will tend to converge upwards - be ahead of them
- be flexible
- remember that "green-ness" is often a proxy for quality in the eyes of your customers, your workers, and your managers.

It is up to leaders to instil this type of thinking into all our operations in rural Australia. The way we handle the problem is the first step to living in harmony with the basic assets on which our wellbeing is based. Change is required, and change is difficult - leaders must help to find the way to successfully implement change.

Lesson 2 - I have suggested an economists' approach to consideration of the "sustainability problem". Perhaps economists have as large a part to play in resolving sustainability problems as do scientists and ecologists - and so do sociologists, marketers, philosophers, and engineers. The debate concerns social decision-making in the face of uncertainty. Leaders must build effective and committed teams to tackle this issue, bringing a wide range of skills to bear. The problem certainly requires a "systems thinking" approach - which means that a wide range of skills will be required. Decisions should not be made in isolation - but at present we lack the structures and institutional arrangements to bring all stakeholders, and all necessary skills, into the decisions that affect the way we interact with our environment.

Conclusions - I would suggest that there is no single definition of "sustainability", nor should there be. It is more important to decide what we are going to do about the way we use finite resources within a closed system, in which energy is the only input. I have concluded:

- uncertainty is fundamental - the only certainty is that any claim to have discovered the definitive solution to the sustainability problem is almost certainly false

- the goal of a genuinely comprehensive understanding of the sustainability problem in all of its dimensions is clearly unattainable.

What we, as leaders, should be concerned with is to ensure that our individual enterprises, our industries, and our communities, have an **awareness** of the problem and operate with an **intent** to work towards improving the sustainability of our activities. It is a global problem, but we can play our own part at a local and national level.

We cannot define sustainability, and there is no quick fix to achieving it. But we can operate so as to increase the sustainability of our activities.

Use the Cairncross checklist. Remember Hartwick's rule. Think global, and live as if for ever - through our children and the resources we bequeath them, we and our actions do exactly that. View "ecology" as the economics of natural systems, and accept the interconnectedness of all organisms - including humankind. Find a "systems thinking" framework for analysing resource use issues. But perhaps most importantly of all - build up capital stock, including natural assets, with the proceeds of any use of the resources provided from the greatest "common" of them all - Spaceship Earth.

Invest in the future, for the best return of all - a future.

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**DIANA GIBBS**

Diana is an economist, with post-graduate qualifications in environmental studies. She has operated her own consultancy (Diana Gibbs and Partners) for the last twenty-five years. She works with major resource industries internationally, and also specialises in regional economic development planning. She has worked with regions such as the Riverina, Orana, and Greater Western Sydney in NSW (as well as communities such as Leeton, Cooma, Bombala, Glen Innes, and Cootamundra), and also Sunraysia in Victoria.

In 2000, she was awarded the RIRDC NSW Rural Womens' Award. She is currently a Member of the Murray Darling Basin Authority, a member of the RDA-Riverina Committee, and also of the NSW Climate Change Council. She previously chaired the NSW Regional Communities Consultative Council for seven years, and has also served on inquiries into the impact of the Trade Practices Act on the recruitment of rural doctors, and into the financial viability of local government in NSW. She lives on a sheep/grain property at Junee Reefs in NSW with her family.

