

# Synthesis paper on socioeconomic factors relating to agriculture and community development

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**Abstract.** Agriculture is highly dependent on the social sustainability inherent in rural communities. Yet too often we focus on the economic and environmental drivers relating to agricultural production, ignoring the social and community aspects that make rural livelihood not only possible but also rewarding and nurturing. In this paper I focus on climate change as yet another factor associated with rural restructuring that defrays community wellbeing. I argue that attention to social factors and a stronger role for government in assisting communities will enable greater adaptation and enhance resilience in what are essentially very uncertain times.

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## Introduction

Socioeconomic sustainability is critical to agricultural productivity. Yet we lose sight of the importance of social factors that are inherent to health and wellbeing of our agricultural producers, a vast majority of whom are members of farm families. A good example of this lack of attention to the social is the current and ongoing, often vitriolic, debate on climate change in Australia that has often devolved to a slanging match between those sceptical of climate change and those more likely to be termed the 'true believers' (see for example Flannery 2005; Plimer 2009; Pooley 2010). In the process Australians, and their policy-makers, appear to have lost sight of the social impacts and the hardship experienced by farm families and rural communities facing a future of increasing uncertainty. For much of the 2000s the environmental and economic impacts of climate change have dominated discussions and commentary relating to agriculture and restructuring. Most recently this has centred on the Water Act and the federal government's Murray–Darling Basin (MDB) Authority plan to withdraw water from irrigators in the MDB area and return it to the environment (Alston and Whittenbury 2010). Understandably this has resulted in considerable tensions among critical stakeholders, including agricultural producers, with conflicting views on the priority to be given to the socioeconomic impacts for the affected areas.

The anger expressed by rural people in the MDB illustrates that governments and policy-makers pay inadequate attention to social issues. This indicates what Molnar (2010; p. 12) calls *institutional recreancy* (or lazy politics) and *benign neglect* and an unspoken expectation that less populated rural areas will bear the burden of climate change actions. This paper outlines the reasons why a lack of consideration of socioeconomic factors alienates rural people. I then articulate a policy vision for rural people and places that exposes attention to those bearing the brunt of climate events in Australia. It gives substance to ongoing social

changes in agriculture and rural Australia and indicates strategies for governments, policy-makers, agricultural leaders, farming families, community groups and individuals to ensure that Australians living and working in rural areas are not carrying an unfair burden of climate change action and can be assisted to adapt to a more viable and positive future.

Of note is that, regardless of climate change events, significant restructuring has been occurring in agriculture and rural communities over at least the last half century (Lawrence 1987; Gray and Lawrence 2001; Dibden and Cocklin 2005). This restructuring has been linked to several factors unrelated to climate variability including technological developments, new production techniques, rising fuel prices, changing industry developments, capital intensive agriculture replacing labour-intensive practices, farm workforce decline, population out-migration, significant changes in rural demographics and declining service delivery (Lawrence 1987; Gray and Lawrence 2001; Lockie and Bourke 2001; Dibden and Cocklin 2005). As a consequence, rural areas have been in a state of seemingly constant change despite agriculture underpinning much of the industry base of rural and remote Australia (see for example Gray and Lawrence 2001). It would be wrong to assume therefore that climate change/variability has been the overarching catalyst for change in agriculture and rural communities. Rather, it is one of several forces shaping our inland communities, albeit a very significant and largely unpredictable one.

The critical point I want to make in this paper is that agriculture and rural policy responses must acknowledge and attend to long-standing socioeconomic changes as well as those emerging as a result of climate variability. Unpredictability and uncertainty does not excuse inaction on the part of policy-makers, politicians, industry organisations or community leaders to the social condition of rural people and places.

### Why should social issues affecting rural people and communities be prioritised?

There are several reasons why the socioeconomic issues relating to agriculture and rural communities must be prioritised. These include:

- environmental stewardship is dependent on rural Australians acting responsibly in the national interest (see for example Agriculture and Food Policy Reference Group 2006);
- rural Australians are at the pointy end of climate impacts and must be supported to address these challenges (Garnaut 2008, 2011);
- our biosecurity is dependent on adequate attention to rural people and places (Grant 2011);
- citizenship rights of rural people carry as much weight in our constitution although perhaps not so much in our ballot box (Alston and Mason 2008);
- rural people are being held back from achieving their potential because of constraints on their access to services (Dibden and Cocklin 2005); and
- rural people need certainty to allay their anxieties (Alston and Whittenbury 2010).

