Absentee ownership of rural land: types, trends and implications

by

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Certificate of Authorship

I, Gina Lennox, hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgment is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

I agree that this thesis be accessible for the purpose of study and research in accordance with the normal conditions established by the Executive Director, Library Services or nominee, for the care, loan and reproduction of theses.

Signature

Date
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Abstract

This Doctoral thesis explores absentee ownership of rural land: types, trends and implications. Absentee landownership (AL) is an important, under-researched topic. With numbers of farmers decreasing worldwide, along with global pressure to double food output by 2050, this competing with rural land being used for biofuels, fibre and timber production, mining, industry, urban spread and conservation, who makes the decisions and on what basis about how rural land is used is of critical importance (Hamblin, 2009; Hoggart and Paniagua, 2001).

Research involved four key questions related to types of absentee landowners (AOs); the extent and trends in AL; factors contributing to these trends; and the implications for sustainable agriculture of different types of AOs in the Lachlan River catchment of New South Wales, Australia.

The concepts of power, and the capitalist and sustainability discourses informed the case study. Theoretical propositions derived from literature and preliminary fieldwork guided research and were tested, refined and expanded by it. Findings relied on quantitative and qualitative data sets. Quantitative data included three databases and statistics gathered from 135 historical maps. These were used to investigate the extent of AOs and absentee-owned land (AOL) in 2009, and at six intervals from 1849 to 2009. Qualitative data were primarily sourced from semi-structured interviews (N=102). Those interviewed included 35 informants representing 28 AOs (including multinationals, investment companies, indigenous incorporations, local town and city-based individuals and companies running cropping and/or livestock operations), as well as farm management companies, farm managers, lessees, contractors, consultants, real estate agents, local historians and long term resident owners. Interviews explored the concept of AL; trends in landownership and the social, ecological and agricultural practices and outcomes of AOs.
An AO was defined as an individual or corporate entity whose primary residence is not located on the land they own, ownership and residency determined by socio-cultural context. A relational typology based on an underlying continuum of landowner autonomy used four theory-derived dimensions (ownership structure, primary purpose for owning rural land; local/non-local and on-property management and labour) to respond to all key questions.

Research established that in the Lachlan River catchment, the extent of AL in 2009 had reached its high extent in 1849. Between 1849 and 2009, there were three phases of landownership. During Phase 1 (1830s–1860s) AOs were most numerous and occupied most land. During Phase 2 (1860s–1970), resident landownership increased, but AOs occupied most land until after 1935. By 1970 resident landowners occupied most land. During Phase 3 (1970–2009), absentee landownership increased, the most dramatic increase occurring between 1990 and 2009. Political-economic, socio-cultural and environmental factors (e.g. colonialism, economic cycles, land laws, deregulation and drought) contributed to these trends. Some factors caused resident landowners to sell or enter a form of aggregated (i.e. joint or contested) ownership and some factors attracted AOs to invest in land.

Implications for sustainable agriculture varied between AO types with multinationals and some family corporations able to dictate tenancy and labour relations. More equal social relations enabled an exchange of ideas and each individual to take responsibility for their decisions and actions. Farm managers played key roles for 15 AOs. A counter-intuitive finding was that for most AOs, property purchase had not led to a reduction in the number of on-property residents as most employed at least one resident farm manager or subdivision had increased resident and AOs.

Managing biodiversity was not linked to AO type, but rather to outside agency assistance; valuing biodiversity for its intrinsic value and agricultural benefits;
wishing to benefit from a carbon market, and government compliance for two mining companies. Access to off-farm capital was not an influencing factor in managing biodiversity as production priorities tended to take precedence for large scale AOs. Almost half of all AOs (N=28) had not conducted any biodiversity management.

The twenty-six AOs that aimed to profit from agriculture used currently recommended production practices, but the nature of these practices varied between AO types. Ten AOs were advantaged by being large in scale and having access to substantial off-farm capital. These attributes enabled them to employ expensive leading edge technologies. But they had high input costs per hectare, and drought severely impacted yields and net returns. Nine local AOs tended to employ less expensive but highly sustainable technologies that generated good production outcomes. Compared to large scale AOs, they were more likely to make a net profit in the drought years but their net returns were not necessarily enough to support a family. Six city-based investors were impacted by primary purpose, and when involved in commercial operations, scale and dependency on the farm operator’s knowledge. Practices and outcomes for three Aboriginal AOs were impacted by a lack of experience, technical support and operating capital. Ownership was contested in two cases.

This research made four key contributions to knowledge. These were constructing a coherent framework for classifying international types of landowners; identifying trends in landownership since European occupation of the Lachlan River catchment in south east Australia; identifying underlying factors contributing to long term trends in landownership; and exploring critical implications for sustainable agriculture of AO types.
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Aboriginal aggregated landowner</td>
</tr>
<tr>
<td>AO</td>
<td>Absentee landowner</td>
</tr>
<tr>
<td>AOL</td>
<td>Absentee-owned land</td>
</tr>
<tr>
<td>AL</td>
<td>Absentee landownership</td>
</tr>
<tr>
<td>AGG.</td>
<td>Non-indigenous aggregated entity (e.g. multinational and subsidiary)</td>
</tr>
<tr>
<td>FC</td>
<td>Family corporation</td>
</tr>
<tr>
<td>Farm-based FC</td>
<td>FC that is resident on one property and an AO of other property</td>
</tr>
<tr>
<td>FM</td>
<td>Farm manager</td>
</tr>
<tr>
<td>FMC</td>
<td>Farm management company</td>
</tr>
<tr>
<td>Individual</td>
<td>Individual/nominal family partnership</td>
</tr>
<tr>
<td>LPO</td>
<td>Lifestyle property owner</td>
</tr>
<tr>
<td>NFC</td>
<td>Non-family corporation</td>
</tr>
<tr>
<td>Res/AO</td>
<td>Resident on one property, and an AO of other property, with unknown ownership structure</td>
</tr>
<tr>
<td>RO</td>
<td>Resident landowner</td>
</tr>
<tr>
<td>ROL</td>
<td>Resident owned land</td>
</tr>
<tr>
<td>GFC</td>
<td>Global Financial Crisis</td>
</tr>
<tr>
<td>Ha</td>
<td>Hectares</td>
</tr>
<tr>
<td>M</td>
<td>Mean</td>
</tr>
</tbody>
</table>
Agricultural terms

**Controlled traffic** refers to permanent lanes along which machinery and vehicles travel so as to minimise soil compaction.

**Direct drill(no till/minimum till/conservation farming)** are terms that are often used interchangeably in reference to the practice of directly sowing into unburnt stubble without ploughing the paddock beforehand. Finer distinctions vary depending on the source. DEPI (2012) distinguishes terms as follows:

- **Direct drill** is when the crop or pasture is sown into un-tillled soil in one pass.
- **No-till** is when a crop or pasture is sown into untilled soil using a narrow or knife point seeder to minimise soil disturbance and moisture loss.
- **Zero-till** is crop or pasture is sown into untilled soil in one pass using a disc seeder.
- **Minimum-till** is when crop or pasture is sown with three or less tillage passes, including seeding.

**Disc seeder** is a zero-till implement shaped like a disc that handles stubble, provides accurate seed placement (important in conditions of marginal moisture), and minimises soil disturbance and draft (saving on tractor size, maintenance and fuel costs). However, disc seeders can have problems in wet clay soils (WANTFA, 2012).

**Press wheels** are wheels mounted after a disc seeder or tyne in order to increase seed/soil contact, reduce seed depth variation and moisture loss. The pressure needs to be adjusted depending on the soil and when sowing in wet soils, press wheels may need to be removed.

**Rotational cell grazing** is the practise of rotating livestock between paddocks in a time-controlled fashion to increase profitability, improve soils, and conserve or enhance moisture and biodiversity (McCosker, 2000).

**Single tyne** is a narrow edge ripper that offers greater soil penetration and improved fuel efficiency. When sowing they are mounted with a seeding boot and fertiliser injector.
Presentations


PART 1: BACKGROUND
Figure 1: A 3,400 megalitre dam on a 32,000 ha property owned by a non-local FC, Lachlan River catchment, NSW, Australia

Figure 2: Pasture and irrigation infrastructure on the same property
Chapter 1: Research Outline

Introduction

This chapter presents critical definitions, my research rationale and how I came to investigate absentee landownership (AL). I then outline the key research questions and research design, and what is included in each of ten chapters.

Critical definitions

In the literature, an absentee landowner (AO) is usually defined as an individual that owns land on which they do not live (Buman and Ridgely, 2009; Klepeis, Gill and Chisolm, 2009). Variations include a landowner who lives outside the county (Constance, Rikoon and Ma, 1996; Johnson, Janssen, Lundeen and Aiken, 1987), or beyond a 50 mile radius (Shaffer and Meade, 1997), although Kollmorgen and Jenks (1958) classified local town-based farmers as AOs. A political economic definition, applicable to all businesses including agriculture, is that an AO is not involved in day-to-day operations, or has more land than they can operate themselves (Veblen, 1997). Incorporating residency and operation, Petzelka and Marquart-Pyatt (2011) defined an AO as one who owns agricultural property, which they do not reside on or operate. As with every definition, there are fuzzy boundaries and various socio-cultural understandings of what constitutes ownership and residency (Powelson, 1988; Oles, 1999; Jian-Ming, 2001; Mbonile, 2004). These considerations led me to define an AO as an individual or corporate entity whose primary residence is not located on the land they own, ownership and residency determined by socio-cultural context. Socio-cultural context means a local town-based farmer is an AO, but a farmer who lives in a village and owns land within the jurisdiction of the village is a resident landowner, as can be a fly-in fly-out miner whose primary residence is the property. That ‘absentee landowner’ is a controversial term is the subject of research findings in Chapter 4.
Entwined with the concept of AL are the meanings of tenure, corporate and corporation. Tenure refers to the terms and conditions under which land is held, used and transacted (Adams, 2001). It refers to ownership and tenancies. Ownership is the legal right of possession (Shorter Oxford English Dictionary, 1973) and includes allodial, feudal and private property ownership. Tenancy refers to the terms and conditions (e.g. duration) of the holding or occupying of property (Nuttall’s Standard Dictionary, 1954) and includes share farming, renting, leasing and tendering out, and variations thereof, including where the landowner has a large asset base and the tenant has a small asset base, or the reverse (Lastarria-Cornhiel and Melmed-Sanjak, 1999; Siddhartha, Knight and Love, 1999).

Allodial ownership is free from service to an overlord, as opposed to feudal ownership which involves a transaction between king, lord and tenant (Commons, 1974). The earliest and on-going form of allodial ownership is a corporate unalienable claim to defined territory by a kinship group (Falconer, 1995; Powelson, 1988) as practiced by Aboriginal Australians before British colonisation (Morris, 2007). In international cases, allodial-owned land can be rented or sold within a lineage (Powelson, 1988), or possession and/or operation can confer ownership (Kevane, 1996). As well, monarchies and non-monarchical states can claim allodial ownership over vast areas, and through common law conditionally grant some of this land to a life tenant (in the feudal system) or as freehold title, as in the Torrens system of state registered land title. The Torrens system establishes private property ownership after a capital transaction (Cahill, 2007), but only of the topsoil and not the minerals underneath. Thus, in all forms of landownership, there are multiple claims on the land based on yield (Powelson, 1988). For instance, tree ownership can be split from landownership (Suryanata, 1996).

‘Corporate’ means ‘belonging to a group’ (Concise Oxford Dictionary, 1991), an example of corporate landownership being when a village collectively owns land (Jiang Ming, 2001). In capitalism, ‘corporate’ or ‘corporation’ has come to
be a legal term referring to a unity of property and people defined by a charter – a single entity independent of its members in terms of the law. For example, in a Proprietary Limited (Pty Ltd) company members are safeguarded by limited liability, that is, to the limit of all assets owned by the corporation and not of its members (Commons, 1974).

**Research Rationale**

AL has historical and contemporary significance (Jian Ming, 2001; Powelson, 1988). In the twenty-first century it may critically address or contribute to challenges facing world agriculture, food and water security (Cotula, Vermeulen, Leonard and Keeley, 2009), biodiversity conservation (Lopez and Laan, 2008; Quan, 2008) and other socio-political issues (Hamblin, 2009). For instance, the World Bank and the Food and Agriculture Organisation of the United Nations view AL in non-industrialised countries as a major obstacle to agricultural development (Fox, Mpuga and Christensen, 2006; Lobao and Schulman, 1991). Yet, AL has received scant attention in the academic literature (Petrzelka and Marquart-Pyatt, 2011).

There are no inter/national statistics on extent of AL. Some indication of its extent is provided as estimates (Crocombe, Tongia and Araita, 2008; Klepeis et al., 2009); and in statistics on state-owned land (Cahill, 2007); US non-operator landlords (Hoppe, 2006); land concentration and land rented out (Cahill, 2007; FAO, 2010). Surveys focused on natural resource management in two regions in Victoria established AOs comprised 22% to 23% of all landowners in 2006/2007 (Curtis, McDonald, Mendham and Sample, 2008; Curtis, Cooke, McDonald and Mendham, 2006). These findings caused Professor Curtis to identify the topic worthy of investigation.

AL is often not the primary focus of the literature (Powelson, 1988). Focused historical studies examine one or two types in a single location and point in time (Raup, 1973; Tyreman, 2007). Most contemporary studies concentrate on
absentee hobby farmers, lifestyle property owners (LPOs) and those who rent out their land (Petrzelka, Ma and Malin, 2013). Other studies have investigated non-family corporates (Tonts, Halpin, Collins and Black, 2003), foreign investment (Anseeuw, Wily, Cotula and Taylor, 2012) and individuals that migrate to urban centres (Mbonile, 2003; Oles, 1999). AO types such as local town-based individuals and corporations, multiple property owners, city investors, indigenous corporations, religious institutions and conservation trusts receive less attention.

Only a few studies employ a coherent classification across some AO types, one being Cotula et al.’s (2009) classification of foreign investors in sub-Saharan Africa. The use of location-specific or unclear terminology hampers a comparison of AO types across time or place (Petrzelka et al., 2013), or a comparison of an AO type with their resident counterpart (e.g. an absentee and resident hobby farmer).

‘A lack of historical vision in too many commentaries’ (Hoggart and Paniagua, 2001, p. 55) has led to a view that recent manifestations of AL are ‘new’ (Aslin, Kelson, Smith and Lesslie, 2004; Burch and Lawrence, 2009; Tonts et al., 2003), despite other literature highlighting contemporary AOs’ antecedents (Struyk and Angelici, 1996; Powelson, 1988). This scattered literature suggests AL was very extensive in the nineteenth century, but decreased in favour of resident landownership in the mid twentieth century (Powelson, 1988), but since the 1970s, has been increasing with farmers moving to urban centres but retaining land (Jian-Ming, 2001); family farm expansion (Ashby and Ashby, 2011); corporate investment (Swinnen, Vranken and Stanley, 2006); foreign investment (Cotula et al., 2009); city investors purchasing lifestyle or hobby farms (Aslin et al., 2004) and since the 1970s, land rights for urban-based indigenous corporations (Alexandra and Stanley, 2007; Kingi, 2007). Yet, few studies investigate historical trends in a particular region, an exception being Heasley (2003). Similarly, while some researchers explore factors contributing to an AO type (Aaronsohn, 2000; Oles, 1999), or cluster of types (Cotula et al.,
2009), few studies have conducted an in-depth analysis of the political economic, socio-cultural and environmental factors contributing to long term trends in landownership.

Research into the implications of AL is likewise patchy. Historical studies refer to political ramifications (Moore, 1967) and production (Roebuck, 1973). Contemporary Western studies focus on the impacts of AL on natural resource management (Klepeis et al., 2009); landowner-tenant relations (Petzelka and Marquart-Pyatt, 2011); place attachment (Aronsson, 2004; Kelly and Hosking, 2008), and the socio-economic impacts of corporate agriculture (Tonts et al., 2003). Whilst most foreign investment targets industrialised countries (De Laperouse, 2010), literature focuses on foreign investment in Africa, Asia and Eastern Europe (Anseeuw et al., 2012; Swinnen et al., 2006). Studies of contemporary indigenous landownership highlight the many challenges (Alexandra and Stanley, 2007), without contextualising these amidst the challenges faced by all landowners. No study found-to-date has focused on social relations within an ownership structure or between a non-family ownership structure and on-property waged labour, or has investigated the biodiversity management practices of corporations, or compared agricultural outcomes on a per hectare basis accounting for the roles of farm managers (Gorton and Davidova, 2004). Overall, it seemed the topic of absentee landownership was ripe for investigation.

**How I came to investigate absentee landownership**

After three decades working in media, cultural development, teaching and authoring five non-fiction books, Dr. Kim Alexander suggested I do a PhD. I was interested in rural issues in Australia and elsewhere, and democracy in the Middle East. Professor Allan Curtis of Charles Sturt University and the Centre for Arab and Islamic Studies at the Australian National University were willing to take me on. The deciding factor was a scholarship from Future Farm Industries Cooperative Research Centre.
Professor Curtis urged me to research ‘drive in-drive out farming’. To be honest, I was lukewarm. After a swim through the ocean of social theory I embarked on a literature review of AL. The topic’s historical and international scope excited me, as did the fact that it was under-researched.

I came to this research with no axe to grind, no vested interest or academic reputation at stake. I had been an AO of rural land for 21 years and in 2005 I moved to the property. When people asked whether I thought AL was ‘good’ or ‘bad’, I was perplexed. If it was that simple, I would not be investigating it. Nevertheless, no one is without biases. Mine are that I try to step out of contemporary Western frameworks to understand a subject and believe the best decisions and actions are based on the common good: social, ecological and economic, with politics underlying all three.

Key research questions

My research into AL was guided by four key questions.

1. What are the different types of absentee landowners?
2. What is the extent and trends of absentee landownership in the Lachlan River catchment of New South Wales (NSW), Australia?
3. What factors contribute to absentee landownership in the Lachlan?
4. What are the implications for sustainable agriculture of different types of absentee landowners in the Lachlan?

Research Design

Ontological and epistemological foundations

A critical realist position was taken for this multi-disciplinary social research (Bhaskar, 1979). Epistemologically, an international and historical perspective informed theory and observations, in accordance with C. W. Mill’s (2000) advice to imagine the range of alternatives that might exist. An iterative use of
theory and observations married underlying processes with the continuities and discontinuities of the phenomenological experience (Kellner, 1990).

**Navigating the literature**

Research began with literature reviews to critique the relevant body of knowledge and methodologies, identify research gaps, generate ideas and link prior and current research (Gray, 2006; Neuman, 2006). Five reviews were undertaken using the worldwide web and electronic databases such as Google Scholar, Google books, Smartsearch, Networked Digital Library, Theses and Dissertations. Bibliographies of journal articles and books were also useful.

Two literature reviews are presented in Chapter 2 (Literature Review). These are a review of theoretical concepts and a contextual review of AL. A review of theoretical concepts resulted in the selection of a socio-political economic framework focused on power relations, and the capitalist and sustainability discourses, with agency versus structure informing all three. These concepts were selected because landownership is intimately bound up with the continuity and discontinuity of power relations among people, and between people and the environment (Benda-Beckmann et al., 2006; Gilsenan, 1984; Munston, 1995; Oles, 1999). How the sustainability discourse related to the Doctoral thesis was revisited in a contextual review of AL.

The contextual review of AL involved searches into the history of landownership and agriculture, absentee/non-resident farming/landowners, hobby farmers, LPOs, corporate agriculture, agricultural business models, investment in agriculture, industrial agriculture, plantation agriculture, indigenous land rights, farm management, share farming, leasing and contract farming, biofuel production and conservation. The review presents a history of international types of AOs, trends in landownership and factors contributing to these trends. The review then explores the implications for sustainable agriculture in terms of social relations, biodiversity management and economic viability for different types of AOs represented in the case study.
Methodological reviews are incorporated into Chapter 3 (Methodology). These reviews canvas critical realism, typology methodology, landowner typologies, historical comparative sociology, thematic analysis of interview data and methods for constructing models.

Another literature review of potential underlying factors contributing to trends in AL in the Lachlan River catchment since the 1830s provided data for Key Question 3 and contributed to findings presented in Chapter 7.

**Case study methodology**

Case study methodology was chosen because it allowed multiple, even rival, theories, data sources and analyses within a geographic and temporal boundary (Yin, 2009). The methodology’s inherent flexibility permitted an evolution of the research design (Neuman, 2006); allowed quantitative and qualitative methods and the use of multiple embedded cases within the case study region. These features provided a tougher testing of propositions (De Vaus, 2002). Preconceived theoretical propositions were derived from theory, literature and preliminary research. They guided research and were tested, refined and expanded by research. This iterative process enabled the plausible to be distinguished from the less plausible. Although some propositions could only be analytically tested by a small non-random sample of 28 AOs, finding based on this sample can be further tested using other case studies (Gray, 2006; Patton, 2002; Yin, 2009).

**Selecting the region in which to conduct social research**

The Lachlan River catchment in central NSW (Figure 3) was chosen as a suitable region because it represents a microcosm of Australian agriculture and contains divergent types of landowners, including foreign investors and mining multinationals, these featured in current discourses on landownership in Australia. The Lachlan catchment has been a centre of Australian
pastoralism since the 1830s, and is contemporarily the second most productive agricultural region in NSW after the Murrumbidgee irrigation area.

Profile of the Lachlan River catchment of NSW, Australia

Figure 3: Location of the Lachlan River catchment in NSW

The Lachlan River catchment covers 85,000 square kilometres of tablelands, slopes and plains located west of the Great Dividing Range. Its eastern boundary is 230 kilometres west of Sydney, its western boundary another 580 kilometres further west. Major towns include Condobolin, Cowra, Forbes, Parkes, West Wyalong and Young. The region has a population of about 106,000 (Lachlan CMA, 2012). Through the catchment winds the Lachlan River, the European name for Kalarri or Galiyarr (Findlay, 2007), a 1,500 kilometre rainbow serpent according to Wiradjuri tradition (Read, 1988). The river arises in the Great Dividing Range and terminates in the Great Cumbung Swamp. In between are twelve weirs and the 1,217 gigalitre Wyangala Dam (Hillman and Brierley, 2002). The Abercrombie, Boorowa and Belubula Rivers feed into the Lachlan River, the system also including Lake Brewster, Lake Cargillego and
Lake Cowal (Figure 4). Underground paleochannels provide another water source for primary producers and three mining operations. In 2009, 400–600 mm of rainfall was recorded across the region compared to an average of 1,100 mm in the east, and 200 mm in the west. Daily maximum temperatures range from 10 to 35 degrees Celsius. The Lachlan catchment regularly experiences floods and droughts, the latter for extended periods, with climate change models predicting hotter, drier conditions (NSW Office of Water, 2010).

Before the coming of Europeans, 2,000 generations of Wiradjuri (Findlay, 2007) practiced fire stick farming (Barr and Cary, 1992). This resulted in a landscape of open woodland and native grasses, considered ideal for pastoralism. Subdivisions of huge stations from the 1860s increased the farming population, these hardy settlers of the ‘outback’ made legendary by Australian writers Banjo Patterson and Henry Lawson.

In the wetter east, small properties are used for cropping, livestock, poultry and horticulture, viticulture and lifestyle purposes. In the west, larger properties mostly support dryland cropping, sheep and cattle, although irrigation infrastructure has been installed throughout the catchment. But the scope and intensity of production has endangered the entire ecosystem (Findley, 2007). By 2011, forest reserves covered 94,985 hectares (NSW Forests, personal communication, 2011), with National Parks comprising 417,352 hectares (Lachlan CMA, personal communication, 2011).

Environmental concerns include the Lachlan River’s loss of flow and algal blooms, dryland salinity, exotic flora and fauna and land degradation (Hillman and Brierley, 2002). Consequently, the Lachlan can be seen as ‘a cradle of contradictions and tensions: a prosperous agricultural and pastoral zone; an ecological system in crisis; a frontier where indigenous and settler Australians shared an entangled but scarcely acknowledged history’ (Proudfoot and Roche, 2005, p. 55).
Figure 4: Map of Lachlan River catchment in New South Wales
Data collection and analysis

Embedded cases

Five sets of cases within the Lachlan River catchment were chosen for context, replication or contrast (Gray, 2006; Yin, 2009). Details of selection criteria are presented in Chapter 3 (Methodology).

Set I: A regional exploration of extent of AOs and absentee-owned land (AOL) in 1849 and 2009 was based on two regions which had a 60% overlap in area. These regions were the

- Lachlan Squatting District (1849) of six million ha, extending from the Lachlan River in the north to the Murrumbidgee River in the south, the Boorowa River in the east to an undefined area in the west. Properties covered 2.2 million hectares (ha), although lessees were inclined to underestimate their properties by up to two thirds.