**ATTACHMENT** - ETHICS AND SUSTAINABILITY

| | Technocentric | | Ecocentric | |
|---|---|---|---|---|
| | **Cornucopian** | **Accommodating** | **Communalist** | **Deep Ecology** |
| GREEN LABELS | Resource exploitive, growth oriented position | Resource conservationist and "managerial" position | Resource preservationist position | Extreme preservationist position |
| TYPES OF ECONOMY | Anti-green economy, unfettered free markets16 | Green economy, green markets guided by economic incentive instruments (EI) | Deep green steady state economy, regulated by macro-environmental standards, with EI | Very deep green economy - heavily regulated to minimise "resource take" |
| MANAGEMENT STRATEGIES | Primary economic policy objective is to maximise growth (max. GNP). Unfettered free markets in conjunction with technical progress will ensure infinite substitution possibilities capable of mitigating all scarcity/limits constraints (environmental sources and sinks). | Modified economic growth (adjusted green accounting to measure GNP). Decoupling important but infinite substitution rejected. Sustainability rules - constant capital rule. Some scale changes | Zero economic growth. Zero population growth Decoupling plus no increase in scale. Systems perspective, "health" of whole system very important. Gaia hypothesis and implications prevail. | Reduced scale of economy and population Scale reduction imperative, at the extreme for some there is a literal interpretation of Gaia as a personalised agent to which moral obligations are owed. |
| ETHICS | Traditional ethical reasoning, rights and interests of contemporary individual humans, instrumental value (ie. of recognised value to humans) in nature | Extension of ethical reasoning, caring for others. Intra- and inter-generational equity is important. Instrumental value in nature. | Further extension of ethical reasoning - interests of the collective over-ride individual. Primary value of ecosystems and secondary value of component functions and services | Bioethics - moral rights for all non-human species and abiotic parts of environment. Intrinsic value in nature - no link between value and human experience. |
| SUSTAINABILITY LEVEL | VERY WEAK SUSTAINABILITY | WEAK SUSTAINABILITY | STRONG SUSTAINABILITY | VERY STRONG SUSTAINABILITY |

Source : Turner, R.K.,Pearce, D. & Bateman, I. (1994) ***Environmental Economics - an elementary introduction***. Centre for Social and Economic Research on the Global Environment, University of East Anglia and University College, London: Harvester Wheatsheaf, UK

# CURRENT RESEARCH ABTRACTS

Members of ANZRSAI have free access to these journals at the ANZRSAI and RSAI websites.

## *Australasian Journal of Regional Studies*

Volume 17, No. 2, 2011 is now available on our website for members & subscribers

102-121

### An Analysis of Diversification Strategies in Regional Queensland using a Two-Region, Portfolio Selection Model

Bernard Trendle
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*ABSTRACT*: This paper presents results from the application of a portfolio selection model to Queensland data. The model presented here comprises two-regions, being Brisbane-Moreton and the Rest of Queensland. The reason for this choice of regional disaggregation rests on the recent policy discussion in Queensland, where concerns about congestion in the south-east of the state have resulted in the consideration of policies aimed at encouraging settlement outside this region. While such a policy may reduce population pressures in the south-east, there may be implications not only for regional, but also state economic growth. Traditional portfolio selection models allow the evaluation of regional development strategies, by simulating the impact of changes to the employment structure on regional growth and stability. The additional insight of the two-region formulation used here, is how the geographic location of activity affects overall state growth and stability.

122-145

### Knowledge Distribution Nodes and Home Based Businesses: Role of Local Business Associations and Local Council in Casey LGA

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*ABSTRACT:* This paper examines the structure, function and role of local business associations in home based business development within an urban region. Casey local government area (LGA), Victoria, is the focus, where nine local business associations in the area (as well as the local council) are evaluated in the context of support for local-based business development. The evaluation draws upon primary data collected by surveys of local home based businesses, and follows up by semi-structured interviews of representatives from these business associations and the local council. This paper identifies that local business associations are fragmented and have significant overlap in their activities, of which the commonest activity is acting as a knowledge distribution node. The cash strapped local council is the most important node. All are restricted by vision and resources. As a result, the services provided have little impact on sustainable business development in Casey.

146-173

### The Regional Economic Impacts of Introducing Dual Function Forestry into an Agricultural Landscape

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*ABSTRACT*: A greenhouse gas emissions abatement scheme that includes payments for sequestration could encourage the establishment of plantations in agricultural areas, which could in turn, change regional economic output. This study is an examination of the regional economic impacts of establishing woodlots for both timber production and carbon sequestration in an Australian agricultural region. Financial and spatial analyses are used to identify where this dual function forestry might be more profitable than current land use while input-output tables and direct expenditure projections are used to estimate regional impacts. Results suggest there will eventually be an increase in gross regional output if a sustainable timber production system was to be established. However there would be a decrease in output during the first plantation cycle despite the injection of emissions credit payments.

