

# **Food Bowl or Empty Bowl? Climate Change, Farm Exits and Regional Economies**

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## **ABSTRACT**

This paper reports on research which follows the difficult process of farm families preparing for and subsequently leaving farming. The period of exit covers the millennium drought of 2000-2010 in four case study areas in Victoria, Australia. It is concerned with families still of working age, in order to trace their subsequent employment outcomes. Identifying exiting farmers from a larger quantitative survey, it uses semi-structured in-depth interviews conducted with twenty-nine farmers, spouses and couples between 2012 and 2013 and frames the research through adaption of an evolutionary economic geography approach. The research finds that push and pull factors must be considered in understanding why the farm business ceased to operate. Most farmers took up work as farm hands or in small business but spouses' career trajectories underwent little change. Farms were sold to neighbours, leased or were, at the time of the interview, non-operational. Most families are better off economically but a significant minority have less personal fulfilment. There is no natural 'shaking out' of the less competitive farmers. Bad luck and global economic conditions, filtered through local area characteristics, play a major role. Further, the decision to quit is a household-scale decision influenced by multiple non-farm considerations. A major structural issue is the state of job markets in rural areas which are tied to the fortunes of the rural sector. In other words, the broader challenge lies not only in 'drought proofing' farms, but through regional planning and other measures drought-proofing communities.

## **1. INTRODUCTION**

Interest in the status and future of Australian agriculture has recently been heightened by the prospect that it could serve as the 'food bowl of Asia' and form an integral part of 'developing Australia's north'. While these narratives are intended to produce an optimistic outlook for rural economies, they shift focus from community-level outcomes. In particular, more knowledge is required on the process and experience of farmers and their families who leave the sector, their subsequent fate and the issues this raises for the capacity and potential of regional economies. This paper provides deep insight into the contemporary status of the sector, not via a grand narrative of productive potential but through the eyes of the farmers themselves. Specifically, through twenty-nine in-depth semi-structured interviews with farming couples, individual farmers and spouses across four case study locations in Victoria, Australia, it reports on the victims of the productivist paradigm, farmers forced from their land during the millennium drought of 2002-2010. The discussion traces the effects of the drought on farms and farming households and unpacks the difficult decision making

processes which led some farmers to leave the land. The central task of this paper is to identify enablers for exit. In this task it critically engages with an evolutionary economic geography approach.

The rest of the paper is structured as follows. The next section introduces previous research on farm exit and argues that it has taken insufficient account of women, gender relations, off-farm work and what became of the farm in terms of ownership and land use transfer. The middle section reports on the interviews. The penultimate section discusses policy and research implications and is followed by the conclusion.

## 2. FARM EXITS: THE AUSTRALIAN EXPERIENCE

Agricultural policy makers in Australia have for many years taken the view that structural adjustment of the farm sector is both necessary and desirable. Numerous programs have been created to encourage the upgrading of viable enterprises and the exit of smaller or marginal farms. Policy settings have evolved incrementally. As the 1970s 'rural reconstruction' scheme was replaced in the 1980s and 1990s with a Rural Adjustment Scheme (RAS), policy settings have increasingly focused on encouraging farmer self-reliance and the on-farm management of farm risks including the risk of drought and by providing support to farmers lacking long term prospects to exit (Botterill and Wilhite, 2005). Since the 1992 *Rural Adjustment Act*, drought is no longer considered a natural disaster, but a persistent feature of Australia's environment that a prudent farmer takes into account.

This has not been a straight-forward process. Identifying and evaluating better management practices and long term prospects – and therefore the type of farmer who is likely to exit - is complicated by lack of definition and the naturally volatile condition of the industry in Australia (Cockfield and Botterill, 2006; Keogh *et al*, 2011). Moreover, regardless of incentives to exit, farmers have often preferred to persist with farming and the farming lifestyle, despite its modest returns (Lawrence *et al*, 1992) especially if the farm has been operated over many generations (Marsden *et al*, 1989). The creation of re-establishment grants in the 1990s did not appear to alter the rate of exit (McColl *et al*, 1997), an outcome that Botterill and Wilhite (2005) attributed to structural adjustment policy's insufficient acknowledgement of farmers' agrarian value systems. Still, as with any industry sector, changes in the overall stock of farms includes an incessant flow of exits and new entrants. In the years 2010-2014, the number of farms in Australia decreased by 15,188 or 7.6%, including 54,159 entrants and 74,676 exits (ABS, 2015).<sup>1</sup> The role and effectiveness of government exit strategies, particularly exit grants, is ambiguous at best, with many farmers leaving by their own means and even those receiving grants suggesting they would have left anyway (Cockfield and Botterill, 2006). Policy evaluations suggest business exits in agriculture are more complex than those in other sectors (IAC, 1976 and 1984; McColl, 1997). Farm exit is not a random event, but rather the culmination of multiple, complexly related influences including opportunities for technological innovation, labour issues, financing issues, institutional structures and household issues (Boehlje, 1992).

The complex issues governing individual exits in Australia have been revealed in previous empirical research studies, first of male farmers (Bell and Nalson, 1974; Paul, 1976; BAE, 1977; Woods and Chamala, 1977; Barr *et al*, 1980) and more recently of farm couples and households (Bryant, 1989; Ginnivan and Lees, 1991; Webb *et al*, 2002; Wilkinson, 2010). Personal factors such as farmers' age and health, risk perception, expectations about future income and household relationships have an important influence on the propensity to exit

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<sup>1</sup> The Australian Bureau of Statistics aggregates agriculture with the far smaller sectors of forestry and fishing.