### A diverse agricultural base – protecting our environment

Environmental stewardship and protection of our landscape are dependent on our rural people having the health, will, means and resources to act responsibly. While the environmental movement has been highly successful in alerting the community to the need for environmental action, it is rural people who will implement and absorb much of the change. The problem for people living in affected rural areas is that the environmental movement has captured the attention of the community and, by contrast, rural people are often unfairly portrayed as environmental vandals. There is room for movement on both sides for the good of rural people and places – farming organisations to acknowledge the significant messages of environmental organisations and for these organisations in turn to respect the lives, work and circumstances of rural people.

Before discussing the socioeconomic impact of change, it is important that we acknowledge the complexity and diversity of rural Australia. The inland areas are home to ~16% of Australians in a vast, sparsely populated area (Hugo 2005). Differential forces are shaping development in more remote areas as opposed to those close to regional centres and capital cities. In more remote areas and the farther one moves from a capital city, there is an increasing tendency for farms to be becoming larger and therefore for traditional farming families and farm workers to be leaving in large numbers from what were once closely settled areas (Gray and Lawrence 2001). As a result these remoter areas are experiencing significant population decline and a changing demographic profile (ABS 2008).

Communities that serve these areas are under pressure because of the decline in the numbers of farm families, farm workers and their families, and supporting professionals such as teachers and health professionals. Those communities most likely to be negatively affected are towns with populations of less than 10 000 (particularly those with less than 4000) and communities more distant from regional service centres

(Hugo 2005). These communities are struggling with a declining and aging population base and a loss of service infrastructure (Birrell 2000).

In stark contrast, areas on the edge of regional centres and capital cities are experiencing a growth of peri-urban development, as well resourced and skilled tree-changers move in and settle on small acreages at the edge of large, well serviced communities. Many of these families bring resources, are dependent on off-farm income and view farming as secondary to lifestyle (Burnley and Murphy 2004). These regional areas are growing more rapidly, attracting expertise and resources and moving beyond a dependence on agricultural production. They are also experiencing a growth in services that provide a further attraction for new people with skills and ideas. Nonetheless there is evidence in these communities of a clash of cultural expectations in relation to farming practices that does cause division and divided expectations. Cultural clashes are also evident within and between groups – for example, long-term residents who have a long history of familial settlement in these areas and those newcomers who have no familial ties to an area and no long-standing place-based connection (Alston and Kent 2008).

In summary there are significant and diverse trends evident in agriculture and rural communities dependent largely on place-based amenity, lifestyle factors and access to services and shaped by growing diversity in populations. More remote communities are changing, contracting and experiencing significant decline in services and are marked by poverty and social exclusion. Larger communities and those closer to cities are expanding, diversifying their income base and becoming lifestyle retreats. These trends have been underway for some time and the impacts of climate change overlay this unstoppable and ongoing restructuring.

### Climate change impacts

Climate variability is adding significant uncertainty to changes already underway (Garnaut 2008, 2011). Globally climate change impacts are creating major social problems. Rising temperatures on land and sea, unseasonable climate variability, widespread droughts, heavy rains and more intense cyclones, heat waves, changing cropping cycles, changes in rainfall patterns, greater erosion and more bushfires are just some of the predicted outcomes of the build up greenhouse gas emissions in the atmosphere (McMichael 2002; IPCC 2007). The potential impacts on food supply and a secure agricultural base are evident. These impacts are compounded by predictions that the world's population will rise to 9 billion by 2050 placing even greater pressure on already stretched resources (UNDP 2008).

Australia has experienced both incremental climate variability as a consequence of drought, and catastrophic climate events typified by extreme weather events such as floods and bushfires. Catastrophic events have also resulted in significant loss of life in many areas including the Victorian bushfire areas and the Queensland communities affected by flood. Over our 2010–11 summer many areas of Australia experienced unseasonal and significant flooding events, events that have placed extraordinary pressure on communities and people and led to major loss of property, crops, homes and businesses. These unpredictable events are changing the face of rural areas as they reduce the

resilience of people and community to address what is often catastrophic change (Hargreaves 2011). They also add tension to the ongoing process of change and reduce the economic viability of areas and the social cohesion of its members. Businesses are destroyed, jobs are lost, services are reduced or inaccessible and people may be in crisis accommodation for significant periods of time.

Climate impacts are also of major concern for Indigenous people whose see their country and significant sites destroyed or diminished. The Boomanulla Statement emerged as a result of concerns held by Indigenous people about their exclusion from decisions regarding water and outlines the views of Indigenous people concerning natural resource management policy (Callaghan and Associates Pty Ltd 2002). Attachment to place is strong, people are very reluctant to leave and yet, ensuring supplies into the area will be problematic. The impact of climate events on Indigenous Australians is an under-researched area.