174-203

**Myth Busting Rural Labour Shortages. A Market Segmentation Approach Reveals New Recruitment Opportunities.**

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ABSTRACT: This study examines two regional meat processing plants (MPPs) whose recruitment strategies have failed to meet staffing needs. Using regional population and workforce survey data, this study applies attribute trade-off analysis to segment the regional labour market and two participating MPP workforces on the basis of individuals' job attribute preferences. The analysis finds that, although both MPPs attract employees with a preference for family support attributes, only one MPP attracts employees equally likely to value family attributes as organisation/job attributes. The findings indicate that MPPs currently fail to fully utilise 33% of the regional workforce that would consider MPP jobs. Regional workers could be recruited separately from the segments of the regional labour market that favour family support attributes (30% of respondents), spouse support attributes (38% of respondents) and/or organisation/job attributes (32% of respondents).

204-

**The Forecast Accuracy of Local Government Area Population Projections: A Case Study of Queensland**

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*ABSTRACT*: Users of population projections tend to assume that they provide accurate predictions of future demographic trends. However, there is limited evidence to either support or refute this assumption because almost no research has evaluated the accuracy of past projections in Australia. This paper assesses the forecast accuracy of seven previous rounds of local government area population projections for Queensland. The analysis reveals errors to be quite large in absolute terms and in relation to State forecast errors, but respectable compared to those reported in other studies. Relative to simple extrapolative forecasts, the official Queensland projections are shown to have performed quite well. Fractional response models are employed to determine the extent to which forecast errors can be predicted on the basis of local area characteristics. The concluding section suggests ways in which forecast error might be reduced and how users can be informed about the possible magnitude of error in current projections.

## *Regional Science Policy &Practice*

Volume 3, Issue 3, August 2011
Selected abstracts from the *Special issue: innovation and creativity as the core of regional and local development policy*

131-144

**Using functional economic regions to model endogenous regional performance in Australia: implications for addressing the spatial autocorrelation problem***

Robert J. Stimson
William Mitchell
David Rohde
Paul Shyy

*ABSTRACT*: A new geography of functional economic regions (FERs) has been created for Australia using a methodology that optimizes within-region self-containment of commuting to jobs. The paper tests whether this FER geography might overcome the spatial autocorrelation problem encountered when using de jure regions such as local government areas (LGAs). The empirical context for the analysis is an investigation of potential factors that might explain spatial variability in the endogenous regional employment performance over the decade 1996–2006.

163-179

**The role of knowledge sources of SMEs for innovation perception and regional innovation policy**

Patricia van Hemert
Enno Masurel
Peter Nijkamp

*ABSTRACT*: The background of this study is the realization that our current understanding of innovation in SMEs is relatively poor, yet the encouragement of innovation in SMEs is at the heart of policy initiatives for stimulating economic development at the local, regional, national and European levels. The sample used for this analysis is drawn from a survey that questioned Dutch SMEs about their involvement in three Eastern Netherlands knowledge clusters that were part of a national economic priorities stimulation programme. SMEs that were located in the more rural sub-region Zwolle, indicated that they were not able to profit enough from the programme. The paper explores if the innovation perception of the SMEs in this sub-region is affected by its collaborative knowledge sources in terms of different types of partners, and if structure of the networks may explain the lack of involvement of these SMEs in the programme. Also, it aims to explore if the internal power relationships of an SME – represented in this study by the education level of the owner/ manager of the SME – influences these relationships. Powerful actors within and outside the organization, namely, may influence the knowledge absorption processes. Results support the strong focus of

SMEs on customers and suppliers for new knowledge and the positive role of higher education on the innovation process. In this study, no significant proof is found for the interaction of higher educated entrepreneurs on the relation between knowledge sources and innovation perception. Preliminary insight into the positive and negative interaction effect of the education level of the entrepreneur on the relation between knowledge sources and innovation perception, however, may provide interesting new research directions.

