

## Editorial

# The Dimensions of Regional Research In Australia

How we pursue regional development in Australia is shaped by a number of factors. It is influenced by the import of ideas - such as industry clustering from overseas; it is affected by the philosophical and policy positions of the State and Federal Governments; it is dependent upon the relative powers of the various tiers of government - and the degree of mobilisation within communities; and finally, and perhaps most importantly, it is moulded by the experience of regional development practitioners, policy makers and politicians. We only need to reflect upon the reluctance of Australian Governments - of both political persuasions - to engage with urban and regional development issues, to realise how influential the negative experiences of the Department of Urban and Regional Development (DURD) remain to this day.

The sort of research undertaken by academics is one influence shaping the nature of regional policy and practice in Australia. While the translation from research into policy implementation in Australia is not particularly strong - and that critique would apply to many areas of knowledge generation, with the nation a leader in fundamental Research but a laggard in Development - academic debates do filter into the policy community and do influence how regional questions are perceived. It is therefore appropriate that we review current trends in regional research and the implications of those trends for how regional issues appear in policy debates and in the public consciousness.

A meta-analysis was undertaken of recent research on regional issues in Australia and internationally<sup>1</sup> and focussed on the following areas:

- · Labour market development and analysis
- Indigenous development
- Technology transfer and industry clustering
- Community development
- Social capital, health and welfare
- Social sustainability
- Regional analysis
- Regional governance
- Environmental management and Environmental science

Before outlining the results of the meta-analysis, it is important to note a number of caveats. As the aim of the meta-analysis was to investigate the depth of Australian literature on each of the research areas above, the search process focused on the major Australian databases likely to generate the best search results, given time and resource constraints. There are extensive bodies of international literature on all of the topics included in the meta-analysis; however, it was beyond the scope of this exercise to survey all of this literature. For the same reasons it has not been possible to find all relevant Australian literature and we do not purport to have done this with this meta-analysis. The meta-analysis simply outlines the major themes of the research in each area and gives some indication of the extent of relevant research.

The databases chosen for this project produced better search results for some of the aforementioned research areas than others. To some extent this is due to the keywords assigned to articles and the way each database treats keywords and strings of words. In some instances however, the meta-analysis has shown what is seemingly a lack of literature on that particular research area. The inclusion of the 11 databases that comprise the ATSIROM database (Aboriginal and Torres Strait Islander database) may have led to an overrepresentation of Indigenous development articles when compared with some of the other research areas. Furthermore, the databases surveyed include a number of health databases and in part this may account for the large number of health and welfare articles included in the meta-analysis.

### Results of the Meta-analysis

### Labour market development and analysis

In excess of 150 articles were found through the meta-analysis on labour market development and analysis (Table 1). A significant proportion of these articles discuss Indigenous Community Development Employment Projects (CDEP). The CDEP programs play an important role in facilitating 'welfare to work' among the Indigenous population particularly in remote areas of Australia. In this respect, CDEP is a vital component of the Australian labour market. Much of the remaining literature on labour market development and analysis discusses problems of regional labour market depression, particularly in rural areas affected by industry restructuring and structural change and concentrations of unemployment among certain demographics, i.e. youth.

### **Indigenous development**

An extensive literature on Indigenous development was uncovered through the meta-analysis (over 160 articles). While a large section of this literature concerns the CDEP, a number of examples and case studies of Indigenous community development projects, localised Indigenous business enterprises and Indigenous cultural and heritage tourism ventures were found.

#### Technology transfer and industry clusters

The meta-analysis did not uncover a great deal of literature on technology transfer or industry clusters. The literature surveyed largely discussed a few pre-existing examples of clusters such as the Adelaide scientific and industry research cluster and the Hunter Valley wine region cluster. The technology transfer literature largely focused on the potential for new technologies (GIS, ICTs) to assist in developing sustainable regions by improving business and agricultural practices and therefore competitiveness.

### **Community development**

An extensive amount of community development literature was unearthed in the databases surveyed. Much of this literature presents localised examples and case studies of community development activities being undertaken in communities across Australia. A significant proportion of the 100 plus articles on this research area also highlight how community development initiatives can have a positive affect on the communities implementing them, building social capital, community pride and a sense of identity.

### Social capital, health and welfare

This research area unearthed the largest body of literature in the meta-analysis. In part this is due to the surveying of large health databases and the significant body of literature on Indigenous health and welfare issues. This literature is of importance given that the Indigenous population has the poorest health and welfare outcomes of all Australians. The literature that does not directly relate to Indigenous health and welfare outcomes can be considered in two parts. First, is the social capital literature.