- Lachlan Livestock Health and Pest Authority (LPHA) (2009) of five million ha or 59% of the Lachlan River catchment. Properties covered 4 million ha.

Set II: Regional variations in extent of AOs and AOL in 2009 were investigated in two contrasting shires. They were

- Bland Shire covering 8,560 square kilometres with a total population of 6,407 in 2009; and

- Cowra Shire covering 2,810 square kilometres with a total population of 12,945 in 2009.

Set III: A statistical investigation of historical trends in AL at six time intervals from 1849 to 2009 was served by a third set of embedded cases. The two contrasting districts fell (mostly) within the shires. They were

- Bland district covering 316,874 hectares;

- Cowra district covering 74,563 hectares.

Figure 5 shows the shires in relation to the Lachlan Squatting District and Lachlan LHPA boundaries. Figure 6 shows the districts in relation to the shires.
Set IV: An investigation of historical AO types and trends in AO types from 1830s to 2011 was served by the compilation of histories of nine pastoral stations which focused on the residency status of successive landowners. Four were in Bland district, four were in Cowra district and one property illustrated Wiradjuri connections and ownership.

Set V: Twelve AO types were represented by 28 AOs. Within each AO type there were one to four cases selected using critical case sampling (Patton, 2002) to either replicate or show variation (Gray, 2006).

Data sources
Case study methodology allowed multiple data sets (Yin, 2009). Data sources included
- Three 2009 databases for a region and two shires;
- 102 informants including 35 interviewees representing 28 AOs; 14 farm managers (FMs) and a farm management company (FMC); 23 other informants selected for their expertise and firsthand experience working with AOs; five council/LHPA representatives for assessing extent in 2009; eight local historians and 18 long-term residents (including two already counted in previous figures) for investigating historical trends;
- 14 on-property field observations;
- 135 parish and shire maps contributing to 12 district maps used to explore historical trends in two districts, 1849–2009.
- Archives, company reports, literature (e.g. Campbell, 1968; Hanson, 1889);
- Unpublished and self-published resources in Cowra, Bland and Condobolin libraries, local history units and museums.

Although a survey was part of the original design, it was excluded for reasons outlined in Chapter 3 (Methodology).
Figure 5: Lachlan Squatting District (1849), Lachlan LHPA, Bland and Cowra Shires

Figure 6: Bland and Cowra districts in relation to Bland and Cowra Shires
Methods of analysis

To identify AO types (Key Question 1) and enable a comparison between types, a relational typology was developed from an iteration between theory and data. It employed an underlying continuum of landowner autonomy in decisions and capital for four socio-political economic dimensions (ownership structure; primary purpose for owning rural land; local/non-local and on-property management and labour) to classify historical and contemporary AOs.

To investigate contemporary extent and historical trends in AL between 1849 and 2009 (Key Question 2), statistical analysis was conducted on three databases; Campbell’s (1968) list of lessees in the Lachlan Squatting District of 1849, and historical maps of two districts. The histories of nine pastoral stations were compiled and used to identify trends between time intervals, trends in AO types, and AOs’ commitment to a property. To address Key Questions 1, 3 and 4 interviews and field observations were thematically analysed using themes derived from literature and field work. For Key Question 3, an historical sociological analysis of the literature identified factors contributing to trends in AL. Interview data and the histories of nine pastoral stations provided additional evidence for underlying factors and motivations. For Key Question 4 (Implications for sustainable agriculture), literature was used to construct theoretical models and rival theoretical propositions (Yin, 2009). These were tested by findings based on thematic analysis of interviews and field observations.

Triangulated data sets supplied convergent and/or non-convergent data for a more thorough testing of theoretical propositions (Yin, 2009). For example, comparing extent in 1849 and 2009 in two regions, investigating trends in two districts, 1849–2009 and constructing histories of nine pastoral stations provided convergent and non-convergent data for an understanding of historical trends in landownership in the Lachlan.
Overview of data collection and analysis for each key question

The research design sacrificed methodological purity in favour of flexibility and triangulation. Table 1 summarises the research gaps, data sources and analysis for each key question.

Table 1: Research gap/s, data sources and analysis

<table>
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<tr>
<th>Research gap/s</th>
<th>Data sources</th>
<th>Analysis</th>
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</table>
| Q1: What are the different types of AOs? | Need for a clear understanding of the concept of AL, terms associated with AL and a coherent system of classification. | A. Literature review  
B. 61 interviews  
C. Company reports | 1. Terms, AO types and typology dimensions sourced from the literature.  
2. Thematic analysis of interviews tested the concept of AL; refined definition and dimensions of the relational typology.  
4. Analysis of interviews and company reports identified four attributes that varied between AO types. |
| Q2: What is the extent and trends of AL in the Lachlan River catchment? | Lack of data sets on extent of AOs and AOL as a proportion of all landowners and all land. | Investigation of extent in 2009 used three databases:  
A. Lachlan LHPA;  
B. Bland Shire Council; and  
C. Cowra Shire Council. | 1. Descriptive statistics for a region and two contrasting shires indicated the proportion of AOs, hectares owned and mean area owned, and for two shires, extent of local and non-local AOs and Pty Ltd companies.  
4. Steps 1-3 used to assess new trends in AL. |
| | Lack of statistical investigation into trends in AL and the need to contextualise contemporary trends. | Trends 1849-2009:  
A. 135 historical maps compiled into 12 maps, six for each district;  
B. 26 informants;  
C. Archives;  
D. Resources in local history units and museums;  
E. Literature including Campbell (1968) and Hanson (1889);  
F. Newspaper articles; and  
G. Council database accessed by council representative. | 1. The proportion of AOs and AOL in the Lachlan Squatting District in 1849 was compared with AOs and AOL in the Lachlan LHPA, Bland and Cowra Shires, 2009.  
2. Data sources (A) to (G) were used to identify the residency status of named landowners on historical maps in two districts at six time intervals. Maps were used to calculate the proportion of landowners, land owned and mean area owned for AO; Res/AO; aggregated; state & ROs.  
3. Histories of nine pastoral stations provided additional data on AO types and trends. |
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<tr>
<th>Research gap/s</th>
<th>Data sources</th>
<th>Analysis</th>
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<td><strong>Q3: What factors contribute to absentee landownership in the Lachlan?</strong></td>
<td><strong>Contextual factors:</strong>&lt;br&gt; A. Literature review;&lt;br&gt; B. Secondary data; and&lt;br&gt; C. 102 informants.</td>
<td>1. Key factors were identified in the literature and interviews. Relevant secondary data was collected. A table of key factors and dates was constructed. Historical sociological analysis of factors contributing to trends established in Key Question 2b was based on repeated impacts and identifying linking mechanisms. 2. (1) used to refine generic model of contextual factors and to generate models for an AO type or cluster of types.</td>
</tr>
<tr>
<td>A lack of conceptual analysis of motivations for AO types.</td>
<td>A. 75 informants.</td>
<td>1. Thematic analysis of interviews identified AOs’ self reported motivations. 2. Motivations were classified using a theoretical classification to ascertain the dominant motivation set for an AO type or cluster of types.</td>
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| Q4: What are the implications for sustainable agriculture of different AO types? | A. Literature;<br> B. Histories of nine pastoral stations;<br> C. 92 informants; and<br> D. 14 field observations. | 1. Thematic analysis of A to D identified practices and outcomes for social relations, biodiversity management and economic viability. These were compared between AO types or a cluster of types (large scale; local; non-local city-based; Aboriginal). 2. Generic theoretical models were tested for an AO type or cluster and refined. |
Thesis Structure

Part I: Background

Chapter 1: Introduction outlines critical definitions, research rationale and research design. It provides a profile of the case study region, an overview of research gaps and presents four key questions and the research design.

Chapter 2: Literature reviews include a theoretical review of key concepts (power relations and the capitalist and sustainability discourses) followed by a contextual review of AL. This review identified historical and contemporary international types of AOs, historical trends in landownership, contributing factors to these trends and the implications for sustainable agriculture of different types of AOs.

Chapter 3: Methodology canvasses the ontological and epistemological paradigm; methodologies used in other studies, ethical issues, research time line and selection criteria for AO types, AO cases and other informants. It then describes the recruitment and interview process before describing the methodologies for each key question.

Part II: Research findings

Chapter 4: Types of absentee landowners explores informant perceptions of AL, before presenting and testing a relational classification of landowners. Validation includes showing how four socio-political economic attributes reflected meaningful differences for 12 AO types.

Chapter 5: 2009 extent of absentee landownership in the Lachlan River catchment of New South Wales provides descriptive statistics on extent of AOs and AOL as a proportion of all landowners and all land within the Lachlan LHPA, Bland Shire and Cowra Shire, based on 2009 databases.
Chapter 6: Trends in landownership in the Lachlan River catchment, 1830-2012, examines trends in AL at a regional level in 1849, and trends between 1849 and 2009 in two contrasting districts. Historical AO types are identified, as are new trends since 1970.

Chapter 7: Underlying factors contributing to trends in landownership in the Lachlan River catchment, 1830-2012 explores contextual political economic, environmental and socio-cultural factors linked to three phases in AL. The dominant motivation set for each AO type is identified.

Chapter 8: Implications for sustainable agriculture of different types of absentee landowners explores the implications of AOs’ practices and outcomes for social relations, biodiversity management and economic viability, the last investigated in terms of sustainable production and profitability.

Part III: Discussion and conclusion

Chapter 9: Discussion identifies four contributions to knowledge. These are contextualised amid the literature and discussed in terms of power relations and the capitalist and sustainability discourses.

Chapter 10: Conclusion critiques the research design and discusses the implications of the findings for policy makers and future research.
Chapter 2: Literature Reviews

Introduction

This chapter begins by presenting literature reviews of three critical concepts (power relations and the capitalist and sustainability discourses). These overviews are followed by literature reviews describing the international types of landowners; contemporary extent of absentee landownership (AL); international trends in landownership since the nineteenth century; and factors contributing to these trends. Lastly, a literature review of the implications for sustainable agriculture of different types of absentee landowners (AOs) is structured around three topics: social relations, native biodiversity management (as opposed to agricultural biodiversity in terms of seeds and breeds), and hereon called biodiversity management, as well as economic viability.

Review of theoretical concepts

Introduction

As “research without theory tends to be decidedly ‘blind’” (Wiley, 1990, p.399) a socio-political economic framework centred on power relations and the capitalist and sustainability discourses informed research. The socio-political nature of these concepts is emphasised because socio-cultural dynamics are intimately linked to political economics (Commons, 1974) and landownership (Spencer and Stewart, 1973; Gilsenan, 1984; Oles, 1999). Power relations is fundamental to any research on landownership, particularly AL, as AL typically involves a separation of ownership and cultivation (Powelson, 1988), while to talk of “land and labour … is rather to talk of politics, … social hierarchy … and personal or group capacities to impose controls” (Gilsenan, 1984, p. 451). Within power relations, capitalism was considered a key discourse as, whilst some types of landowners may not have capitalist relations, all landowners are affected by capitalism’s global reaches (Ghorayshi, 1986). The sustainability discourse was also crucial, given its prominence in transforming agricultural
practices in recent decades (Barr et al., 2005; Cheney, Nheu and Vecellio, 2004; Luke, 1995) and the challenges it poses for the capitalist discourse.

These three concepts informed all key questions. The concepts confirmed a single underlying continuum and four dimensions for classifying landowners (Key Qu. 1). Literature on the capitalist discourse highlighted the need to examine trends in landownership from the nineteenth century (Key Qu. 2). The three concepts helped identify underlying factors contributing to trends in landownership (Key Qu. 3) and themes for a qualitative investigation of implications for sustainable agriculture of different AO types (Key Qu. 4). For instance, an understanding of power relations drove an examination of on- and off-property social relations and, given that dominating discourses set agendas, a discussion of the clashes and overlaps between the capitalist and sustainability discourses.

**Power relations**

Power is a much contested concept, defined by Weber as “the probability that one actor in a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests” (Uphoff, 1989, p. 299). For Mann (1986), power was the ability to pursue and attain goals through social organisation and mastery of the environment, whether by economic means or imposing a definition of reality. Mann (1986) distinguished between authoritarian and diffused power, tracing the evolution of the former from voluntary submission to coercion involving a concentration of landownership. For Weber, authority included the charismatic power of individuals, traditional power (e.g. of kingship, clan and family) and the rational-legal power of bureaucracies (Gerth and Mills, 1974; Uphoff, 1989). All these forms of power manifest in different AO types, from an autonomous farmer to a state-owned collective or national park.

Marx et al. (1991) claimed all power has an economic basis, whereas Weber (Gerth and Mills, 1974) and Mann (1986) emphasised multiple fractured
interlocking and organised spheres of power which can act independently or in collusion. Foucault investigated the link between power and knowledge (Lukes, 2005), which informed an investigation of AO-FM relations. Power in the form of self interest, leading to a conflict of interests (Collins, 1980), has been explored in terms of class (Marx et al., 1991), gender, politics, race, culture (Mills, 2000) and ideology (Huntington, 1996). Yet others question the distinction between self interest and collective interest, given the perpetuation of discourses that serve to limit what is thought and done (Lukes, 2005).

The concept of power considered most relevant for this study was that discursive practices define legitimate perspectives (Rabinow & Rose, 1994; Lukes, 2005). This conceptualisation has a long heritage. Marx proposed that ideology is used to cement and camouflage exploitation (Tucker, 1972). Foucault proposed power is everywhere and is not something that can be overthrown. Later, having been criticised for denying free will, Foucault emphasised the mobility of power relations, that regimes of truth evolve or undergo paradigm shifts and power relations adjust, adapt or are reversed (Rabinow & Rose, 1994). This process can be explained by Weber’s multiple interlocking but independent spheres of power (Crow, 1997; Elderidge, 1971) influencing choices between dominating discourses and variations within. Thus, the discourses of capitalism and sustainability may overlap or compete leading to variations in practices and outcomes for sustainable agriculture. In keeping with Foucault, Lukes (2005, p.1) argued ‘power is at its most effective when least observable’, that compliance is secured by a manipulation of agendas (e.g. by agribusiness). While discourses can be repressive and/or contradictory, they can also be productive, even transformative (Lukes, 2005), as demonstrated by both the capitalist and sustainability discourses.

Within the dominating discourse of capitalism, the discourses most relevant to land and agriculture include that private property ownership is the foundation of a prosperous society (Cahill, 2007); there are economies of scale
(questioned by Binswanger, Deininger and Feder, 1993); land is a hedge against inflation (De Laperouse, 2010); market forces provide solutions (questioned by Veblen, 1997); centralised state control results in a stagnant economy (questioned by Jian-Ming, 2001); and hunger will be alleviated by technological innovation and global trade (questioned by George, 1990).

As dominating discourses manifest in every relation, Foucault suggested power is best analysed in specific contexts (Rabinow and Rose, 1994). This was done in studying AL in the Lachan River catchment. Mann (1986), Moore (1967) and Powelson (1988) explored the power relations of landownership. Other investigations focus on colonialism, sovereignty and subnations (McSloy, 1992), (post) socialist transformations (Benda-Beckmann et al., 2006), a farming elite (Pichardo, 1995) or the environment (Luke, 1995). Some US research exploring power relations between an AO and tenant found landowners had substantial control (Mooney, 1983) and other research found dominant tenant-subordinate landowner relations (Efflund, Rogers and Grim, 1999; Petzelka and Marquart-Pyatt, 2011; Eells, 2008). European studies largely focus on the impacts of new city investors on rural power relations (Shucksmith, 2012) rather than examining the power relations of contemporary aristocratic landowners who own more land (Cahill, 2007).

In analysing power relations, Foucault suggested looking at systems of differentiation (e.g. economic resources, social status, information and networks); objectives (e.g. the accumulation of profit); the means of gaining compliance (e.g. remuneration) and the institutions behind the power relations (e.g. legal, economic) (Rabinow and Rose, 1994). Such considerations informed an investigation of AOs’ political economic attributes. Alker (1973) highlighted that parties potentially had different advantages, this observation informing an investigation of AO-FM relations. Lukes (2005) emphasises the need to identify the means through which power is exercised, whether through action (e.g. by an AO or FM), inaction (e.g. a lessee not complying with a lease agreement) or suppressing/ignoring an issue (e.g. the impacts of peak
oil on Western farming systems). These considerations informed an analysis of the implications for sustainable agriculture of different AO types.

Inaction and suppressing an issue are examples of counterfactuals, that is, power relations that determine what is not thought, said or done. Identifying counterfactuals was critical when exploring AOs’ implications for sustainable agriculture. Whilst admitting counterfactuals were difficult to investigate, Lukes (2005) maintained coherent plausible and justifiable propositions could be constructed by identifying the apparatus that sustain/s power relations independent of the person exercising it (e.g. capitalist discourse); identifying issues (e.g. managing biodiversity) and potential issues (e.g. the impacts of peak oil); observable and latent conflict (e.g. in social relations) and distinguishing subjective and real/best interests. ‘Real’ or ‘best’ interests are determined and justified by the investigator. Thus, an informant’s interpretation of what was sustainable (i.e. subjective interest) could differ from mine. My justifications for determining what is most sustainable are provided in Chapter 3 (Methodology). The impacts of the capitalist and sustainability discourses on AOs’ practices and outcomes are discussed in Chapter 9.

**The capitalist discourse**

Fundamental to the capitalist discourse is political economy or the way economics and politics interact. Political economy includes notions of utility and exchange, and therefore is often used synonymously with ‘economics’. Yet, the political economy of capitalism encompasses ways of thinking, norms of duty, ethics, habit, law, social relations and relations with other nations (Commons, 1974). This emphasises the need to understand the social and cultural milieu, as advocated by Weber (Gerth and Mills, 1974) and highlighted by the different forms of capitalism that have evolved in different countries (Crow, 1997).
Capitalist transactions are transactions conducted for profit. They occur in non-capitalist societies, but capitalism is when provisions are so capitalistically organised that if this form of organisation is taken away, the political economic system would collapse (Eldridge, 1971, p. 276). In Europe, capitalism, private property ownership and the nation-state co-evolved from the thirteenth century (Commons, 1974). By the nineteenth century, capitalism was the dominant system in Europe, the USA (Veblen, 1997) and the British colonies of Australia (Wells, 1989). In support of capitalism, Adam Smith (1806) argued self interested individuals inadvertently benefit society through capitalist endeavour in an environment of free trade in which supply and demand set the natural price for goods and services. For this to occur, Smith (1806) advocated minimal government, as states interfere with the natural economy. Smith was also against monopolies, as monopolies distort the natural price. In practice, the expansion of capitalism benefited from state investment in transport, communications, legal and banking systems, whilst monopolies quickly evolved (Veblen, 1997) including those supported by the state, such as the East and West India Companies (Crow, 1997; Powelson, 1988). The growth of unfettered capitalism meant that by the turn of the twentieth century, there was such a concentration of ownership and use of credit, money-values assumed more importance than productive work. This New Order developed in the mid latitudes in areas of mixed farming and an adequate food supply (Veblen, 1997), where many landowners were AOs (Powelson, 1988; Rasmussen, 1994). Overproduction and inflation inevitably led to cycles of prosperity and depression. Even in prosperous times, big business (a term employed by Veblen, 1997) could legally sabotage innovation and production when it did not suit their net return. Controlling what was done and left undone, big business fostered a faith that business principles could provide solutions to all things (Veblen, 1997), a more encompassing claim than market forces setting the natural price.

Big business only had partial control over land and agriculture. This was enough to keep the benefits of autonomous farmers’ work to a minimum, for big business
controlled inputs, local businesses being mere distributors. Big business likewise controlled milling, packing, marketing and distribution. Unable or unwilling to collude, farmers could not narrow the margin between the farm gate and consumer price (Veblen, 1997). This observation was made of US farmers in the 1920s, during the first international food regime, decades before the neoliberal capitalism of the third international food regime of the late twentieth century (Huggins, 2011; McMichael, 2005). Like the first international food regime, the third regime is associated with an international upsurge in multinational investment in land and agriculture for a global export market (Burch and Lawrence, 2009; McMichael, 2010). The capitalist discourse also served to guide an investigation of potential underlying factors (e.g. economic cycles and commodity prices) that contributed to trends in landownership, while the political interventions of the second international food regime (Huggins, 2011; McMichael, 2005; 2010) indicated a need to investigate the impacts of political interventions on trends in landownership.

Capitalism requires a continual expansion of opportunities and power (Commons, 1974). Despite some people questioning the sustainability of perpetual growth, capitalism remains largely uncontested (Shucksmith and Ronningen, 2011). The dominance of the capitalist discourse in the current era (McMichael, 2005) has led to some types of landowners thriving, and others not, and some agricultural practices being transformed and others not. AOs in the Lachlan case study represented the spectrum of capitalist endeavour, from traditional capitalists who take part in day-to-day operations to multinationals and investors located on other continents. However, as all had been influenced by the sustainability discourse, an investigation of their implications for sustainable agriculture was based on themes generated from both the capitalist and sustainability discourses.

The sustainability discourse

The concept of sustainability informed a comparative analysis of the agricultural practices and outcomes of different AO types at the property and entity level and whether these were viable (Key Qu. 4). To sustain is “to
“uphold, support, maintain” (Nuttell’s Dictionary, p. 915), but what is being sustained? In 1987, sustainable development was defined by the Brundtland Commission as meeting “the needs of the present without comprising the ability of future generations to meet their own needs” (United Nations General Assembly, 1987). Definitions have multiplied like rabbits but that does not belittle the importance of the concept (Rigby, Woodhouse, Young and Burton, 2001). In exploring sustainability, Elkington (1998) borrowed the term ‘triple bottom line’ or balancing economic, ecological and social priorities. Important, Bunch and Lopez (1994) highlighted that technologies and practices are not sustainable in themselves. It is the process of innovation – evaluating, learning and adapting – that is sustainable.

Sustainability implies a set of goals but goalposts move (Smailes and Hugo, 2003) and are inevitably constrained by what is conceived (Rigby et al., 2001) and considered ethical, legal or politically do-able. Goals can be framed within existing power relations (Bossel, 1999), hijacked by economic development (Luke, 1995), or challenge the status quo (Diamond, 2005). The much trumpeted triple bottom line sets arbitrary boundaries (Cheney et al., 2004), while solutions can lead to other problems, conditions change (Petty, 1995) and macro benefits can cost micro situations (Luke, 1995; Petrucci, 2002; Vanclay, 2003).

Sustainable agriculture has been defined as “the use of farming practices and systems which maintain or enhance the economic viability of agricultural production; the natural resource base and other ecosystems” (Ashby and Ashby, 2011, p. 19), whilst maximising the “net social benefits derived from agriculture” (Ashby and Ashby, 2011, p. 19). Most definitions emphasise long-term viability (Rao and Rogers, 2006) at the level of the paddock, property, entity, region, nation and/or world. The definition employed in this Doctoral thesis is that sustainable agriculture is an on-going process of evaluation, learning and adaption involving the balancing of social, ecological and economic relations likely to confer on- and off-property viability over time.
Within this definition, the three arms of sustainability are inseparable. To consider one in isolation of the other, and the socio-cultural milieu of all three, is unsustainable.

The sheer complexity of the balancing act means there are no single solutions. An example is the currently recommended cropping practice of direct drill into unburnt stubble. Wet-country British farmers brought inappropriate expectations, crops and animals to Australia. With Australia’s poor soils and unpredictable rainfall, the task of managing land involves complex trade-offs (Barr and Cary, 1992; Cathcart, 2009; Diamond, 2005; Henzell, 2007). Until the 1990s, most croppers ploughed before sowing a crop. This resulted in soil degradation and soil loss and was replaced by the current recommended practice of direct drilling into unburnt stubble, which is promoted as a way of reducing erosion, building up soil carbon, improving soil structure and water retention and saving fuel, time, labour and machinery costs (Brown, 2003; Handreck and Black, 2005; Kirby, 2009). However, direct drilling into stubble is not as effective in building up soil carbon in Australia compared to other countries (Lyon, 2009). Moreover, compared to ploughing, the practice requires a dramatic increase in the use of herbicides and fungicides (Angus and Kirkegaard, 1998), this having multiple health implications for people, animals and ecosystems (Cohen, 2007; Margni et al., 2002). With growing concern about chemical contamination of food and natural resources, organic farming is becoming more popular (Knudsen et al., 2005). For instance, in 2008, 7.4% of all utilised agricultural land in Europe was devoted to organic farming (Rohner-Thielen, 2010). Compared to dominant Western farming systems, organic farming relies on genetic diversity, less expensive inputs and more labour, ideal for labour-rich agrarian-based countries (George, 1990), but more more problematic in labour-poor countries like Australia. Alternatives to high chemical use include biological controls (Rigby et al., 2001) but these may have their own problems (Barr and Cary, 1992).
The concept of economic viability includes themes related to sustainable production and profitability. Sustainable production is the maximising of production whilst maintaining or enhancing the natural resources on which production depends (Ashby and Ashby, 2011). Themes such as enterprise mix and technology adoption were informed by Western farming practices since World War II. These typically involve monocultures and expensive technologies that include increasingly sophisticated cropping machinery, nitrogen- and phosphate-based fertilisers and patented genotypes, all sold by multinational agribusinesses (McMichael, 2005; 2010). Advocates argue Western systems have produced abundant food at lower cost (Trewavas, 2001) but monocultures are vulnerable to environmental conditions, disease and infestations (McMichael, 2005) and even where monocultures are successful, as in the (semi) arid regions of Australia and sub-Saharan Africa, innovative practises and mixed enterprises can spread risks and improve livelihoods (Mishra and El-Osta, 2002).

