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**Diversification for sustainable development in rural and regional Australia:
How local community leaders conceptualise the impacts and opportunities
from agriculture, tourism and mining**

Although the multiple economic, environmental and social challenges threatening the viability of rural and regional communities in Australia are well-known, little research has explored how community leaders conceptualise the impact and opportunities associated with economic diversification from agriculture into alternative industries, such as tourism and mining. This qualitative research, utilising the Darling Downs in Queensland as a case study, documents how 28 local community leaders have experienced this economic diversification process. The findings reveal that local community leaders have a deep understanding about the opportunities and challenges presented by diversification, articulating a clear vision about how to achieve the best possible future for their region. Despite excitement about growth, there were concerns about preserving heritage, the increased pressure on local infrastructure and an ageing population. By documenting local leader's insights, these findings may help inform planning for rural and regional communities and facilitate management of the exciting yet challenging process of growth and diversification.

Keywords: growth development; diversification; agriculture; mining; tourism

Traditionally, rural and regional communities have played a significant role in the economic development of Australia. Up until the late 1950's, more than 80% of the value of Australia's exports was attributable to agricultural products (Australian Bureau of Statistics [ABS], 2004). These days, although the agricultural industry still utilises more than half of Australia's land area and employs 318,000 people (ABS, 2010), multiple local, national and global challenges are threatening the viability of both the industry and the surrounding rural and regional communities that depend on it. Locally, severe weather events, including long-term droughts, floods, cyclones, and bush-fires, are challenging the existence of family farms across Australia, with media reports explaining that many farmers unsure if they can 'pick up the pieces' once again (Hughes & Hughes, 2011). Nationally, the agriculture industry continues to fight for its place in a diversifying economy, competing against the mining, manufacturing and service industries (ABS, 2004). Internationally, the reality of a global marketplace, harsh economic downturn and declining commodity prices continues to challenge the economic viability of Australian agricultural industry (Garnaut, 2008). Although many of these challenges are not necessarily new or unique to Australia, the isolation of inland regions intensifies their vulnerability and the combination of such stresses is a recent force (Herbert-Cheshire, 2000; Cocklin & Dibden, 2005).

With rural and regional Australia traditionally heavily reliant on the agricultural industry, which is in decline, the environmental, economic and social sustainability of these communities is at risk. The future of rural and regional Australia will depend on the capacity of communities to respond to these challenges, and their success will rely heavily on innovative thinking, collaborations and strong local leadership. Thus, this research explores how local rural and regional leaders conceptualise the opportunities and challenges facing the growth and development of their communities, identifying their unique insight and perspectives about ensuring a sustainable future for rural and regional Australia.

The role of diversification in sustainable rural development

Sustainable rural development can be simply defined as "a process of multidimensional change affecting rural systems" (Pugliese, 2001, p. 113), although it is important to note that there is no one agreed definition and a great deal of confusion as to what 'sustainable development' actually means. The most widely accepted and well-known definition is from the World Commission on Environment and Development (WCED), which defined sustainable development as meeting "the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p.43). Achieving this vision of sustainable development, however, requires careful consideration of the key triple bottom line domains of sustainability: economic growth, social issues and environmental conservation (Elkington, 2004). To date, although a growing body of literature has explored issues of sustainable development in the context of rural and regional communities, the focus has predominately been on agriculture (see for example Bell, 2005; Ogaji, 2005; Pugliese, 2001; Scott, Park, & Cocklin, 2000). This is despite increasing concerns that over-reliance on the agriculture industry contributes to the economic disadvantage of rural Australia, creating volatile single-purpose resource-centred communities (McManus & Pritchard, 2000). Contemporary rural communities must adapt their growth strategy to mitigate the effects of a diminished agricultural sector and develop alternative economic functions that diversify from their traditional agricultural services; put simply, they must diversify in order to survive (Barlow & Cocklin, 2003).

Diverse economies, as Gibson-Graham (2005, p12-13) argues, involve "the production, appropriation and distribution of surplus within different kinds of enterprise, where value is liberally distributed, not attached to certain activities and denied to others". However, while diversification may offer positive economic opportunities, it may also result in equally negative economic impacts that potentially compound negative social impacts. For instance, the diminishing agriculture sector has resulted in the

outmigration of farming families from many rural and regional communities, causing a shift in community demographics that negatively impacts local economic and social sustainability (Tonts & Black, 2003). With reduced local spending shrinking the local economy, and a subsequent loss of employment opportunities, the result is often further out-migration, placing rural and regional communities into a potential cycle of depopulation (Tonts, 2005).