(Cary *et al*, 2001). Older farm couples are more likely to persist, perhaps reflecting their poorer job prospects in other sectors (Dumas *et al*, 1995). Comparative studies have struggled to discern points of differences - in age, education, farming experience, financial status and farm size – between exiting and non-exiting farms, suggesting that the decision to quit is not based purely on farmer and farm conditions.

In Australia’s productivist context, farmers operating modern, capital-intensive farming businesses have become complexly dependent on capital borrowings that lock them into continuing cycles of indebtedness (Argent, 1997). Despite foreclosures being relatively rare, banks denying farmers additional or bridging loans has the same result (Bryant, 1989). Debt is the recurrent factor in exits, but the question of what caused the debt is rarely explored. It seems to be assumed rather than demonstrated that overly-indebted farmers had made poorly judged borrowing decisions in the past (Paul, 1976; Bureau of Agricultural Economics, 1977; Ginnivan and Lees, 1991). In the late 1960s, no one predicted the extent to which Australian agriculture would be exposed to market forces or the extent to which other agricultural economies would continue to protect their own producers. The effects of the resulting oversupply of agricultural outputs, shrinking or restricted overseas markets, depressed prices and declining terms of trade were exacerbated in the early 1990s by unprecedented high interest rates associated with changes in macroeconomic policy. Drought was ever-present in exit decisions but rarely explicitly acknowledged as a reason for leaving farming (Bryant, 1989). The value of a farm’s landholding relative to its income-generating capacity appears to influence the decision to break from the treadmill and exit. This produces a spatial patterning in which exits are more likely in high amenity locations attractive to ‘tree changing’ urban buyers. Sector specific farm characteristics such as the arduous demands of the dairy industry or changed market conditions for citrus were important. Restriction of water supply did not occur in the Murray Darling system until 2006; the state government allowed separation of land and water titles the following year (Smith and Pritchard, 2014). Hence these critical junctures in water policy were not an issue in earlier studies.

In recent years, farming households have depended increasingly on paid employment in the wider labour market (Eversole and Martin, 2006). With women doing more off-farm work (Alston, 2000), they have become critical players in farm businesses decisions (Bryant, 1989; Alston and Kent, 2004). Exit was more likely when farm wives had established non-farm employment (Barr *et al*, 1980). The decision making process also involves accountants and bank managers, but tends not to be discussed in formal or informal social networks (Bryant, 1989). The length of time in considering selling varies, but Ginnivan and Lees (1991, p. 18) note that some families “either fail to recognise or refuse to accept that their financial situation is such that they should at least consider selling...too late to be able to negotiate a reasonable lead time with creditors”.

Documenting former farmers’ quality of life after farming has been important to policy’s objective of breaking down barriers to exit. Typically former farming men find work within a few months of leaving the farm, and usually strongly gendered ‘bloke’s work’ in farming-related labouring positions. Here, past research notes a correlation between loss of independence in the new role and levels of dissatisfaction. Women’s post-exit employment and the impact of exit on couple relationships are seldom explored, but it seems that farm exit does not affect women’s work.

When exiting farmers relocate, they usually stay close to their farming location and social networks, often moving to the nearest town. The policy recommendations arising from this work recognise that “transitions that improve economic or environmental sustainability at a broad industry or sectoral level do not necessarily represent successful transitions at the

grazing family level” (Webb *et al*, 2002, p. 99). To reduce adverse outcomes, farmers should be in a position where they can extend the exit process, taking time to organise financial and resettlement matters (Ginnivan and Lees, 1991). Observers recommend retraining for new jobs or assistance establishing new businesses, as in urban structural adjustment programs (Bell and Nelson, 1974; Barr *et al*, 1980). However, retraining leading to a non-rural sector was rare in practice, inhibited by lack of services and farmer reluctance. Others recommended financial literacy training (Barr *et al*, 1980), social support or counselling services (Bryant, 1989; Ginnevan and Less, 1991).

Whilst this work provides a solid foundation for contemporary research on farm exits it is overly focused on the farm as a lifestyle and as business, rather than on the household and its relationship to the wider rural economy. Some previous research has ignored farming women or cast women as silent supporters of the farm enterprise. None of the previous studies has encountered the impacts of water privatisations that change the fundamental cost structures of irrigated farms.

*The ‘Path of Least Resistance’? Adapting Evolutionary Ideas to Farm Exits*

The conceptual framework through which the paper interprets the restructuring of the Australian farm and farming draws on a geographical interest in evolutionary and path dependent regional development. This approach attempts to incorporate both historical legacies and spatial influences in its understanding of regional change and to acknowledge how the two influence each other. Evolutionary economic geographies view regional change as an organic and emergent process, impelling us to examine the ways in which the forces making for economic change, adaptation and novelty shape and reshape the geographies of production, distribution and consumption, and with how the spatial structures and features, so produced, themselves feedback to influence the forces driving economic evolution. (Boschma and Martin, 2007, p. 539)

In this interpretation, the legacies of the past irrevocably influence relationships in the present, with taken-for-granted practices and methods and various types of local institutional arrangements in effect accretions of the past events - living expressions of what has gone before. Institutions range from Country Women’s Associations, Landcare groups, established forms of social organisation like the nuclear family, regulated labour markets or privately owned farms. They extend to the meso-level institutions with which farmers interact on a regular basis: supermarkets, regulatory boards, governments. Traditions and institutions persist when they continue to have practical efficacy but wither when they no longer serve a useful purpose or are made obsolete by new arrangements. Change can in this sense be understood as analogous to the processes of Darwinian biological evolution, although there is the acknowledgement that social change is produced by the interaction and inter-influence of structure and agency as actors, in their response to presenting challenges and opportunities, prompt new practices and novel reinterpretations of guiding frameworks.