While scale and technologies have benefited agriculture in Australia, Canada and USA, increasing costs and declining commodity prices over decades have caused a cost-price squeeze for many farmers (Carroll, 2005; George, 1990). A suppressed issue is the impacts on Western farming and global trade of expected peaks in non-renewable resources such as fossil fuels (Hubbert, 1976; Pfeiffer, 2006). For instance, the dominating discourse of capitalism does not promote the direct selling of produce into local markets, even though this conserves fuel, decreases costs, reduces waste and has multiple social benefits (Petty, 1995; Pretty, Ball, Lang and Morison, 2005). Many researchers conclude that sustainable practices need to combine the best modern and local/traditional technologies and processes (Bossel, 1999; Hillman and Brierley, 2002).

Themes related to managing biodiversity (e.g. fencing rivers and revegetating with local native seed) were developed on the understanding that Western farming systems have led to the wholesale clearing of natural habitat (ABS,
2010; Diamond, 2005), impacting biodiversity (Vandermeer and Perfecto, 2007), natural pest controls (Bianchi, Booji and Tscharntke, 2006), sources of pollination (Banaszak, 1992), water and soil quality and quantity (e.g. erosion), and vegetation that offers weather protection and/or alternative enterprises (e.g. timber, firewood and honey), all of which go largely uncusted (Balmford et al., 2002). This has led to a call for biodiversity farming matrices (Vandermeer and Perfecto, 2007; Pagiola et al., 2004). Whilst every solution has its dangers, for instance, unmanaged reafforestation enhances the potential for bushfire and weed infestation (Barr and Cary, 1992), biodiversity loss may hold even greater dangers. Yet, in Australia, where environmental programs are uncoordinated and often rely on volunteers (Lawrence, Lyons and Momtaz, 1996), in the cost-price squeeze of current high input farming (Sherren, Dovers, Fischer and Schirmer, 2008), if providing an ecosystem service is not market based, the ‘post-materialist’ biodiversity managers (Hettne, 1995, p. 66) must rely on their own resources.

Literature on social relations tends to focus on the welfare of farmers and rural communities (Shucksmith and Ronningen, 2011), often in terms of human, social and institutional capital (Stayner, 2003). Paramount for sustainable agriculture is the critical mass of people required to produce sufficient food and fibre. From 1986 to 2001, the number of Australian farming families declined by 22% (ABS, 2003). One third of Australian farmers rely on off-farm income, in many cases, this exceeding farm income (Aslin, 2006). Perhaps of even more concern is that internationally, farmers are ageing, retiring, or leaving their land for work in higher wage urban economies, as are farmers’ children and farm workers (ABS, 2010; Jian-Ming, 2001). Nor are city workers attracted to low skilled, low paid and gender biased agricultural labour (Slee, 1994). There is a growing shortage of farm labour (Barr and Cary, 1992). For instance, between 2001 and 2006, there was a 19% decline in the number of people employed in Australian agriculture (ABS, 2006). If AOs can navigate social relations, they may be part of the solution. If not, they may be part of the problem.
Diamond (2005) outlined twelve issues facing the world today, all vital to agriculture. He suggested four reasons why societies do not take remedial action: a failure to anticipate, perceive or solve, and solution failure. He warned that when an industry has low, unpredictable profit margins, less capital to absorb or pass on costs, and when environmental degradation is insidious, it becomes even more difficult to make changes. Agriculture is one such industry.

**Agency and structure: the micro-macro discourse**

Critical to power relations is the discourse on agency versus structure, also referred to in terms of the micro-meso-macro discourse, macro being global and national forces; meso being regions and institutions (Duster, 1981; Harre 1981; Callon and Latour, 1981), and micro being individual agents, events and interactions (Ritzer, 1990). For instance, Moore (1967) took a macro perspective when proposing the evolution of fascism, communism and democracy being the result of alternate power relations between landowners and cultivators during the transition to commercial agriculture. US studies on power relations tend to take a micro perspective.

The discourse addresses the question ‘Is history, society and underlying socio-political economic processes a product of human agency or do they become independent systems?’ For Weber, various social spheres have mutually influencing dynamics, their structures and interactions not necessarily predicted by psychology. This infers they are qualitatively different. However, because society is not an integrated system Weber saw controversy only arising when a sociologist gave too much causal weight to either rationality, freewill or determinism (Crow, 1997; Eldridge, 1971; Gerths and Mills, 1974). In the twentieth century, extremists captured either end of the discourse (Collins, 1981; Hedstrom and Swedberg, 1998; Ritzer, 1990). Theorists like Giddens (1981) and Bourdieu (1981) attempted an integrated framework, while Derrida, Foucault, Lyotard and Baudrillard considered the distinctions a
product of Western philosophical dualism (Seidman, 1998). Luhmann (1981) viewed the distinctions as abstractions. It was up to the sociologist to define a system and its environment. Of interest was Hernes (1998) proposal that structure can change actors and actors can change structure, and Callon and Latour’s (1981) proposition that actors themselves are micro or macro, macro actors embodying the will of others through power relations. Sampson (1962) observed that rather than a great Leviathan, those wielding power could be in a fog of disparate interests, each disclaiming responsibility.

I adopted the position that whilst the whole is inseparable from its parts (Bhaskar, 1979) is unequal to the sum of its parts. For example, the charter of a Pty Ltd company reflects the work of individuals but binds the directors to the corporation’s rules and the will of the majority. On the other hand, Weber’s spheres of power means there are multiple discourses that mould choices and non-choices, thus allowing for rational and irrational agency (Lukes, 2005). It follows that in the jostlings of the capitalist and sustainability discourses, individuals can make choices, as will be shown in Chapter 8.

Context review for absentee landownership

Types of absentee landowners

The history of landownership suggests AL was common in stratified societies. One of the first AO type - the local urban-based farmer - appeared in the seventh millennium BC, with the emergence of towns in the Fertile Crescent, extending from the Levant to Mesopotamia (Falconer, 1995; Helms, 1984; Mann, 1986). By 3,000 BC, urban-based landowners relied on tenant or slave cultivators (Falconer, 1995; Mann, 1986). Contemporary versions include local town-based farmers and retired farmers (Kollmorgen and Jenks, 1958a; 1958b), and those who have inherited property (Hoppe, 2006), or moved to urban centres, some leaving behind resident kin (Oles, 1999) or members of a collective (James, 2006; Benda-Beckmann et al., 2006). Not studied in the literature are local town-based FCs and NFCs and individuals who fly-in fly out.
Under-represented in the literature are non-elite AOs forced to abandon their territory, land or site, traditionally held in communal allodial tenure (Adams, 2001; Powelson, 1988) to become political, economic and/or environmental refugees. This AO type is receiving more attention in the twenty-first century (Anseeuw et al. 2012; Diamond, 2005; Rawat, Bhushan and Surepally, 2011).

Since the priestly bureaucracies of Mesopotamia (3,500 to 3,000 BC), religious institutions have been AOs of substantial areas of rural land. Priestly bureaucracies oversaw estates cultivated by slaves or highly taxed tenants, and were also in charge of distributing the produce (Mann, 1986) in ancient Egypt, Vedic India, Aztec Mexico and Inca-ruled Peru (Powelson, 1988). Prior to the Reformation, the Catholic Church owned 37% of Europe (Cahill, 2007), and subsequently 50% of all cultivatable land in Spanish Mexico (Powelson, 1988). Islamic charitable institutions (Seikaly, 1984), Shinto and Buddhist monestaries, Hindu temples and various Christian churches also own rural estates (Cahill, 2007; Powelson, 1988).

Urban-based royal families are also owners of substantial rural land. This AO type, still prevalent in modern day Europe, created other elite AOs, the ruler granting land to loyal officials and military commanders, these estates supplying the bulk of the individual’s salary, military conscripts and food for their armies (Mann, 1986; Powelson, 1988; Ward, 1984; Brunt, 1972). In Britain the tradition was formalised in the Magna Carta of 1215 (Commons, 1974). European elites were granted revocable life tenancies, their tenants supplying rent and food to their overlord and taxes for the king. A non-contractual, feudal-like pattern of landownership also evolved in the Middle East and Monsoon Asia (Donner, 1984; Powelson, 1988; Binswanger et al., 1993).

Other elite urban-based AOs had no agricultural background but invested in land for commercial/(subsistent) agriculture. Since the first millennium BC they have included political elites (Fales, 1984) and entrepreneurs (Morony, 1984), who employed overseers, and used their country estates as rural retreats (Pascual, 1984; Slee, 1994). Internationally, political elites and entrepreneurs continue to
own substantial land used for commercial agriculture (Cahill, 2007; Cotula, 2012). In contemporary Australia they are called ‘Collins Street’, ‘Queens Street’ and ‘Pitt Street farmers’ (Vanclay, Silvasti and Howden, 2007). They have received scant attention in the literature, an exception being a study by Kollmorgen and Simonett (1965).

Foreign landowners could be state-authorities, elite individuals or corporations. State ownership of foreign territory used for agriculture occurred in the sixth century BC when the Athenian state sent administrator soldiers to manage plantations in Salamis and later, Egypt (Mann, 1986; Powelson, 1988). Under Islam, the majority of conquered land was owned by the state/sultan/emir, the land managed by an official, whose family could become hereditary owners or be usurped by the next regime (Donner, 1984). Throughout European colonisation, nation-states sent de facto feudal vassals of the Crown (East/West India Companies) to manage agriculture and trade in Africa and Asia. Individuals also owned foreign land throughout successive empires, their landowning descendants often pursuing city-based lives (Haarmann, 1984; Powelson, 1988). From the seventeenth century, European and US non-family corporations (NFCs), including land and financial companies, invested in foreign land (Bravo, 2011; Rasmussen, 1994; Wells, 1989) while international investment by state authorities, state/private hybrids, public and privately-owned companies and individuals is increasing in the twenty-first century (Cotula et al., 2009). Distinguishing sovereign and private investment can be difficult. For instance, the oldest and largest agricultural company in Australia, the Australian Agricultural Company (AACo), established in 1824 by British parliamentarians and banks, became majority owned by the Dubai Food Group, IFFCO, in 2009. However, IFFCO transferred its 19.9% stake to a Kuala Lumpur-based company owned by Felda Iffco Sdn Bhd (FISB). Felda is 100% owned by the Federal Land Development Authority of Malaysia, Malaysia’s largest plantation house (Weekly Times, 2010).

Urban-based creditors have also been acquiring land from indebted landowners since 1500 BC (Fales, 1984). During Persia’s Sassanid Empire (224-651 AD) and under the Romans, mortgages involved temporary or permanent
changes in landownership (Powelson, 1988), as they did in nineteenth century Australia, USA and elsewhere (Johnson, 1995; Khaladi, 1984; Wells, 1989).

Another AO type is the tax collector, the system known as tax farming, in which landownership is subordinate to ownership of the yield. This occurred in Egypt, where, over time or by law, the tax collector became the landowner (Frantz-Murphy, 1984). In Muslim India and feudal Japan, tax farming translated into multiple levels of ownership. In Japan, taxation was a fixed amount and resident cultivators were kin. In India, taxation was a fixed proportion of the crop and labour was based on caste, the legacy continuing to this day (Moore, 1967; Powelson, 1988).

An uncommon but historically significant AO type is the benefactor. From 1882, Baron Edmond de Rothschild purchased absentee-owned Palestinian land for Jewish settlers. He also established an agricultural college and provided agronomists and financial support for wages, community infrastructure, agriculture and processing factories (Aaronsohn, 2000). Trusts purchasing land for conservation could be seen as modern day benefactors to the cause of conservation but not necessarily to the cause of traditional land rights (Vidal, 2008).

Individual/family farm operations and family corporations (FCs) (Hoppe, 2006; Raup, 1973) could be resident or AO, or resident on some property and absentee on non-adjoining property (Res/AO). Those who are AOs and Res/AOs have received little attention.

Bain (1984) and Rasmussen (1994) classified in-country state authorities and NFCs as AOs. Other Western studies tend not to employ the term ‘absentee landowner’ to these ownership structures. Nor has the term been applied to indigenous corporate AOs in industrialised countries. Yet, the unit of ownership, source of capital, and strategic decisions are typically urban-based
(Tonts et al, 2003). While most state authorities and NFCs are AOs, indigenous and state collective ownership structures can be resident or AO.

In nineteenth century Russia, members of the urban-based middle and upper classes purchased a country retreat known as a *dacha* located 50 to 75 kilometres from a city (Struyk and Angeleci, 1996). These *dacha* owners could be seen as absentee lifestyle property owners (LPOs), otherwise known as amenity property owners, or those who own property for lifestyle purposes, rather than its productive value (Aslin, 2006). A peri-urban landholder owns land on the outskirts of an urban centre. They can run commercial operations, hobby farms or lifestyle properties (Aslin et al., 2004). Hobby farmers and trophy ranchers (Gosnell and Travis, 2005) are those who own land ‘more for lifestyle reasons and ancillary income’ (Peterson and Coppock, 2001, p. 109), as do owners of non-industrial private forest (NIPF) (Erickson et al., 2002). These landowners can be AOs or resident owners (ROs), whereas Australian terms like ‘sea changer’, ‘down shifter’, ‘tree changer’ and ‘dirt changer’ refer to urban people who move to a seaside town or rural region and who are often resident (Ragusa, 2010).

**Contemporary extent of absentee landownership**

**Existing statistics on extent**

To gauge the importance of AL and contextualise research findings, a literature review of the international extent of AL was undertaken. No inter/national statistics on the extent of AL could be found although isolated statistics provide some indication. For example, about 91% of Cook Islanders could be AOs (Crocombe et al., 2007; Fingleton, 2008). In the USA, 42% of all rural landowners are non-operators, 95% of these being individuals/families (Hoppe, 2006). Their residency status is unknown. Other US studies refer to regional extent, this varying from 23% to 53% of all landowners and up to 68% of all land (Bain, 1984; Bruynis, 2007; Kollmorgen and Simonett, 1965). Most
studies do not explore AOs as a percentage of all landowners or AOL as a percentage of all land (Petzelka et al., 2013).

In Australia, the only available statistics are that 23% of all land is state-owned and managed (Geoscience Australia, 2010), and 11.3% of all land has some level of foreign ownership (Moir, 2011). This would indicate a minimum of 34% of Australia’s territory is absentee-owned. Australian regional studies refer to AOs being 22% to 45% of all landowners although there was no indication of the extent of AOL (Curtis and Mendham, 2012; Kelly and Hosking, 2008). In the absence of national and regional statistics on extent of AL, statistics on land concentration and land rented out may provide some indication.

**Land concentration**

Internationally, Cahill (2007) claims the largest landowners are the state, monarchs, aristocrats, political elites and religious institutions. City-based governments own large tracts of territory that are conserved, harvested or farmed (Benda-Beckmann et al., 2006; Diamond, 2005). In China, Myanmar and Vietnam the state owns all land but provides individuals and villages with long term secure and saleable leases (Jian-Ming, 2001). In Israel, the state owns 92% of all land, of which 20% is retained by state authorities (Cahill, 2007; Hodgson, Cullinan and Campbell, 1999). The Canadian Government leases out 88% of all land (Cahill, 2007) and Australian governments lease out 42% of all land, apart from 23% retained by governments (Geoscience Australia, 2010). In Azerbaijan, Indonesia, Iran, Mongolia, Sri Lanka, Ukraine, South Korea and Syria the state owns between 58% and 64% of the territory (Forni, 2001; Cahill, 2007). In the USA and India, different levels of government own 37% to 38% of the territory (US, 2007; Hodgson et al., 1999).

In 2006, 35 monarchs claimed legal ownership to 25% of the planet. In Europe, where half of all farms are less than five acres and European royal families and aristocrats have maintained ownership of vast estates for centuries, 0.42% of the population owns 70% of all farmland. In the UK, 0.27% of the population –
two thirds being aristocrats – own 69% of all arable land. Royal families own
the largest rural estates in Kuwait, Malaysia, Saudi Arabia and the United Arab
Emirates. Internationally, political elites also own substantial areas. In the US,
4.1% of the population owned 44% of all land. Only four of the top ten
individual US landowners accumulated land in their own lifetime (Cahill, 2007;
Cotula, 2012; Powelson, 1988).

The Catholic Church continues to be the largest landowner in Malta. In Poland, it is
second only to the state. In Spain the Catholic Church owns 20% of all cultivatable
land (Cahill, 2007). In the 1960s, the Church of England was the third largest
landowner in Britain (Sampson, 1962) and the church continues to own prime
agricultural land (Church of England, 2011). In the US, numerous Christian
organisations own rural land (Heasley, 2003), although not identified in any US
Census.

**Land rented out**

Table 2 presents international statistics for land rented out as a percentage of
all cultivated land. Given that the cultivator is not the landowner, land rented
out is a possible indication of extent of AL. For instance, in Europe, land rentals
are more common than land sales (Swinnen et al., 2006). However, there are
important caveats. In non-industrialised countries, many AOs of small holdings
do not rent their land in fear of losing access or control (Jian-Ming, 2001).
Some landowners who rent out may be resident and not all owner-operators
are resident. Normal tenancy and reverse tenancy, the latter when small
landowners rent to large operators, may impact statistics, and statistics are
unreliable in Africa and South America where large areas are not held in any
formal land registration (Cahill, 2006) and where there is no formal rental
market. The prevalence of sub-tenancies in India, Pakistan and Bangledesh
(Macours et al., 2002; Mearns, 1999; Quan, 2005) may also skew statistics.
Table 2: Statistics of land rented out as a percentage of all cultivated land

<table>
<thead>
<tr>
<th>Country</th>
<th>% of all cultivated land rented out</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovak and Czech Republics</td>
<td>90%</td>
<td>Swinnen et al., 2006</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Very high</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Qatar</td>
<td>74%</td>
<td>Cahill, 2007</td>
</tr>
<tr>
<td>Germany</td>
<td>68%</td>
<td>Swinnen et al., 2006</td>
</tr>
<tr>
<td>Bulgaria and Hungary</td>
<td>50-60%</td>
<td></td>
</tr>
<tr>
<td>France, 2000</td>
<td>55%</td>
<td>Cahill, 2007</td>
</tr>
<tr>
<td>Turkey, 1991</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>Phillipines, 2002</td>
<td>49.4%*</td>
<td>FAO, 2010</td>
</tr>
<tr>
<td>Sweden</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Switzerland, 2000</td>
<td>39%</td>
<td>Cahill, 2007</td>
</tr>
<tr>
<td>USA, 2007</td>
<td>38%</td>
<td>US, 2009</td>
</tr>
<tr>
<td>Lebanon, 1998</td>
<td>38%*</td>
<td>FAO, 2010</td>
</tr>
<tr>
<td>Canada</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>32%*</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Austria and Finland</td>
<td>29%</td>
<td>Swinnen et al., 2006</td>
</tr>
<tr>
<td>Spain</td>
<td>26%</td>
<td>FAO #1, 2010</td>
</tr>
<tr>
<td>Greece, 1995</td>
<td>24%</td>
<td>Cahill, 2007</td>
</tr>
<tr>
<td>Denmark</td>
<td>24%</td>
<td>Swinnen et al., 2006</td>
</tr>
<tr>
<td>Egypt, 2000</td>
<td>18%*</td>
<td>FAO, 2010</td>
</tr>
<tr>
<td>Jordan, 1997</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>17%</td>
<td>Swinnen et al., 2006</td>
</tr>
<tr>
<td>Albania</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>6%</td>
<td>Ashby, 2003</td>
</tr>
</tbody>
</table>

Statistics impacted by informal contracts, sub tenancies or land registration

<table>
<thead>
<tr>
<th>Country</th>
<th>% of all cultivated land rented out</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan, 2000</td>
<td>20%</td>
<td>FAO, 2010</td>
</tr>
<tr>
<td>Nepal, 1995-1999</td>
<td>12%</td>
<td>Cahill, 2007</td>
</tr>
<tr>
<td>Brazil</td>
<td>3%</td>
<td>FAO, 2010</td>
</tr>
<tr>
<td>India, 2000-2001</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

* Includes other forms of tenure
Trends in absentee landownership since the nineteenth century

Findings on trends in the Lachlan from the mid nineteenth century required contextualising, but only one study conducted a spatial analysis of extent of AOL between 1930 and 1995 (Heasley, 2003). However, a broader literature indicated AL was internationally extensive in the nineteenth century. Based on AOL, land rented out and land concentration, AOL ranged from 60 to 90+% of all land in Europe (Jian-Ming, 2001; Powelson, 1988; Tyreman, 2007), Egypt, throughout the Ottoman Empire (Gilsenan, 1984; Jwaideh, 1984), Iran (Hooglund, 1982) and the USA (Broad and Fulton, 2003; Rasmussen, 1994; Zhang, Zhang and Schelhas, 2005), India, Central and Southern America (Aaronsohn, 2000; Deininger and Byerless 2011; Powelson, 1988), the Pacific (Oles, 1999) and colonial Africa (Powelson, 1988; Rennie, 1978). In Japan and southern China, 45% to 60% of land was absentee-owned in the early twentieth century (Moore, 1967; Powelson, 1988). In Australia, by 1913–14, 21% of all freehold landowners were AO (Heaton, 1925), this excluding long-term lessees of 43% of all land.

Available evidence suggests AL decreased in the twentieth century. In Britain, land rented out fell from 88% of all land in 1908 to under 50% by 1962 (Sampson, 1962). In Egypt, land rented out fell from up to 90% of all land before the 1950s (Cahill, 2007) to 18% in 2000 (FAO, 2010). Under apartheid, 75% of indigenous South Africans were gathered into 13% of the country (Cahill, 2007). Land reform since 1994 increased residency (James, 2006). From the 1970s, there was a decrease in state-owned land leading to increased residency in post socialist countries of Europe and the USSR (Benda-Beckham et al., 2006) and in the US, after 1998, there was a massive sell off of state owned land (US, 2007).

More generally, since the 1970s, there appears to have been a reversal of this trend towards resident landownership, corresponding to an increase in AL (Anseeuw et al. 2012; Petrzelka et al., 2013). For example, in Japan, 45% to 47% of cultivatable land was rented out in 1903–1938 (Moore, 1967). In 1946–
1952, 10% of all farms were rented out (Japan, 2006). In 2000, 64% of all farms were rented out (Cahill, 2007). Since the 1950s, Australian crop and livestock farms have increased in area by almost 50% (Ashby and Ashby, 2011). When expansion involves the purchase of non-contiguous land on which no member of the ownership structure resides, it increases the area absentee-owned.

Since the 1970s, there is also an increased number of city-based and interstate individuals who purchase or inherit land used for commercial agriculture, hobby farms and/or lifestyle properties in Australia (Aslin et al., 2004; Kelly and Hosking, 2008; Mendham and Curtis, 2010), Britain (Sampson, 1962) and the US (Gosnell and Travis, 2005; Gosnell, Haggerty and Travis, 2006; Petzelka et al., 2013). In Europe and USA, there is also an increase in city-based individuals purchasing small non-industrial private forests (NIPFs) (Wiersum, Elands, and Hoogstra, 2005; Zhang et al., 2005).

The acquiring of collective land title by often urban-based indigenous incorporated entities in Australia, Canada, New Zealand and USA has also increased AOL. In 1967, no Australian Aboriginal owned land. In 1980, 9.3% of the continent was owned by Aboriginal incorporated structures. The area increased to 15.1% in 1996; 16 to 18% in 2000 (Pollack, 2001) and in 2007, 20% of Australia’s territory was held by Aboriginal incorporated structures (Reconciliation, 2009; Alexandra and Stanley, 2007). Elsewhere, 5.6% of New Zealand’s territory is owned by Maori corporates (Kingi, 2007); 3% of US territory is Indian reservation (Hoppe, 2003) and 0.39% of Canada is held in three registries related to First Nation peoples (Canada Statistics, personal email, 2011).