The economic sustainability of rural communities is further threatened by an increasingly older and ageing demographic. The demographic composition of rural communities is ageing due to the comparatively older workforce in the remaining agriculture sector (ABS, 2003), the in-migration of retirees and other 'tree-changers' (Costello, 2007; Crowther & Ragusa, 2011) and the outmigration of young people due to limited tertiary educational prospects and post-school employment opportunities (Drozdowski, 2008; Eacott & Sonn, 2006; Hugo, 2004). Such demographic change translates into a depletion of social resources, which threatens the viability and vitality of many rural communities (Corcoran et al, 2010; Hugo, 2004). For example, key impacts from youth out-migration include the loss of potential future leaders, the loss of social interaction (Tonts, 2005a), a reduced birth-rate and, subsequently, reduced chances of regenerating the local population (Argent & Walmsley, 2008). In-migration can similarly result in negative social impacts. The influx of new residents, such as tree-changers as Costello (2007, p. 93) reports, has resulted in social conflicts over local development creating the perception that "a new rural class is emerging and changing the local landscape – making existing residents feel out of place". While return youth migration would negate this impact, many communities permanently lose their youth to their metropolitan neighbours (Stock, 2006). Clearly, social diversity and equitable steady migration, avoiding significant influxes that counter-balance the existing population, are key indicators of sustainable rural development that must be addressed in a move towards diversification.

Critically, the specific social challenges and impacts of diversification vary according to the industry involved. Mining and tourism are two key land-use change industries in rural and regional Australia. The diversification of rural communities has been encouraged by the force of a globalised market, which is explicitly evident in regional areas that exhibit resource potential for commodity markets (Bowler, 1999). In Western Australia, Mayes (2008) qualitatively explored the local perceptions of residents (n=60) in relation to pre-mining and post-mining growth. Describing a discourse around issues of social equity, population change, infrastructure and rural identity, Mayes (2008) concluded that mining has the potential to bring long-term benefits to rural and regional communities across Australia *if* key social challenges are met and understood. The first challenge is the fly-in, fly-out culture of the industry, which emerged in the eighties as a cost cutting strategy for an industry that once opted to invest in local communities and contribute to the development of social infrastructure (Lockie, Franetovich, Petkova-Timmer, Rolfe, & Ivanova, 2009). The second challenge is the loss of control by the community, which is considered by some to be the greatest threat to the ongoing viability of rural Australia (Cheshire, 2010; Mayes, 2008). Despite the push towards corporate social responsibility, it is in the post-mining stage that rural communities remain most vulnerable as the introduced social and economic benefits are disrupted by the withdrawal of mining residency (Kapelus, 2002). These challenges illustrate the need to better understand the triple bottom line impact of the mining industry and identify the circumstances under which these natural resources are either a 'blessing' or a 'curse' for individual communities (van der Ploeg, 2011).

Similarly, it is argued in some areas tourism has overtaken the traditional role of agriculture as the anchor of rural communities, providing employment opportunities and economic stimulus in a variety of ways (Garrod, Wornell, & Youell, 2006). First, the natural environment surrounding rural communities is a sellable product for rural tourism. Rural tourism is described as the 'lifeblood' of the rural landscape, thus giving communities economic justification for preserving and maintaining their natural resource (Garrod, et al., 2006). Second, heritage tourism encourages rural communities to invest in the development and conservation of historical enterprise (i.e., precincts, museums, displays), resulting in significant impacts on community spirit and pride (Gilbert, 2006). Third, agri-

tourism combines these two concepts to draw tourists into an experience that promotes food production and rural lifestyle, transforming the rural landscape into an economic, as well as an environmental, asset (Marsden & Sonnino, 2008).

Despite obvious employment opportunities, tourism is often subject to peak periods and off-seasons which creates annual dips in employment (Marsden & Sonnino, 2008). Additionally, while some research has highlighted serious concerns for the loss of rural identity due to tourism development (Sharpley & Vass, 2006), other research has found tourism to have a positive impact on social identity. For example, in a comparison of nineteen Norwegian farms, Brandth and Haugen (2011) found that agri-tourism was revitalising, rather than threatening, rural identity as it turned the traditional farming identity a unique sellable product. Of course, although tourism presents an opportunity for economic growth and diversification in rural and regional communities, it cannot be considered a sustainable, or equitable, solution unless the community exhibits resource capacity for tourism development (Kauppila, Saarinen & Leinonen, 2009).

Given the temporary residency of the mining industry (Cheshire, 2010), and the annual off-seasons of the tourism industry (Marsden & Sonnino, 2008), diversification into these areas clearly presents both opportunities and challenges for rural and regional communities. To date, however, limited research has explored the impact and experiences of diversification for rural and regional communities, especially in the Australian context. The purpose of this paper, therefore, is to address this knowledge gap. Utilising the Darling Downs regions in southern Queensland as a case study, it explores how self-defined local community leaders perceive their traditional agriculture-based communities have experienced the impact of two key land-use change industries: mining and tourism. The focus is on understanding how critical key opinion leaders, who frequently shape local attitudes towards change, conceptualise competing economic priorities, diversification options and the current and future prospects for their rural and regional communities.