181-198

**The functions of government in social entrepreneurship: theory and preliminary evidence***

Gordon E. Shockley
Peter M. Frank

*ABSTRACT*: Much social entrepreneurship has occurred in countries with national governments with low levels of state capacity to address social problems. Yet, little or no social change resulting from social entrepreneurship could have become 'large-scale' without the enabling institutions, resources, and policies of government, even ones with reputations for inefficiency or corruption. We develop a typology for describing the functions of government in social entrepreneurship in terms of the level of state capacity (i.e., higher or lower) and the locus of social innovation (i.e., top-down or bottom-up). We adopt the 'classical view' of entrepreneurship of Israel Kirzner and Joseph Schumpeter and extend it to social entrepreneurship in order to recognize entrepreneurial behaviour as a universal phenomenon in all institutional environments and to model and specify social entrepreneurship in social systems. We find preliminary evidence to support the typology in many well-known, contemporary cases of social entrepreneurship.

219-230

**Governance for sustainable regions: can government meet the innovation policy challenge?***

Brian W. Head

*ABSTRACT*: Governments have long attempted to encourage innovation and entrepreneurship in many policy spheres, including economic development at national and regional levels. Neo-liberal market-based approaches to regional economic policy have been developed as an alternative to government subsidization and regulation. However the role of the state remains very significant in shaping regional strategies and in funding the physical and social infrastructure essential for economic growth. Neo-liberal approaches have focused on economic development through entrepreneurship, but regional innovation policy has been broadened to include economic, social and environmental objectives, summed up as 'innovation for sustainable regions'. Regional policy consists of a series of intersecting goals and programmes that are often in tension. Governments operate in complex institutional contexts and multi-level arrangements which constrain their responsiveness and their capacity to innovate. In the face of complex or 'wicked' issues, there are serious challenges for the government sector to develop capabilities for promoting successful innovation at the regional level. It is argued that governments need to play a leadership role, and that they require new approaches based on partnerships and networks.

231-247

**Unsustainable cities, a tragedy of urban infrastructure**

Tomaz Ponce Dentinho

*ABSTRACT*: This paper tries to understand urban unsustainability. The main argument is that the story of unsustainable cities is characterized by a 'tragedy of the commons'

phenomenon not only in the deployment of urban infrastructure but also in the overuse of the natural capital that sustain the city. We show that, looking at the story of unsustainable cities from the perspective of a simple general equilibrium urban model, open access to urban land leads to high concentrations of population, huge deployment of urban infrastructure and irreversible degradation of the natural capital creating a 'tragedy of urban infrastructure' that undermines the sustainability of cities creating preannounced urban ruins.

249-270

**Does local technological innovation lead to local development? A policy perspective**

Richard Shearmur
Nicolas Bonnet

*ABSTRACT*: Much recent work on innovation and regions takes as a starting point Marshallian districts, variously updated by concepts such as clusters, regional innovation systems and learning regions. The basic premise is that certain regional dynamics are conducive to innovation. This work has inspired regional development agencies, which regularly implement local innovation policies with the hope of stimulating local economic development. However, we argue in this paper that there is no necessary connection between local innovativeness and local development: indeed, it is quite possible that innovation in region A leads to growth (of employment and income) in region B, particularly if region B is better suited to developing the economic potential of innovations. In this paper the conceptual underpinnings of this argument are developed, and an exploratory empirical analysis undertaken. Using Canadian data (patent applications and census data for 203 urban labour markets) this paper explores whether there is a connection between local applications and local employment and income growth. The results show that there is virtually no connection between local innovation (as measured by local applications) and local development, and that local development is closely connected with access to markets, local industrial structure and wider-scale regional factors.

## *New Book*

**Risks and resilience**
**– future-proofing Asian cities**

by Jennifer Strand
Reproduced from UniSA News with permission.

A UniSA professor has co-authored a book on some of the greatest challenges facing Asian cities as they plan for the future after an unprecedented population boom.

UniSA's Emeritus Professor of Urban and Regional Planning, Stephen Hamnett (pictured right), and Dean Forbes from Flinders University have brought together a collection of essays from the region's most distinguished urbanists, in a new book, ***Planning Asian Cities: Risks and Resilience***.

"The book provides a history, a picture of contemporary life and a discussion of future urban challenges in 11 of the most important cities in the Asia Pacific region," Emeritus Professor Hamnett said.