### **Socioeconomic factors – agriculture and rural communities**

As agriculture adapts to changing circumstances, so too do the social relations that govern this dominant Australian industry. Over 90% of farms are still run by farm families making this the main mode of production (Garnaut and Lim-Applegate 1998). As farms become bigger in rural and remote areas, these larger-than-family farms are run by families with assistance from hired labour or by large corporate entities run by managers with assistance from a small poorly paid workforce (Gray and Lawrence 2001). This point is worth making as the families of isolated workers may not have the same access to education in remote areas. In the past educational access has been highly dependent on financial access to boarding schools and tertiary institutions and the unacknowledged efforts of mothers who have found the time and resources to home school their children. Our research suggests that some children are slipping through the net because their parents may not have the time and capacity to ensure that regular lessons are conducted – often because both partners, as well as the children, may be working regularly on properties. Children may also be denied access to secondary school and tertiary education because of a lack of financial means to send them to boarding school (Alston and Kent 2006).

The growing size of remote area farms has several additional social consequences including, as farm families leave, a decline in numbers of children at small schools, small school closures, closure of school bus routes, decline of small communities, high numbers of empty farm houses, reduced road maintenance, low levels of telecommunications access, greater likelihood that women may move away for work and so their children can access education and greater social isolation for those remaining (Alston and Kent 2004, 2006).

By contrast the peri-urban fringe lifestyle farms are becoming smaller and are usually run with support of off-farm income. There is a high level of diversification evident in these peri-urban areas as newcomers introduce a variety of crops, animals and/or value-added product.

In between the two extremes are the bulk of farms run by families with little or no farm labour and reliant on family to

undertake the critical tasks associated with running a working, productive farm. These families are critical to social capital in their communities as they contribute a great deal of unpaid work to their communities in a voluntary capacity and in several organisations and services. More recently this additional contribution to community is under stress as these family farms are increasingly dependent on off-farm income, income usually provided by the female partner working in the local town, regional centre or capital city (Alston 2000; Alston and Kent 2004).

During the past decade of drought, this off-farm income has become critical for families to survive in agriculture but is not often acknowledged as key to a viable agricultural industry. It may not be too far from the truth to say that the profitability of Australian agriculture rests heavily on the shoulders of women (Alston 2000). What is also of note is that volunteer work is declining because of time pressures experienced by these family members. Nonetheless our research reveals that women in small communities take these voluntary duties seriously and time-poor women are conflicted by competing priorities. These time conflicts create trauma for families trying to juggle the needs of their communities with their family's need for income (Alston and Kent 2004). Elsewhere I have argued there is a case for critical community work in rural areas to be paid from the public purse and for public and private sector organisations to negotiate with workers to ensure essential voluntary community work is incorporated into workforce wages (Alston and Whittenbury 2010).

The Australian Bureau of Statistics (ABS) Socioeconomic Indexes for Areas (SEIFA) are locality-based measures of social disadvantage (ABS 2006). Australia's rural areas are significantly over-represented among the lowest bands of SEIFA. A brief and generalised assessment of socioeconomic indicators for rural and remote communities reveals the extent to which basic citizenship rights of rural people and places appear to be eroding by comparison with that of other Australians. There are increasing levels of poverty, significant out-migration of young people for work and education, and of workers and their families displaced by drought. There are static or declining populations in more remote communities, a gendered trend in out-migration is resulting in more remote communities becoming masculinised, higher levels of unemployment or precarious attachment to the labour force, poorer health on several indicators, higher morbidity including from road accidents and suicide, lower life expectancy, lower levels of education, a higher proportion of aged citizens and lower levels of service delivery (Bourke 2001; Hugo 2002; AIHW 2005, 2008; Foster 2007; Alston 2010). Women are working at much the same rates as their city cousins, but there are fewer aged, child and disability care services. There are also fewer public transport options, telecommunications are patchy and services are more costly (Alston and Kent 2004).

More remote communities have a growing proportion of Indigenous people (ABS 2008) and an in-migration drift of welfare dependent people seeking cheap housing (Alston and Kent 2004). These communities are experiencing increasing levels of poverty and higher levels of violence as the numbers of socially excluded people with few job opportunities and reduced services grow. Remote inland communities are sites

for growing disaffection and alienation as poor services and poverty compound reduced expectations.

Many small community hospitals have closed or offer only basic services, often excluding essential services such as birthing care (Dietsch *et al.* 2008). Mental health has been identified as a significant factor in rural areas and particularly among rural men by the national Beyondblue organisation and yet mental health servicing is at best poor (AAP 2006; Alston and Kent 2008; Alston 2009). Where there are high schools they may offer fewer subjects and/or subjects by distance education and, as numbers decline, so too do teacher numbers. The numbers of rural young people accessing higher education has been declining markedly during the drought period as financial pressures reduce a family's ability to support one or more young people away from home and access to Youth Allowance is unfairly limited for rural young people. Thus it is little wonder that the proportion of the population with a post-school qualification declines as remoteness increases (Alston and Kent 2006; Alston 2009).