Method

Case Study Communities

The case study regions of Southern Downs and Western Downs, located within the Darling Downs region in southern Queensland (see Figure 1), were selected due to their recent economic diversification into tourism and mining. Known colloquially as 'Queensland's breadbasket,' the Darling Downs is a sparsely populated diverse agricultural landscape that covers nine million hectares. Approximately 5.6% of the state's population live in the region (OESR, 2006), which is responsible for 26% of the state agricultural output with an estimated market value of over \$1.9 billion (The State of Queensland, 2006; OESR, 2006). Approximately a fifth of residents currently work within the agricultural industry: 15.7% in Southern Downs and 24.5% in Western Downs (OESR, 2006). At the time of data collection (late 2009), each region was transitioning from an economy primarily reliant on traditional agriculture to one that was actively engaging new industries and enterprises. Southern Downs (2011) was engaging in a voluntary process of diversification into tourism, whereas Western Downs was diversifying more involuntarily into mining. Although the Queensland Government has identified the Surat Basin in the Darling Downs as key to mining and energy production, with an estimated 6.4 billion tonnes of high-quality thermal coal ready to be mined (The State of Queensland, 2006), there is considerable community concern and opposition to the state approved development of the mining industry (Wagner, 2010).

INSERT FIGURE 1 ABOUT HERE

Within these local government areas, four small towns were selected as the specific case study communities: Stanthorpe and Warwick (Southern Downs), and Dalby and Chinchilla (Western Downs). Each town is typical of Australian rural and regional service centres, strategically situated on major highways connecting to city centres in Queensland, New South Wales and Victoria.

Traditionally reliant predominately on agriculture, these regions are diversifying into mining and tourism. The Southern Downs region is focussing on tourism development (see Miller, van Megen, & Buys, 2010), with Stanthorpe capitalising on its cool climate high-altitude location to become Queensland's premier wine district and Warwick known for seasonal festivals and old sandstone architecture reminiscent of early Australian settlement (About Australia, 2011). The Western Downs region is focussed on capitalising on the mining opportunities for Chinchilla, although agriculture is still important with Chinchilla producing 25% of the nation's watermelons and Dalby celebrating agricultural heritage through their Pioneer Park Museum (Western Downs Regional Council, 2011). Table 1 summarises some of the key environmental, economic, political and socio-demographic characteristics defining these case study communities.

INSERT TABLE 1 ABOUT HERE

At this juncture, it is important to note that limited research has explored rural resident's views on economic development and this small body of research has typically focussed on the impact of one industry only. For instance, Mayes (2008) qualitatively explored the impact of mining through 60 in-depth interviews, whilst Barlow and Cocklin (2003) interviewed 27 residents about plantation forestry. Quantitative residents surveys focussed specifically on regional economic development issues are relatively rare, as is the use of focus groups. Thus, as is appropriate when knowledge is limited, this research utilised qualitative methods to generate specific textual descriptions and unique insight into the experience and impact of economic diversification for four rural and regional Australian communities. Focus groups were selected as the method of data collection because these semi-structured small group interactions encourage extensive discussion and debate, allowing participants to share, react and build-on to each other's viewpoints, experiences and ideas (Liamputtong & Ezzy, 2005).

Participants

After obtaining formal ethical clearance from the university human research ethics committee, focus groups were conducted in the towns of Stanthorpe and Warwick (Southern Downs), as well as Chinchilla and Dalby (Western Downs). Participants were selected through a purposive snowball sampling approach. Contact details of local self-defined community leaders, defined as those that are well-known in the community and active in local activities, events or civic functions, were sought through word of mouth referrals, as well as the assistance of our industry research partners, a non-government environmental organisation, state and local government, and the Chamber of Commerce in each locality. These initial community contacts were asked to suggest names of local residents who would consider themselves key stakeholders in the future of their community and fit the following three general criteria: residents who live in and know the community well, were prominent participants in local community events, for example, elected community leaders, business owners, or employees of public organisations, and care about future development and growth issues, regardless of their specific position on development issues. These potential participants were contacted via phone and/or email and invited to participate in a discussion about the development and growth of their region through a focus group held at a convenient central location, for example, a room in local council or library. They were also asked to suggest other potential participants. Following standard good practice interview and ethical protocols including informed consent for participation and subsequent publishing of quotes, participants were offered a light meal and a \$10 gift voucher as an incentive and thank-you for their participation. The 28 residents who participated had resided in the region for an average of 20 years. The four focus groups comprised of 6, 10, 5 and 7 participants, 16 males and 12 females, ranging in age from 30 to 65, with an average age of 48, with two participants choosing not to disclose their age. A diverse range of occupations and industries were represented across the four focus groups including local business owners, farmers, social service organisations,

schools, hospitals, government agencies, special interest groups and real estate agents. Most participants (65%) earned more than A\$66,000, with six choosing not to disclose their income.