As the concept of social capital has risen to prominence in recent years, there is extensive literature on this research area, most of which looks at definitional issues, measuring social capital, how a community can build social capital and the benefits of doing so. This literature highlights the importance of engendering feelings of well being in communities and residents by building networks, cooperative arrangements and relationships, values, trust and facilitating participation in community activities.

The second subset of literature in this research area discusses regional health and welfare issues, specifically shortages of rural health care and welfare services and practitioners and demands on these services brought about by an ageing population.

### Social sustainability and services

The social sustainability and services search uncovered around 40 relevant articles. Much of this literature concerns the declining provision of services in rural and remote Australia and the community and local government responses to the decline in community and social services and infrastructures in these regions. A number of articles on this topic point to the opportunities

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presented to communities suffering decline as a result of new information and communication technologies.

### **Regional analysis**

A small number of articles were located on the topic of regional analysis. These few articles used mainly census data to investigate the demographic and socio-economic characteristics of particular geographic regions. Data discussed point to the ageing of the population and declining fertility. This research shows that not all regions are uniformly experiencing decline and disadvantage: rural is not synonymous with decline and disadvantage and urban is not synonymous with prosperity and advantageous economic growth.

### **Regional governance**

Again due to the surveying of the 11 Indigenous databases in the meta-analysis, the majority of articles on regional governance concerned the Indigenous population. Such articles focused on how best to recognise and incorporate traditional Indigenous ideas of governance in economic, regional and community development and acknowledged the diversity of opinions on governance among the Indigenous population. The search for literature on regional governance in Australia revealed a shortage of non-Indigenous

Table 1 Number of Research Publications by Theme, 1998-2004

governance literature but this gap may be filling quickly. There are a number of important initiatives unfolding in this area, including an Academy of Social Science forum being held at the Hamilton campus of RMIT in July 2004 that should lead to a major publication in this area.

## Environmental management and environmental science

The environmental management literature collected through the meta-analysis largely discusses the importance of, and conflicts in, managing the triple bottom line: economic, social and environmental issues. The literature emphasises the need for Australians to be less environmentally intensive in their production and consumption methods and more aware of the impact they are having on the environment through economic and social processes, i.e. to consider their 'ecological footprint'. Authors of this literature discuss issues of environmental management concern: biodiversity conservation; water use and allocation issues and inefficient water use; land use, management and rehabilitation; waste management; and the environmental impacts of recreational pursuits such as cultural, heritage and eco-tourism. The metaanalysis unearthed a dearth of environmental science literature revealing a significant gap in regional environmental science research.

Research Topic	No of Articles	Most Prominent Research Themes
Labour Market Development and Analysis	Australia 153 International 33	Need for direct government intervention in regions faring poorly and where labour market depressed. Assistance to be tailored to local needs. Discussion of regional disparities in employment, i.e. between different regions and especially between rural and urban regions. High rural unemployment as result of withdrawal of services from rural communities and lack of investment in these regions.
Indigenous Development	Australia 163 International 5	Role of Community Development Employment Projects (CDEP), 'welfare to work' program. CDEP as major vehicle for employment in indigenous communities, particularly in remote communities where 70 per cent of CDEPs operate. Discussion of growth in non-CDEP employment and need to further expand number of non-CDEP employment opportunities for Indigenous peoples. Future of CDEPs in ability to place CDEP participants in non-CDEP employment.
Technology Transfer and Industry Clusters	Australia 43 International 10	Porter's cluster thesis. Use of technology for sustainability and competitive advantage. Discussion of opportunities to develop regional clusters and supply chains such as the potato industry cluster in Victoria for export to Asian markets.
Community Development	Australia 111 International 2	Self-help and community capacity building initiatives. 'Cooperative approaches to rural renewal' (Barraket). Community coordination and action for small town renewal and revival.