Farm workers leaving with their families have created significant and dramatic declines in the numbers of students in schools. Blackall, for instance saw a reduction of 100 students from their central school in a 12-month period – from 350 to 250. This has major implications for staffing as teacher numbers are dependent on student numbers. Many teachers lose their positions, subject offerings are reduced, some students are forced to take their subjects by distance education, and many students lose close friends – all within a short period of time. These social impacts experienced by children are under-researched. What we do know from our research (and here I am not referring to Blackall) is that teachers are expressing increased concern for the mental wellbeing of children in their schools because they are absorbing the impacts of significant change within their families, schools and communities with little formal support and a perception that their life chances are being reduced by climate events (Alston and Kent 2006).

Nonetheless, there is no doubt that agriculture and rural people and communities have been significantly destabilised by climate variability and climate events and this adds to the uncertainty and social complexities in rural life. Over the last decade this has taken the form of a major drought as well as catastrophic events such as fires, floods, cyclones, and dust storms. The civil unrest following the release of the MDB Authority's guide to its water plan in 2010 suggest that this had become a focal point for those who are disaffected by long years of government inaction to significant hardship, a lack of planning for the future and a lack of direction from governments on ways communities and people in affected areas might be supported to a more positive future. The unpredictability of the extent of change and the lack of certainty in climate science confounds people reliant on agriculture and the communities that support them, rendering them somewhat helpless to make determined decisions about their futures. Thus the resilience of rural people and communities is significantly eroded and they are searching for support and guidance to move through what are major change processes.

### Human service providers

An army of human service providers working in health, education, emergency services and welfare services provide

support to rural Australians. These workers often carry high caseloads, work with limited resources, cover vast areas, have few colleagues, may be supervised from distant regional centres and often must determine how to provide services to highly stressed populations. Rural human services are stretched, under-funded and barriers to service delivery are often misunderstood by regional administrators (Stayner and Barclay 2002; Alston and Whittenbury 2010). Charities bear an unfair burden of service provision in rural areas and it is not unusual for organisations such as the Salvation Army and St Vincent de Paul to be providing basic services. Also among the most trusted workers are the financial counsellors who work with families to develop future plans (Alston and Kent 2004; Alston and Whitney-Soanes 2008).

Of note is that farm family members, often the female partner, work in health and education areas. These women speak of carrying the burden of their personal situation and of hearing similar issues from their clients/patients in their workplace. Supervisors are aware of this additional stress on workers and assist where possible to allow women to juggle the burdens of their busy lives (Alston and Kent 2004; Alston and Whittenbury 2010).

In summary we know a great deal about rural and remote communities and service delivery into these areas, but there are significant gaps including a lack of detailed understanding of the social impacts of ongoing restructuring and climate events and a lack of understanding of what types of service supports are needed and how best to deliver them. This information would assist in creating an easier transition period through rapid change.

### Policy shortcomings

The community response to the MDB Authority guide to the Basin Plan demonstrates that communities are feeling alienated and disaffected and that policy development and implementation is flawed. While it is important to note that anger at the lack of attention to long-standing social issues in rural areas has been simmering, there is a real sense that informed consultation has not taken place and that policy has been imposed from above. There is also a widespread feeling that governments and policy-makers do not understand the culture of farming life and rural communities. There is an unrelenting sense that what passes for process is a one way giving of information rather than an informed exchange and consultation.

Policy relating to agriculture and rural communities has been at best haphazard and marked by short-term programs and policies and a lack of determined commitment to vision a future for agriculture that is embedded in viable rural communities. For example, there has been an historical trend to view rural policy as indivisible from agricultural policy and this has resulted in a lack of attention to the social needs of people engaged in, or supporting, agricultural industries. These policies demonstrate a *benign neglect* and *active exploitation* of rural people and places (Molnar 2010). What is lacking is an engagement with place – or what Shucksmith (2010) calls place-shaping. Policy must be constructed on a territorial rather than sectoral basis, and acknowledge the multifunctional nature of our rural areas. These are places that are essential to our national environmental wellbeing, to our food security and national

wealth, to our sense of who we are as a people. Ignoring their place in our national policy vision is derelict at best.