Procedure

The focus groups were held at council meeting rooms or local Retired and Services League (RSL) of Australia clubs. Lasting for approximately 90-120 minutes, each focus group was audio recorded and moderated by the lead author. The focus group guide questions were developed by the authors (a complete copy is available on request), based on existing literature and applying a triple bottom line approach to understanding sustainable development in terms of economic, environmental and social impacts and opportunities (Elkington, 2004). A semi-structured format was utilised to explore local community leaders understanding of, and opinions about, issues of local development, growth and diversification. Questions such as the following were asked, with the use of prompts where necessary: “tell me about your region and any changes you’ve seen in your region over the years”; “taking a forward looking perspective, what do you think the future holds for your region, whether positive, negative or mixed?”; “what do you think are the main issues, challenges and decisions which your region will face over the coming years?”; “what are potential solutions to the issues/problems we’ve talked about?”; and “how would you engage the community and other stakeholders on these issues?”. Conversation amongst participants was encouraged, with participants' views sought on five specific inter-related issues affecting the development of regional and rural communities. The five priority issues, which the moderator raised if they were not organically raised in the group discussion, were peri-urban development planning (e.g., new developments, lifestyle blocks), land and water resource management (e.g., role of agriculture, potential conflict with mining or tourism), economic priorities (e.g., labour shortages, skill shortages, unemployment, industry transformations/relocations, education constraints), climate change (e.g., drought, changes in growing season, changes in temperatures/rainfall) and population changes (e.g., ageing population, youth outmigration, population changes from ‘tree-changers’). The final question was always “if you were a decision maker, say the Mayor of this region, what would be the one thing you would address right now, and in 5 years time, to make your region stronger, to make it a better place?”. This article focuses specifically on the findings drawn from the qualitative data in relation to economic priorities and diversification.

Data analysis

The audio recordings were fully transcribed verbatim, with a thematic approach used to analyse the data. The facilitator, the lead author, led the data analysis process, which were explored and coded manually after the transcripts were read and re-read to identify common and contrasting concepts. Rice and Ezzy (1999, p. 258) describe how the identification of themes occurs through “careful reading and re-reading of the data”. They outline four key iterative steps involved in thematic data analysis: mechanics (data preparation and transcription), data immersion (i.e., reading and re-reading transcripts, listening to audio-recordings), generating initial codes and emergent patterns re the experience of diversification (i.e., initial pattern recognition within the data), and finally searching for key themes and sub-themes (i.e., identification and categorisation of dominant categories and themes). Iterative coding enabled categories, themes and patterns to be identified, grouped and labelled (Liamputtong & Ezzy, 2005), with the focus of this article on understanding local leaders experiences and expectations of economic diversification. The final themes purposely include multiple excerpts from the raw data using the exact words of participants, thus allowing readers to evaluate our thematic structures. To preserve anonymity participants are identified only by their gender (M/F) and locality in the results section.

Results

Community leaders described how regional growth offered both opportunities and challenges. While diversification was considered the key to sustainable development of the region, community leaders outlined a variety of triple bottom line issues that were perceived as barriers to achieving this

outcome. These residents highlighted similar experiences, challenges, impacts and opportunities as a result of industry diversification and population growth. Key areas of discussion included capitalising on diversification, an ageing community, preserving heritage and culture, and increasing pressure on local infrastructure. Specifically, two key themes are discussed: how to capitalise on diversification opportunities whilst maintaining an agricultural base and the key challenges to growth.

Theme 1: Capitalise on diversification opportunities, yet maintain agricultural base

Community leaders were confident that growth within their region could bring a wealth of opportunities for the broader community. They identified the recent move towards diversification as a positive step in the regions sustainable development, highlighting the benefits of growth from both mining and tourism, as well as the traditional agriculture industry.

Capitalising on diversification – mining and tourism

As each area relies on different natural resources, there are distinct immediate economic opportunities and priorities. Western Downs' residents highlighted the positive (e.g., jobs, new residents, local expenditure) and negative (e.g., busy and ageing roads, minimal mining expenditure in local community) impacts associated with mining and energy provision, whereas the Southern Downs' region was focussed on opportunities created by the tourism industry.

Both Western Downs focus groups discussed opportunities to capitalise on the investment associated with the mines, explaining that the positive 'buzz' and energy around mining offered significant economic opportunities that needed to be capitalised on. One suggestion included building a housing development, which could then be used in the future as a resort-style hotel, in place of the existing demountable single-occupied accommodation. Residents favoured the alternative functions the dwellings could later provide for the community. There was also a belief that minimising the amount of temporary accommodation may also entice mining workers to turn against the customary fly-in, fly-out practice of long-distance commuting. All residents felt that workers, if provided the option of a more permanent and appealing living arrangement, would spend more time, and consequently more of their earnings, within the townships. However, one resident felt their town currently lacked the products/services that mining workers generally sought for their desired casual expenditure.

I reckon there's an opportunity for us, we've got a lot of workers' camps that are coming here, why don't we look at the potential for those to become something in the end, so we build like resorts, resorts that are going to be the housing...it's built around a golf course, sporting facilities — these blokes, they want gyms, they want pools, they want sporting things to keep fit. (M, Chinchilla)

A lot of the people coming through in the mining sector, the energy side of it, are Y-type generation, in for the buck and out, no contribution. We have got to be very careful [with] that one, we have got to supply services to cater for that because they do want to spend their money, which is where business houses come in — we'll help them spend it. If they don't spend it here, they will go elsewhere and spend it. (M, Dalby)

While Western Downs residents focussed on the impacts and potential from mining, Southern Downs residents focussed on tourism. They felt that their region offered a unique Queensland destination, with Stanthorpe officially the highest and coldest town in the state. Extensive bushland and profuse wildlife was described as creating potential eco-tourism, as well as enabling active and adventurous tourists to be targeted. While new educational facilities, such as a new winery training institute that had recently opened, were not predicted to entice long-term residents, they were considered beneficial for 'word-of-mouth' advertising of the region. All residents were generally very confident about their ability to draw in tourists, with one stating that even the global financial crisis would improve their tourism prospects. There was a strong belief amongst Southern Downs residents that

diversification into tourism would filter new revenue through their community creating new business opportunities, employment and, subsequently, reduce youth-outmigration.