The contingencies that shape change processes find their origins at all of many geographical scales. In rural regions, the direction of change might be shaped by farmers’ individual skills and ambitions; by farm household considerations; by local economic issues like the closure of a local grain silo, processing plant or training college; by national issues such as changes to agricultural or drought policies, currency exchange rates or bank interest rates, or changes in the way that buyers of outputs or suppliers of inputs are organised, or by changes in global conditions including financial crises, export prices and changing weather patterns. The comprehension of the ‘local’ scale is interpenetrated by events at all these other scales. The perception and effect of external influences is likely to vary from place to place depending on pre-existing contextual conditions. The trajectory of change is path dependent: “... a process

or effect that is locally contingent and locally emergent, and hence to a large extent ‘place dependent’” (Martin and Sunley, 2006, p. 409). Economic evolutionary theory conceives of development as a process of continuity *and* change and of spatial connections that subtly or sometimes abruptly expand and contract over time. Neither space nor time are conceptually discreet of the other.

The evolutionary character of development in rural Australia is demonstrated by change which remains partly anchored in the past: the gradual transition to more multifunctional land uses (Holmes, 2006) without jettisoning the overarching productivist paradigm (Argent, 2002); the persistence of family farming as the social organisation core in the transition to business practices (Pritchard *et al*, 2007), the continuing and visible links to an imagined pioneering past (Watson, 2014), local labour markets that remain resolutely agrarian-based (McGann and Moss, 2012), and the dark legacy of poor land management resulting in persistent environmental problems such as salinity, erosion, species loss and invasion of exotic flora and fauna (Lawrence *et al*, 2013). It can also be seen in the intermittent episodic shifts to which the countryside has been subjected with shifts in environmental, economic and policy conditions (Tonts *et al*, 2012; Tonts *et al*, 2014). Although the millennium drought passed, the slow progression of environmental damage wrought by unsustainable farming practices, climate change and other environmental impacts continues to threaten established ways of operating and institutional norms. The emergence of new, more sustainable arrangements is inhibited by insufficient knowledge of viable solutions and capital deficits (Cockfield and Botterill, 2006).

Endurance is indeed is the by-word here (Anderson, 2014); farmers have attachments to their localities, with the social, emotional and mnemonic anchors forged over a long period of time constructing the perceived landscape as a social as much as a physical reality (Vanclay, 2003). The sense of connection and continuity is reinforced by the agrarian vision of farming as a quintessentially an exercise in independence and self-sufficiency (Webb *et al*, 2002). Rural social networks tend to locally proximate, so knowledge of labour market opportunities is also localised (Becke *et al*, 2013). In this context it can be seen how farm exit is a dramatic change within a slow moving institutional, social and economic environment. The ‘path of least resistance’, to extend the analogy, is the trajectory with the least number or severity of obstacles (Liversage, 2009). Because farmers are unavoidably embedded in existing institutional arrangements (Edwards, 2003; Botterill, 2011), the possible paths available are constrained. The options are not like walking across a trackless paddock with an infinitely random variety of possible directions. Rather, institutions are constraining, effectively creating multiple tracks, some more well-trodden than others.

#### *Context*

The agricultural sector has evolved: we find a trajectory of enhanced international competition, declining terms of trade, marketization of the structures governing product sales, increasing farm indebtedness, increasing fuel costs, and changing relationships with downstream industries (Tonts, 1999; Gray and Lawrence, 2001). Changes in Australia’s regulatory structures have led to the withdrawal of many services from regional towns, declining infrastructures, rising inequality and declining rural populations (Beer *et al*, 2003; Pritchard and McManus, 2000). Prolonged drought, climate change and the resulting water crisis are intensifying these pressures. By September 2009, the Australian state of Victoria had experienced drought conditions for almost ten years. Although it is almost a cliché to say drought is a recurrent feature of the Australian environment, this was a longer period of drought than had been experienced before, so bad, indeed, that even the most cautious and risk-averse farmers had exhausted their reserves. It was, in the words of the Productivity

Commission, not just a drought but an *irrigation* drought, overwhelming the most ‘drought proof’ of infrastructure (Productivity Commission, 2009).

Coincidentally, the drought came at a time when the cumulative effects of years of agricultural and regional policy deregulation had introduced new stresses to farms and farming communities. This drought was also different because it was increasingly linked with the broader phenomenon of climate change, and the associated implication that the recent warmer weather and constrained water availability would be permanent. In this context, insufficient environmental flows in the inland Murray Darling river system could be attributed to the over-allocation of scarce water resources to irrigation – as a result of lack of policy coordination among Australia’s States (Smith and Pritchard, 2014). The national Murray Darling Basin Plan (MDBP) had been created to address the crisis by reallocating and repricing water (Murray-Darling Basin Authority, 2011). In 2009, under the early versions of the MDBP, farmers across northern Victoria faced the prospect of dramatically reduced water access and increased water costs. While the final version of the plan moderated the anticipated effect, the 2009 draft Plan was the source of considerable anxiety and political mobilisation in farming areas.

Government response to drought, including relief programs and exit packages, are mostly administered through the National Drought Policy (NDP) which was adopted in 1992 (Australian Government, c. 1992). Other assistance includes financial advice, counselling, interest rate subsidies (abolished in 2013 as interest rates fell to record lows) and the equivalent of unemployment benefits. This assistance applied to areas where ‘exceptional circumstances’ (EC) had been declared, not individual farms.<sup>2</sup> That is, any farm within a declared area was eligible to apply, but none outside that area. Community and industry bodies could present a case for declaration, which required detailed written material, to state governments. All parties would then apply jointly to the Commonwealth. The process could take twelve months. Applicants needed to show conditions in their area were both ‘‘rare’’ and ‘‘severe’’ (Productivity Commission, 2009). Individual farmers needed to show that their farms were economically viable in the long term. For example, drought proofing was now seen as a component of economic viability and likewise the farmer’s cost.<sup>3</sup> The overarching philosophy of the NDP, one which distinguishes it from previous drought policy, is that drought is a recurring feature of the climate, not an unexpected disaster and is therefore a farm management issue (Harris, 1970; Botterill and Wilhite, 2005).