This lack of action is eroding resilience in rural areas, a concept defined by Eckersley (2009) as the ability of people to respond positively to adversity. Elsewhere (Alston and Whittenbury 2011) we have argued that positive adaptation to change is critical to the ability of people and places to manage *resilience with intent* (Gooch and Warburton 2009). What is needed is policy that is grounded in rural experience, and which enhances rather than erodes resilience. A failure of metagovernance, or the governance of government (Bell and Quiggin 2008), has restricted our nation's ability to transform to more desirable futures in rural areas because positive futures are highly dependent on governments being deeply engaged. What is needed is to 'bring government back in' to the policy process (Bell and Quiggin 2008; p. 74). Such a role would assist in the building of resilience, helping people and communities to adapt, aid the transformation of communities to places where people desire to live and provide knowledge and resources to build trust between rural people and the institutions that serve them. This role would include fostering inclusive partnerships (Shucksmith 2010) between government, non-government and voluntary sectors, a factor that would assist these communities to move through very difficult times and to adjust in a supportive environment. The successful Landcare model is an exemplary model of successful partnerships. But it is clear that governments must do more 'heavy lifting' (Bell and Quiggin 2008; p. 727).

### Adaptation to climate change

Globally two divergent policy responses to climate change include mitigation strategies – or reducing as much as possible carbon emissions to reduce the effects of climate change – and adaptation strategies – which include strategies to assist people to respond to inevitable change. In the context of rural Australia, mitigation strategies might include reducing resources used for production, reducing intensive agriculture in some areas; growing different crops and changing production techniques. Adaptation strategies might include targeting particular irrigation areas to be dryland farming only, changing cropping and livestock patterns, reducing farming in marginal areas and rewarding farmers for environmental stewardship work. Yet there is a marked difference between coping and adapting to significant change. Coping is a short-term response that is reactive and motivated by crisis and is largely unsustainable (Taylor *et al.* 2010; Pelling 2011). Adaptations by contrast are more likely to result in long-term and sustainable change. Many of the *social* adaptations we are observing in areas affected by climate change appear to be coping rather than adaptation strategies. These include:

- generating income off-farm at a distance requiring living away to ensure the family can remain in farming;
- men working in isolation while their families live and work away;
- reduced attention by women and men to health care;
- rising levels of mental health and stress but a lack of help-seeking behaviour;
- alcohol and drugs being used for self-medication for stress;
- young people leaving for a future elsewhere;
- young people dropping out of school;
- small business closures or reduction/casualisation of employees;
- small businesses operating as quasi-banks; and
- gender implications leading to differential experiences for men and women (Alston 2009; Alston and Whittenbury 2010).

These responses are occurring incrementally and with limited purposeful policy to develop sustainable futures for families and communities.

Further, in our observation and research, there have been significant resistances to exit packages and to moving away from farming. This needs to be understood in a social and cultural sense. Farming land has often been passed to sons through patrilineal inheritance practices and there is a strong sense of masculine identity being located in the male farming occupational status. To exit is to lose far more than land and occupation. It also involves a loss of identity and a fear of the future that must be acknowledged in policy parameters. At the same time our research indicates that women are more likely to want to receive funding from the water buyback scheme and from exit-based grants. For them, this means a retreat from an unending working life and a future that looks much easier for themselves and their children (Alston 2006). Understanding gendered experiences is a critical part of policy development.

### A vision for rural Australia

What is needed to achieve our objectives of a viable rural Australia where climate impacts are addressed responsibly, where citizenship rights are recognised, where people have access to services to achieve their potential, is a visionary rural social policy development process. This vision must incorporate an adequate assessment of the environmental, economic and social sustainability of rural places and a determination to assist transition to new futures (Alston 2002). There may be areas that are unviable in the long term. Recognising this and offering community members transition packages including skills training, business planning and occupational assessments may be part of the future policy process.

There are obvious research and policy gaps relating to social imperatives in rural Australia that should be addressed immediately. In the area of research these include a detailed and ongoing assessment of the social and economic impacts of climate events on agriculture and rural communities and ongoing evaluation of strategies to address these. In policy areas it includes making Youth Allowance available to any young person from a rural area who must leave home to complete their studies; ensuring that health services are adequate and include antenatal and birthing care provided by midwives; health and welfare service support in the form of funding, adequate staffing and staff supervision and making use of technological advances to provide further expert advice; state of the art telecommunications and telecommunications hubs in small towns; accessible and affordable public transport.

In the medium term, local governments should be funded to auspice social inclusion committees that employ community development workers. The role of these workers would be to

assist communities to develop plans for their regions that assess future viability, assist growth and development, and build human and social capital. Their role would also encompass writing grants for competitive government funding for community programs and alternative industry development.