On a positive, I think we should mention the Wine and Tourism College and the upcoming apprenticeship training centre that we are going to have here...there's a link with the universities. There is always the chance, in terms of good news, that young people come in and then say, I went to Stanthorpe and loved it, so that message goes home to mum and dad, and they say, we'd better go and have a look. (M, Stanthorpe)

[Because of the] economic downturn world-wide a lot of Queenslanders and also other people are taking short break holidays now, which does benefit places like this. (M, Stanthorpe)

We've focused a lot on tourism, which is good, because it employs a lot of people, a lot of women, a lot of young people, part-timers, it gets people to the district, outside money, that sort of thing. (M, Stanthorpe)

Maintaining the role of agriculture

Despite being generally supportive of diversification into mining or tourism, all community leaders from the Western Downs and Southern Downs strongly believed that agriculture should play a key role in the development of their region. Western Downs leaders, in particular, described the important role the agricultural industry plays in their community and the positive opportunities offered by new developments and innovations. All felt that the critical basic function of providing food was reason enough to sustain the industry, along with the lifestyle opportunities agricultural employment offers compared to higher paying employment in the mines.

Agriculture is very strong and there is some really innovative stuff out there in agriculture and that's going to continue because they are always improving and adopting new technologies. So there's that vision to keep that industry sector thriving. (M, Chinchilla)

The sustainable area in terms of business and in terms of growth as well, and that is one thing where we have to have a very balanced view between the energy company and our agriculture which is our base, we will always need food. So there has got to be a balance. (F, Chinchilla)

I know at least three young fellows, under 40, who have been up the mines and they've come back for lifestyle reasons, they're not making as much money, they're with their kids on the weekend. (M, Dalby)

While they were confident that these factors will enable the agriculture industry to remain viable alongside the mining sector, the community leaders highlighted the important role the council will have to play in ensuring a balance is achieved. As one resident explained:

Our stance as a local authority is to protect prime agricultural land.... They'd take it tomorrow, the mining...but we need to protect it, otherwise how are you going to feed the world? There comes that balance. We are a very strong rural community. That's what Dalby has been renowned for. (M, Dalby)

Theme 2: Key Challenges to Growth – preserving heritage, infrastructure and community

Creating a balance in terms of regional development and growth was considered not only in terms of maintaining the existing agriculture industry but also from a general perspective of preserving heritage

and culture. All Community leaders viewed this as a key challenge, along with insufficient infrastructure and an ageing community.

Preserving heritage and culture

The move towards a diversified economy was generally supported by the residents of both the Southern Downs and Western Downs regions. However, increased peri-urban development, and an influx of new residents, was causing some conflict and the challenge was how to appropriately manage this growth. 'Tree-changers' were perceived to hold different values and ideas, although one community stakeholder felt this shift in thinking was positive for the region.

I have noticed an incredible influx of city-based people into this region, both in terms of long-term residents as well as weekenders. I guess they brought with them a different set of values from the original farming-based community and they have perhaps different aspirations where they'd like to see this region go... they probably value the natural environment more than some of the local residents... [and] are happy to link the natural values of their property into their tourist enterprise. (F, Stanthorpe)

With both regions diversifying, whether voluntarily or involuntarily, from a traditional agriculture base to accommodate new economic activities, predominantly mining and tourism, all residents described the challenges associated with maintaining the existing agricultural industry and workforce. They emphasised the importance of maintaining a vision that would actively support local businesses and keep the agricultural sector thriving: "start trying to promote 'local first'. A lot of businesses here do business out[side] of the community, which means we've got a huge leakage of money out of the community". (F, Stanthorpe). Notably, although one resident felt a positive collaboration had been achieved in Southern Downs with tourists now keen to "see how things are grown" (M, Stanthorpe), many others reflected on the need to ensure their local heritage was preserved.

Indeed, the future of the region was a key concern for many of the residents. The majority were against ideas that focussed on creating 'big business' to provide large-scale employment, stating that previous plans for a jail were opposed by the community. Highlighting the need to avoid "*growth for growth's sake*" (M, Warwick), one participant felt the region needed better planning, with a number of residents believing the focus should remain centred on preserving the unique rural lifestyle. The majority felt that, if appropriate balance was achieved, the growth of tourism and mining would be a positive step in ensuring sustainability of their region. However, for one leader in particular, the temporary nature of the mining industry resulted in concerns as to how the town would remain viable once the mining companies move on.