The extent NFCs own rural land also indicate an increase in AOL: 17% of farmland in Portugal; 46% in Argentina (Cahill, 2007), 63% in the Slovak and Czech Republics and an increasing level of NFC ownership in post-socialist Eastern Europe and Central Asia (Benda-Beckmann et al., 2006; Swinnen et al., 2006), Central and South America (Bravo, 2011) and India (Rawat et al., 2011).
Plantation agriculture continues. Otherwise, contract farming involves a state or private corporation owning a nucleus estate, in addition to purchasing harvests from owner-cultivators, who can also be AOs (Baumann, 2000). In Australia, in 2001–2006, there was a 55% increase in the number of FCs and NFCs with an annual revenue of AU$2 million or more, 42% being NFCs (Clark, 2008). An apparent exception to an increase in land owned by NFCs is the USA, where NFCs owned 7% to 8% of all farmland in 1968 (Raup, 1973) and in 2007 (US, 2009), although there are regional variations (Bruynis, 2007; Heasley, 2003). In 2010, the largest NFC landowner in the USA was a public investment trust owning 2.75 million hectares of harvestable woodland (Plum Creek, 2010).

The most controversial trend is the international upsurge in foreign investment (Anseeuw et al., 2012). Public and private multinationals, mining companies, pension/retirement funds, foundations, unit trusts, funds with a limited number of partners/investors, hedge funds (first established in 1949), state-owned sovereign wealth funds and state/private hybrids are investing in land (Burch and Lawrence, 2009; Cotula et al., 2009). The available capital is enormous (SWF, 2011). Of the top 54 corporations investing in foreign land, 44% are European, 26% North American, 19% South American, 7% Asian and 4% Middle Eastern (De Laperouse, 2010). Based on hectares acquired by purchase or lease, investment is greatest in Africa and Asia (Anseeuw et al., 2012). For example, one third of Indonesia’s palm oil operations are controlled by Malaysian interests (Lopez and Laan, 2008). Eastern Europe, the Russian Federation and South America are also targeted (Anseeuw et al., 2012). For example, German aristocrat-owned Pty Ltd companies, Japanese and Western oil companies are purchasing rural land in the Russian Federation (Cahill, 2007). Ironically, whilst Chinese entities lease land in Africa, Japanese firms lease land in China (GRAIN, 2009). Nevertheless, De Laperouse (2010) found investors prefer purchasing land in politically stable countries with established markets like Australia and New Zealand. In Australia, in 2010, companies with varying levels of foreign ownership owned 11.3% of all agricultural land, an
increase from 5.9% in 1983–1984, in part due to mining interests (Moir, 2011). Foreign companies that purchased rural land in Australia since 2007 include Brazil-based JBS Swift; Chinese-based Pegasus Corporation and the state-owned Shenhua Watermark Coal; Denmark-based Ingleby Company; Japan’s Mitsu; Singapore-based Wilmar International and Olam; South Korean-based Ho Myoung Farm Company and UK-based Terra Firma (Coorey, 2011; Cowie, 2011; JBS Australia, 2011). Foreign investment in the Lachlan is discussed in Chapter 6.

An apparent exception to this trend in increased foreign ownership is the USA, where foreign entities have owned about 1% of all agricultural land for two decades. Canadian investors held the largest area (31%), followed by Germany (11%) and UK (10%) (US, 2007). Brazil-based JBS Swift entered the market in 2002 (JBS USA, 2011).

Factors contributing to absentee landownership

A literature review of studies not necessarily focused on landownership identified social, political and economic factors that contributed to international trends in landownership. The review identified factors to investigate for the Lachlan case study and provided context for the Lachlan findings.

Evidence suggested that AL was high in the nineteenth and early twentieth centuries due to the persistence of feudal and feudal-like landowning structures, colonial expansion (i.e. war and empire building), global trade and land laws establishing private ownership, whilst debts of resident landowners led to land accumulation by capitalised AOs. The persistence of aristocratic ownership of rural land in Europe was enhanced by the law of entail, granting the right to reserve land within a family, introduced in Britain by Alfred the Great in the ninth century (Powelson, 1988). In the nineteenth century, British aristocrats and gentry became increasingly absent from their estates as members of the House of Lords or House of Commons; in their services to the British Empire (Moore, 1967; Powelson, 1988);
in the running of their newly acquired mills and mines; in playing the London stock market; and in leisurely pursuits throughout Europe (Roebuck, 1973). Their AOL increased as a result of strategic marriages (Tyreman, 2007) and the enclosure of land formerly held in common right, enclosures made lawful in 1801 (Jian-Ming, 2001; Prentis, 2008). Similarly, East German Junkers owned vast estates for growing wheat but increasingly became city-based traders and manufacturers, whilst French aristocrats were expected to be in permanent attendance at the King’s court in Versailles, or serve in the army or church. Likewise, Japan’s shogun demanded landowning daimyo to attend his court in Eno and under the Qing in China, no Han bureaucrat was assigned their home province (Moore, 1967; Powelson, 1988).

Internationally, those who inherited land were often city-based (Hoppe, 2006; Powelson, 1988) but retained land to maintain status, prestige and continuity with the past (Tyreman, 2007). Land was a source of income and an asset on which to obtain credit. In the nineteenth century, landownership gave men the right to vote (Cahill, 2007). In the USA, it conferred favourable tax deductions (Raup, 1973) and subsidies (Jian-Ming, 2001) as it continues to do in the European Union. In 2006, 48.5% of the European Union’s budget subsidised rural landowners, the larger the land, the larger the tax free subsidy (Cahill, 2007). Why sell the source of such bounty? Only in Australian literature was the three generation syndrome noted: the first generation establishing a farming operation; the second expanding; and the third, having too many shareholders with no agricultural experience and not willing to be asset rich and income poor, selling (Morrison, 2009). However, China appears to be another exception to land accumulation over many centuries, with successive Han dynasties before the sixteenth century redistributing land to the peasants to broaden the emperor’s tax base (Powelson, 1988; Jian-Ming, 2001).

European colonialism reached a zenith in the nineteenth century, as East and West India Companies, churches, corporations, aristocrats and entrepreneurs, supported militarily, politically and economically by European governments, claimed land
wherever an export monoculture could be grown (Haralambous, Liversage and Romano, 2009; Powelson, 1988). Throughout Africa, the Americas and Australia, land was confiscated from traditional owners, who were either confined to reservations or ‘trust lands’; used as slave or tenant cultivators; or conscripted down the mines (Baumann, 2000; Powelson, 1988). Each European AO type dictated the enterprise, its selling price and the conditions of employment, relying on a local elite to supervise labour and collect rents and taxes (Powelson, 1988). AL expanded with the international trade in coffee, jute, rubber, silk, sugar, tobacco, tea, opium and wool (Frankema, 2006; Payne, 1967; Moore, 1967). The dividends were enormous. In 1850–1860, the returns on the Dutch East India Company’s West Javanese coffee and sugar plantations constituted an estimated 32% of Netherlands’ public revenue (Suryanata, 1996).

AL also increased wherever new commercial opportunities attracted rural landowners to the cities (Chao, 1981; Jwaideh, 1984), and wherever cash crops could be grown for export, the latter attracting urban-based entrepreneurs and political elites to invest in land and agriculture (Al-Rahim, 1984; Rasmussen, 1994). Other factors contributing to urbanisation and increased AL were increased emphasis on education, as well as natural disasters and clan feuds (Oles, 1999). Similarly, war increased AL in various ways, although there is scarce research on the topic, an exception being Holt (2004). Apart from armed service personal becoming temporary AOs and war creating refugees, war could result in a change of landownership. For example, during the US Civil War (1861–1865) demand for food led to farm expansion and after the war, speculators purchased southern estates, leasing out or share cropping (Rasmussen, 1994).

British joint stock companies, the London Company and Plymouth Company, invested in US land since the 1600s (Zhang et al., 2005), renting out to farmers. In 1844, Britain’s Joint Stock Companies Act gave any investor the right to incorporate as a legal entity and the 1855 Limited Liability Act enabled investors to limit losses to the amount they invested (Todd, 1932). Such laws resulted in a proliferation of corporate investment in rural land in the
Americas, Africa and Australia (Powelson, 1988; Wells, 1989). For example, in the USA, 1760–1950, non-family corporations (NFCs), exempt from property tax, purchased large acreages to develop infrastructure and expand their mining, timber harvesting and/or agricultural interests (Allen and Lueck, 2002; Rasmussen, 1994; Raup, 1973).

The impacts of nineteenth century land laws varied between countries. The US Government granted land to civil war veterans and the 1862 *Homestead Act* gave settlers with five years residency 160 acres of unoccupied Crown land if improvements were made within five years (Zhang et al., 2005; Rasmussen, 1994). In contrast, laws establishing private property ownership in Africa, Asia, the Middle East and South America increased AL as political elites had power over legislation and traditional landowners often held no title deeds (Deininger andBinswanger, 1999; Powelson, 1988; Rennie, 1978). Thus, in Northern India in 1793, the British Parliament’s institution of proprietorship awarded land to a level of tax collector among a hierarchy of tax collectors, British taxes taking up to 90% of all agricultural revenue. The indebtedness of smaller landowners led to further land accumulation by parasitic absentee landlords (Mearns, 1999; Moore, 1967; Powelson, 1988). Similar processes occurred throughout the Ottoman Empire. The land codes introduced from 1858 effectively gave communal village and tribal lands to the most powerful beys and sheikhs. These were the first to move into town, leaving aghas to oversee oppressed fellahaan (Gilsenan, 1984). The privatization of property under French and British mandates continued favouring city-based entrepreneurs and political elites (Buheiry, 1984). For non-elite landowners everywhere, property privatization was associated with increased debt, interest rates, input costs and taxes, causing many to abandon their land or sell to capitalised AOs (Jwaideh, 1944; Moore, 1967; Powelson, 1988; Puin, 1984; Rafeq, 1984; Seikaly, 1984; Sluglett and Farouk-Sluglett, 1984).

In the twentieth century, land, tax and inheritance laws as well as farmer support schemes were the most important factors behind the international increase in
resident ownership (Riddell, 2000). The 1862 *Homestead Act* began the process in the US. In twentieth century Britain, rent controls and death duties decreased the extent of land rented out (Sampson, 1962). Any delay in the trend towards residency was caused by a delay in land reforms due to a landowning political elite blocking reforms, as in Egypt (Rodrik, 1982) and South America (Powelson, 1988), or landowners circumventing laws, as in Syria. However in 1969, Syria’s socialist government distributed state land and water rights to 11,000 families, subsidising costs, providing agricultural advice and low interest loans (Metral, 1984). Subsequently in Syria, AOs decreased from 36% of all landowners in 1981 to 28.6% in 1994 (Forni, 2001).

Land reforms in post socialist Europe and, and between 1970 and 1993, in Cambodia, China, Laos and Vietnam decreased state ownership in favour of ownership by villages and households (Jian-Ming, 2001). In China alone, this effectively gave land rights to 212 million people (Cahill, 2007). Thus, during the short-lived second international food regime, from World War II and until the 1970s, the proportion of landowners who were resident owner-operators dramatically increased (Daugbjerg and Swinbank, 2004; Jian-Ming, 2001; McMichael, 2005).

Factors contributing to an increase in AL in the late twentieth century include urbanisation, neoliberal policies, an ageing farmer population, increased demand and speculation this will only increase, and other socio-political factors. In 1800, only 2.4% of the world’s population lived in cities of 20,000 or more (Holmes, Hughes and Julian, 2003). In 2006, this had increased to 50% (Hamblin, 2009) and by 2025, 63% of the world’s population are predicted to live in urban centres (Holmes et al., 2003). Landowning farmers and their offspring are moving to towns in search of better income, education and amenities; to escape the watchful eyes of elders, be reunited with family or retire (Forni, 2001; Oles, 1999; Suryanata, 1996). Many are reluctant to sell their land as land is a source of security if they lose their city job (Jian-Ming, 2001; Crow, 1997), as well as a source of credit (Cahill, 2007), income (Kendra
and Hull, 2005), food, reciprocal exchange and a way of maintaining links with extended family, community and cultural traditions. Their land is also kept for holidays and retirement. Some stay away for decades. Others exhibit a circulatory pattern, aided by modern transport and communications (Oles, 1999).

Urbanisation also includes farmers moving into town and remaining farmers. In 2001, 13% of 113,000 Australian farming families were urban-based (ABS, 2003) but only Kollmorgen and Jenk (1958b) and Kollmorgen and Simonett (1965) have explored the phenomenon. The second of the two US studies found that mechanisation had eased manual labour; the farmer was already travelling between non-contiguous blocks; the property had no house or a house that lacked modern conveniences and a town house was a good investment. Families had higher lifestyle expectations and the means of achieving these, including off-farm work, while farm isolation made town amenities attractive, particularly for women. Meanwhile, farmers continued to share resident farmers' satisfactions regarding farming life.

Drivers behind family farm operations purchasing non-contiguous land include the wish to achieve economies of scale, spread risks associated with disease and climate, and plan for succession (Allen and Lueck, 2002; Carroll, 2005). However, with the mean age of farmers rising and their urban-based offspring not wishing to farm, many replacement ‘farmers’ are predicted to be ‘secondary’ operators (Barr et al., 2005; Hoppe and Banker, 2005; Suryanata, 1996). Secondary operators include in-country and foreign FCs, NFCs, state authorities and public-private hybrids. They are investing in land as a result of increasing demand for biofuels, timber products, minerals, oil, food, carbon sequestration, conservation, tourism (Anseeuw et al., 2012), industry (Rawat et al., 2011), infrastructure and urban development (Dufey, Vermeulen and Vorley, 2007).
In the third international regime (McMichael, 2005) characterised by neoliberalism and the fostering of market liberalisation and a diminished role of the state, twentieth century reforms seeking a more equitable distribution of land appear to have run their course (Quan, 2005). New land laws encourage investment (Bravo, 2011), many countries actively courting foreign investment (Cotula et al., 2009). For example, in Ethiopia, pre-1975, the majority of rural land was held by AOs (Powelson, 1988). In 1975–1991, the Marxist government redistributed land at their political discretion. Since 1991, Ethiopia has developed a free market economy, resulting in increased AL (Deininger, Ayalew and Alemu, 2006). In India, the government is actively facilitating corporate investment in rural land by setting up tax exempt special economic zones (Rawat et al., 2011). In Eastern Europe and Central Asia, NFCs have acquired large estates from the manipulation of land laws and bankruptcy proceedings (Swinnen et al., 2006). Under the 1988 directive of free movement of capital among member states of the European Union, Western European investment in new member states is anticipated to escalate. Lower land prices and production costs and historic low levels of chemical use are attracting investors (Grover, 2006).

De Laperouse (2010) found the top foreign incorporations investing in land for agriculture were primarily motivated by inflation hedging and secondly, agriculture’s low correlation of returns with other investments. Agriculture’s positive fundamentals – namely that with a growing world population, demand for prime agricultural land and agricultural products will increase – the latter view reinforced by the grain price spike in 2007–2008 preceding the 2008 Global Financial Crisis (GFC) and another spike in 2010 (Muir, 2011) caused similar spikes in foreign investment (Anseeuw et al., 2012). Additional factors were corporations’ access to capital, the ability to specialise and reduce risks associated with seasons, and vertical integration requiring the efficient delivery of a standardised product (Allen and Lueck, 2002).
Factors forcing traditional owners off the land without (adequate) compensation include the construction of large scale infrastructure projects like the Baku-Tbilisi-Ceyhan (BTC) oil pipeline (EIA Review, 2003) and the purchase of land for conservation purposes. For instance, in Brazil, Bolivia and Ecuador, European carbon offset companies are leasing and managing natural forests and plantation monocultures (Bravo, 2011; Quan, 2008). In Africa and elsewhere, not-for-profit Western conservation institutions like the African Wildlife Foundation, the World Wildlife Fund (both established in 1961), Conservation International (established 1987), and World Land Trust (established 1989) are purchasing land for wildlife conservation (Private Protected Areas, 2005; Vidal, 2008).

With advances in transport, telecommunications and increased disposable incomes and leisure time, city-based, upper-income professionals, the self employed and retirees over 50/55 years in Australia, US and Europe are purchasing rural properties in easy commuting distance from a city. They see their rural property as an investment, an aesthetic escape from urban stresses and, sometimes, a future home (Aslin et al., 2004; Bain, 1984; Kelly and Hosking, 2008; Shucksmith, 2012). Some wish to subdivide or harvest timber (Gosnell and Travis, 2005). Hobby farmers also wish to practice farming in a limited way (Gosnell et al., 2006). Far less literature focuses on those targeting land for commercial agriculture. Kollmorgen and Simonett (1965) considered this cohort had off-farm capital to purchase the best land, and were enticed by the prospect of increased land values, tax benefits, a management program that could be left to others, security, status and recreation.

Since the 1970s, the increase in state-supported indigenous landownership in industrialised countries follows the recognition of original treaties in the case of Canada, New Zealand and USA. This was not the case in Australia, which the British declared *terra nullius*. However, the need for those dispossessed of their land, identity and traditional rights to have some justice (Macdonald,
1998) and self determination led to this form of AL (Alexandra and Stanley, 2007; Kingi, 2004; White, 2002).

There are also factors that may limit AL. They include one AO type replacing another; countries restricting foreign or NFC ownership; political economic cycles and business failure. Instances of one or more AO types replacing other AO types can be found in pre-, extant and post-socialist and colonial contexts. For example, following the Soviet Revolution in 1917, all lands owned by the Russian imperial family and aristocrats, monasteries, churches and gentry were confiscated and private property was abolished, except for dachas. Peasant communes were established but due to urban food shortages, in 1929–1933 the state assumed control of rural land, setting up state farms and collectives (Powelson, 1988). On the dissolution of the USSR, privatisation spread (Benda-Beckmann et al., 2006), most collectives turning into co-operatives of households or private corporations (Eidson, 2006). But land laws were vague (Visser, 2006) and urban-based entrepreneurs and corporations, agricultural managers of former collectives and ethnic groups competed for land (Sikor, 2006). Similarly, religious and elite absentee landownership in China and Tibet were replaced by state ownership post-1949 (Powelson, 1988), and since 1979, state ownership has been replaced by long-term leases to villages and households. Yet, many individuals are moving to urban centres (Jian-Ming, 2001). In Africa, Asia and South America, upon achieving independence from colonial rule, an urban-based political oligarchy (Frankema, 2006) confiscated colonialists’ estates and land held in customary tenure. They used this land for their own benefit or for selling to existing landowners or urban-based professionals (Adams, 2001; Baumann, 2000; Cahill, 2007; Greenberg, 2004).

Various countries place restrictions on landownership. Some Canadian states restrict land access to non-citizens (Docksteader, 2002) as does the Philippines. Brazil and Japan require foreign applicants to be resident. Mexico, New Zealand and Nigeria have introduced restrictions or review processes. China, Ethiopia, Vietnam and Zambia only allow leasing, whereas countries like Argentina, Australia, Britain, Chile, France, Germany, Netherlands, Portugal and
Venezuela have no restrictions on foreign ownership (Hodgson et al., 1999). In Australia, only foreign state entities wishing to purchase rural land need approval by the Foreign Investment Review Board (FIRB, 2012; Moir, 2011).

Some countries or states have restrictions on in-country NFCs owning rural land, as do nine US states, leading to one third of all private agricultural land being closed to NFCs. Restrictions were in response to the extent of British landownership in the nineteenth century, and spikes in AL after debt default creating creditor landowners in the Great Depression and 1980s (Johnson, 1995).

Exposure to political economic cycles, a low rate of return from agriculture, and business failure may also curb investment and cause existing AOs to sell. In the 1950s and early 1960s, NFCs invested in US farmland, at a time when there was much talk of world food and land shortages. Investment was encouraged by changes in tax and revenue laws for firms with less than ten shareholders, access to credit and farm support schemes (Jian-Ming, 2001; Johnson, 1995; Raup, 1973). But very large farms proved disadvantageous in their cost per unit of output, especially with declining commodity prices in the 1970s. With many in debt and experiencing management problems, and the Green Revolution having discredited the Malthusian view, in the late 1960s, NFCs sold, unable to tolerate a low rate of return carried by family farmers (Cahill, 2007; Raup, 1973). Corporate cycles and counter-cycles also occurred in Australia (PRNationwide, 2012). For example, the British-owned Vestey Group (that also invested in China from 1905) sold their Australian holdings in the 1990s (Vestey, personal communication, 2011), as did British-owned Bovril Australian Estates after the 1987 stock market crash.

Following World War II, US NFCs saw Australia as the new Eldorado, helped by favourable tax concessions. Most of these US corporates, including King Ranch, sold in the late 1970s after cattle prices crashed (Cuddy, 1976; Cypher, 1996). Following a 12 year drought at the beginning of the twenty-first century, British-owned Clyde Agriculture is selling its Australian holdings, the parent company (Swires) wishing to concentrate on other interests (Clyde Agriculture, 2012). Yet, environmental
impacts on corporate investment have received very little attention (Allen and Lueck, 2002).

Corporate failure in agriculture (Allen and Lueck, 2002; Payne, 1967; Raup, 1973) is another limiting factor. Recent failures in Australia include a number of investment vehicles that promised investors tax deductions. For instance, Great Southern Plantations was established in 1999, and became the third largest corporate landowner in hectares before liquidating in 2007. Timbercorp was established in 1996 and liquidated in 2009 (Great Southern Plantations, 2007; Timbercorp, 2000; Crittenden, 2011). While these business failures are reported in company profiles and newspaper articles they have received no academic attention.

Implications for sustainable agriculture
A literature review of implications for sustainable agriculture of different AO types provided themes and context for my research findings. However, international studies could reach contrasting conclusions, even within an AO type.

Implications for social relations
Historically, the monopolisation of land and political power by elites and colonialists led to estate wealth and labour squalor, and sometimes peasant rebellions, civil war (Haralambous et al, 2009), coups d’état (Bravo, 2011) and war (Moore, 1967). Centuries of feudal (like) monopolies created rigidly stratified societies with few opportunities based on merit (Powelson, 1988). Frequently, foreign and in-country AOs grew cash crops for export leading to reduced local consumption (Patnaik, 1996) or the government having to import food, as did Egypt in the 1960s (Deeb, 1984; Rodrik, 1982). In the nineteenth century, some British aristocrats and gentry became interested in their estates, and overseers became more skilled (Roebuck, 1973). Other landed oligarchies retained few connections (Rock, 2005). How these differences impacted on-property social relations was not explored.

Contemporary literature on the upsurge in foreign investment is focused on non-industrialised countries. Although some academics claim producing for
global trade has local benefits (Srinivasan and Jha, 2001) others liken the upsurge to the colonial land grab of the nineteenth century, which had multiple ramifications. Chief among these were the usurpation of traditional owners’ land rights, this jeopardising their capacity to produce food and maintain community networks (Anseeuw et al. 2012; Daniel and Mittal, 2009; Fox et al., 2006; Rawat et al., 2011). Currently, although top corporations can hire and train local managers (De Laperouse, 2010), and there is potential employment and upskilling of farm labour (Cotula et al., 2009), foreign owners often employed low paid, temporary labour (Anseeuw et al., 2012) while some can fly in scientists and farmers (GRAIN, 2009). Otherwise, scant attention is paid to the implications of foreign investment in industrialised countries. A broader literature noted there are differences in relations between an in-country subsidiary and the multinational parent company (Harzing, 2000), and cultural differences in how different multinational operates, stemming from the firm’s country-of-origin (Harzing, 2006). Foreign investors could also abuse market power and avoid taxes (Fisher, Stoekel and Borrell, 1998). Other studies do not distinguish between foreign and in-country NFCs. Of these, Tont et al.’s (2003) Australian study concluded socioeconomic implications were related to corporate ethics, vertical integration, property location and types of surrounding farms.

While most NFCs in Australia rely on a FM or a farm management team (Tonts et al., 2003) no study has explored AO-FM-labour relations, or relations within an ownership structure, and how this impacted practices and outcomes. A brief study by Billikopf (2001) identified people skills and not being micromanaged as key issues for farm supervisors. The lack of research on this topic is surprising given the broader literature emphasises the need for good farm management, a comprehensive plan and budget, and a skilled, organised, decisive, knowledgeable, adaptable strategist and communicator (Bamberry, Dunn and Lamont, 1997; Lee and Reeve, 1991), who is preferably computer literate (Sørensen et al., 2010). Seckler and Young (1978) argued that a FM could be more important than farm size in determining profits. Allen and
Lueck (2002) concluded the downfall of large NFC owned bonanza farms along the Minnesota-North Dakota border by 1910 was partly because of a hierarchically organised, poorly paid, casual labour force. Tonts et al. (2003) found contemporary NFCs in Australia could employ casual labour and have a high staff turnover but vertically integrated NFCs increased full-time employment, skills and local household expenditure. Bruynis (2007) also found that NFCs hired local farmers and college graduates. Studies found non-vertically integrated NFCs employed less than family farms (Broadbay, 2000; Bruynis, 2007) but no distinction was made between unpaid and waged labour. Only one study discussed the use of cropping contractors. Contractors saved on maintenance but timeliness and standard of work were potential drawbacks (Allen and Lueck, 2002).