Policy has been re-orientated in three closely related, fundamental ways. First, the focus is on the ability or otherwise of the individual farm business to successfully engage with markets (Pritchard, 2005). Second, the priority is firmly placed on matters of production at the expense of non-economic needs of communities (Hogan *et al*, c. 2010). And third, drought policy has become an internal farm matter, the responsibility of the individual farmer and has ceased to be a collective issue (Stehlik, 2005). On that note, it has been argued this undermines the tradition of drawing on community resources (skills, mutual help, ‘a sense of belonging’ and crucially, job networks) which forms the basis for withstanding and moving forward from shocks such as drought, or what a great deal of the academic and policy literature refers to as ‘resilience’ (Stehlik, 2003).

<sup>2</sup> In 2012, exceptional circumstances declarations and the controversial ‘lines on the map’ they produced were abandoned in favour of farm-level case-by-case assessments. Australian Government Department of Agriculture and Queensland Government (2014). Drought Concessional Loans Scheme Brisbane Australian Government Department of Agriculture and Queensland Government: (s11c, p. 80).

<sup>3</sup> Examples of drought proofing include modification of grazing practices, improved water use, introduction of more drought-tolerant varieties and most radically of all, conversion from irrigated to dryland agriculture.

There are three irresistible labour market-related trends which influence farm exit outcomes in Australia and these are accentuated by drought conditions. First, the established trend is one of consolidation of farm ownership as farmers purchase neighbouring properties (Barr, 2007). Second, the family as a traditional source of labour is breaking down as spouses are more likely to work off farm (Alston, 2006) and children are less likely to be groomed for inheritance (Wheeler *et al*, 2012). And third, labour shortages may emerge in the post-drought recovery period due to the loss of the working age population during the crisis (Hunter and Biddle, 2011). The sum effect in some areas may well be that farm labour is likely to both in demand with the supply issue partly resolved by farm exits.

The ‘managed risk’ regime has been questioned on several fronts. First, the viability trigger for drought relief is poorly defined (Keogh *et al*, 2011). Second, the regime does not seem to have resolved the issue of farmers living in poverty. That is, there is a cohort of farmers who for reasons that need further investigation can neither improve management of their properties nor leave their properties (Alston, 2006). They fall between the cracks of eligibility for exit packages on the one hand and sufficient equity in their property to extinguish debt on the other. In short, they are trapped. Finally, such had been the prevalence of declarations of ‘exceptional’ circumstances – a process involving, in effect, (an often successful) lobbying of government – that the regime resembled the emergency relief approach it sought to supplant (Botterill, 2005; Productivity Commission, 2009). The paradox then is that while actual exit packages are extremely difficult to come by, EC declarations are relatively easy to achieve. This ensures a sort of stasis when it comes to individuals and economic regions in crisis. They cannot move forward in a genuine way or at least, to use the terms of evolution, succession is very slow indeed.

Second, the criteria and operation of farm exit grants is similarly unclear. Grants require farm sales but this is a major issue. Seasonal and market conditions impact on property values and attractiveness for sale as a review of a Western Australian government pilot scheme recently found (Keogh *et al*, 2011). Uptake of grants is low, partly because farmers will stay on the land for non-economic reasons, in particular, attachment to the land (Doxey, 2011).

And third, regional and land use planning options form very little of the substance of drought policy. Recent research by regional planners found that two hundred years after settlement, there was no comprehensive inventory of the carrying capacity of Australian farmland (Budge *et al*, 2012). The position of the Productivity Commission (2009, p. 239) is that ‘retaining all farmers currently in the industry and maintaining country towns should not be the driving objective of drought or climate variability policy’. In other words, it considers regions in an undifferentiated way; the viability of towns are not considered separately from the viability of the agricultural sector. The focus has been and continues to be assistance for the individual farm household with little emphasis on economic diversification of the region in which the farm (and therefore exiting farmers) are located.