We have a vision for the future, which is not purely centred around industry and growth but around lifestyle, so that we maintain the nice lifestyle we've got. (M, Warwick)

Changing basically from a rural base, keeping that rural base, trying to keep that heritage there but at the same time moving towards a resource base... and working hard to look at the next 100 years for our kids, and our grandkids... that there is something sustainable out here. (M, Chinchilla)

We also need to make sure that the decisions we are making today take us up to the long-term sustainability, because really, if you have a look at it, many of the resource companies may only be here for 30 years, so they are really only visiting us. (F, Chinchilla)

An ageing community – reversing youth out-migration

The community leaders identified an overall population growth across the region, creating a cultural and demographic shift that locals welcomed and embraced. As one explained, "ten years ago, I could

walk down the street here and I would know every person I walked past, every child I walked past, and everyone's mother and father I walked past. But that's changed now and that's fine. (M, Chinchilla). Although the general population had grown, the birth rates had remained static (F, Warwick), highlighting the widespread problem of an ageing population. The Southern Downs residents were generally more tuned into the issues associated with an ageing population, concerned particularly about their ageing workforce. One expressed frustration at a lack of skilled employees, stating that "it's a constant battle, just finding staff; we've had to resort to importing people from overseas in technical area(s)" (M, Warwick). Another was concerned about the pressure placed on the older members of the community to continue their work or volunteer roles longer than desired.

One thing...that's worried me a bit, is our volunteer workforce for our community groups. My mother is 89 and she gets dragged along to Red Cross meetings to make up the numbers. We've had people who have been office bearers in some of these groups for decades, and we're not getting enough young people volunteering for those roles, coming in to rejuvenate them. (F, Stanthorpe)

Community leaders identified a number of compounding factors that had resulted in the rapid shift in their regions demographics. There has been an influx of older 'tree-changers', in their early fifties or just retired, believed to be attracted to the region for the relaxed, rural lifestyle and the lower cost of living with the towns offering more affordable housing than their metropolitan neighbours. While these new residents were highly valued, as they brought a wealth of knowledge, skills and experience to the region, there was an acute awareness that more younger residents and families would be needed to create socially sustainable communities. Another key contributor to the ageing population was the ongoing problem of youth out-migration -- "every family here knows about it, once your children go to university, they almost never come home" (M, Warwick). Many felt future planning needed to target this demographic to ensure the community is socially sustainable.

There seems to be no growth in younger people. There certainly seems to be growth in elderly people. We now regularly, as an employer, are putting on people who are 45 years plus. Most of my engineers are older than I am because they see this as a good place to come to at the end of their working lives... I have got quite a few friends who have moved up this way. It's very economic[al] because the average housing price here is probably \$200,000 lower than Brisbane for an equivalent house, so there will be a lot more retirees gradually moving to this area. (M, Warwick)

We need to attract young people back into the community or to keep them in a community. We are an ageing community. Does that mean in ten years time, we are going to be a retirement village? We do need to have fresh blood moving through constantly. It's the 18 to 25 age group that we need to think seriously about. (F, Stanthorpe)

Contrastingly, those residing in Western Downs felt that, for the first time, the younger generation had reason to return to the region due to the economic growth and improved job opportunities, primarily from mining. It was perceived that these new economic prospects, combined with the traditionally lower cost of living and supportive family-friendly environment, enticed many of the younger generation to return home. One stated that while they may still have some youth out-migrating to the urban centres, they have also witnessed youth in-migration.

Probably now, more than in the past, there is that opportunity for them. Realistically, when people left before, there wasn't a lot to come back for. It was all the same. They'd look at it and say, what are the real opportunities for me if I come back? Nothing. Now, with the changes that we are seeing, there are those opportunities to come back here, they are into employment or into business. They say, I can really make something for myself in this community. It's a community they really want to be a part of. (M, Dalby)

Increased pressure on local infrastructure

Infrastructure planning and development was perceived as critical to the future viability of the communities, as both regions felt the pressure of rapid growth and were concerned about the impacts of future growth. One of the major challenges was the age of existing infrastructure; one resident believed a lack of maintenance and/or upgrades was impeding general growth within the region. Along with water security and access, residents described deteriorating communications infrastructure and local and arterial roads. As one explained, "our roads are falling to bits" (M, Dalby).

If we are looking at trying to attract goods and businesses into town, one of the greatest problems we have at the local government level at the moment is that we have got ageing infrastructure. Our water mains were built in 1953, our sewerage mains were built in 1963, and like a lot of other small towns unless they've got the population to upgrade their budget, we've got millions of dollars sitting under the ground, which is ageing. (M, Stanthorpe)

I think the problem is going to be your transport or communications, roads and rail, that sort of thing, because the more people that you get here, the more traffic you'll have on the road. (M, Warwick)

Additionally, a broad range of social infrastructure was identified as struggling to cope with population growth. Transport was a key issue in both regions, with one highlighting that the increased cost of living creates a growing reliance on the insufficient public transport system: "there are no trains out here, you won't find a bus, and as the town has spread out.. a sustainable transport system will need to be put in place" (F, Chinchilla). Another felt a lack of collaboration between governments had resulted in numerous services and facilities failing to meet the communities' needs.