Regarding local off-property social relations, Tonts et al. (2003) found corporations contributed to the community by investing in research and development; marketing, making donations and attracting newcomers who participated in community life. These researchers concluded that NFC farms in Australia may have more benign impacts than in the US because of their small number and NFC farms being a recent phenomenon. The last conclusion is tested by the Lachlan findings. Another Australian study found residents resented NFCs and their staff as they did not abide by the ‘invisible rule book’ of country life (Talbot, 2003, p. 7). Most Australian and US studies found NFCs were less likely than family farmers to purchase inputs and services locally, and the larger, more vertically integrated and more distant the headquarters, the more leakage (Brady and Breneman, 2008; Tonts et al., 2003).

Goldschmidt’s (1978) classic US study found NFCs had negative impacts on local per capita incomes and community cohesion. Barnes and Blevins (1992), and Winson (1996) reached similar conclusions, but Lyson, Torres and Welsh (2001) found the presence of a middle class was a more consistent predictor of community welfare than the presence of large absentee-owned farms. Bruynis (2007) concluded that surrounding farm sizes, off-farm work, the number of non-farm private businesses and home ownership impacted communities
more than AOs. Other studies expressed a concern that a cadre of non-voters in elections could impact local needs being met (Lapping and Clemensen, 1983; Williams and Williamson Jr, 1985). The implications were often judged ‘good’ or ‘bad’. More nuanced research was required, including an investigation into corporate labour relations and long-term viability (Tonts and Black, 2002).

For farm-based FCs, different aged family members could have different on-farm goals (Wilcock et al., 1999) as there was a strong relationship between education and the introduction of new practices (Bamberry et al., 1997; Barr et al., 2005). Tenancies allowed for intergenerational transfers (Broad and Fulton, 2003) but no study explored the relations between farm-based FCs and non-family waged labour.

Contemporary research tended to overlook city-based individuals who owned commercial farms, except when leasing or renting out. In the UK, twentieth century legislation gave tenants inheritance rights, which restricted farming to existing social structures. In contrast, tenancies in the US and Australia can be informal arrangements based on trust between people that owned land in the same district and who are connected through kinship or the community. Problems only arise if the lessee cannot afford the lease or there are different views on land management (Allen and Lueck, 2002; Ashby, 2003; Broad and Fulton, 2003). However, arrangements are impacted by the AO’s geographic distance and/or knowledge of farming (Constance et al., 1996). If managed correctly, tenancies can lead to a more equitable distribution of land and income (Jian-Ming, 2001; Quan, 2005; Hoppe, 2006), but Swinnen et al. (2006) observed the importance of power relations in tenancy arrangements with large scale NFCs demanding to pay less rent, often in-kind rather than cash, compared to family operations in Eastern Europe and Central Asia.

Social implications for absentee LPOs include not knowing neighbours (Caddick and Marshall, 2006), being difficult to contact (Aslin et al., 2004) and having
conflicts of interest with neighbouring farmers (Gosnell et al., 2006). Hoggart and Paniagua (2001) noted some newcomers, especially women, did not find the idyll of rural social cohesion. However, many researchers assumed time within a community contributed to trust, co-operation and reciprocity (Smailes and Hugo, 2003). This was in contrast to rural communities having varying levels of neighbourly reciprocity; often excluding the ‘other’ and sometimes having frequent, even catastrophic disputes (Dibden and Cocklin, 2003; Malkki, 1995).

For indigenous corporate AOs, ‘economic objectives must ... be juggled alongside the group’s cultural imperatives’ (Kingi, 2004, p. 2), as in becoming landowners within a capitalist society, many customary practices are challenged. For instance, in Maori and Aboriginal organisations, decisions are made by committees of elected representatives meant to represent community interests. However, they often represent an extended family and their cultural legitimacy is sometimes controversial (Kingi, 2004; MacDonald, 2000). Coming to a decision is a lengthy process requiring consensus (Howitt, 1993; Ross, 1992) and can be delayed by high rates of mobility (Biddle and Hunter, 2005; Prout, 2008). Delegation is culturally difficult (Dale, Lane, Yarrow and Bigelow, 2000), particularly when communities are not united and people come from different traditional groups. Young people do not respect elders and there are increased social problems and welfare dependence (MacDonald, 1998). Most projects rely on one or a few initiators and, in Australia, a CDEP program (Community Development Employment Projects). This pays little more than unemployment benefits and means there was no incentive to work hard over time. Projects are expected to employ as many people as possible but there is a reluctance to live on isolated properties, 70% of 460,000 Aboriginal Australians living in urban centres (Altman, 2004). Thus, the social challenges of running successful commercial enterprises are immense.
Implications for managing biodiversity

Australian farmers manage 60% of Australia’s land mass and 70% of the nation’s diverted water (Landcare, 2010). This means managing biodiversity on private property is critical. There is very little research on historical AOs’ biodiversity management although Diamond (2005) noted that a Japanese shogun ordered a massive re-forestation program in 1866. In 1885, as a result of China’s enormous environmental problems, the Chinese Government established a scheme whereby AOs returning to their village could be contracted to work on land reclamation, water conservation, forests and grassland expansion in return for food subsidies (Jian-Ming, 2001). The focus of most Australian and US investigations has been on absentee-owning individuals’ attitudes towards conservation and participation in conservation programs. No study has investigated actual practices and outcomes in managing remnant native vegetation, plantings trees, fencing for conservation purposes and no study appears to have assessed the existing areas of remnant native vegetation on properties owned by different types of landowners.

US studies have found that although forests are expanding in some places (Walker, Marvin and Fortmann, 2003) due to natural regrowth on AOL (Erickson et al., 2002), increased subdivision (e.g. around national parks) has reduced natural habitat on each property and continuity of natural habitat across properties (Bunker and Houston, 2003; Gosnell et al., 2006). Australian and US studies consistently find that AOs express conservation values, but are less likely than farmers to implement current recommended practices (Curtis et al., 2008; Petzelka, Malin and Gentry, 2012), whether they are LPOs (Klepeis et al., 2009), small forest owners (Erickson et al, 2002) or rent out their land (Carolan, 2005; Eells, 2009; Salamon and Keim, 1979). Factors contributing to this lack of conservation work include a lack of time, finances, knowledge, experience and advice (Aslin et al., 2004), age, wishing to sell (Caddick and Marshall, 2006) and not participating in conservation programs (Buman, 2007; Curtis et al., 2008). Importantly, Broad and Fulton (2003) noted that in most tenancy agreements there is a lack of provision for sharing
conservation costs. Another factor was that urban dwellers may not see natural landscapes as being in need of management (Erickson et al., 2002; Klepeis et al., 2009). However, conservation practices increased with education, larger land sizes, income from the land, having a farming background (Petzelka et al., 2012), and when there was a succession plan (Sherren, Dovers, Fischer and Schirmer, 2008).

Large scale corporate operations were assumed to have more capital to spend on conservation and more land to reserve for natural habitat (Trewavas, 2001). However, Lockie (1996) observed the shifting locus of control to large scale landowners in Australia impacted the effectiveness of conservation programs like Landcare. Internationally, by 1999, at least 5,000 companies across sectors certified their environmental management systems under the International Organisation for Standards ISO 14001 guidelines. Environmental performance reports became common practice. Most programs work with external stakeholders and corporate benefits act as incentives to go beyond regulatory compliance (Rondinelli and Berry, 2000) but no study looked at what was actually being done. This is a major research gap in light of the international land rush in non-industrialised countries involving the wholesale clearing of forests and native grasslands, and the damage being done to marshlands, mangroves and water supplies (Anseeuw et al., 2012).

With 20% of Australia’s territory held in Aboriginal corporate ownership, there is huge potential for Aboriginal landowners to manage biodiversity (Adams, 2004; 2008). In the Northern Territory, about 35 community-based CDEP ranger programs provide employment for 300 individuals to manage feral animals, noxious weeds and biosecurity and to conduct traditional burning regimes (Altman, 2004). In NSW, opportunities include conservation and co-management agreements in return for a rate deduction or tax exemption (Lane, 2001; Altman and Whitehead, 2003; Adams, 2008) but work is limited by a lack of funding, particularly for wages (Alexandra and Stanley, 2007) and no study investigated actual practices and outcomes.
Implications for economic viability

Available evidence suggests that, historically, AL could inhibit or increase production. If an AO made huge demands on their estate, taking a high proportion of the yield, or preferred estate expansion instead of investing in better practices, production tended to be low (Gilsenan, 1984; Powelson, 1988). This remains the case in India, where tenants are victim to unequal share-cropping arrangements (Bardhan, 1970; Mearns, 1999). In these cases, when whole villages desert or sell land, the area under cultivation is reduced, as occurred in nineteenth century Syria (Rafeq, 1984) and Palestine (Seikaly, 1984). Likewise, in the 1980s, production fell in China when Chinese farmers left the land in search of urban jobs (Jian-Ming, 2001). In contrast, when AOs invest in practices, production increases (Frantz-Murphy, 1984). For example, in eighteenth and nineteenth century Britain, many AOs invested in fertiliser applications, crops and livestock rotations and were consequently credited with the British Agricultural Revolution (Roebuck, 1973). Other researchers suggest it was their increasingly professional FMs and tenants that introduced new practices (Benda-Beckman et al., 2006).

Contemporary large scale FCs and foreign and in-country NFCs are rapid adopters of new technologies (Molnar and Beaulieu, 1987), the latter types providing the agricultural sector various organisational configurations (Tonts et al., 2003) and immense capital (Burch and Lawrence, 2009) that is channelled into large scale production (Tonts et al., 2003). Scale increases production per worker (Rutton, 2002) and reduces costs per unit of area but there are many caveats (Johnson, 1995), so costs per unit of output can increase (Lutz and Binswanger, 1998), especially as large scale entities often operate less productive land (Benjamin, 1995; Gorton and Davidova, 2004). Other challenges for large Australian FCs and NFCs include finding skilled labour and having cost effective operations, their greatest costs being servicing debt and fuel. Although comprising only 1.5% of all farming units, in 2008 they accounted for 28% of all input purchases, but contributed 24% of total output (Clark, 2008). Other reports likewise claim large scale NFCs and FCs are in the top range of producers (Hamblin, 2009; Hoppe, 2006) but none of these reports consider production per hectare or product quality.
Other studies find access to information, technology, credit, subsidies, tax relief, infrastructure, distribution, processing and marketing influence findings on production and profitability (Allen and Lueck, 2002; Hamblin, 2009). Once new technologies are adopted by smaller farmers, they demonstrate higher productivity per unit area corrected for land quality than large scale operations (Lutz and Binswanger, 1998; Mearns, 1999; Rutton, 2002). They also produce better quality product and can better respond to changing market demands than large scale corporations (Baumann, 2000). Another issue rarely raised is the investment horizon of NFCs, when investment is best judged over a 20 to 30-year span (Morrison, 2009). Another concern is that although 78% of all international land acquisitions in 2000–2010 were focused on agriculture, three quarters of this land was being used to produce biofuels (Anseeuw et al., 2012).

In relation to FCs and individual/family operations, Ashby (2003) and Barr et al. (2005) claimed large Australian family farms had a higher return on capital than small family farms, but Carroll (2005) observed well run, medium sized Australian farms generate double the return as a percentage of capital invested (5.9%) than the average return of large scale operations (2.8%). No study has focused on the economic viability of commercial operations owned by city-based individuals. However, various studies have noted that financial constraints can limit land management (Caddick and Marshall, 2006); these landowners are less likely to have a farming background (Petzelka et al., 2012) and knowledge of farming, and are less likely to use consultants or participate in a training course compared to farmers (Curtis et al., 2008). Highlighting the importance of knowledge and capital, one of the largest and most successful organic farms in the UK is owned by the Prince of Wales (Ripe, 2006).

In contrast, there are excellent studies on tenancy arrangements. Production advantages included the utilisation of non-viable units; providing operator flexibility in farm size, land type, enterprises and rotations and spreading risk. Arrangements can allow an infusion of new ideas and in the case of share farming, can increase landowner involvement in decisions, risk sharing and
incentives to farm sustainably (Ashby, 2003; Broad and Fulton, 2003; Hoppe, 2006). Other studies note that unequal power relations can impact production outcomes (Mearns, 1999).

The problem in assessing literature on the economic viability of various landownership structures is that no single study or meta-study has compared fixed and variable costs per hectare, production per hectare and production per person corrected for useful rainfall and soil type (Broad and Fulton, 2003), and has also considered tenancy arrangements, FM input and other intervening variables (Gorton and Davidova, 2004). In the absence of systematic comparisons of critical independent, intervening and dependent variables, it is difficult to assess findings.

In regards to the economic viability of absentee hobby farmers and LPOs, there is little research. Australian studies report increased subdivision in peri urban districts threatens scarce prime agricultural land (Bunker and Houston, 2003) and reduces district production levels (Aslin et al., 2004) because amenity property owners placed less value on agricultural production (Gosnell and Travis, 2005; Mendham and Curtis, 2010). In contrast to many other studies (Klepeis et al., 2009), Caddick and Marshall (2006) found most LPOs actively controlled weeds. Otherwise, subdivisions increase land values, making it difficult for local farmers to expand (Aslin et al., 2004). As more long-term farmers leave a district, local knowledge could be lost (Curtis et al., 2008).

Aboriginal landowners in Southern Australia are more disadvantaged than their Northern Australian counterparts as most programs focus on people with traditional affiliations (Pollack, 2001). Aboriginal properties in the south tend to be of little commercial value (Altman, 2004; Macdonald, 1998) and establishing agricultural enterprises is handicapped by a lack of capacity building in developing a sound business model; skills training; quality mentoring and technical support over a realistic time frames; the confusing number of government agencies that fund projects; insufficient funds; the
stop-start nature of funding and the need for integrated development (governance, education and training, paid work, health and housing (Alexandra and Stanley, 2007; Dale, 1993; Lane and Dale, 1995). As productivity is held back if land is not demarcated for individual use (Benda-Beckmann et al., 2006) there is a need for legal frameworks to enable multiple allocations of enterprise rights and tenancies. Since the late 1970s, subsistent polyculture gardening (e.g. permaculture) was established in some communities but is not regarded as a valid rural industry by funding agencies, whilst harvesting and cultivating introduced species, native grass seeds, foods and medicines could open up market opportunities (Alexandra and Stanley, 2007). Projects in the Top End have been successfully developed (ACIAR, 2009; Altman, 2004) but there was no study on functioning farms in NSW.

In many respects, Australian Aboriginal landowners share the challenges faced by AOs in non-industrialised countries, for instance, in South Africa after indigenous people gained ownership by pooling their settlement grants (Adams, 2001; James, 2006). In these countries, the underutilization of AOL is one of the main obstacles to agricultural development (Jian-Ming, 2001, Mbonile, 2003). Mbonile’s (2003) Tanzanian study identified that care of land was enhanced by AOs having a higher income, while 46.4% of all absentee-owned farms used organic fertilisers. Oles’ (1999) Micronesian study pointed to increased production when land rights for AOs and stewards (cultivators) were assured.
Summary of literature reviews

Theoretical concepts that informed this Doctoral thesis were power relations, and the capitalist and sustainability discourses. Power relations were defined in terms of dominating discourses setting agendas and ensuring compliance. The capitalist discourse largely determines what is done and left undone, the latter resulting in counterfactuals (i.e. what is not thought, said or done), while sustainable agriculture is defined as an on-going process of evaluation, learning and adaption involving the balancing of economic, ecological and social relations likely to confer viability over time. As such, the sustainability discourse can be co-opted by or contradict the capitalist discourse.

There are no inter/national statistics on extent of AL and few regional statistics, but if land concentration and land rented out are reliable indicators of AL, AL is internationally extensive. Elite and non-elite AO types have existed throughout human history. Scattered studies suggest AL was extensive in the nineteenth and early twentieth centuries due to the prevalence of feudal (like) structures, colonialism, global trade and the introduction of private property ownership. In the twentieth century resident ownership increased as a result of political interventions. Since the late twentieth century AL has increased due to urbanisation and neoliberal policies, family farm expansion through the purchase of non-contiguous land, an increase in foreign and in-country corporate investment as a result of land being seen as a hedge against inflation and because of agriculture’s positive fundamentals. Otherwise, affluent city-based individuals are investing in land for recreational purposes.

The implications for sustainable agriculture depend on the type of AO and the researcher’s perspective, especially regarding economies of scale. Studies focus on one or two types and do not compare different ownership structures, relations within an ownership structure or AO-FM relations. The majority of US and Australian studies focus on individual AOs’ and find that these landowners are less likely to implement current recommended practices compared to resident farmers. No study compared biodiversity management between
ownership structures and different scales of operation. No study compared input costs or production per hectare across landowner types, corrected for rainfall, soil type, and farm management. Farm-based FCs; local town-based individuals, FCs and NFCs and city-based owners of commercial operations have received negligible attention in all respects.
Chapter 3: Methodology

‘Not everything that can be counted counts and not everything that counts can be counted’

Ontology

The position taken for this social research was that external reality exists independent of peoples’ perceptions (Gray, 2006; Bhaskar, 1979), although ‘people possess an internally experienced sense of reality’ (Neuman, 2006, p. 89), which can bring ‘into being that which does not exist’ (Deleuze quoted in Pryke, Rose and Whatmore, 2003, p. 30). While the world’s complexities have different meanings for different people, this does not imply ‘truth’ is impossible to define. Definitions are always possible. They are the prisms through which we communicate (De Vaus, 2002), albeit limited by our perceptions, thoughts and language (Pryke et al., 2003). Nor does it imply that truth is a matter of consensus for consensual beliefs can be based on prejudice, ignorance and other human failings (Patton, 2002). It does mean our relationship with reality is ambiguous, especially as much of reality is unknown and, likely, unknowable. But rather than leading to a ‘crisis of representation’ (Patton, 2002), Foucault’s ‘games’ or ‘regimes of truth’ emphasise the need for context (Rabinow and Rose, 1994). Consequently, I took a post-positivist critical realist approach. Critical realists emphasise the existence of multi-level, multi-causal contingencies rather than universal laws or total subjectivity (Bhaskar, 1979; 1986). This approach informed an historical sociological investigation of underlying factors contributing to trends in landownership. Critical realism also suggests there is rarely one definitive solution to norms that are rationally justified as unsustainable (Sayer, 1997). This view informed a comparative analysis of AO types’ implications for sustainable agriculture.
Epistemology

Knowledge is a social construct constrained by paradigms and conventions (Pryke et. al, 2003). Each discipline has its challenges. The challenges for sociology are dealing with the intentional agent (Hedstom and Swedberg, 1998); multiple causes (Eldridge, 1971); and intervening variables (Moore, 1967). This means conclusively establishing causality is problematic (Patton, 2002). For a critical realist, the fallible epistemological relativities require examining feasible alternative explanations (Bhaskar, 1979), or what Yin (2009) calls rival theoretical explanations. These theoretical explanations guided my investigations for each research question. For example, the discourse on sustainability generates plausible, desirable alternatives, each possessing their own strengths and weaknesses (Sayer, 1997).

The Lachlan research employed qualitative and quantitative methods and comparative analysis as ‘comparison affords explanation’ (Durkheim, 1951, p. 41). Comparative analysis often requires phenomena to be classified in some way (Neuman, 2006) despite all societies, groups and individuals being heterogenous and arbitrarily bounded (Crow, 1997; Mann, 1986). No matter how rational and evidence based the criteria for comparison, what a sociologist includes and excludes, highlights or de-emphasises has political and moral consequences (Moore, 1967). Moore (1967) concluded neutrality was impossible, but objectivity was desirable. Objectivity was attained by exploring different perspectives to arrive at congruent explanations (Eldridge, 1971; Yin, 2009). Such considerations informed the development of an inclusive classification of landowners.

Aspiring to link macro and micro perspectives served three purposes. A comparative analysis of phenomenological experiences, described as the differences, paradoxes, continuities and discontinuities of little narratives (Kellner, 1990, p. 265) and embedding these in underlying processes avoided the totalitarianism of macro determinism (Rabinow and Rose, 1994). On the other hand, a historical sociological approach to investigating social, political, economic and environmental processes over time counteracted the possibility
of ‘total relativity’ (Kellner, 1990, p. 258), or the ‘end of history’ (Kellner, 1990, p. 267).

The second purpose of linking macro and micro perspectives was a wish to circumvent the pitfalls of Eurocentrism, assumptions about modernity and postmodernity (Crow, 1997) and the ahistorical nature of many contemporary social studies (Hoggart and Paniagua, 2001). To do so, I drew upon historical and international perspectives, in the tradition of Weber (Eldridge, 1971; Gerth and Mills, 1974), Foucault (Rabinow and Rose, 1994), C. W. Mills (Mills, 2000), Mann (1986) and Moore (1967). Thus, a broad perspective informed all key questions.

Mixed methods also counteracted the biases and limitations of a particular method (Gray, 2006; Neuman, 2006; Patton, 2002), although distinctions can be arbitrary. This is especially so if quantitative research is equated with the use of statistics and all other research is classified ‘qualitative’. Ratnesar (2005) concluded that a quantity is always a measurement of a quality, and at every stage of research, qualitative constructions are made.

Thus, this multidisciplinary social research was an interplay between evolving theoretical propositions and emerging quantitative and qualitative themes and patterns (De Vaus, 2002; Yin, 2009). In-depth interviews, field observations and an historical sociological analysis of the literature allowed for new data and insights, yet I was ultimately responsible for the process. By triangulating theory, data sources and analyses I aimed for a reliable investigation.

**Methodologies used in past research on (absentee) landownership**

Appendix A lists some of the methodologies used in research that either focused on or referred to AL. Case study methodology was the most common, although data sources and analytic methods varied. Outstanding for its depth and clarity was Broad and Fulton’s (2003) Australian research on different
tenancies that relied on interviews and a survey. Their presentation of methods and data guided my analysis of AO attributes. Oles’ (1999) and Mbonile’s (2003) qualitative explorations of AL in the Pacific and Tanzania confirmed that interviews provided depth of understanding. These studies highlighted themes and criteria for investigating factors contributing to AL and its implications. Khalidi’s (1984) collection of historical studies focused on the Middle East confirmed the value of relying on diverse data sets and informed an exploration of AO types, trends and factors contributing to these trends. Heasley’s (2003) spatial and historical analysis of rural transformation in two Wisconsin districts supported my intention, methodology and presentation of findings about trends in AL at different time intervals. Finally, the scope of works by Jian-Ming (2001), Mann (1986), Moore (1967) and Powelson (1988) gave me courage and guidance to take a historical sociological perspective.

**Case study methodology**

Case study methodology was considered ideal for this social research. By confining my investigations to the Lachlan River catchment of New South Wales and comparing cases within the region, I could respond to my four key questions within the resource constraints of a Doctoral thesis.

Given the flexibility of case study methodology, Yin (2009) advocated a set of pre-conceived descriptive and explanatory propositions, which could even contradict. After reviewing the literature and conducting my first field trip I developed a set of preliminary propositions. These propositions guided research and were refined and expanded throughout data collection and analysis. This ability to refine and expand propositions meant important insights were not excluded. The preliminary propositions are presented in this chapter. The validated propositions, incorporated as headings and presented in full at the end of each findings chapter, provided an analytic interpretation of the findings. They are not statistically generalisable, but could be tested by other case studies (Gray, 2006; Patton, 2002; Neuman, 2006; Yin, 2009).
The case study methodology aimed to meet Yin’s (2009, p. 41) four criteria on which to judge social research. These criteria were having clearly outlined data sets and procedures (i.e. reliability); convergent data, a clear chain of evidence and informant review process (i.e. construct validity); a process of explanation building (i.e. internal validity) and use of theory and replication logic (i.e. external validity). If these criteria were transparent and systematically applied, then the quality of the findings can be judged on their relevance and utility (Patton, 2002).

Timeline of research

Introduction

My case study methodology evolved through an exploratory phase, data collection phase and synthesis phase. Each phase will now be explained briefly. Details are presented later, when I outline the methodology for each key question.

Preliminary research phase (February, 2009 – December, 2009)

Research commenced on 4 February, 2009. To select a case study region, three regions were targeted based on firsthand knowledge and literature. The first region extended from the far coast of NSW to Canberra in the Australian Capital Territory (ACT). This region was close to home and showed variations in AL from coast to the Monaro plateau. The second region was the Gwydir Border River catchment in northern NSW, as it was known to have a diversity of AO types (Aslin et al., 2004; Clark, 2008). A third region, the Lachlan River catchment, was suggested by my principal supervisor.