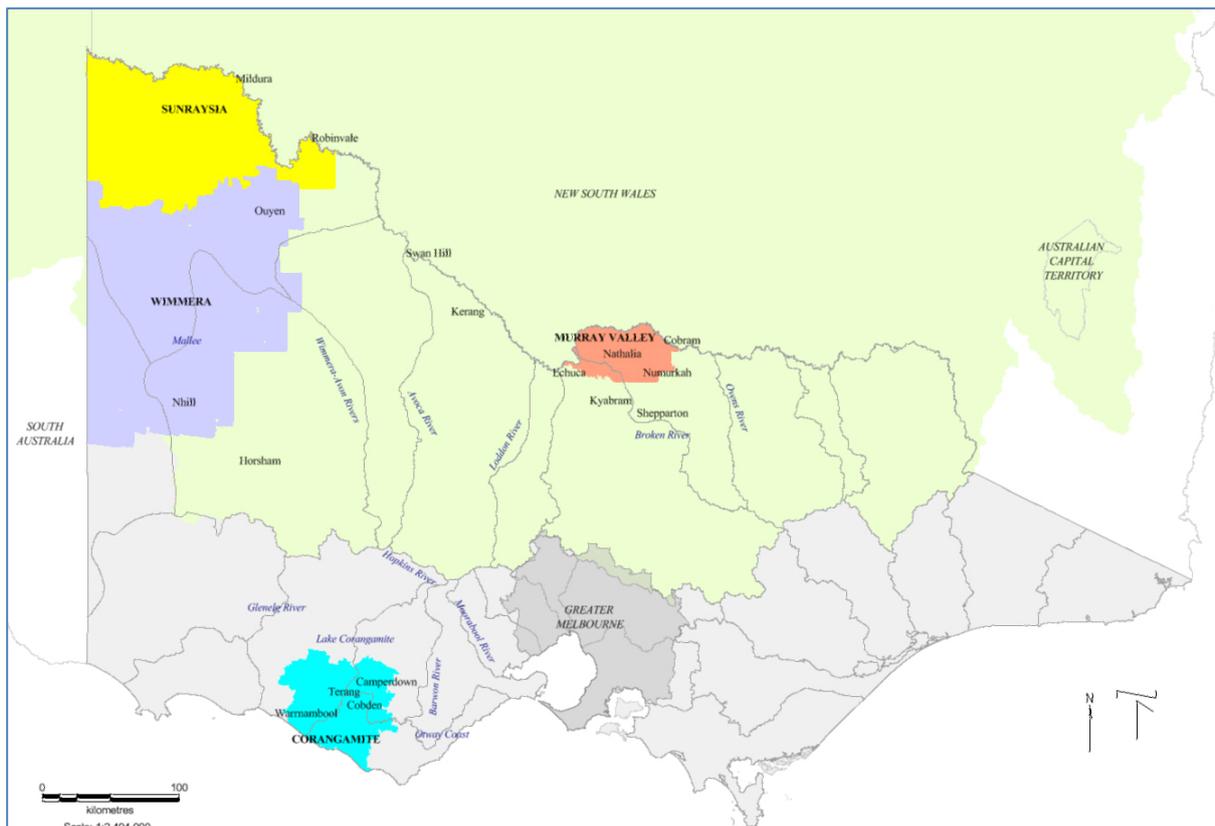
### *Research Approach*

Many previous studies rely on structured questionnaires and interviews that restrict farmers’ capacity to tell their stories, explain their interpretations and inject their facts with meaning. To capture this sense of exit requires an approach that seeks to locate the decisions of individual farm households in the wider context of rural restructuring processes. This requires putting the exiting farmers at the centre of the research endeavour and asking them open-ended questions about goals and processes; about the fulfilment or abandonment of farming aspirations; and about their sense of control – or lack of it - over the unfolding situation. Our study examines farmers’ constructions of their household’s position in broader webs of circumstances and events - in contracts, bank loans, markets, supply chains, deregulation, off-

farm work, water supply restrictions and water trading – as well as what became of their land. We think that exiting farmers are in the best position to provide advice for others who are contemplating leaving farming and for governments bent on restructuring water rights and rural economies and to identify interventions that might have smoothed the process or elevated its trajectory.

The project from which this paper arose aimed to trace the effects of the drought and MDBP in four selected farming areas in Victoria (Figure 1). It focused on three of the most affected farm specialisations across four case study locations: irrigated grape-growing (Mildura), irrigated dairying (Murray Valley), non-irrigated dairying (Corangamite) broad-acre farming (Wimmera).

**Figure 1: Case Study Areas**



Key:  Murray-Darling

The main project involved repeated surveys of a random sample of farmers in the selected locations and industry specialisations. A smaller subsample of farms that had or who were preparing to exit was identified from the respondents in the first 2010 data collection. In contrast to previous studies, which have identified exits through the lists of clients of government structural adjustment projects or by ‘snowball’ sampling, this method produced a small but randomly selected group of potential exiting farmers. Semi-structured in-depth interviews sought to elicit respondent’s understanding of the process of exit and the significant events triggering change in the context of the structural conditions in which, and with which, these agents engaged. To frame the research approach, five critical areas were examined: why did they leave, what became of the farm, what became of the farm family; financial well-being; personal well-being.

### 3. RESULTS

#### *Why Did They Leave the Farm Business?*

##### 'Push' Factors

With drought such an obvious part of the landscape we might expect it would be given at least as the starting point for leaving. However, this was not the case. Rather, it was (what can be seen in hindsight) the outcomes of drought but equally, the pressures on farmers to increase productivity, a regime which had been in place for some time. There were both 'push' and 'pull factors'. The key summarising factor for leaving was debt, just as the key attraction for exit was the chance to resolve debt.

As the drought wore on, in the mid-2000s, water allocation to farmers from irrigation systems were reduced by up to 30%. Vineyards in particular were forced to simply 'dry off' some or all of their plantings. For broad acre farmers, drought meant first and foremost the need to purchase expensive feed. However, the unfortunate timing of purchasing more land prior to the drought increased debt burdens. In some cases, this was on the back of already considerable investment in improving original parcels which were sub-standard in quality or size when purchased.

Commodity prices fluctuated during the drought period, particularly during the Global Financial Crisis (GFC). Milk prices for example declined 30%. A major wine manufacturer collapsed during this period leaving contracted farmers with no sales option. In spite of the intended 'equilibrium' effect of marketization, farmers found themselves contracted to grow chardonnay grapes that by harvest time were in a state of global over-supply. Relationship breakdown, sibling conflict and ill-health were cited in a minority of cases. The toil of farming life and in a minority of cases, soft-tissue injuries that had left their legacy was often mentioned in the context of the relief at having such a burden lifted.