In the long term federal and state governments must work to develop a future vision for rural areas that addresses the socioeconomic needs of people in these communities, and environmental protection for our damaged landscapes. Part of the government's 'heavy lifting' requires development of a rural plan detailing:

- a vision for rural and remote areas in the light of climate change, ongoing social change and reduced water availability;
- an assessment of the areas, communities, services and commodities that have long-term viability and those that do not;
- a vision that acknowledges diversity in agriculture, small business and rural communities;
- a vision that prioritises people;
- a vision that enhances resilience, family wellbeing and community capacity;
- social inclusion strategies;
- new models of governance characterised by inclusive partnerships between governments, non-government organisations and the private sector;
- greater community participation in policy and place shaping, more transparent community consultation and information exchange, and an acknowledgement that rural people are experts in their own lives;
- thick and comprehensive human services and supported environments for human service workers;
- a commitment to rural people and communities through a vision for transition and change and the supports that will be provided to people in these communities to achieve this change;
- the supports – financial, services and infrastructure – that will be needed to assist people to informed choices about their futures;
- a plan for the future of rural and remote areas;
- an acknowledgement that the people in these communities cannot address the future unaided while there is such uncertainty over their industries, communities and people;
- an investment in human capital so that people in rural areas can achieve their potential and access education/retraining to achieve their ambitions;
- a fund that provides investment funding to rural communities to establish new directions for change;
- a social taskforce to be established to oversee the vision, the investment in rural people and communities and the change management process; and
- the establishment of a new, well funded model of Human Services practice that values and builds rural community capacity and acknowledges and values voluntary contributions through workforce practices.

However, this is not just the role for governments. There is a need for agricultural and rural community organisations and women's groups to advocate for rural areas and their members; there is a

need for businesses and private enterprise to address and resource rural needs; there is a need for farming families and rural community members to work together to determine their immediate social requirements and to develop future strategies and there is a need for individuals to provide leadership and vision for their communities.

### **A positive future for rural people and communities**

There is no doubt that rural and remote communities are going through a rapid period of change. While this process has been ongoing, the impact of climate events and the uncertainty this creates has eroded the resilience and wellbeing of rural people and communities and degraded our landscapes. There is a sense among rural people that their views have been ignored, that they are somehow responsible for the environmental concerns of the community and that they are being asked to bear the brunt of government policies to address climate change adaptation. This has led to a growing sense of alienation from governments and from the rest of the community and a growing sense of distrust of governments and institutional mechanisms. Rural and remote people feel disenfranchised. This paper has outlined socioeconomic factors that indicate rural Australians are slipping behind on several indicators of wellbeing. Previous government policies have focussed on letting the market decide the future of rural areas and advocating self-reliance and a 'do it yourself' mantra for rural people. Climate change is exposing the need for governments to be much more engaged in assisting communities under threat of major social dislocation to re-vision their futures. Some areas will be increasingly unviable and we need to manage this change carefully and with deep respect for those most affected.

What farm families and those living and working in rural communities expect from governments is a commitment to visionary rural policy development. Ideally this should be based on current conditions but also draw on the precautionary principle that it is better to be prepared for potential future scenarios than to hope for the best. It must also be responsive to ongoing and constant change and it requires careful planning to ensure that the quality of life and citizenship rights of rural people are not compromised. In developing appropriate policy, governments must ensure they are sensitive to governance practices that are inclusive, partnership-based, supportive and attentive to emerging and ongoing trends. This requires cooperation and respect from farmer organisations, women's groups, environmental bodies and private enterprise to name a few. Without this agriculture and rural communities will change in ways that may be defeatist and divisive and adaptation may be negative and unsustainable.

In attending to rural people and places it is important that diversity is acknowledged and that there is recognition of area variations dependent on industry base, size of farms, where one lives, how close the area is to a centre of regional population growth, demographic variations, income levels and service infrastructure. Resilient people and places require innovations and adaptations that enable sustainable practices and social sustainability. Creating and maintaining a vibrant agriculture is dependent on vibrant communities, well resourced people, adequate industry and business support, optimal service

infrastructure and attention to sensitive policy development that rewards and supports people who live and work in these areas and who have the same citizenship rights as people in the cities.