Initial investigations of each region involved contacting local representatives of the NSW Department of Primary Industry (DPI), Catchment Management Authorities (CMAs), Livestock Pest and Health Authorities (LHPAs) and Aboriginal Land Councils. The major disadvantage of the first region was the
diversity of agricultural enterprises, which made implications for sustainable agriculture difficult to compare. The disadvantage of the second region was its distance from home. The Lachlan catchment was closer to home and was found to have many AO types that practised dryland cropping and livestock (sheep and cattle). The Lachlan became my case study region.

The initial plan was to complement qualitative data gathered from face-to-face semi-structured interviews with quantitative data gathered using a survey. Interviews would provide rich nuanced data and analysis of survey data would allow a statistical comparison between AO types and their resident counterparts. To obtain a data set of rural landowner names and addresses that could be drawn on to provide a random sample, I approached organisations with landholder databases. In each case, they cited privacy legislation to deny access. In consultation with my supervisors, I considered other ways of implementing a mail survey. For example, I could hand deliver surveys to a random selection of roadside properties. A final decision was left until after my first field trip.

Interviewing 24 informants on Field Trip 1 highlighted the complexity of the topic, for example, the interplay between an AO and farm manager (FM). I was concerned that a survey could oversimplify issues (De Vaus, 2002) and limit my capacity to explore major research gaps such as long term trends in AL and AO-FM relations. I also had practical concerns about hand delivering surveys to large, isolated properties, thinking the survey may not reach AOs, especially those based in Sydney or overseas. My principal supervisor requested I provide a research proposal that did not include a survey. The proposal submitted was the final research design outlined in Table 1 (Chapter 1).

After being denied direct access to existing data sets, I approached three organisations with landowner databases (Lachlan LHPA, Bland Shire Council and Cowra Shire Council) and asked if they would conduct an in-house analysis to assess the contemporary extent of AL. Meanwhile, I sought ethical clearance.
Ethical Clearance

Introduction
My application for ethical clearance to Charles Sturt University’s (CSU) Human Research Ethics Committee was submitted on 7 September, 2009, and was approved before Field Trip 1. The key issues were the inclusion of Aboriginal Australians and confidentiality.

Inclusion of Aboriginal landowners
In Aboriginal culture, only traditional owners have the right to speak for country, while many Aboriginals suffer from research fatigue and are tired of their issues being exoticised or pathologised. Land issues are particularly sensitive. Local communities are divided and there is often conflict between the legal landowner and traditional owners, as well as argument over who is a traditional owner. From past experience, I knew that Aboriginal people have no trouble saying ‘no’ if they do not want to participate in a project, and some value their voice being included in a wider framework. Although cross-cultural interviewing can lead to misunderstandings (Patton, 2002) and misrepresentation, I trusted my past experience working with Aboriginals and my knowledge of their cultural protocols (e.g. need for consensus). I respect the challenges they face in Australian society and had faith in my ability to interview in a respectful, empathetic way. I approached Aboriginal landowners early in the research, knowing it was important to allow the necessary time to gain agreement to participate. In one case, it took 18 months for the traditional owner to agree to be interviewed. I gave Aboriginals the choice of being interviewed in a group or one-on-one. Four chose to be interviewed one-on-one. One took me to the property, introduced me to other heritage sites and bush tucker. It was a day to remember.

Privacy and confidentiality issues
The major risks for participants were the invasion of privacy and the need to preserve confidentiality. Conditions of participation were outlined in an
information sheet and informed consent was required before an interview or field observation took place (see Appendix B).

Semi-structured interviews allow the interviewee to express their views to the level they wish, or refuse to answer. They could also withdraw from the research at any time. Potential sensitivities related to an individual reporting financial details or other life circumstances or interviewing an AO and their FM, if perceptions differed. When transcribing interviews, to preserve anonymity each participant’s name was replaced by a code. All participants were given the opportunity to review their interview transcript.

Data collection phase (October 2009 – July 2011)

Introduction

Interviews and other data were collected over four field trips between October 2009 and December 2010. This social research included 102 informants, involving 99 interviews. An interview lasted from 15 minutes to eight hours (183 hours in total, excluding follow-up phonecalls and emails). Field observations of 14 properties were conducted, each taking two to six hours (47 hours in total). A typist transcribed all recorded interviews. All interview transcriptions were completed by March 2011.

Field Trip 1: 12–30 October, 2009

Data collection began on Field Trip 1. Field work focused on research into the history of AL in the Lachlan and interviews with 24 individuals. Eleven interviews targeted seven AOs, two FMs, one farm management company (FMC) and two individuals with links to an Aboriginal-owned property. Four on-property field observations were conducted and 13 non-AO informants were interviewed (e.g. a local historian and a local real estate agent who had been a FM for 30 years).
Field Trip 2: 26 June – 18 July, 2010

Field Trip 2 focused on historical research and interviews with 28 individuals. Twenty-three interviews targeted 13 AOs, including one follow-up interview, and six FMs. The other five informants were a stock and station agent and four local historians. Seven on-property field observations were conducted.

Field Trip 3: 20–29 August, 2010

Field Trip 3 focused on other AOs, an investigation of the extent of AL in Bland Shire in 2009 and trends in AL between 1849 and 2009. Fourteen interviews were conducted. Eight interviews targeted six AOs including five new AOs. Three on-property field observations were conducted. To map historical trends, I conducted six interviews with long-term residents and a local historian. An interview with an AO in Sydney afforded a visit to NSW State Records to access archives.

Field Trip 4: 10–13 December, 2010

Field Trip 4 was devoted to identifying the residency status of named landowners on historical maps with the help of twelve informants including local historians and long term resident landowners.

Non face-to-face interviews

Twenty-four informants were interviewed by phone and four submitted information via email. Phone interviews included six AOs and nine informants that helped map trends in AL. Phone interviews were conducted between June 2009 and July 2011.

Other data collection

In 2010, the typology was developed, and maps and secondary data collected. The NSW Land and Management Property Authority (LMPA) voluntarily supplied 131 of 135 maps. To further identify the residency status of landowners named on the
maps, in 2010–2011 archival research was conducted at the Mitchell Library, Sydney; Bega Library and the Australian National Archives, Canberra.

**Analysis and writing-up phase: January 2010–September 2012**

Analysis and writing up occurred between December 2009, and September 2012. In February 2010, I attended a two day NVivo training course to learn how to process interviews using this software. The analysis of three databases’ statistics on extent of AL finished in December 2010. Analysis of interviews began upon receiving the first transcripts from Field Trip 1 in December 2009, and ended in June 2012. In June–July 2010, a staff member of the Spatial Analysis Unit Network at CSU electronically cut and pasted 135 historical maps to create six maps at six time intervals for two districts in which trends in AL were investigated. Maps were available for Field Trip 3 and 4. Analysis of trends was completed in June 2011. Writing-up began in January 2011 and was completed in September, 2012.

**Interviews**

All key research questions relied on data from semi-structured interviews. This section describes how I identified and recruited informants and the interview and post-interview process.

**Overview of informants**

The 102 people that participated in the research were

- 28 AOs represented by 35 interviewees (i.e. 17 AOs involved multiple informants, one AO being a FMC);
- 14 FMs and directors of two FMCs that managed properties for 15 AOs, one FMC also being an AO (i.e. 15 new informants);
- 23 non-AO informants with firsthand experience working with AOs, including three former FMs, lessees, contractors, agronomists, agribusiness representatives and real estate agents;
Five shire council/Lachlan LHPA representatives who assisted with my investigations on extent of AL in 2009 and trends in AL, 1849–2009;

Eight local historians and 18 long-term resident landowners (ROs) (i.e. 24 additional informants as two are included in previous categories) who assisted with my investigation into trends in AL, 1849–2009.

Selection of AO types

During preliminary research I discovered a wide array of AO types were represented in the Lachlan. To ensure research focused on key types, I developed a set of criteria for selecting types to target. Not all criteria had to be met. The criteria were that the AO type had a substantial presence in the Lachlan; had a focus on sustainable agriculture; had received scant attention in the literature, (e.g. local town-based individuals, FCs and NFCs); was controversial, (e.g. mining multinationals) and/or appeared to be a qualitatively new type (e.g. Aboriginal landowners and lifestyle property owners (LPOs)).

The application of these criteria as well as resource constraints led to the exclusion of state-owned land and AOs with a primary purpose of conservation. ‘Sovereign wealth fund’ was excluded because this AO type was not established in the Lachlan until November, 2010. Despite their substantial presence, two US-based religious institutions were excluded as including them would have meant excluding another AO type.

Applying the aforementioned selection criteria, stratified purposive sampling (Patton, 2002) was used to select 12 AO types based on ownership structure and primary purpose for owning rural land. Table 3 shows the AO types and the number of cases in each type. For qualitative data, the size of a sample depends on the type of case. Yin (2009) suggested two to six embedded cases could provide replication and/or contrast. Gray (2006) suggested a sample of eight and Patton (2002) considered 15 to 25 cases were ideal. The Lachlan research included 28 AOs representing 12 AO types. The inclusion of so many
AO types involved a trade-off between breadth of types and the number of cases within a type. I chose breadth of types because I wanted to explore differences between AO types and because interviews conducted on Field Trip 1 indicated I could gain meaningful insights from a few cases.

Table 3: AOs in the Lachlan research

<table>
<thead>
<tr>
<th>AO Type</th>
<th># of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mining/Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>Public multinational</td>
<td>2</td>
</tr>
<tr>
<td><strong>Commercial agriculture</strong></td>
<td></td>
</tr>
<tr>
<td>Local town-based farmer</td>
<td>3</td>
</tr>
<tr>
<td>Non-local city-based non-farmer</td>
<td>3</td>
</tr>
<tr>
<td>Local farm-based FC</td>
<td>3</td>
</tr>
<tr>
<td>Local (1) and non-local (2) vertically integrated FC</td>
<td>3</td>
</tr>
<tr>
<td>Local and non-local vertically integrated NFC</td>
<td>2</td>
</tr>
<tr>
<td>Non-local overseas and city-based NFC</td>
<td>2</td>
</tr>
<tr>
<td>Investment company</td>
<td>2</td>
</tr>
<tr>
<td>Public multinational</td>
<td>1</td>
</tr>
<tr>
<td>Local (1) and non-local (2) indigenous aggregated</td>
<td>3</td>
</tr>
<tr>
<td><strong>Hobby</strong></td>
<td></td>
</tr>
<tr>
<td>Local and non-local urban-based individual/family</td>
<td>2</td>
</tr>
<tr>
<td><strong>Lifestyle</strong></td>
<td></td>
</tr>
<tr>
<td>Non-local urban-based individual/family</td>
<td>2</td>
</tr>
</tbody>
</table>

**Selection of AOs within each AO type**

In selecting particular AOs, key criteria were that an AO

- own ten or more hectares within the Lachlan LHPA, and preferably within Bland or Cowra Shires. All 28 AOs were in the Lachlan LHPA boundary. Nine AOs owned land in Bland/Weddin Shires and nine AOs owned land in Cowra Shire. Five AOs owned land in the Lachlan Shire, two in Parkes Shire, two in Boorowa Shire and one in Cobar Shire.
- represented an AO type of interest;
- agreed to be interviewed and allow me to conduct on-property field observations;
- cropped and/or ran cattle and/or sheep, if a commercial operator.

These farming systems covered 60% of Australia (Jayasuriya, 2004), and
the focus aided comparisons and excluded informants that were outliers and easily identifiable.

- were rich sources of quality information, as revealed in one or more preliminary telephone conversations; and,
- for AOs that employed a FM, gave consent for their FM to be interviewed and the FM was willing to be interviewed.

Applying the concepts of typical and critical case sampling (Patton, 2002), based on a collation of AO profiles, these being obtained from initial telephone conversations, a spread of cases was achieved by seeking variation in landowners’ primary occupation/business (i.e. farming or non-farming) (related to the typology dimension of ownership structure); distance from the property (local/non-local typology dimension) and on-property management and labour arrangements (another typology dimension); length of ownership; scale of operation; and participation in biodiversity management programs.

**Selection of non-AO informants**

**FM and FMCs**

FM and FMCs were an important inclusion in this research. Fourteen FMs and the managing directors of two FMCs were interviewed because they worked for AOs included in the research. One FMC was an AO. Three other informants were FMs for past AOs. These 17 current and past FMs were expected to be vital sources of information regarding social relations, other on-property practices and outcomes, and for identifying counterfactuals.

**Informants not associated with historical analysis**

Twenty-eight informants were selected for their firsthand experience working with AOs; expertise, depth of local knowledge and/or access to a landowner database. They included three agribusiness representatives (two local, one regional), three agronomists, two conservationists/farm advisors, two contractors (a third contractor being an AO), two fire brigade representatives, one Aboriginal advisor,
two livestock experts (one a consultant and another a stock and station agent and former FM), one pest control officer, three real estate representatives (two local, one regional), two resident farmers, one rural banker, one rural counsellor, four shire representatives (two for Bland Shire and two for Cowra Shire) and a Lachlan LHPA database analyst. Interviews with these informants averaged one hour in length (a total of 28 hours) compared to AO and FM interviews that averaged 2.5 hours in length excluding follow-up telephone and email contact.

**Local historians and long-term residents**

Eight local historians and 18 long-term residents/landowners (including two already counted) were selected for their depth of local knowledge, in many cases extending back to 1885–1900. Three local historians and fifteen long-term residents/landholders were over 80 years of age. This meant that they were alive in 1930. Local historians had conducted archival research in the Mitchell Library, NSW State Records and Australian National Archives. The breakdown of these informants is presented in Table 4.

Table 4: Informants who identified landowners’ residency status on historical maps

<table>
<thead>
<tr>
<th>Informant category</th>
<th>Bland/Forbes/Weddin</th>
<th>Cowra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historians</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Long-term residents</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Landowners identified</td>
<td>1,393</td>
<td>988</td>
</tr>
</tbody>
</table>

**Demographics of informants**

Of the 102 informants, 78 were located within the Lachlan and 24 were primarily located outside the Lachlan. All were aged over 35. Sixteen were female, including two AOs that were interviewed with their AO partners and one representative of a multinational. However, age, sex, ethnicity and family status were not used to select informants. AO type and non-AO informant expertise and local knowledge were the most important considerations. A detailed examination of AOs’ political economic attributes including asset base and total net earnings before tax (i.e. from all income sources), is included in Chapter 4, as these variables relate to AO types.
Recruitment of AOs and FM s

Using the worldwide web, I made contact with local agronomists, livestock consultants, real estate agents, and staff in agribusinesses, and recontacted staff in the Lachlan LHPA, Lachlan CMA and NSW DPI. During telephone conversations informants identified AO types and particular AOs in the Lachlan catchment. Notes of these conversations provided information on non-AO informants and about twenty FCs, NFCs and aggregated AOs. The contact details for about seventeen were found on the worldwide web. In three cases other informants nominated the appropriate person and their contact details, providing a direct line of enquiry. Based on selection criteria, thirteen were selected and telephoned and/or emailed. One high powered FC did not reply to numerous emails and phone messages. Two were excluded because they did not crop or run sheep and/or cattle. For others, during an initial telephone conversation, the individual was informed of the project and the ethical considerations. If they were interested in participating, I asked questions based on selection criteria. About six asked, ‘How much do you want to know about business matters?’ My response was ‘Whatever you are willing to tell me’. Note-taking during these discussions provided an AO profile. Ten agreed to participate.

Research on the worldwide web identified six Aboriginal AOs operating ten or more hectares in the Lachlan. Representatives were contacted. One case was excluded because the area owned was less than ten hectares. Another case was excluded because the land was not used for commercial agriculture. For three cases, a representative of the ownership structure agreed to be interviewed. On Field Trip 1, I discovered one of these cases fitted the criteria of residency. For another case, a representative claimed I had no understanding of Aboriginal land rights. However, a traditional owner/partner to a former FM on the property and a former representative of the previous Aboriginal landowner, a current FMC and FM agreed to be interviewed in regard to this property. Consequently, all three Aboriginal AOs that owned 10
or more hectares used for commercial agriculture were included in the research.

Twelve AOs were selected from about 80 AOs contacted by other informants. On my request to interview a targeted AO type, an informant would contact the FM or AO and ask if they were willing to participate in my research, and if so, could their contact details be forwarded to me. These details were recorded in a file that profiled AOs. I would ring the individual and conduct a preliminary interview. About 60 were excluded because they did not fit the criteria of absentee owning 10 or more hectares; they did not crop or run livestock or because of resource constraints. A local town-based doctor did not respond to numerous phonecalls. Three AOs refused to participate on account of being too busy.

Opportunistic sampling in the field selected another three AOs. In one case, I walked into a local town-based business and discovered the FC owned a property. In another case, I interviewed the individual for his expertise and discovered he was a local town-based farmer working full-time off-property. One LPO contacted me after hearing of my research. As he appeared counter-stereotype, I included him in the research.

For 10 AOs, the FM/lessee was the initial point of contact. I would conduct a preliminary telephone interview with the FM and then ask for the contact details of the AO. I would then telephone the AO to seek permission to interview them, their FM and conduct field observations. For FC, NFC and aggregated structures, the in-country managing director or chief executive was interviewed in all but two cases. In two cases, the director gave permission for a company representative and FM to be interviewed.
**Interview codes**

To ensure anonymity, a coding system was developed to uniquely identify each interviewee on the audio file and transcript. The code had three parts, for example, AO-FC-11 and FM-AGG-35. The primary code ‘AO’ indicated ‘absentee owner’ or ‘FM’ for ‘farm manager’. The second code indicated the ownership structure (e.g. FC for ‘family corporation’). Variations in coding within an ownership structure occurred and were kept for ease of identification. For example, one AO was coded AO-FMC-21, as this entity was an AO/FMC, although NFC was the correct generic code. A NFC syndicate of two individuals and a company was coded AO-S-37.

For individual AOs the second code identified location, tenure or *primary purpose* for owning land. Thus, for local town-based farmers the secondary code contained ‘T’ (town) and denoted arrangements such as ‘SHF’ for ‘share farmer’ and ‘L’ for ‘lessee’. For other individuals, the second code indicated primary purpose (e.g. ‘HF’ for ‘hobby farmer’). For non-AO informants, the second code indicated their area of expertise (e.g. ‘RE’ for ‘real estate agent’).

The first number, 1-4, indicated on which field trip the interview was conducted. The next number, 1–1X, was less uniformly applied, as the criteria changed during Field Trip 1. Initially it denoted the order of interview. For example, FMC-11 and FM-AGG-12 were the first and second interviews conducted on Field Trip 1. However, I began using the number to denote the first, second and third example of an ownership structure. For instance, AO-AGG-12 was the second aggregated structure interviewed. This meant that FM-AGG-12 and AO-AGG-12 are not linked.

When an interview was arranged with one individual but two people attended, in all but one case the interviewees were distinguished by ‘a’ and ‘b’ after the same code. In one case they were distinguished by consecutive numbers. The code list is presented in Figure 7.
### Primary codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO</td>
<td>Absentee landowner</td>
</tr>
<tr>
<td>AL</td>
<td>Absentee lessee</td>
</tr>
<tr>
<td>C</td>
<td>Contractor</td>
</tr>
<tr>
<td>FM</td>
<td>Farm manager</td>
</tr>
<tr>
<td>FMC</td>
<td>Farm management company</td>
</tr>
<tr>
<td>KI</td>
<td>Key Informant that was not an AO, FM, FMC or contractor</td>
</tr>
<tr>
<td>RF</td>
<td>Resident farmer</td>
</tr>
</tbody>
</table>

### Second code for AOs

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Aboriginal aggregated owner</td>
</tr>
<tr>
<td>AGG</td>
<td>Non-Aboriginal aggregated owner</td>
</tr>
<tr>
<td>C</td>
<td>City-based individual, property used for commercial agriculture</td>
</tr>
<tr>
<td>LP</td>
<td>Lifestyle property owner</td>
</tr>
<tr>
<td>L</td>
<td>Lessee</td>
</tr>
<tr>
<td>FC</td>
<td>Family Corporation - farm-based or non-farm-based</td>
</tr>
<tr>
<td>HF</td>
<td>Hobby farmer</td>
</tr>
<tr>
<td>NFC</td>
<td>Non-family corporation</td>
</tr>
<tr>
<td>S</td>
<td>Syndicate of individuals (NFC)</td>
</tr>
<tr>
<td>SHF</td>
<td>Share farmer</td>
</tr>
<tr>
<td>T</td>
<td>Town-based farmer</td>
</tr>
</tbody>
</table>

### Secondary codes for other informants:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>Agriculture</td>
</tr>
<tr>
<td>AB</td>
<td>Agribusiness</td>
</tr>
<tr>
<td>E</td>
<td>Environment</td>
</tr>
<tr>
<td>H</td>
<td>History</td>
</tr>
<tr>
<td>CV</td>
<td>Community relations</td>
</tr>
<tr>
<td>RE</td>
<td>Real Estate</td>
</tr>
<tr>
<td>SH</td>
<td>Shire representative</td>
</tr>
<tr>
<td>SS</td>
<td>Stock and station agent</td>
</tr>
<tr>
<td>B</td>
<td>Banker</td>
</tr>
</tbody>
</table>

### Field Code Key

- **First number**
  - Identifies field trip 1 - 4 on which interview was conducted
- **T**
  - Telephone interview
- **Second number**
  - Identifies individual interviewed: 1 – X
Field trips

Field trips could not clash with sowing or harvesting. The potential interviewee was telephoned to confirm their willingness to be interviewed and a suitable time and place was arranged. A formal letter of invitation to participate confirmed the date and time. This letter and another copy of the information sheet were e/mailed to the informant. A week before the field trip, I confirmed arrangements.

A detailed field trip schedule was developed. A day was allocated to an interview and field observation. I did not interview more than two interviewees a day, except when mapping historical trends. Free time was spent researching in libraries, local history units and museums.

Two weeks before departure all vital equipment was checked and a folder prepared, containing my field trip schedule, background notes, interview guides, and copies of information sheets and consent forms in case of an unexpected interview. Any notes taken in the field were placed in the folder for that field trip.

After a day in the field, audio files were transferred to cassette (Field Trip 1) or from WAV to MP3 files and onto computer (Field Trip 2 and 3). Digital photographs were downloaded and all field notes were typed up. For Field Trip 3 and 4, marked up maps were checked. Each field trip had an electronic file for field trip notes that included the background information for each interviewee, notes taken during and after interviews, reflections and preliminary analysis, field observations and historical research. Appendix C provides two examples of field notes from Field Trip 1. There was one electronic folder for photographs. Contained within were separate folders for photographs from each field observation, each folder labelled with the AO’s code. A single word document identified each photograph, the AO and subject.
Interview guides

Introduction
Detailed interview guides were designed to go from questions of a discursive nature to factual questions about the property, before venturing into more nuanced questions about on-property relations and motivations. For AOs and FMs, the last questions related to financial circumstances.

Questions for AOs, FMCs and FMs (N= 50)
AOs and FMs were asked the same questions so responses could be compared. Thirty AO informants, 12 FMs and two FMCs were asked whether they perceived the landowner to be an AO and their definition of an AO (Key Qu. 1). All 50 were asked about factors contributing to AL, including motivations for being an AO (Key Qu. 3). Other questions related to on-property practices and outcomes (Key Qu. 4); their personal values, background, income, and for AOs, the capital value of their total asset base and AOL as a percentage of their asset base. The interview guide is presented in Appendix D.

Questions for other informants (N=23)
Interview guides for informants with firsthand experience of working with AOs (i.e. excluding five informants associated with database analysis) were designed according to informant expertise. All 23 were asked about their firsthand experience of contemporary AOs (Key Qu. 1 and 4); trends in AL (Key Qu. 2) and factors contributing to trends (Key Qu. 3). Eleven were asked to define an AO (Key Qu. 1). The interview guide is presented in Appendix E.

Questions for local historians (n = 8) and long-term residents (n = 18)
To explore trends in AL (Key Qu. 2) a complete list of lessees and the properties they occupied in the Lachlan Squatting District of 1849 was shown to local historians. In each interview the historian was asked to identify whether the lessee was AO or RO. For mapping trends in two districts, 1849–
1990, local historians and long-term residents in each district were asked to identify whether the named landowner on five maps (dated 1849, 1885–1900, 1920–35, 1970 and 1990) was AO or RO. For 2009 maps, on which landowners were not named, the question was ‘Do you know if this property is absentee or resident owned?’ Local historians were also asked about the history of four pastoral stations in their district and their knowledge of the landowners.