##### 'Pull' Factors

There were a number of enticements which led farmers to first seriously consider and then actually cease the farm business. The government-funded Rural Financial Counselling Service was used by a minority; this is a reflection, not of the service, but of the depth of financial literacy of the farmers themselves. In some cases, spouses played the role of financial advisor 'Even the accountant loves her too because everything's always down to the last cent organised.' More generally, some spouses were clearly 'the brains of the operation: 'I did the book work as well and that used to drive me nuts because he would think you just pull a figure out of your head and it works, I said no it doesn't.' This effect was enhanced by the impression both in terms of general demeanour at interview and concrete responses that married couples were a team. 'We' made decisions together about the farm and about leaving the farm. This impression was conveyed regardless of whether spouses were interviewed together or separately.

The nature of the land and water market and farmers' decision making process enabled a generally smooth farm exit, financially if not emotionally. Farmers could to some extent control the pace and scale of sales. One farmer was able to hold off on sale until prices improved. Another staggered sales of land parcels over several years to minimise tax. Generally, people had breathing space of at least six months to consider selling. Once the decision was made, it was made quickly, in the character of a business transaction and was purchased without delay. The contemporary structure of farm labour and of local labour markets which are based on the farm sector provided a demand that ex-farmers could fulfil. Intergenerational farm labour was rare; this was reflected, writ large, in the broader farm

labour market. Thus, labour was in demand. If the pressure of deregulated markets led to overstretch through extra land acquisitions, it also provided an additional asset in the form of tradable water. Exit packages played a minor role; only two respondents, both of whom were successful, applied for exit packages. However, the realisation that a package was forthcoming was the crucial ‘tipping point’: “There’s the exit grant.” He [the financial counsellor] said, “You can both take this, I’ll give you the forms.”

*What Became of the Farm Family?*

All farmers (all but one of whom were men) found work either immediately or within a few months. Most jobs were found through personal contacts, an indication that informal networks remain strong. Most had held the same job since leaving farming, a sign that their work was ongoing. Almost one quarter (six) found employment as farm workers. A similar number established or bought their own business. Three reverted to the trade for which they already had qualifications. In one case a man returned to his trade from thirty years before. He found ‘It was difficult because things had changed in the industry. They’ve now computerised equipment. I wasn’t trained in that area. And, thank goodness, they still needed somebody with manual experience’. There were three labourers, three dairy industry trainers, two truck drivers, an environmental remediation worker, a teacher (who had farmed part-time), and a parson who returned to his position full-time. Two were farming again, but on a part-time basis. They deliberately planned a future where off-farm work would be a permanent source of income. As it so happens, these were the only families to move out of their local area; they had a total break from farming to consider their future. A further case obtained worked intermittently and had held a variety of retail and banking jobs. This ex-farmer, one truck driver and one farm worker were cases which could be described unambiguously as having post-farming experiences of precarious employment (Weller and Webber, 2001), that is, there were periods when work could not be found when wanted, resulting in periods of dire poverty: ‘Last year we’ve had probably more times where it’s [money] run out ... And we seem to be doing that more and more.’

The influence of location on job outcome was apparent. The irrigated grapes area of Sunraysia produced only one farm worker job of the twelve Sunraysia respondents, with four ex-farmers embarking on their own small business. There was a similar result for the southerly location of Corangamite; one out of five. For Murray Valley, there was a different outcome again. The higher skills required for the dairy sector meant two things: the availability of training jobs and ‘transferable skills’ for the two cases where farming had been taken up again. In contrast, the Wimmera produced four of the six cases of farm worker, an indication of the location’s isolation and dominance by one sector. More detail on these outcomes are provided in the Appendix.

In general, the career aspirations of both farmer and spouse was low. There was little discussion of future prospects or plans. A very small minority had taken on training post-farming. There did not seem to be a concern to increase disposal income. Those whose narrative was generally more enterprising were indeed those who tended to purchase a small business and these in turn lived near major regional towns.

Most spouses worked on the farm in some capacity. In some cases, this took up a considerable amount of ‘free’ time, including working during holidays and prior and after a full working day. However, very few women expressed ambitions to assume a better employment position, in spite of the removal of the burden of what was effectively a second job; post-farming, there was little movement up the career ladder. As one woman put it, ‘it’s a small school in an isolated location; there is no ladder.’ Again this is partly a matter of the geography of opportunity; there was a small spread of employers to choice from the range of industries

women usually work. As another describes, ‘I just felt stifled because we’re in this remote area.’

#### *What Became of the Farm?*

All farmers surveyed left the farm *as a business*. However, a variety of arrangements were arrived at relating to the ultimate relationship between the farm family and the farm. Of the twenty-nine respondents, sixteen sold the farm outright. However, of these, five retained ownership of the farm house and continued to live there. Other strategies were retaining ownership but leasing the farm, and keeping the farm property but not in operation. Thus the farm was kept as an investment and as a source of income. By selling stock and equipment, debt could be eliminated or curtailed. Some never lived on the farm; while they sold the farm they retained higher value properties in the local town. Two resumed farming; these were two of the only three cases of ex-farmers who moved out of the area. Farmers would do whatever was necessary to clear their debt, which they largely succeeded in doing; but where they could, they retained a link to the property. This degree of flexibility was afforded farmers who not only sold their stock and equipment, but in irrigated areas, sold their water. These results contrast with those found by earlier research, where the farm was sold outright in every case. The distinction is that in the current period, the imperative of ever-increasing productivity leads to the purchase of additional assets which drove farmers into debt but which ironically enough they can then dispose of to clear that debt. A spread of assets, therefore, including water rights, augers well for a more controlled exit strategy which in the end, often does not mean actually having to sell the farm. Another remarkable point is that farms were sold or leased to neighbouring farm families. The only exception was one case where the property was purchased by an interstate buyer. All farms remained farm land. Therefore, the crisis of the drought merely perpetuated and perhaps accelerated the long-term trend of farm consolidation through other farm families purchasing their neighbours’ properties, but did not, at least in the case of the farms surveyed here, result in the alienation of farm land.