## References

- Agriculture and Food Policy Reference Group (2006) Creating our future: Agriculture and Food Policy for the Next Generation. Report by the Agriculture and Food Policy Reference Group to the Minister for Agriculture, Fisheries and Forestry, Commonwealth of Australia, Canberra.
- Alston M (2000) 'Breaking through the grass ceiling: women, power and leadership in rural organisations.' (Harwood Publishers: Amsterdam)
- Alston M (2002) Inland Rural Towns: Are they sustainable? Keynote address to the ABARE Outlook Conference, Canberra. pp. 1–13. Available at: [www.assa.edu.au/programs/workshop/workshop.php?id=60](http://www.assa.edu.au/programs/workshop/workshop.php?id=60) (accessed 12 April 2012)
- Alston M (2006) 'I'd like to just walk out of here': women's experience of drought. *Sociologia Ruralis* **46**, 154–170. doi:10.1111/j.1467-9523.2006.00409.x
- Alston M (2009) 'Innovative human services: Australia's changing landscapes.' (Pan Macmillan: Melbourne)
- Alston M (2010) Rural male suicide in Australia. *Social Science and Medicine (Special Edition)* **74**, 515–522.
- Alston M, Kent J (2004) 'Social impacts of drought.' Report to NSW Agriculture. (Centre for Rural Social Research, Charles Sturt University: Wagga Wagga)
- Alston M, Kent J (2006) 'Impact of drought on rural and remote education access.' A report to DEST and Rural Education Fund of FRRR. (Centre for Rural Social Research, Charles Sturt University: Wagga Wagga)
- Alston M, Kent J (2008) The Big Dry: exacerbating the link between rural masculinities and poor health outcomes for rural men. *Australian Journal of Sociology* **44**, 133–147. doi:10.1177/1440783308089166
- Alston M, Mason R (2008) Who determines access to Australia's water? Gender, citizenship and stakeholder priorities in the Australian water crisis. *Rural Society – Special Edition Gender and Water* **18**, 214–219.
- Alston M, Whitney-Soanes K (2008) 'Social impacts of drought and declining water availability in the Murray-Darling Basin.' (Institute of Land, Water and Society, Charles Sturt University: Wagga Wagga)
- Alston M, Whittenbury K (2010) Social impacts of declining water in the Murray-Darling Basin: Short Report. Monash University, Caulfield, Melbourne.
- Alston M, Whittenbury K (2011) Climate change and water policy in Australia's irrigation areas: a lost opportunity for a partnership model of governance. *Environmental Politics* **20**, 899–917. doi:10.1080/09644016.2011.617175
- Australian Associated Press (AAP) (2006) Beyond Blue calls for Rural Counselling, National Nine News, 19 October. Available at: <http://news.ninemsn.com.au/article.aspx?id=153751> (accessed 24 November).
- Australian Bureau of Statistics (ABS) (2006) An introduction to socio-economic indexes for areas (SEIFA), 2006 Information Paper: 2039.0, Commonwealth of Australia, Canberra. Available at: [www.abs.gov.au/ausstats/abs@.nsf/mf/2039.0/](http://www.abs.gov.au/ausstats/abs@.nsf/mf/2039.0/)
- Australian Bureau of Statistics (ABS) (2008) 'Australia's social trends.' (Commonwealth of Australia: Canberra)
- Australian Institute of Health and Welfare (AIHW) (2005) Life expectancy. Available at: [www.aihw.gov.au/mortality/data/life\\_expectancy.cfm](http://www.aihw.gov.au/mortality/data/life_expectancy.cfm) (accessed 4 June 2005).
- Australian Institute of Health and Welfare (AIHW) (2008) Rural, regional and remote health indicators of health status and determinants of health. *Rural Health Series* No. 9, Cat. No. PHE 97. Commonwealth of Australia, Canberra.
- Bell S, Quiggin J (2008) The limits of markets: the politics of water management in rural Australia. *Environmental Politics* **17**, 712–729. doi:10.1080/09644010802421448
- Birrell B (2000) Centre for Population Research, Melbourne, quoted in Sydney Morning Herald, Concerns over Greying of Rural NSW, 22 March 2000.
- Bourke L (2001) One big happy family? Social problems in rural communities. In 'Rurality bites: the social and environmental transformation of rural Australia'. (Eds L Stewart, L Bourke) pp. 89–102. (Pluto Press Australia: Altona)
- Burnley I, Murphy P (2004) 'Sea change: movement from metropolitan to Arcadian Australia.' (University of New South Wales Press: Sydney)
- Callaghan and Associates Pty Ltd (2002) Report on the Boomanulla Conference for Country incorporating the Boomanulla Statement, NSW Land and Water Conservation, Sydney.
- Dibden J, Cocklin C (2005) Introduction. In 'Sustainability and change in rural Australia'. (Eds C Cocklin, J Dibden) pp. 1–18. (UNSW Press: Sydney)
- Dietsch E, Davies C, Shackleton P, Alston M, McLeod M (2008) 'Luckily we had a torch: birthing in rural and remote NSW.' A Report to the Nurses and Midwives Board of NSW. (Institute for Land, Water and Society, Charles Sturt University: Wagga Wagga)
- Eckersley R (2009) Population health: the forgotten dimension of social resilience. In 'Brighter Prospects: enhancing the resilience of Australia'. Australia 21 Shaping the Future. Weston, ACT. (Ed. S Cork) pp. 36–40. Available at: [www.australia21.org.au/pdf/A21%20Brighter%20Prospects%20Report.pdf](http://www.australia21.org.au/pdf/A21%20Brighter%20Prospects%20Report.pdf)
- Flannery T (2005) 'The weather makers: the history and future impact of climate change.' (Text Publishing Company: Melbourne)
- Foster M (2007) Fields of health service provision. In 'Health care practice in Australia'. (Eds S Taylor, M Foster, J Fleming) pp. 74–102. (Oxford University Press: South Melbourne)
- Garnaut R (2008) 'The Garnaut Climate Change Review – Final Report.' (Cambridge University Press: Melbourne)
- Garnaut R (2011) The Garnaut Review 2011. Available at: [www.garnautreview.org.au/update-2011/garnaut-review-2011/garnaut-review-2011.pdf](http://www.garnautreview.org.au/update-2011/garnaut-review-2011/garnaut-review-2011.pdf) (accessed 25 November 2011).
- Garnaut J, Lim-Applegate H (1998) People in farming. ABARE Research Report 98.6, Commonwealth of Australia, Canberra.
- Gooch M, Warburton J (2009) Building and managing resilience in community-based NRM groups: an Australian case study. *Society & Natural Resources* **22**, 158–171. doi:10.1080/08941920801967880
- Grant A (2011) Situating analysis of pest and disease import risk in Australian agriculture: towards a post structural sociocultural theory of biosecurity risk communication. Unpublished PhD Thesis, Charles Sturt University, Wagga Wagga, NSW.
- Gray I, Lawrence G (2001) 'A future for regional Australia: escaping global misfortune.' (Cambridge University Press: Cambridge, UK)
- Hargreaves D (2011) Centrelink social workers and disasters. In 'Paper presented to the Gender and Climate Change Conference'. Prato, Italy, September. (GLASS, Monash University: Caulfield, Melbourne)
- Hugo G (2002) Australia's changing non-metropolitan population. In 'The new rural health'. (Eds D Wilkinson, I Blue) pp. 12–43. (Oxford University Press: Melbourne)
- Hugo G (2005) The state of rural populations. In 'Sustainability and change in rural Australia'. (Eds C Cocklin, J Dibden) pp. 56–79. (UNSW Press: Sydney)
- Intergovernmental Panel on Climate Change (IPCC) (2007) 'Climate change 2007: mitigation of climate change.' (IPCC Secretariat: Geneva) Available at: [www.ipcc.ch](http://www.ipcc.ch)
- Lawrence G (1987) 'Capitalism in the countryside.' (Pluto Press: Sydney)
- Lockie S, Bourke L (Eds) (2001) 'Rurality bites: the social and environmental transformation of rural Australia.' (Pluto Press Australia: Sydney)
- McMichael AJ (2002) Global climate change and health: an old story writ large. In 'Climate change and human health: risks and responses'. (Eds AJ McMichael, DH Campbell-Lendrum, CF Corvalan, KL Eloi, A Githeko, JD Scheraga, A Woodward) pp. 1–15. (World Health Organisation: Geneva)