**Interview process**

Interviews were conducted face-to-face (N=71) or by telephone (N=24). Four informants supplied information via email, two being database analysts. Before an interview, I explained the purpose of the research, the conditions of participation and that the interview transcript would be sent to the interviewee for their records. If they so wished, they could check the transcript for errors or information they would prefer withheld. Before the consent form (Appendix B) was signed, the interviewee was given the opportunity to ask questions, and was asked permission for the interview to be audio recorded. Two informants who were interviewed face-to-face preferred I take notes. For these two interviews and the 17/24 phone interviews that were not audio recorded, I attempted to write down verbatim responses to my questions unless I was investigating the residency status of landowners in which case I wrote down whether a landowner or property was resident or absentee (owned).

Ideally an interview is a rewarding insightful experience for both interviewer and interviewee. I relish the interactive process. It is always my intention to suspend my own perspectives and be a respectful, empathetic stimulus. The interviewer plays two roles: a choreographer and actor (Berg, 1995; Rubin and Rubin, 2005). Both influence the quality of responses. Despite the importance of a set order of questions to ensure reliability and validity (Berg, 1995; Gray, 2006), an interviewee’s spontaneous responses determined the final order. This maximises the quality of information (Gray, 2006). Standard questions could be followed by neutral probes: ‘Can you please explain?’ ‘Can you provide an example?’ or
requests for clarification of ‘when’, ‘where’, ‘who’, ‘what’ and ‘how’, or ‘Is that your average yield or best yield per hectare?’ The flexibility of an interview is one of its key assets, providing opportunity for major insights. Occasionally the interviewee needed to be brought back on topic, in most cases, when an anecdote became long winded. I would gently interrupt saying, ‘In summary then …’ or ‘How does this relate to …?’

Interviews ended with the question: ‘Is there anything we have not covered that you would like to talk about?’ Some interviewees expanded or raised issues. The usual response was, ‘I think we’ve covered everything there is to cover!’ All but one interviewee was relaxed. The one who was not was friendly and forthcoming, but from a shake of his knees I could tell he was nervous. Even so, he was an invaluable information source and was to connect me with several AOs. Two were included in the research. No participant withdrew from this research.

Audio recording and note taking during interviews
Audio-recording provides an accurate copy of the spoken interview. Most interviews were conducted in-doors, preferably away from extraneous background noises. During an interview, notes were taken about a probe, or for future reference or when the interviewee wished to supply information after consulting records. Notes were brief as my priority was to maintain rapport. If the interviewee offered insights after the Zoom H4N audio recorder was packed away, these were written down verbatim. Notes of unrecorded interviewee responses were added to the interview transcript for the interviewee to review. Notes about the duration of the interview, confidentiality issues and preliminary thoughts were typed up in the ‘Field Trip X notes’.

How interviews changed over time
On Field Trip 1, interviewees were not asked to define AL. After discovering many interviewees did not agree with a definition based on non-residency alone, on subsequent field trips each interview opened with ‘How would you define an AO?’ and where appropriate, ‘Do you consider yourself an AO?’
These opening questions indicated my wish to understand the topic from the interviewee’s point-of-view and made the interviewee relaxed about discussing other issues. I emailed or telephoned interviewees from Field Trip I to ask the same questions.

Having started analysis on Field Trip 1’s transcripts, on subsequent field trips, some additional questions were asked, for example, ‘How many people resided on the property before you purchased it?’ These questions were followed up with AOs from Field Trip 1. To save transcription time and cost, on Field Trips 2 and 3, I took notes on factual information such as hectares devoted to each enterprise, cost of variable inputs/hectare and production/hectare. These were typed up and added to the transcript. If the interviewee did not have the information at hand I emailed the requested information. Later interviews required less follow up. Otherwise, questions remained consistent.

**Strengths and limitations of interviews**

Data gathering is always a selective process. The researcher selects interviewees and questions. Audio data leaves out visual interactions. The transcript leaves out tone-of-voice nuances. In all cases, an interview is a snapshot of dialogue at a particular place and time. Months or years later, an interviewee may see and say things differently. Even so, interviews are a good method to explore under-researched topics and capture experiences and points-of-view. An interview guide assures focused questions and responses across interviews, while open ended questions and probes provide opportunities to explore and reflect on unanticipated topics and nuances (Patton, 2002). With appropriate questioning an interviewer can provide a much less frustrating experience than a preset survey. The quality of data between the face-to-face and telephone interviews appeared no different. There was more difference between audio recorded transcripts and those in which notes were taken as my notes missed the meanderings of speech.

An interview’s greatest strength and weakness is that data is based on perception, memory, accuracy of reporting, point-of-view and the ability to
articulate issues. The basis on which a fact is reported can vary between informants (e.g. best or mean production per hectare) and data is not a reflection of a consistent objective measure across a sample. However, to enhance reliability, data was cross-checked with other sections of the interview, or another interview (e.g. with the FM or AO), field observations and the interviewee, when reviewing the transcript.

Some AOs were reluctant to respond to questions regarding their financial circumstances or the names of foreign investors. It appeared the more wealthy an AO the greater the sense of privacy in these matters. Given that all interviewees had the right to not answer, there were holes in the data set. To fill these, I devised ranges and asked AOs to identify which range best represented them. For example, for total net income before tax, the ranges were: up to AU$50,000; $50,000+ to $300,000; $300,000+ to $2 million; $2+ million to $50 million; $50+ million to $1 billion and $1+ billion. AOs identified the appropriate range. For five AOs, annual company reports, accessed from their website, provided details of their asset base and net income. Thus, a full range of data was collected.

The selection criteria attempted to ensure a representative sample of AOs, but in wishing to represent particular AO types, the sample was weighted towards non-local AOs (17 non-local AOs compared to 11 local AOs). Another potential bias was that local town-based farmers and farm-based FCs recommended by DPI and CMA informants had links to these organisations and consequently may be more likely to employ current recommended practices than a broader sample. Informant interest in the topic helped. One managing director of a very large vertically integrated FC (a legend in the industry) rang me as soon as his secretary told him of my enquiry. He viewed AL as a critical, unaddressed issue in Australian agriculture. These and other unknown factors influenced the selection of informants and my findings.
Post – Interview process

Transcripts

A good professional typist takes three to four hours to type one audio hour. The typist was instructed to transcribe interviews verbatim, replace all individual names with the designated code, save the file using that code and not reveal names to anyone. On receiving the emailed transcript I reviewed it while listening to the audio file. Punctuation was adjusted to reflect speech patterns and to make meaning clear. Half sentences and digressions were left as spoken to retain the immediacy of speech. Indications of a laugh, a pause or a break in recording were added, (e.g. [Laughs]). There were surprisingly few ‘um’s and ‘ah’s but many ‘you know’s and ‘sort of’s. As typing progressed the typist omitted more of these. Thinking these not critical to the study of AL, and that time could be better spent elsewhere, I did not reinstate them. Miscellaneous errors of hearing or typing were corrected. Company and property names were replaced with generic labels such as [Parent Company]. Town, river or valley names were replaced with initials. I then reread the transcripts without the audio. Occasionally a phrase or sentence made ambiguous by convolution or a vague use of a pronoun was edited. If in doubt as to the meaning of some text, the words were highlighted for the interviewee to review. It was in this second reading that I inserted colour coded queries, such as a question I had omitted to ask, a quest for more detail or a clarification of meaning.

Transcript review

I e/mailed each transcript to the interviewee with a covering letter listing the queries, giving the interviewee the option to answer queries by telephone or write them into the text in a different colour. Alterations were tracked by the original interview being saved as one file in a separate folder for each field trip and all alterations being colour-coded and dated, the altered interview saved in another folder for each field trip. The final transcript was resent to the interviewee for their records.
A transcript review process allows the interviewee the opportunity to edit, correct, clarify or add information and thereby enhances accuracy of specific details (Hagens, Dobrow and Chafe, 2009). For instance, critical interviewee corrections included number of hectares owned and leased; the total number of on-property labour hours per year; variable input costs per hectare and commodity prices (i.e. data not accessible at the time of the interview). During an interview, the promise of an opportunity to review the transcript encourages openness as the interviewee is reassured s/he will not be misquoted or quoted as saying something s/he would prefer withheld. The review process also allows addition material and insights to be collected without the need of a follow up interview.

While the transcript is no longer a snapshot in time, the integrity of the data was not compromised by the review process. No interviewee wished to change meaning or grammar. The process enhanced an accurate collection of a full range of data and clarified ambiguous meanings. These advantages made a second face-to-face interview unnecessary for all but one AO. The disadvantage of the review process was sometimes it took six months to receive feedback and two interviewees preferred to withhold some non-critical information to ensure anonymity.

**Analysis of interview transcripts**

Selective reporting, observation and analysis can ‘paint a highly misleading picture’ (De Vaus, 2002, p. 209). To counter possible bias, methods need to be transparent (De Vaus, 2002), systematic, and disconfirming instances noted (Yin, 2009). The reviewed transcripts were used to

- generate codes;
- code data, sometimes multiply;
- test that codes worked for new data;
- quantify the proportion of interviewees that expressed a theme, this measure not used to refute or confirm a proposition but provide insight into
a theme’s prevalence, such as when testing the definition of an AO (Braun and Clarke, 2006);

- develop themes, either by combining or separating codes, to better reflect patterns;
- construct matrices for AOs, FMs and other informants for each key question;
- provide convergent and non-convergent evidence for a theme in the form of information rich quotes referenced by the interviewee’s code;
- construct empirical models of factors contributing to AL and implications for sustainable agriculture, which were then used to refine the theoretical generic models based on literature, a process called pattern analysis (Yin, 2009); and
- test assumptions and theoretical propositions (Fereday and Muir-Cochrane, 2006; Yin, 2009).

In view of processing interviews into NVivo Version 8, I formulated a list of codes, clusters of codes and terms associated with each code that were useful in answering each key question (Yin, 2009). An example is as follows.

**Code/Theme: Roles and responsibilities (Key Qu. 4: Implications)**

Roles / responsibility / decisions / initiate / discussion / talk about / goals / team / big picture / small picture / policy / policies / negotiations / suggestions / latitude / hands on / boss / day-to-day decisions / strategic decisions / tactical decisions / labour / FM / autonomy / planning / reporting / micromanaged.

Codes were independent (e.g. definition of sustainable agriculture) or hierarchical (e.g. underlying contextual factors). A list of codes was completed before I did a course in NVivo in February 2010. Afterwards, the codes were refined and entered into NVivo as independent and tree nodes. Whilst entering data from Field Trip 1, codes were added, deleted or refined, as described shortly. After completing the process, on several occasions I had problems accessing NVivo due to the licence expiring. It could take a week to obtain a new licence. This made me nervous. Also,
it took such a long time to process interviews into NVivo and I was concerned the coded segments lacked context that only a transcript provides. As NVivo is only a tool for analysis (Yin, 2009) I decided I would be more efficient using Excel spreadsheets to organise, access and analyse quantitative and qualitative variables. Nevertheless, experimenting with NVivo identified the need for a systematic experimentation and refinement of codes based on credibility, inclusivity or utility. Codes or themes could reflect reality or interpret reality (Braun and Clarke, 2006; Fereday and Muir-Cochrane, 2006) and were refined throughout analysis by

- generating new themes if existing themes were inadequate in describing data. For example, technology adoption was further distinguished, with sub-themes including farm plans and monitoring; mechanization, and fertiliser applications. Fertiliser applications were further distinguished: no fertiliser; fossil fuel-based fertilisers; lime and gypsum; organic fertilisers; self sufficient or recycling organic fertilisers.
- combining themes where there was too much overlap. For example, the motivations ‘love of space’ and ‘love of a rural landscape’ were combined.
- combining themes based on a conceptual link. For example, a set of motivations classified intrinsic/non-material self incorporated ‘love of space/rural land’.
- deductively re-organising a thematic hierarchy. For example, instead of classifying factors contributing to AL as global (macro), regional (meso) and individual (micro), contextual factors were classified political economic, socio-cultural and environmental and individual motivations were classified extrinsic/utilitarian, intrinsic/non-material self and transcendent (Patton, 2002; Rubin and Rubin, 2005; Yin, 2009).

**Synthesis phase**

Thematic matrices proved to be invaluable tools in the synthesis phase. Within each Excel spreadsheet, AOs were ranked in accordance with Table 8. Each matrix had a column for each theme or sub-theme. A quantitative variable or positive response (identified by numerical data, summary or transcript page number) was
entered in the appropriate column. For some themes, (e.g. concept of AL), FMs and other informants were added to the matrix and their responses recorded. Particular themes and sub-themes are described in the methodology section for each key question.

Whilst processing data, exceptions or disconfirming cases were identified. Later, these were written up and used to see if they disqualified or supported a theoretical proposition (Patton, 2002). Other informant responses and field observations were also noted, where relevant. During data entry, webs of interrelationships, explanations, inferences and counterfactuals were identified and served to refine or expand themes and theoretical propositions.

For Key Question 3 and 4 the process also generated empirical models that were used to test and refine the theoretical models based on literature. All model construction was an iterative process that involved defining the purpose and boundary, what to include (as many endogenous factors as possible) and exclude (some exogenous factors). Invariably, models simplify a complex system. For example, while my models identified multiple causes, direction (i.e. increasing or decreasing the effect) and interactions, including linking mechanisms and feedback loops, they did not show delays, tipping points or the magnitude of a factor. Given all the assumptions and abstractions that go into model building, models were inadequate but useful in illuminating interactions (Patton, 2002; Sterman, 2000; Yin, 2009). Testing the generic model identified whether a model incorporated critical factors. In clarifying concepts and interactions, models helped test theoretical propositions.

The methodology for each key question will now be described. Each section begins with the key research question and its component questions. Relevant assumptions and theoretical propositions that guided research are presented, followed by data source/s, approach to data collection and analysis, and where relevant, selection criteria. Each section ends with a discussion of the strengths and limitations of the methodology.
Key Question 1: AO types

Key research question and component questions

Key Question 1: What are the different types of absentee landowners?

included the component questions

1. How should absentee landownership be defined?
2. How can different AO types be classified? and
3. How do AO types vary in their socio-political economic attributes?

Assumptions and theoretical propositions

To respond to the component questions, in need of testing were variations in defining AL and the following theoretical propositions.

- Most perceptions of AL incorporate the concept that an absentee landowner does not reside on all or some of the land owned.
- Types of landowners can be classified in a relational typology based on an underlying continuum of landowner autonomy that employs four dimensions (ownership structure; primary purpose for owning land, an AO’s distance from the property (local/non-local) and on-property management and labour).
- The last two dimensions reflect degrees of absentee ownership.
- Four key AO attributes that vary between AO types are the need to negotiate with members within an ownership structure; access to off-farm assets and capital; reliance on a farm operator and on-property involvement.

Data Sources

Data sources were my literature review of AO types (Chapter 2) and interview transcripts for 61 informants.
Defining absentee landownership

The literature review suggested most researchers defined an AO as a non-resident, although there were variations (Veblen, 1997; Petzelka and Marquart-Pyatt, 2011). Thirty AO informants were asked if they considered themselves AOs. Fourteen FMs and two FMCs were asked if they considered the AO/s they worked for to be an AO. These 46 informants were among 61 informants asked to define AL. These data were used to conceptually deconstruct the concept of AL using three themes: location of landowner, family ownership and on-property involvement. Responses were categorised to identify the number of informants expressing a particular theme or sub-theme, although these numerical weightings were not intended to provide a quantitative testing of the definition. The three themes were divided into the following subthemes: AO identifies as AO; FM identifies AO as AO; agrees with a definition based on residency; only non-local landowners are AO; only non-self operators are AO; only non-resident/non-self operators are AO; only those that do not manage or visit land are AO; local town-based farmers not AO and local multiple property owners not AO. Findings were contextualised using international literature and the definition of AL was refined.

Identifying AO types

Given the lack of contemporary literature on AO types, a historical sociology reading of literature (Crow, 1997; Neuman, 2006; Skocpol, 1984) gleaned new insights from existing data about landownership patterns. In Chapter 2, a wide array of types of landowners in need of classification were identified. These data informed the construction of a relational typology that could classify historical and contemporary international types of landowners.

My first attempt to classify AO types focused on occupational identity (farmer/non-farmer), but this approach failed to adequately reflect the diversity of types, identity being yet another mutable concept (Ferguson, 2009; Giddens, 1991). Inspired by typologies of Gosnell et al. (2005) and others, I used the unit of ownership, that is, whether the property was owned
by an individual/family, family corporate (FC), non-family corporate (NFC) or state, to classify AO types. Within each ownership structure, I identified permutations related to tenure (e.g. owned, leased, share farmed) and labour (self operated, self operated with family labour/non-family labour; non-operator employing non-family labour). This approach did not distinguish between a commercial operator, hobby farmer or LPO. Dissatisfied with the shortcomings of my early efforts, I examined literature on typology methodology and further investigated typologies related to AOs, agriculture, farms, farmers, farming styles, farm businesses, landowners and corporations, on the understanding that no single model can entirely capture reality (Weisberg, 1974).

To construct a typology that would be useful across time and place I needed a consistent set of dimensions that were not time, place, topic or research contingent. In the literature, there were ‘lumpers’ and ‘splitters’ (Spencer and Stewart, 1973, p. 530). The former can offer too few dimensions, potentially creating tautologies (Harzing, 2000), while too many dimensions prevents pattern discernment (Bailey, 1973). To derive dimensions, researchers relied on empirical observation or theory. Many landownership and farmer-related typologies used empirical observation (Bryant, 1999; Vanclay et al., 2007). Of these empirical typologies, some used one dimension (e.g. income) to classify all types (Hoppe and Banker, 2005); inconsistent criteria, including a single criterion to define one type (Goss, Rodefield and Buttel, 1980); frequent constellations (Stinchombe, 1961); or post hoc definitions that result in overlapping categories (Gosnell and Travis, 2005; Caddick and Marshall, 2006). Consequently, these typologies have been critiqued for equating observable features to structurally different types and unsystematically combining or distinguishing features (Bailey, 1973; Whatmore, Munton, Little and Marsden, 1987a).

Whatmore et al.’s (1987b) set of relations for UK farm business provided a way forward. Whatmore et al. (1987a) argued that only by employing a theoretical
framework resulting in a continuum that refers to underlying processes, along which cases can be ranked for each dimension, can data be interrogated, causal patterns identified and tested, and non-linear or contradictory tendencies explained. Such typologies are called relational, for they require variations along a dimension to move in one direction (e.g. more-to-less), or, if not linear, at least in a sequence (Weisberg, 1974). The political economic continuum along which Whatmore et al. (1987b) organised their set of relations was subsumption, that is, from least-to-most diffusion of control in capital and decisions. In considering types of landowners outside capitalist relations I preferred to call the continuum ‘landowner autonomy’ in capital and decisions, arranging cells from most-to-least. Thus, the continuum was consistent with subsumption, making my dimensions consistent with Whatmore et al.’s (1987b) set of relations.

Other features of theory-based typologies are their use of ideal types and cells being left empty if a dimension combination is rare or nonexistent (Bailey, 1973). Whatmore et al. (1987b) observed a lack of empirical correspondence with their ideal types. Consequently, I wished to use theory-derived dimensions to classify empirical cases so the typology had practical applications. I identified four dimensions, each containing six cells indicating degrees of landowner autonomy in capital and decisions. These cells will be described in Chapter 4. What follows is how the dimensions were identified.

The dimension of ownership structure was retained, as were cells for individual/family, FC and NFC, as different ownership structures reflect variations in political economic attributes (Allen and Lueck, 2002). An individual/family operation was distinguished from an FC in that the scale of an FC requires employing full-time non-family waged labour, whereas an individual/family operation does not (Hoppe, 2006; Raup, 1973). Some typologies distinguish between the owners of capital and the owners of land (Goss et al., 1980). Whatmore et al.’s (1987b) four internal relations for classifying UK farm businesses included ownership of business capital and
ownership of land rights. As these two indicators co-varied, they were collapsed into ownership structure. Whatmore et al., (1987b) suggested empirical data could inform theory-derived typologies, and a preliminary typology was tested using feedback from 61 informants. An informant identified the term ‘aggregated ownership’, for when the owner of capital is different to the landowner. Field work and literature reviews distinguished three forms of aggregated structures, including indigenous, non-indigenous (multinationals and investment companies) and state authorities.

Because of their focus on farm businesses Whatmore et al. (1987b) did not consider other reasons for owning rural land, such as mining, infrastructure (Moir, 2011), subsistence agriculture (Oles, 1999) and conservation (Vidal, 2008). As different objectives can reflect different socio-cultural milieus (Spencer and Stewart, 1973) and lead to different outcomes, a landowner’s primary purpose for owning rural land appeared to be a critical dimension for classifying landowners.

Whilst ownership structure and primary purpose were found to be sufficient to classify landowner types in mutually exclusive cells, they did not reflect other variations in landownership identified in the literature and confirmed during field work. These variations were captured by two dimensions, local/non-local and on-property management and labour. The dimension local/non-local refers to the distance between the property and principal location of the ultimate decision maker/s. For instance, some researchers focused on AL excluded non-resident landowners within a county or 50 mile radius of the property (Constance et al., 1996; Johnson et al., 1987; Shaffer and Meade, 1997). Others did not (e.g. Kollmergen and Simonett, 1958b). This made comparisons between studies difficult (Petzelka et al., 2013) and meant a dimension indicating the primary location of the final decision maker could serve to identify and compare types of landowners in or between studies.
Whatmore et al. (1987b) identified *business management structure* and *labour relations* as critical to farm businesses. As these relations co-varied, they were collapsed into a single dimension. Also incorporating tenancy arrangements (Broad and Fulton, 2003) the dimension was called *on-property management and labour*. Management includes whether the land is self-managed full-time, part-time or no-time, or whether a farm management company, farm manager or contractor is employed. Or the land could be subject to tenancies such as single or multiple share-farming, renting, tendering or leasing out (Powelson, 1988; Jian-Ming, 2001). Labour covers the employment of family or non-family labour and whether it is full-time, casual or contracted. For instance, Kevane (1996) found that although access to unpaid family labour had economic and incentive advantages over non-family waged labour, a landowner’s asset base had far greater implications for yields, profits and land accumulation. Thus this dimension reflects the complexities of management and labour relations.

**Identifying four key AO attributes**

A thematic analysis of interviews identified four key AO themes/attributes that were anticipated to vary between AO types (Chapter 4) and impact practices and outcomes (Chapter 8). One attribute/theme was *number and nature of members within an ownership structure*. Sub-themes were: number of directors/partners; background of directors/partners, this sub-theme identifying those with and without farming experience; primary source of capital; educational qualifications.

The second attribute/theme was *off-farm assets and capital*. Sub-themes were: the dollar value of the landowner’s total asset base; the Lachlan property as a percentage of the AO’s total asset base; AO’s total net income before tax and area owned in the Lachlan. Income ranges were described on p. 112. For total asset base, ranges were: up to $2 million; $2+ million to $10 million; $10+ million to $50 million; $50+ million to $1 billion and $1+ billion. Ranges for absentee-owned property in the Lachlan as a percentage of the entity’s total asset base were: up to 5%; 5+ to 30%; 30+ to 75% and 90+%. 

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The third attribute/theme was reliance on farm operator/s. Sub-themes were: self-operator and voluntary family labour; self operator and employment of non-family waged labour; non-operator employing part-time/casual labour; non-operator employing a full-time FM; non-operator employing an FMC; non-operator employing more than one FM, full-time waged labour and contractors; lease in; lease out; share farm; agist.

The fourth attribute/theme was on-property involvement. Sub-themes were: AO’s distance between property and residence/HQ; frequency of communications with a farm operator; frequency of visits; average length of visit; activities conducted on property; children’s visits. Tables were constructed to compare AO types and to see if any theme interacted with another theme, for example, farming experience and local/non-local interactions for on-property involvement.

**Strengths and limitations of methodology**

Deconstructing the concept of an AO highlighted key differences in informant understandings, which were reflected in the literature. Contextualising the concept amidst the international literature added two key refinements related to AOs including corporate entities and that socio-cultural context is critical.

The typology’s construction was an important component of this research. In applying historical sociological analysis to the literature to identify types of landowners, I was not compromising its utility, as is the case when a typology only relates to one country when the phenomenon is international (Harzing, 2000); restricts types to Western economic theory or omits relic and evolving forms (Spencer and Stewart, 1973). Given the typology was a conceptual tool for addressing all key questions, it is further evaluated in Chapter 9.

The identification of four key AO attributes proved useful in investigating implications for sustainable agriculture but was restricted by the small sample size for each AO type.
Key Question 2a: Extent of absentee landownership in the Lachlan

Key research question and component questions

The first part of Key Question 2: *What is the extent of absentee landownership in the Lachlan River catchment of NSW?* included the component questions

1. What proportion of all property owners are absentee landowners?
2. What proportion of all land is absentee-owned?
3. Are there regional variations in the extent of absentee landowners and absentee-owned land?