#### *Financial Outcomes and Sense of Well-being*

There are two examples of achievement which remarkably, were shared by almost all respondents: the farm was sold, part-sold or leased without great difficulty and work was found immediately for the vast majority. Almost all respondents reported that they were better off financially: ‘At least now we know what we make is our own – it’s not all going back into the farm’, although some reported in ambivalent tones: ‘We are in a better position, but we would have been in a better position had it not been so much of a struggle’. There were three unambiguously negative responses: As one said, ‘I’m not better off, no. When I was making money, I was making good money...[now with factory work] at \$26 an hour, would you call that good money?’ And another: ‘I don’t feel like we’re faring very well...it [income] comes and goes’. What these three cases had in common was deep dissatisfaction with another aspect of the transition: dissatisfaction with fellow-work mates, family breakup, conflict in the extended family.

Around three-quarters of respondents reported they were happier: ‘Much, much happier, because the hours of work are contained within a reasonable timeframe, like eight to five’; ‘I’m less stressed – a lot less stressed.’ But the benefits of ‘the farming lifestyle’ and a sense of loss were acknowledged: ‘There were some good things about working your own land and for yourself... but you also need to be financially viable too for it to work.’ The sardonic disposition of the Australian farmer was evident: ‘I’m happier in that I’ve been able to eat’; ‘I don’t feel like killing myself today.’ For minority, there was ambivalence: ‘today was brilliant. I just need to lose the manager’; ‘I can still remember the buzz I used to get if the cows were in a great paddock... everything was just magic. I can still remember that euphoria

and I'll never get that in this job.' For a smaller minority still, there was grievance associated with the terms of the new job: "John" is doing long hours [truck driving]... farming was a great thing to be doing... being on a farm with family is fantastic'; 'I have to put up with this bullshit [of other workers] every day at work. So, through no fault of mine, I'm stuck in a factory. It stinks but what do you do?'

Financial and personal well-being were linked by removal or lessening of the burden of debt, tied as it was to the visceral sense of degeneration drought was having, on their properties, and for that matter, as far as the eye could see. As one spouse described her husbands' disposition at the time, 'It was like he failed, and every time we went outside we were surrounded by dead wine grapes'. But it was also tied to a release from the burden of work: 'it was just too much of it all the time. Christmas day we would be out there working picking, forty-seven degree heat.'

Most respondents were left unfulfilled by their experience. Aspirations varied between a desire to really just make a living, 'I guess the main thing was to make money, which we didn't really', an enjoyable lifestyle, 'No, because we thought it would be a good life...But it was a lot more work than we ever thought...' and more business-orientated proposals to expand and improve production techniques: 'I still have a feeling that I left there incomplete; we just didn't get a chance to complete the plans and the dreams we had for the property.' Sometimes a strong sustainability ethos was woven into plans for farm improvement: 'Doing things better either in crop nutrition or general practises, well we only just started to touch on that...I'm pretty unfulfilled I think'. One respondent had already advanced plans to construct a bale straw house, water self-sufficiency, natural fertilisers, solar and methane power. But it all came to nought in the end.

The extent of disappointment discounts pretty clearly the idea that farmers who leave are farmers who lack forward thinking or plans for improvement. Some of these plans were already half-implemented, cut short by circumstances utterly beyond their control, killed, by drought, water restrictions and price fluctuations: 'I was hopeful, I was still hopeful, I was still looking at a plan, "This will work, we just need water'.

#### 4. DISCUSSION

Drought assistance will not keep farmers on farms. The majority of those surveyed received drought assistance of some kind, but still left. On the other hand, the vast majority did not receive an exit grant. Most report mitigating circumstances engendered by deregulation, in particular fluctuations in prices and demand for commodities. These difficulties are accentuated by drought. Further, the research raises doubts about both the notions of 'viability' and the fate of 'self-reliant' farmers. Assumptions about farmer competence need to be reassessed; farm families who are able to sell their farms and stock at the right price, who can time the sale to maximise returns and find and keep off-farm work - all in the most trying of conditions - display all the traits of self-reliance and viability and yet they have left. There is no natural 'shaking out' of the less competitive farmers. Bad luck and global economic conditions play a major role. This raises an uncomfortable possibility. Is it perhaps the case that it is the more competent who are able to leave and the less competent who remain trapped by negative equity, debt, ageing or illness?

It should also be recognised that the decision to quit is a household-scale decision influenced by multiple non-farm considerations, detailed in this paper as 'pull factors': non-farm work, non-farm skills, a desire for (in some aspects at least) a non-farm life. We found that financial well-being and personal well-being were linked by removal or lessening of the burden of debt against the despairing landscape of the country in drought. We need to consider then, that

contemporary farming in Australia has endured a schism. Whereas previously it could be argued that farming *was* the lifestyle, what the burden of debt also seems to have ‘achieved’ is to break the nexus between the positive sense of lifestyle (own boss, own land, open air, freedom for the farmer and his family) and an increasingly problematic experience of farming as a business or a ‘workstyle’.

A major structural issue is the state of job markets in rural areas which are tied to the fortunes of the rural sector. Generally, these produce seasonal, poorly paid work with little or no scope for advancement. In other words, the broader challenge lies not only in ‘drought proofing’ farms, but in drought-proofing communities through regional development and decentralisation. The assumed role of planning has been to direct or at least encourage certain activities in certain locations. In reality, planning follows the trend rather than creates it; this can be seen in the facilitation of multi-faceted land uses in high amenity locations where the population trend is irresistible, but a vacuum of thought when it comes to the future of other locations which just happen to comprise a large area of the state (including the locations where these case studies were conducted), where the most pressing environmental concerns are present and where drought has the greatest material and physical impact. To date, the vacuum has been filled by the (Productivity Commission, 2009), whose competitive economic outlook has led to a recommendation to abandon areas of the state. More broadly, the Commonwealth’s current priority is to develop virgin areas in Australia’s north rather than diversify already populated locations in the south (Commonwealth of Australia, 2015).