"Our approach was to ask each author to write a personal account of his or her city, while covering a number of common themes – urban history, the impacts of globalisation and major environmental and social challenges."

Asia has more than half of the world's megacities, including Shanghai, Beijing and Manila, which each have more than 10 million people, while Tokyo, the largest city in the world, has 36 million.

Emeritus Prof Hamnett suggests that the overwhelming issue facing many Asian cities is the sheer scale and pace of growth.

"According to the United Nations, 1.6 billion residents of Asian countries live in towns and cities. China now has more than 100 cities of a million people or more," he said.

"Migration of younger people to these cities continues at historically unprecedented rates.

"By some estimates around two-thirds of the world's population now lives in Asia. There is an urban revolution under way of the sort that the world has never seen.

"Many people are amazed that cities like Jakarta or Bangkok continue to function, despite longstanding concerns about their excessive size, congestion and fragile environments. However, Asian cities offer proof of the ability of human societies to adapt to rapidly changing conditions."

According to Emeritus Prof Hamnett, resilience to shocks and disasters is regularly tested by natural disasters such as floods, typhoons and earthquakes.

"Tokyo was almost completely destroyed twice in the 20th century, first by the Great Kanto earthquake of 1923 and then by the fire-bombings of World War II," he said.

"Tokyo escaped major damage from the 2011 earthquake and tsunami, but there remains great concern about what will happen when and earthquake and associated tsunami next strike. While recent buildings in Tokyo are built to resist earthquakes, vulnerability to flood and fire remain high."

The book emphasises the importance of social capital and community networks being resilient in the face of shocks and disasters. It also covers environmental issues facing Asian cities and the responses of city and national governments to these issues.

"Singapore, for example, has made remarkable progress in recycling its water and sewage and has some of the best examples of green buildings anywhere," Emeritus Prof Hamnett said.

"Seoul has an ambitious national plan for addressing climate change which goes much further than the aspirations of most western countries."

Emeritus Prof Hamnett argues that globalisation has exposed a new set of risks to Asian cities as the integration of the global economy has exposed them to the shocks of regional and global economic crises.

"Chinese cities are catching up fast and the events of the recent past have left us no doubt about how important China is to the world economy," he said.

"The speed and scale of China's economic transformation over the past 30 or so years has had profound impacts on its cities, leading to the relocation of millions of people and to deep economic polarisation between, for example, the rural population of western China and the new middle classes of coastal cities like Shanghai."

*Planning Asian Cities: Risks and Resilience* is available now through Routledge Press and the University of South Australia library.

# NEWSLETTER

## REGIONS & PRACTICE

### *From Cockatoo*

Reproduced with permission from The Cockatoo 59 and 60.

### *Rural not synonymous with economic decline, says OECD*

Huge regional variations in economic and social conditions within a country require a rethink of the way governments design policies to boost growth and jobs, says a new OECD report. The economic crisis has hit some areas far harder than others. The OECD‟s first Regional Outlook calls on policy makers to pay greater attention to regional factors such as amenities, accessibility, size, infrastructure and demographics, industry specialisations and networks. The report focuses on the need for good governance and coordination of policy around these regional factors and rejects the idea that governments should rely on budget transfers to reallocate resources between rich and poor regions.

The Regional Outlook observes that policy-makers have traditionally looked to major cities to spur economic dynamism. But on average 70% of the economic growth of OECD countries occurs outside the big metropolitan hubs. And although predominantly rural regions can be among the slowest-growing regions in the OECD, they are also over-represented among the most dynamic. Contrary to popular belief, “rural” is by no means synonymous with economic decline, the report says.

OECD Regional Outlook 2011, ‘*Building Resilient Regions for Stronger Economies*’ OECD Publishing ISBN: 9789264111707

### *Blueprint Mississippi: Capitalizing on the Creative Economy*

The Mississippi Economic Council has developed a collaborative vision for moving the state’s economy and community forward - known as Blueprint Mississippi 2011. The reports are available on the Mississippi Creative economy website (http://mscreativeeconomy.com).