The impact on our smaller communities in relation to growth – it is not just the cost of affordable housing. We have all other lifestyle infrastructures, including child care facilities that are inadequate, our police department will be inadequate, we have a health system that is collapsing, we have transport infrastructure that has collapsed, and there seems to be no forward planning from our federal and state governments towards it, and I believe it is a partnership between the three tiers of government to operate in our communities to make it work. (M, Dalby)

All Western Downs residents believed mining companies should contribute financially to the development of the region in remuneration for the substantial growth introduced by the industry and the resultant pressure on existing infrastructure. They highlighted that the money required to repair or expand existing infrastructure would be minuscule in comparison to the billions of dollars spent on the actual mining projects. Critically, they sought meaningful, not token, contributions, with one resident explaining how "I don't want them contributing to the netball team's bibs" (M, Dalby).

Whether the companies that are doing the developments have to contribute more for what they're doing – they don't just turn up and start drilling holes in the ground. The council can say, you must give us 'x' amount or something. They need to address the issues that the community has, the issues that are caused by the growth that's occurring... There is an expectation in our local community that the mining companies, or the companies out there, should be footing more of the bill. (M, Dalby)

In particular, residents desired improved educational facilities to entice families into the region, with one stating that "we need the schools to be improved [because] families build communities too" (F, Chinchilla). It was made clear that finding adequate funding to improve, rebuild or expand the local facilities was just one step in catering for the increased population. 'Soft' social infrastructure and services, such as doctors, teachers and police, have also been under pressure due to the rapid population growth experienced by these two regions. Service availability and accessibility were

perceived to no longer meet the needs of these rapidly growing communities, with one healthcare worker highlighting the increasing pressure on the healthcare system - "our emergency presentations have increased from 600 a month to in excess of 3,000 a month" (F, Warwick). Residents explained that they wanted long-term investment in social infrastructure, with Southern Downs residents particularly concerned about an increase in gambling, drug use and homelessness, each of which were perceived as social impacts of regional growth. They understood, however, that creating balance between the levels of supply and demand would take some time: "the wait to see a doctor – where once it was a week, now it can be up to three weeks. It's reactive, not pro-active, and we've got to turn that around and that will take a little time" (F, Chinchilla). Despite the general feeling that a lack of infrastructure created a negative barrier to the potential opportunities of a diversified economy, one resident reflected on the situation describing it as a positive change to the issues of the past.

I've sat around tables where we've talked about losing population, and when I talk about losing population 12 to 13% in some of the towns around us, and I've seen a total turnaround in the last 10 years, where the community is now bursting at the seams. We used to talk about too much infrastructure, idle infrastructure, and it's interesting now that councils are talking about not enough infrastructure, and somebody else should pay, and all that sort of stuff, and this is much more exciting than talking about idle infrastructure (M, Chinchilla)

Discussion

This study is the first to identify the opportunities and challenges associated with growth and development in rural and regional Australia, as understood by 28 local leaders residing within the Darling Downs in Queensland. The results suggest that diversification was impacting their communities in both positive and negative ways, with local leaders identifying three key challenges associated with growth management: the desire to preserve heritage and culture, impacts of an ageing population and growing pressure on local infrastructure. Overall, however, leaders were excited about the opportunities that diversification and economic growth offered their community and focused on working to ensure that any investment would have significant long-term benefits. They prioritised practical suggestions that would benefit their community now and into the future, such as building resort-style hotel accommodation for housing mining workers rather than demountables and encouraging large industries to support local businesses and also invest in repairing and upgrading existing infrastructure that they utilised. Such findings add to the small but growing body of national and international literature on economic issues in rural and regional communities, broadening our understanding about the role, impact and potential of economic diversification in creating a sustainable future for rural communities (Barlow & Cocklin, 2003; Brandth & Haugen, 2011; Cheshire, 2010; Gilbert, 2006).

Our findings emphasise how rural communities are both excited and concerned about their experience of diversification, regardless of the industry involved (i.e., mining or tourism). Whilst leaders knew it was necessary to diversify and transition from a single-focus economy, maintaining a strong agricultural heritage and protecting prime agricultural land was a non-negotiable value. As in other research exploring rural values and identity (e.g., Sharpley & Vass, 2006), these leaders perceived the agricultural industry as providing the lifestyle that shapes their rural identity. They placed a very high value on farming and their agricultural heritage, and wanted to find the right balance between farming and any economic diversification activities. All leaders agreed that tourism, whether it was natural tourism or farm-based agri-tourism experiences, provided positive opportunities to build on and diversify their existing agriculture industry (see also Brandth & Haugen, 2011).