The ex-farmers interviewed for this research faced multiple stresses and the direct effects of drought could not be entirely separated from the effects of drought-related policy changes, including access to government Exceptional Circumstance drought support and changes in irrigation water allocation policies. In irrigated locations in particular, the challenges of earning a reasonable return from competitive productivist farming were as much, if not of more, of a concern than environmental conditions because drought was in effect experienced as a shift in irrigation water pricing and allocation policy. The introduction of water trading allowed some farmers to trade water to reduce debt. When it was available, off-farm work maintained farm households and allowed marginal farms to continue to operate, but also broadened farmers’ horizons to consider work futures after farming.

The central determinant of farm exit was not week-to-week farm income but farm capitalisation, with exit more likely among farms with high levels of debt. The decision to exit was (for the vast majority who were in relationships) without exception a joint decision of farming husband and wife. When farmers exited, properties were sold to farming neighbours who would continue to care for the land and whose enterprise would benefit from the resulting improved economies of scale. In fact, this was a major indirect determinant of exit because it allowed exiting farmers to pass on their deeply felt responsibility for the land.

Through the lens of evolutionary economic geography can be seen the manner in which links to the land are not so much broken but restructured. When selling the farm eliminated the debt, former farmers were in a better position financially and (to a less extent) happier, than they had been as farmers. Many exiting farmers who sold their farm land retained the farm house, continued to live in the farming community and to work locally. Former farming men mostly found farm-related work, while farming women retained their pre-exit employment status. There is a need to reconsider farm ‘exit’, as for these farmers who have successfully found a way out of the farm business, the ability to ‘mix and match’ a variety of outcomes meant that certain benefits accrued, including a continuation of income from the farm (through leasing), continuing links to the land (by retaining the farm house or leaving the land fallow) or at the very least, by remaining in the area. On a less sanguine note, it can also be

seen in the transfer from the precarious business of farm operator to the precarious work of a rural proletariat. The geographically-driven path-dependent nature of the exit process is revealed most tellingly in the calibre of jobs that are taken up. For the isolated, farm dominated Wimmera, farm labourer positions prevailed. For the more diverse Sunraysia, small business opportunities arose.

## 5. CONCLUSION

This paper contributes to our understanding of contemporary rural Australia by directing attention from large scale narratives about the Australian ‘rural condition’ to the day to day experiences of farmers and contextualising these experiences through the relationships and the range of institutions with which they engage. Also, it not only examines why and what happens to those who leave farming but *how* they leave. Its contribution to policy considerations, then, is to highlight that farm exits are the product of conditions beyond the farm gate - including the policy context, the conditions in regional labour markets and the viability of surrounding farms - rather than being the isolated consequence of farming conditions on particular farms. Further, policies should avoid the implication that farm stress is the consequence of incompetence on the part of individual farmers, should recognise the decision to quit is a household-scale decision influenced by multiple non-farm considerations and should focus on facilitating farm consolidation at the neighbourhood scale. The paper’s theoretical contribution has been to show how evolutionary economic geography can be applied to farm exits, revealing in fact, that ‘exit’, though more dramatic a term, is inaccurate. It is more credible, if more cumbersome, to describe the experiences of these farmers as a clear break from the farm business, but a graduated transition from the land itself.

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## APPENDIX

First interview	Area	Year Interviewed	Age of Interviewee(s)	Ceased Farm Business	Ex Farmer Job
Male	Corangamite	2013	60s	2010	Own business (Accommodation)
Male	Corangamite	2013	40s	2012	Environmental remediation worker
Couple	Corangamite	2012	30s	2010	Labourer
Couple	Corangamite	2012	60s	2012	Farm worker
Male	Corangamite	2012	30s	2012	Stonemason
Couple	Murray Valley	2012	50s	2012	Farmer
Couple	Murray Valley	2013	50s	2010	Trainer, dairy education
Female spouse	Murray Valley	2013	50s	2012	Truck driver
Couple	Murray Valley	2013	60s	2010	Trainer, dairy education
Male	Murray Valley	2012	50s	2008	Own business, (Retail)
Male	Murray Valley	2013	50s	2007	Trainer, dairy education
Couple	Murray Valley	2012	50s	2010	Farmer
Male	Sunraysia	2013	50s	2010	Tradesman
Female farmer	Sunraysia	2012	50s	2009	Services sector, various
Female	Sunraysia	2012	40s	2006	Truck driver
Female	Sunraysia	2013	50s	2006	Tradesman
Male	Sunraysia	2013	60s	2009	Shop keeper
Couple	Sunraysia	2013	60s	2008	Own business (Domestic services)
Couple	Sunraysia	2012	40s	2009	Own business (Transport)
Male	Sunraysia	2012	50s	2009	Teacher
Male	Sunraysia	2012	40s	2009	Farm worker
Male	Sunraysia	2012	50s	2007	Own business (Advertising)
Male	Sunraysia	2012	40s	2010	Parson
Male	Sunraysia	2013	40s	2007	Labourer
Couple	Wimmera	2013	50s	2008	Farm worker
Male	Wimmera	2013	70s	2006	Farm worker
Male	Wimmera	2013	70s	2007	Labourer
Male	Wimmera	2013	60s	2010	Farm worker
Couple	Wimmera	2013	30s	2009	Farm worker