The recommendations relating to the creative economy include:

- Promotion of entrepreneurship and small business growth among creative firms.
- Help for communities to preserve and generate added value from cultural and historic heritage.
- Increased use of art and design in buildings. Enhancement of networking infrastructure for creative talent across the state.
- Measures to grow and retain creative talent living and working in Mississippi.
- Development of tools and strategies to support the tourism industry.

Involved in the creative industries? Why not plan a trip to the Deep South. Dallas is now Qantas’ main USA hub - so fly direct, hire a car and drive east a couple of hours for a coffee with David ‘the Preacher’ Dodd (Louisiana) and then onto Mississippi to meet with the CraftNet folk – they are a very collaborative outfit..

Go to http://rtsinc.org/wp-content/uploads/2011/10/sketches10_11.pdf.

### *Competitive Cities in the 21st Century*

Professor Brian Roberts has informed us of the release of his latest work, co-authored with the late KyeongAe Choe. The book is basically about clusters in Asia and it is an absolute treasure trove!

The background is that economic challenges in developing Asian countries are now more complex - urban populations are growing at great cost to the environment, climate change has increased risks of natural disasters, and income gaps within and between developing countries are widening. These factors threaten

the sustainable growth of urban areas, the drivers of Asia‟s economy. A strategic approach for inclusive growth is therefore needed.

The City Cluster Economic Development approach provides a strategic framework and analytical tools. The approach was developed and tested by the Asian Development Bank to improve the basis for integrated planning and development of urban regions.

The chapters include:

- Factors Shaping the Spatial Agglomeration of Asian Cities.
- Emerging Factors Accelerating Urban Economic Growth.
- The Cluster: Theory, Analysis, and Experience in Agglomerated Asian Cities.
- Building Competitive Local Economies: Approach and Analytical Steps.
- Cluster-Based City Economic Development in Bangladesh, India and Sri Lanka.
- A New Paradigm of Local Economic Development for Growing Asian Cities.

Hard copy = $US40 – go to http://beta.adb.org/publications/competitive-cities-21st-century-cluster-based-local-economic-development

### *Smart Specialisation Strategies (S3)*

Professor John Tomaney spoke on Smart Specialisation Strategies at the 35th ANZRSAI Annual Conference in Canberra.

The Seville conference sponsored by the OECD, European Commission and Government of Andalusia in November also discussed S3 stategies.

The S3 agenda allows the private sector (with academia) to identify development nodes, while providing the means by which governments can facilitate them. An EC speaker said it will also assist it in directing Structural Funds expenditure (interesting message).

S3 is evidence-based and ”entrepreneurial‟ (hence bottom-up) and is designed to identify potential competitive advantages in a global context. It’s about helping a locality to excel in something specific, and thereby attract investment and develop critical mass.

### *Sha Tin – practical example of smart specialisation*

Hong Kong is now home to arguably the world’s best horseracing cluster in terms of the quality of the horses, jockeys, trainers, administrators, training facilities and racecourse amenities.

The racecourse attracts 50,000 or more patrons to the bigger meetings, and prize-money is very healthy. The Hong Kong Jockey Club hosts some of the world's key racing events.

What have been the success factors? Obviously the Chinese love of gambling. But the underlying strength has been the integrity and quality of the management of the operation. The current Club CEO is from Germany and the Executive Director of Racing is from the USA. The bulk of the stewards and racecourse managers are Australian. The horses are mainly imported from New Zealand and Australia, the totalisator managers are mostly Australians, Brits and locals, and the jockeys are a mix of Asians, French, US, South African, Kiwis and Australians. In economic jargon, technology transfer and diffusion has been a dominant factor.

Contributed by a Cockatoo member.