Research Topic	No of Articles	Most Prominent Research Themes
Social Sustainability and Services	Australia 42 International 6	Infrastructure provision - all tiers of government. Discussion of trend toward increasing reliance on Local Government as the level to deliver many social and community services and infrastructures beyond their normal scope of service delivery and infrastructure provision. Sustainability of services for Indigenous people. Access and delivery issues, particularly in very remote regions. Case studies of remote communities undertaking service delivery role.
Regional Analysis	Australia 9 International 0	Discussions of the differences in demographic and socio-economic characteristics between regions and especially between urban and rural (Census data). Population ageing and fertility decline. Rural Australia not uniformly experiencing decline and disadvantage. Urban Australia not uniformly advantaged.
Regional Governance	Australia 20 International 4	Indigenous governance issues. How to incorporate traditional Indigenous governance ideas with rural/regional economic development and community development projects. Indigenous governance as means of improving economic development outcomes and Indigenous participation in economic development activities. Diversity in ideas of ownership and governance among Indigenous peoples.
Environmental Management and Environmental Science	Australia 43 International 8	How to sustain and maintain environmental quality with a growing population and increasing demands on the environment resulting from current consumption and production patterns. Discussion of the population carrying capacity of the Australian environment. Issues of migration and carrying capacity.

## Where are the Gaps in Australian Regional Research?

The audit of research capacity and international research direction helps us to identify where there are gaps within Australian regional research. This listing reflects our views on the major omissions within research activity in Australia.

### **Regional Economic Modelling**

There is a profound need to enhance capacity in regional economic modelling. Relatively few research centres and researchers engage in quantitative economic modelling at the regional level.

Other nations, such as the United States and the United Kingdom, have well developed capacities in this field. It is possible that more of this work is undertaken in Australia than is apparent from our analysis, as some activity would take place via consultancies that are not published. However, this explanation cannot fully explain the dearth of material - and subsequent gaps in the evidence base informing decision-making - evident in this field. It is also worth reflecting on the fact that Regional Science Associations in other parts of the world are largely dominated by researchers who engage in work of this nature.

### Forecasting the Social, Economic and Environmental Futures of Regions

There is an almost complete absence of information on the social, economic and environmental futures of regions. We do not know, for example, what the regional implications will be of the free trade agreement with the United States. Perhaps more fundamentally, forecasts are needed relating to the impact of environmental change - such as, climate change, dry land salinity, increasing urban density, increasing social polarisation both within and between urban centres - on the social and economic futures of regions.

## Regional Governance and Governance for Natural Resource Management

The whole question of governance is a rapidly emerging field within regional studies broadly defined. In the international literature - and especially the European literature - the rise of new methods for managing the economy, society and the environment has attracted considerable research attention. In particular emphasis has been placed on the rise of public sector/private sector partnerships and the 'hollowing out' of the conventional state. While some research has been undertaken in this area in Australia - for example, with regard to the reform of local government and catchment management - a more substantial body of work is needed to fully understand these new governance arrangements and their implications for the regional social, economic and physical environment.

### Innovation and Mechanisms for Technology Diffusion

Australia's research effort in the area of innovation and technology diffusion significantly lags the US and Europe. In part this reflects structural conditions within Australian universities, which do not have access to large scale specific funding for community engagement and technology diffusion. In the US land grant universities have always played an important role in this area - with Texas A&M serving as a strong example - while British universities have access to £600 million of funding for community engagement and technology diffusion. Innovation per se has also been an important area of research, both at an industry sector level and within a regional paradigm. Morgan and Cooke (1999) for example, discuss regional innovation systems. In Australia there is some research in innovation and technology diffusion, as well as the related field of cluster development. RMIT, the University of Canberra and the University of Western Sydney appear to be leaders, however, Australia lacks a significant research capacity in this area.

## Health Outcomes and the Physical and Social Environment

The environment in which we live exerts a considerable impact on our health status as individuals and as a population. Regional environmental factors that exert an impact on health include: the level of social capital within a region; the physical environment and the degree to which it encourages or precludes exercise; income level and income inequalities; population composition at the regional level and access to services; and, the physical dimensions of environmental quality, including air borne pollution, water quality etc. The health of Indigenous Australians is clearly affected by the physical and social environment, but other vulnerable groups also have their health status shaped by these external factors.

### Social Well Being and Regional Processes

There are profound regional differences across Australia in the level of well-being. Some of this difference is a product of individual processes but regional processes are also fundamentally important in shaping job opportunities, access to infrastructure and services, and living costs.

### Regional Labour Markets as Drivers of Social and Economic Outcomes

Australia's labour market has experienced profound change over the past 20 years. Micro economic reform and de-regulation has deeply affected the labour market with respect to employment levels, wages paid, security of employment, the nature of the participants within the labour market, hours worked, and non-wage benefits. Increased differentiation between regions has been one outcome of labour market restructuring. There has been a reasonable level of research effort into regional labour markets. The major gaps in this field lie in the inter-section with other social and economic outcomes. There is a need, for example, for a more detailed analysis of the relationship between changing labour markets and access to housing and other services. This is an important concern both for metropolitan and nonmetropolitan regions. Other areas of research include labour market change and its impact on natural resource use; the relationship between changing labour markets and health outcomes; gender and regional labour markets, Indigenous Australians within metropolitan and nonmetropolitan employment.