Although diversification was seen as a positive strategy for sustainable rural development, the reality was many social and economic opportunities, particularly from the mining industry, are yet to be realised. It is difficult to categorise the community leaders perceptions of the industry in van der

Ploeg's (2011, p366) terms, as while the results show that the industry is not generally perceived as a 'curse' it is yet to be fully considered as a 'blessing'. Most local leaders felt the mining industry was still failing to provide sustainable diversification for rural and regional Australia and consistent with past research (Cheshire, 2010), expressed key concerns about the threat to agricultural land and the loss of farming families, as well as the temporary nature of the industry. While the short term benefits of diversification were understood and welcomed, thoughts about the future of the region constantly raised the question, 'what happens once they're gone?'. Reiterating concerns found in Western Australian communities (see Mayes, 2008), our findings highlight the need for mining to move away from the fly-in, fly-out scenario and move towards strategies that promote long-term commitments to the community. As Kapelus (2002) also suggests, there is a need for more appropriate and impactful corporate social responsibility, specifically through significant financial contributions towards infrastructure. Notably, participants also recognised that responsibility in achieving long-term social sustainability from diversification was also in the hands of local community and political leaders, suggesting that investments in housing, education and recreational developments would entice mining workers, and their families, to settle in their communities.

Local community leaders also described how preserving local heritage and culture was profoundly important to their community, not only to sustain the lifestyle that residents treasure but to also realise the full potential of the development of the tourism industry (see also Gilbert, 2006). The unique heritage, nature and culture in rural communities, very much valued by newer 'tree-change' residents (Hugo, 2004; Miller et al., 2011), was perceived as essential to maintain. Consistent with past research (e.g., Barlow & Cocklin, 2003), this study illustrates how diversification is dynamic and fluid, acting as both a potential inhibitor and facilitator to the ongoing challenges associated with demographic shifts. In line with Costello's (2007) findings, our study also suggest that tree-changers may hold different ideas and values regarding the future of their 'new' community, potentially creating social conflict with existing residents. Demography is an important yet often neglected aspect of sustainable rural development and diversification, illustrating the importance of adopting growth strategies that might mitigate ageing populations through targeting young families and youth who have left the area.

Critically, our study also reveals the need to consider both social and physical infrastructure when planning sustainable rural development. Of the few studies analysing the role of diversification in sustainable rural development (Barlow & Cocklin, 2003; Brandth & Haugen, 2011; Cheshire, 2010; Gilbert, 2006), little discussion is provided regarding the role of physical infrastructure. Growth in population intensifies pressure on often ageing and insufficient physical infrastructure such as roads, buildings, hospitals and telecommunications, which often requires improved maintenance and redevelopment in order to effectively manage these increased demands. Local community leaders saw diversification as offering the potential to build and enhance existing infrastructure, but were concerned that the new industries, especially mining, were not held financially accountable for such impacts.

At this juncture, it is important to emphasise that the qualitative nature of this study, specifically the non-random snowball sampling approach and unique characteristics of the case study communities, limits the generalisability of the findings. However, as few previous studies have focussed specifically on the experience of economic diversification and how local community leaders perceive the competing impact and opportunity offered of agricultural, tourism and mining industries, the findings offer valuable insight into how rural communities perceive and experience economic change. Of course, it is important to acknowledge that our qualitative study focussed on the views of a small sample of local community leaders, who at the time of data collection, were residing in relatively prosperous communities at early stages of diversification. How a larger sample of residents, from communities at different stages of diversification, might conceptualise the opportunities and challenges is an important topic for further research both across Australia and internationally. Future research should explore those communities that have experienced more significant population decline

and ongoing economic challenges as a result of diversification. Particular attention towards communities which are left behind once temporary industries, such as mining, move on would reveal the true longer term success, or failure, of diversification as a strategy for sustainable rural development and highlight the social, economic and environmental impacts.

Conclusion

Overall, this study expands understanding about the role of diversification in sustainable rural development. The findings reveal that local community leaders have a deep understanding about the opportunities and challenges presented by diversification, articulating a clear vision about how to achieve the best possible future for their region. Local community leaders highlighted how economic diversification into newer industries, such as tourism or mining, should not be done at the expense of the existing agriculture industry and needed to be managed in a way that ensured longer-term benefits for their community. Our hope is that, by documenting local leader's insights, learnings and reflections, these findings may help inform planning for rural and regional communities and facilitate management of the exciting yet challenging process of growth and diversification.

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Figure 1: Regional Map of Queensland, Australia, adapted by author to show case study communities

Table 1: Overview of case study regions – Southern and Western Downs in Queensland

General characteristics of the Darling Downs and the case study regions				
Macro Economic Environment	The traditional and dominant agriculture industries of livestock and crop production are being challenged by regional issues of labour, resource, and land-use trends (e.g. ongoing drought, skills shortage, lifestyle development)			
Political	Recent amalgamation of local shire councils into a central, regional council body. Centralisation of local government. Competing land-use pressures within rural communities, economic rationalism.			
Case Specific features	Southern Downs		Western Downs	
Economic Commodities	Primary production (Fruit and Vegetable), Beef, Viticulture, and Tourism		Natural resources (Gas and Coal), Primary Production (Melons), Manufacturing	
Local Government Areas and Population*	Warwick	13,952	Dalby	10,846
	Stanthorpe	4,693	Chinchilla	4,242
Agricultural Land*	511 941.3 ha		Unavailable	
Key trends and concerns	Affordability and availability of good farming land with access to water is being challenged by peri-urban development and lifestyle migrants.		Region experiencing significant mining growth, with subsequent land-use challenges. Mixed views on impact of mining, with some extremely supportive and others apprehension.	

*Source: ABS, 2006