A very good walk through the key issues in getting regions firing on Smart Specialisation Strategies (S3), authored by Christian Saublens, CEO of EURADA, is at www.eurada.org/site/files/No%20Nonsense%20Guide-E.pdf

## UPCOMING CONFERENCES

The Place of Leadership in Urban and Regional Development: RSA Research Network. Call for papers, Workshop 4

***What Next? Leadership in Urban and Regional Development: Framing the Emerging Research Agenda***

April 23-24, 2012

University of Tampere, Finland

Network organizers

Dr. John Gibney, University of Birmingham (UK)

Professor Markku Sotarauta, University of Tampere (Fin)

Professor Andrew Beer, University of Adelaide (Aus)

This research network aims to incorporate leadership and related concepts within the wider urban and regional development studies debate(s). The suggestion is that to truly understand and construct regional advantage - we need to investigate in more depth what it is that formal and informal leaders actually do, how and why to transform and reinvent their regions.

Consequently, the main proposition is that a deeper understanding of how leadership plays in and through cities and regions might provide us with additional analytical leverage to theorise and better explain endogenous development processes.

***Sustaining Regional Futures***

24-26 June 2012

(Field trip on 27 June 2012)

Beijing Conference Center, Beijing, China

The Regional Studies Association Global Conference 2012, in partnership with Chinese Academy of Sciences

Call for papers

Register now

Deadline for submission: 10 February 2012

For more information:

http://www.regionalstudies.org/events/2012/June-Beijing/

RSA Organiser: Jimmy Ancheta Jr.

jimmy.ancheta@regionalstudies.org

***2012 International Rural Network World Forum***

***Rural and Remote Resilience: Making the Priorities Possible***

24 - 28 September 2012

University of South Australia

Whyalla, South Australia

Call for Abstracts

IRN 2012 aims to link community groups and practitioners with researchers / academics and or policy makers / industry. IRN 2012 will focus on the policy and governance challenges related to the differences between regional, rural and remote communities.

Topics include volunteers / volunteering, indigenous knowledge and its importance to the "local", regional, rural & remote labour markets, technology and how it advantages or disadvantages regional, rural & remote communities, water and development, climate change, macro- and micro-migration, leadership, governance, speed of change, mindsets of poverty, UN Millennium Development Goals and new ways of thinking about resilience. We are interested in hearing about practical applications of new knowledge – knowledge for communities, knowledge for businesses & productivity and knowledge that informs policy for regional, rural & remote places.

Abstracts must be submitted by email to irn2012.abstracts@unisa.edu.au Submission

deadline is 29 February 2012. Final presentations for accepted abstracts must be received by 31 May 2012. Guidelines for the formatting of presentations and papers will be sent to successful participants.

Details from the organisers at irn2012.enquiries@unisa.edu.au
www.international-rural-network.org

## ABOUT ANZRSAI

***Council Annual General Meeting Canberra December 2011***

Some long-standing and valued members of Council retired at the AGM. ANZRSAI will miss their good advice, hard work and participation.

Shelby Canterford, who was the local organizer for our conference in Canberra, retired as ACT representative. David Fuller, our long serving Secretary/ Public Officer and former President retired. Ann Hodgkinson had already served many years as Secretary when she became NSW Councillor and retired as Vic Councillor on retiring from academia.

We welcome: Yogi Vidyattama of the National Centre for Social and Economic Modeling as ACT Member. He is already thinking of ways to engage regional researchers in Canberra.

Greg Kerr of University of Wollongong has taken up the Secretary /Public Officer role. He is already at work on our 2012 Conference, to be held in Wollongong.

Paul Collits has stepped down as Vice President (Australia) and is now the Council Member for Queensland. Robyn Eversole has become Vice President (Australia).

Matthew Campbell-Smith joins Council as Member for Tasmania. Michelle Graymore, University of Ballarat at Horsham joins as Council Member (VIC).

### ANZRSAI Council 2012

**President**
Paul Dalziel
AERU, Lincoln University, Canterbury NZ
**Vice President (Australia)**
Robyn Eversole
University of Tasmania
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NATSEM, Canberra
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Matthew Campbell-Smith
University of Tasmania
**Council Member (VIC)**
Michelle Graymore
University of Ballarat, Horsham
**Council Member (WA)**
Vacant
**Ex-officio**
Editors: Australasian Journal of Regional Studies
Tony Sorensen and Sonya Glavac
University of New England
Bob Stimson
Australian Urban Research Infrastructure Network
University of Melbourne

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