### Research Directions - Does it Matter?

No organisation or body co-ordinates regional research in Australia. Regional issues are not one of the Australian Government's priorities when allocating Australian Research Council or National and Medical Health and Research Council funding. At best regional research squeezes into national priorities in an ad hoc fashion by claiming to offer insights into the regional dimensions of industry development, dryland salinity etc. The Bureau of Transport and Regional Economics (BTRE) has a role, but its task is - in large measure - to answer the research questions of the Australian Government rather than shape the research horizons for the broader Australian community. The Australian Bureau of Statistics has a strong Regional Statistics Unit but we must question how fully their wealth of data is used.

The absence of a nationally co-ordinated approach to regional research has almost certainly had negative impacts on the performance and potential of Australia's research community. We have specialised in a limited number of fields - such as social capital research and community development - and ignored other endeavours that could produce equally worthwhile results. Perhaps more importantly, Australian researchers may have lost the ability to take on some of the more complex research tasks.

### This Issue of Sustaining Regions

This issue of Sustaining Regions adds to our shared knowledge on regional issues. The first article is by Dr Terry Clower of the Center for Economic Development at the University of North Texas. His article draws out the differences between local economic development in Texas and regional economic development in Australia. He highlights the importance in the Lone Star State of retail activities and a broader approach to development than found here in Australia. Dr Clower's paper is followed by two articles taken from the BTRE's Colloquium in February of this year. In the first paper Tom Murphy and Mathew Brooks consider the potential of an Enterprise Zone for reducing regional disadvantage in Australia. Their research focuses on the considerable challenges confronting the Barwon Darling region of northwest NSW. Enterprise zones have been an important theme in regional policy debates in Australia and this paper makes a significant contribution to that body of work. The second paper taken from the BTRE is by Ann Hodgkinson and presents a Best Practice Model of Regional Exporters. Export base theory is a fundamental tenet of regional studies but there have been relatively few attempts in Australia into the ways in which this theoretical perspective could be operationalised in Australia's less developed regions. Ann's paper provides important insights into the ways in which regions could move forward and promote exporting to their small and medium sized businesses.

In their paper Andrew Woodhouse and Sharon Jansesen-May discuss social capital in North Queensland. Their research provides interesting insights into the role of social capital in business retention and export programs. Our final paper is by Andrew McDougall of SGS economics and it provides a snapshot of private financing of local government infrastructure in Australia. It recognises that the cost of maintaining and establishing local government infrastructure networks is substantial and there are increasing calls for private sector participation in the delivery of those services. The paper presents an interesting summary of how private sector participation in local government infrastructure is evolving, and the thoughts of public sector managers on the process.

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<sup>1</sup> Meta-analysis is just a fancy word for a database and Internet search of listings. Meta-analysis is literally an analysis of analyses and contemporary technology makes it relatively easy to get a good grasp of current trends in the research literature as virtually all publications are listed on either the web or CD ROM databases. The meta-analysis involved a comprehensive search of a number of Australian electronic databases. These databases included the Electronic Reference Library databases: AustHealth; AustROM databases including Australian Public Affairs Information Service (APAIS), Australian Architecture Database, Multiculturalism (MAIS), Family and Society (FAMILY), Education (AEI) databases; and the Heritage and Environment set of databases including Australian Natural Resources database (Streamline), Australian Heritage Information System and Great Barrier Reef Marine Park database. Further literature searching was undertaken with the Informit group of databases. This group includes: the Agriculture and Natural Resources databases - Australian Bibliography of Agriculture, Australian Rural Research in Progress and Completed Australian Rural Research Projects; Australian and New Zealand Books in Print (ANZiP); the ASIAROM social sciences and Asia databases (APECLIT, ASIANRES, BERITA, BIPE, INDBIO, INTAN MAS, PDIP, PDIR); and ATSIROM the 11 Aboriginal and Torres Strait Islander databases. A brief search of the Web of Science and Web of Knowledge databases was also carried out to locate international literature on the above research areas. This search also allowed us to capture other Australian literature of relevance not already unearthed in the aforementioned searches.

Sustaining Regions