- Molnar JJ (2010) Climate change and social response: livelihoods, communities and the environment. *Rural Sociology* **75**, 1–16. doi:10.1111/j.1549-0831.2010.00011.x
- Pelling M (2011) 'Adaptation to climate change: from resilience to transformation.' (Routledge: London)
- Plimer I (2009) 'Heaven and earth: global warming the missing science.' (Connor Court Publishing: Ballan)
- Pooley E (2010) 'The climate war: true believers, power brokers, and the fight to save the earth.' (Hyperion: New York)
- Shucksmith M (2010) Disintegrated rural development? Neo-endogenous rural development, planning and place-shaping in diffused power contexts. *Sociologia Ruralis* **50**, 1–14. doi:10.1111/j.1467-9523.2009.00497.x
- Stayner R, Barclay E (2002) Welfare and Support Services for Farm Families: a Report to Rural Industries Research and Development Corporation. RIRDC Publication No. 02/042. RIRDC Project No. UNE-58A, Commonwealth of Australia, Canberra.
- Taylor A, Harris K, Ehrhart C (2010) Adaptation: key terms. *Tiempo* Issue 77 October. pp. 10–13. Available at: [www.tiempocyberclimate.org/portal/archive/pdf/tiempo77low.pdf](http://www.tiempocyberclimate.org/portal/archive/pdf/tiempo77low.pdf) (accessed 16 May 2011)
- UNDP (2008) 'Department of Economic and Social Affairs Population Division. The world at six billion.' Department of Economic and Social Affairs, Population Division. Available at: [www.un.org/esa/population/publications/sixbillion/sixbillion.htm](http://www.un.org/esa/population/publications/sixbillion/sixbillion.htm) (accessed 12 April 2012)