Assumption and theoretical propositions

An assumption in need of testing was that (*Australian*) *agriculture is dominated by the resident family farm* (*Australian Government, 2012; Hooper, Martin, Love and Fisher, 2002*). Contrary to this assumption, the theoretical propositions that guided research and were quantitatively tested using three landowner databases were that, in the Lachlan,

- AL is extensive.
- Most AOL is used for commercial agriculture.
- There are substantial regional variations in extent. Proposed variations were
  - In Bland Shire, non-local Pty Ltd companies are few in number but own a disproportionate share of rural land.
  - In Cowra Shire, non-local small property owners have a substantial presence but own a minimal proportion of rural land.

Introduction

To investigate extent of AL, the Australian Bureau of Statistics was approached to see if they would include questions on AL in their next national census. They would consider this. However, there was a possibility the results of the 2011 national census would not be publicly available before the completion of this Doctoral thesis. The next preferred option to establish extent of AL was surveying all rural
landowners in the case study region. Curtis and Byron (2002) were given access to a database covering about 9,000 landholders in the Lachlan Catchment Management Authority (CMA) region as a result of their relationships with various authorities. However, I had no such relationship and in 2009, all database custodians I approached claimed new privacy regulations prevented them from providing me access. Based on selection criteria outlined next, I asked representatives of the Lachlan LHPA, Bland Shire Council and Cowra Shire Council if a staff member could conduct an in-house analysis of their landholder data sets. The Lachlan LHPA and Cowra Shire Council agreed to this. Bland Shire Council chose to supply me their ratepayer database stripped of property addresses but including postcodes so I could conduct the analysis.

Selection of three databases
To analyse the extent of AL, the Lachlan LHPA’s database was chosen because it covers 59% of the Lachlan River catchment. Bland and Cowra Shires were selected as they provided contrasting cases in terms of climate, geographic features, landowner types and patterns of land use. Bland Shire is remote from metropolitan centres and features a relatively flat landscape, a low but highly variable rainfall and a history of corporate investment in pastoralism and cropping. Cowra Shire is a third the size of Bland but with twice the population. The shire is close to the metropolitan centres of Canberra and Sydney and features a more varied topography and a higher, more reliable rainfall. These attributes contributed to a history of extensive subdivisions of rural land used for intensive agriculture, hobby and lifestyle purposes.

Selection of landowners to be analysed
Only owners/occupiers of ten or more hectares (ha) were included in the analysis because this research was focused on

- rural land, 10 ha commonly used to distinguish rural and urban land in Australia (Mendham and Curtis, 2010);
- rural blocks less than 10 ha were historically uncommon; and
implications for sustainable agriculture. Rural blocks of less than 10 ha were unlikely to be used for crop, cattle or sheep production.

Overview of methodology

For all three databases, assessment of a landowner’s residency status was based on a comparison of their property address/postcode and mailing address/postcode. This resulted in landowner/occupiers being placed in one of four mutually exclusive categories. These were

**Absentee (AO):** a landowner who is absentee on all property, identified when the property address and landowner’s postal address/postcode are different.

**Res/AO:** a multiple property owner who is resident on one property and absentee owner of non-adjoining property, identified when the mailing address/postcode and one property address/postcode are the same but the database indicates ownership of other property.

**Resident (RO):** a resident landowner of a property, identified when the mailing address/postcode is the same as the property’s address/postcode.

**Unknown residency status:** an owner of one property whose mailing address is a PO Box inside the boundary of the database and whose residency status was unable to be identified through other means.

From these four categories of landowners, I generated three categories of land:

**Absentee-owned (AOL):** all land not resided upon, including that owned by an AO and the non-resident land of a Res/AO.

**Resident owned (ROL):** all land resided upon, including that owned by single property owners and the resident-owned property of a Res/AO.

**Unknown:** all land owned by entities with unknown residency status.

The databases did not include data that enabled a calculation of extent of particular AO types. However, on my request, staff employed two methods to explore differences in AOs, which I also employed for Bland Shire. The first method was based on the typology’s dimension *local/non-local*. The analyst was asked to categorise AOs as local or non-local. **Local AOs** lived within the
database boundary. **Non-local AOs** lived outside the database boundary. Thus, there were five mutually exclusive categories of landowners: local AO, non-local AO, local Res/AO, RO and those with unknown residency status.

The second method used to investigate differences in AOs was assessing the proportion of landowners and area they owned/occupied within three landownership ranges. The scale of landownership was linked to a cluster of AO types. For example, it was assumed that LPOs and hobby farmers would own smaller properties than FCs and NFCs. I selected the landownership ranges 10 – 40 hectares (ha), 40+ – 1200 hectares and 1200+ hectares (ha).

Justifications for selecting these landownership ranges were

- 10 – 40 ha is generally not a sufficient size to support a family, and it has previously been used to indicate land owned by hobby farmers and LPOs (Ragusa, 2010), although this is not necessarily the case. Some commercial enterprises (e.g. horticulture and viticulture) fall into this range (field work), and some hobby farms and lifestyle blocks are larger than 40 ha (Gosnell et al., 2006; field work).
- The category 1200+ hectares was historically and contemporarily assessed to be the minimum size for dry land cropping and livestock enterprises to support a family in the Lachlan (Morris and Ranken, 1883; informants) and these enterprises were the focus of my research.

The proportion of each landowner type in relation to all landowners and the proportion of area owned relation to all land covered by properties 10 or more ha in size in the three landownership ranges were calculated. Mean area of resident owned land was calculated by dividing the total area of resident owned land by the number of residents and Res/AOs. Mean area of AOL was distinguished for Res/AOs, local AOs and non-local AOs. As populations rather than samples were compared, tests for sampling errors were unnecessary. However a proportions test for independent samples retrieved from [http://www.answersresearch.com/proportions.php](http://www.answersresearch.com/proportions.php) was used to test if differences
between populations were significant. All differences described in Chapter 5 were significant at the 99% level.

**Limitations of approach**

Analysis of three databases provided a statistical understanding of the extent of AOs and AOL for a region and two contrasting shires in 2009, and an understanding of variations between shires. The limitations of database analysis were that

- The databases did not contain information that would allow an investigation of extent of particular AO types (e.g. the ability to distinguish hobby farmers from LPOs).
- Given that two databases were analysed in-house, and staff time was limited, it was not possible to alter the landownership ranges of 10 – 40 ha, 40+ – 1200 ha and 1200+ ha and re-do the analysis.
- A resident postal address may not reflect the landowner’s residential address. This could occur when mail was sent to a resident FM or lessee, but the owner lived off-property. This would lead to an underestimation of AOs and AOL.
- For the Lachlan LHPA and Cowra Shire databases I did not have access to landowner names so all landowner/occupiers of a single property with a PO Box mailing address within the boundary of the database had ‘unknown residency status’. In the LHPA, these amounted to 15% of all occupiers occupying 10.5% of all land. In Cowra Shire, they were 8.5% of all landowners owning 8% of all land. Having access to landowner names in the Bland Shire database I was able to reduce those with ‘unknown residency status’ to 1% of all landowners who owned 0.6% of all land.
- For the Lachlan LHPA and Cowra Shire databases, the extent of Res/AOs was ‘resident on one property and potentially absentee on others’ because statistics were based on assumptions that multiple properties were non-adjoining and did not have a member of the ownership structure living on them. For Bland Shire, I was able to use database information and local informant knowledge to more accurately distinguish Res/AOs from ROs.
- For all databases, the extent of Res/AOs was assessed for properties within the database’s boundary. Therefore, extent refers to local Res/AOs. There would be more Res/AOs if properties outside the database’s boundaries were considered. This appears a likely explanation for the high proportion of Res/AOs in the Lachlan LHPA database compared to the shire databases.

- It was not possible to investigate the number of properties owned by each landowner category as each database recorded a unit of occupation/ownership that did not relate to a property, and the basis of the unit varied between databases.

- On the basis of the data received from the Lachlan LHPA, I was unable to determine the area of AOL for 32% of all landowners (these including 17% of all occupiers who were Res/AOs and 15% of all occupiers with unknown residency status who could be AOs, ROs or Res/AOs. The final statistic for AOL was an estimate based on the proportion of AOL for 68% of all landowners. This proportion was scaled up to cover 100% of landowners.

Appendix F contains details of how each database was analysed and the strengths and limitations of the analysis.

Assessing the proportion of AOL used for commercial agriculture

As the typology dimension primary purpose included ‘commercial agriculture’, an assessment of AOL used for commercial agriculture was conducted for each shire. To do this I employed a number of thresholds based on area owned and ownership structure, the relevant data found in Tables 8 and 9 in Chapter 5 and Appendix G. For both shires, all AOL of 1200+ ha was classified as being used for commercial agriculture, as 1200+ ha was a viable size to support a family in the Lachlan. From field work I knew that owners of less area also ran commercial enterprises. Consequently, in assessing the proportion of AOL used for commercial agriculture in Bland Shire, I included all AOL for Res/AOs and AO Pty Ltd companies owning 40+ – 1200 ha, given that it was unlikely multiple property owners and Pty Ltd companies absentee-owned land purely for lifestyle purposes. For Cowra Shire,
where properties less than 40 ha could be used for commercial viticulture and horticulture, and properties greater than 40 ha could be used for lifestyle purposes, in assessing the proportion of AOL used for commercial agriculture I included half of AOL for all AOs and Res/AOs owning 40+ – 1200 ha and half all AOL of AO Pty Ltd companies owning 10 – 40 ha. AOL used for commercial agriculture was then calculated as a proportion of all AOL. I consider this approach provided a conservative estimate of the proportion of AOL used for commercial agriculture.

**Key Question 2(B): Trends in absentee landownership**

**Key research question and component questions**

The second part of Key Question 2: *What are the historical trends in absentee landownership in the Lachlan River catchment?* included the component questions

1. What was the extent of AL in the Lachlan Squatting District in 1849?
2. In two contrasting districts, what were the trends in absentee landownership between 1849 and 2009?
3. What were the trends in types of AOs?

**Assumptions and theoretical propositions**

Assumptions in need of testing were that *family farm operations have dominated the history of Australian pastoralism* (Wilkinson, 2009; Australian Government, 2012); *investment by non-family corporations in Australian agriculture is a recent phenomenon* (Tonts et al. 2003); *the contemporary extent of financial firms investing in land for agriculture is unprecedented* (Burch and Lawrence, 2009), and *absentee lifestyle property ownership is a recent and increasing trend* (Mendham and Curtis, 2010).

The theoretical propositions that guided and were tested by research on extent of AL were
Absentee occupation of the Lachlan in the nineteenth century was extensive.

Over time, resident landownership increased.

Quantitative findings served to refine these propositions. The refined versions are presented at the end of Chapter 6.

Theoretical propositions related to AO type/s were

- Historically, most AO types were involved in commercial agriculture.
- Most contemporary AO types have historical antecedents.
- British-owned or financed financial firms and pastoral companies played a major role in nineteenth and twentieth century pastoralism.
- AOs could have a long-term commitment to a particular property.
- AOs could change their residency status over time.
- Unprecedented trends since 1970 are the extent of non-local absentee small property ownership; a change in the country-of-origin of foreign investors and Aboriginal aggregated landownership.

**Extent of absentee landownership in the Lachlan Squatting District, 1849**

**Data sources**

Data sources used to establish the extent of absentee occupation in the Lachlan Squatting District in 1849 were

- Campbell’s (1968) list of lessees and property acreages in the Lachlan Squatting District of 1849;
- Beckham, E. (1848–1849). Itineraries and returns itemizing lessee, superintendent (i.e. FM), acres, dwelling/s and livestock;
- Certificates of Registers of Depasturing Licences (1849) Series 14363, Reels 5067–5081, Sydney: NSW State Records, providing registration, date, name and address of lessee, although in most cases the address was not listed for 1849; and
- Interviews with three local historians.
Assessing extent of absentee landownership in the Lachlan Squatting District, 1849

An assessment of extent of AL in the Lachlan Squatting District involved the following steps.

**Step 1:** Interviews with Harmer, R., 2010–2011, Thomas, M., 2009–2010 and Ousby, H., 2010–2011 identified the residency status of 105 of 160 lessees of 207 runs 10 or more hectares listed in Campbell (1968), and the resident property for Res/AOs.

**Step 2:** Lessee names, number of properties, residency status (denoted by a ‘1’ for AO), area of ROL and AOL were entered on an Excel spreadsheet. Data sources and other details were noted in another column.

**Step 3:** Using Edgar Beckham (1848–1849) the residency status of another 33 lessees were identified by comparing the lessee’s and superintendent’s (FM’s) name. If these differed, the landowner was classified AO. However, 17 landowners that Beckham named as superintendent were identified by local historians as having resided outside the district. These 17 lessees were classified AO. This could indicate that the assessment of AOs and AOL was an underestimation.

**Step 4:** The residency status of three lessees was established using Certificates of Registers of Depasturing Licences. This left 12% of 160 lessees with unknown residency status.

**Step 5:** The proportion of lessees who were AOs, Res/AOs and ROs, the proportion of AOL and ROL and the mean area owned for each category of landowner were calculated.

**Step 6:** Findings from Step 5 and statistics from the 2009 Lachlan LHPA, Cowra Shire and Bland Shire were compared.

**Strengths and limitations of methodology**

At the regional level, the use of archives, secondary documentation and local knowledge provided an assessment of regional extent of AOs and AOL in 1849. It afforded a comparison between extent of AOs in 1849 and 2009. However, a comparison of extent of AOL at the regional level was somewhat compromised as the statistic for the Lachlan LHPA in 2009 was an estimate. Nevertheless, regional
level comparisons were validated by comparing AOs and AOL in 1849 with AOs and AOL in Bland and Cowra Shires in 2009.

Another limitation in comparing regional statistics in 1849 and 2009 were that statistics were based on regions with different boundaries. The area of overlap was a conservative 2,660,739 hectares, or about 60% of the area of each region, although 1849 lessees were notorious for underestimating the size of their holdings by up to two thirds (Bloore, Hudson and English, 1978). A maximum of 3.5 million hectares of the Lachlan Squatting District in 1849 fell outside the Lachlan LHPA. Much of this was in the west, which had yet to be occupied by Europeans in 1849. Although claimed by the Crown, Aboriginal occupation continued in this area. By excluding this area, the residency status of European occupiers of the Lachlan Squatting District of 1849 could be more reliably compared with that of 2009.

**Trends in two contrasting districts, 1849–2009**

**Selection of two districts**

Two districts selected to map trends in AL were the Bland district and Cowra district. They were chosen because they fell wholly or mostly within the shires used to assess extent in 2009; agriculture was the primary industry and it was anticipated that trends in AL may contrast. Bland district was 316,874 hectares (36% of the area covered by properties 10 or more ha in area in Bland Shire but taking in a southern sliver of Forbes Shire and a western sliver of Weddin Shire). Cowra district was 74,563 hectares (32% of the area covered by properties 10 or more ha in Cowra Shire). Cowra district was only 23.5% the area of Bland district, but given that Cowra Shire is a third the size of Bland, with double Bland’s population, this was deemed sufficient for comparison. That Cowra district featured many small properties and a higher property turnover made it the more difficult district to investigate. A historical profile of each district is presented in Chapter 6.
Overview of methodology used for investigating trends

Two methods were employed to investigate historical trends. The first was a statistical analysis of the residency status of landowners in each district based on landowners named on maps from 1849, 1885–1900, 1920–1935, 1970 and 1990, as well as the residency status of unnamed landowners on properties depicted on 2009 maps. This process afforded a statistical assessment of AOs and AOL at six time intervals. The second method traced the history of landowners and their residency status on nine pastoral stations. This process helped identify AO types and trends in AO types.

Data sources

Data sources for mapping trends in Bland and Cowra districts (1849–2009) and tracing the histories of nine pastoral stations were

- Interviews with eight local historians and 18 long-term residents/landholders;
- 135 parish and shire maps, 131 supplied by the NSW Land and Property Management Authority (LPMA);
- Archives: e.g. Beckham (1848–1849);
- Secondary data: e.g. Campbell (1968); Hanson (1889);
- Trove, an electronic data source of old newspapers; and
- Electronic archives of individual landowners found in the National Archives, Canberra, and Mitchell Library, Sydney.

Other data sources for Bland district and the history of four pastoral stations, were

- Bloore et al. (1978); English (1978); Hohnen (1974).
- Self-published literature: Musgrave (1979);
- Unpublished material found in West Wyalong Museum, Forbes Museum and Forbes local history unit. Notes were recorded during field trips. Included was a newspaper article about Ben Boyd published in the Daily Telegraph Mirror, 15 June, 1994.
- Newspaper articles by Austin (2001; 2008; 2010); Photocopy of article written by a ‘Special representative’ (1966) and ‘Merino Sheep Article’
(1926) supplied by former landowner, now FM for an investment company; *Caragabal Station* Auction Sale notice, November 1977, supplied by Englert, 2011.

Other data sources for Cowra district and the histories of four pastoral stations, were

- Marriott (1988);
- Unpublished local histories found in Cowra local history unit filed under the property names Coura Rocks/Jerula, Glen Logan, North Logan and Mulyan;
- NSW Registry of Births, Deaths and Marriages for 12 landowners in the Cowra district, 1885–1900; and
- Cowra Shire Council database, accessed by a staff member, to identify residency status of owners on the 2009 Cowra district map.

For *Booberoi Station* newspaper articles and a self published history by Riley (1981) were found in Condobolin Library.

By triangulating data sources I attempted to overcome problems inherent in each source (Friendship, Thornton, Erikson and Beech, 2001; Mathison, 1988). Social historians often rely on newspaper articles, albeit with caution (Franzosi, 1987) while Berney (1997) found peoples’ memories of simple socio-demographic data from 50 years ago held a useful degree of accuracy when compared to historical records. To map historical trends using maps, I was asking a straightforward question: ‘Do you know if this landowner (named on the map) was absentee or resident?’ All 26 informants were very knowledgeable about their local area, 18 being over 80 years of age.

**Selection of years in which to map trends in two districts**

Investigating trends in AL over 160 years was designed to capture key trends and avoid giving undue importance to short-term fluctuations (Crow, 1997). Six time intervals were selected to make the task manageable. Originally, they
were 1849, 1885, 1930, 1970, 1990 and 2009 based on known changes occurring around each date. These changes were as follows.

1849: In 1847, a new system of 14 year leases over defined boundaries was established in the Lachlan. Until 1836, all occupation of the Lachlan was illegal. From 1836–1847, revocable annual leases allowed squatters to take up any amount of unsurveyed land (Weaver, 1996).

1885: A 1861 Land Act required residency as a condition of purchase of rural land. The 1875 Land Act doubled the amount of land that could be purchased to 640 acres. The 1884 *NSW Subdivision of Runs Act* subdivided pastoral holdings into leased and licenced portions, the licenced portion able to be purchased. However, the 1884 Act required boundaries to be fenced, which could financially hurt undercapitalised ROs, causing some to sell (Gammage, 1990; Wells, 1989).

1930: Subdivisions favouring resident ownership continued, for instance, with the 1917 Soldier Resettlement Scheme (Powell, 1981). However, by 1930, landowners were in the midst of the Great Depression.

1970: Before international financial deregulation, interest rate rises and increase in LPOs.

1990: During a period of high interest rates and declining terms of trade but before total agricultural deregulation in Australia.

2009: Following the GFC and total agricultural deregulation in Australia, and ten years of the worst drought since European occupation.

**Historical maps**

To map trends in AL required the compilation of parish maps to form two districts. But not all parishes were mapped in 1885 and 1930. This meant periods of 1885–1900 and 1920–1935 were selected. Map dates and where they were sourced are as follows.

1849 Owen’s 1869 unscaled Squatting map (National Library of Australia, MAP RM 3596/3)
1885–1900  **Bland district**: a composite of 45 parish maps, supplied by NSW LPMA: 40 maps dated 1887–1900; four maps dated 1879–1884; one map dated 1920 for lack of alternatives.

**Cowra district**: a composite of 18 parish maps supplied by NSW LPMA: 10 maps dated 1884, six maps dated 1887–1892; two maps dated 1902.


**Cowra district**: a composite of 18 parish maps (LPMA): 15 maps dated 1925–1935; three maps dated 1921–1923.

1970  Shire maps for Bland, Cowra and Forbes showing landowners were supplied by the LPMA. As no map for the Weddin Shire was found for 1970, a LPMA 1990 map was used and corrected.

1990  Bland Shire map published by *Bush Telegraph* was provided by an agronomist in NSW DPI; Forbes Shire map was provided by a Forbes Real Estate Agent; Weddin Shire map was supplied by LPMA; Cowra Shire map was supplied by Cowra Shire Council staff member.

2009  District maps without landowner names supplied by LPMA.
Mapping trends in absentee landownership at six time intervals, 1849–2009

Mapping trends in AOs and AOL involved the following steps.

**Step 1**: All maps were sent to SPAN, CSU. Using ArcGIS software, Simon McDonald scaled and pasted parish maps for each time interval to form a district. The maps for Cowra 1990 and 2009 and Bland 2009 were readable as A4 documents. For other district maps, two versions were created. One could be printed at ‘AO’ size, its electronic version used to colour code AOL. The other version was subdivided the map so it could be printed on A4 paper.

**Step 2**: On Field Trip 3 and 4, I showed the maps for each district to the relevant informants. Based on informant knowledge, I marked each property RO, AO or unknown on the A4 maps.

**Step 3**: To assess landowners with unknown residency status, I made contact with other long-term residents by phone and e/mail, and e/mailed them the maps. Subsequent phonecalls served to identify more landowners. My informants had remarkable memories of their local district. Even without maps in front of them, many could identify where properties were located when given the landowner’s name and in many instances could provide further details that indicated their assessment of the landowner’s residency status was based on knowledge rather than supposition. For the period 1885–1900, when no informant was alive, their assessment was based on local knowledge including family stories or a descendant of the named landowner living on the land.

**Step 4**: Other data sources were investigated for the remaining landowners with ‘unknown residency status’. For example, the residency status of 12 landowners in Cowra (1885–1900) was ascertained from the NSW Registry of Births, Deaths and Marriages. Eleven landowners were classified RO as their birth, marriage, death and children’s births occurred within Cowra district, although s/he could have lived off-property. One landowner was classified AO, as all these events occurred outside Cowra Shire. For three landowners with the same surname, I contacted a person with the same surname through a family history website. He contacted relatives who lived on a property near Cowra. These relatives had lived in the area for generations. They identified
the three landowners as AO. In searching Trove, these landowners were found to be gold prospectors. For others with unknown residency status, I used two protocols, both of which erred on the side of residency, resulting in a conservative estimate of AOs and AOL. For Bland district (1885–1900), some 15 landowners (0.06% of all landowners) on homestead blocks, where residency was a requirement for conditional purchase, were assumed RO. For Cowra district, 1885–1900 and 1920–35, different family members were named on different blocks. If the family was known to be resident in the area, and a member had unknown residency status, this family member was classified resident.

**Step 5:** For the Cowra district map of 2009, Cowra Shire Council supplied a 2009 database containing assessment numbers categorised ‘non-resident’, ‘resident’, ‘PO Box mailing address outside Cowra’, ‘single property owner with PO Box mailing address inside Cowra’ (i.e. unknown), ‘resident multiple property owner’ and ‘multiple property owner with PO Box mailing address inside Cowra’. From this information, Simon McDonald colour coded the map. A large number of properties had unknown residency status. I emailed the map to a staff member of Cowra Shire Council. With access to the council database he was able to identify the residency status of the owner of each unknown block of land over a series of phone conversations.

**Step 6:** My marked-up A4 maps were used by Simon McDonald to colour code the electronic maps. On receipt of each colour coded map, anomalies were corrected and scanned back to him, for corrections to be incorporated into the electronic map.

**Step 7:** I calculated the proportion of AOs, local Res/AOs and ROs in each district at each time interval, except for 2009, by listing the named landowners on each colour coded map in one of five columns on an Excel spreadsheet for each map (AOs; local Res/AOs; ROs; state-owned land, a subcategory of AO; and those with unknown residency status). For 1885–1900 and 1920–1935 maps, there was a sixth column for aggregated structures such as financial firms, banks and pastoral companies. These ownership structures were not identified for 1970 and 1990 as in many cases it was not possible to distinguish
FCs, NFCs and aggregated AOs. The number of landowners in each column were used to calculate the proportion of each type of landowner.

**Step 8:** From each electronic colour coded map, Simon McDonald calculated the area owned in each landowner category. I used this data to calculate the proportion of AOL and the proportion of ROL, as well as the mean area owned in each landowner category for each district at each time interval.

**Step 9:** The proportion of AOs and AOL were compared between time intervals in one district and between districts for one time interval. As populations rather than samples were being compared, tests for sampling errors and significance were unnecessary. However, differences were tested using a proportions test for independent samples, retrieved from http://www.answersresearch.com/proportions.php. Only one insignificant difference was found. This was for the proportion of AOs in Cowra district between 1885–1900 and 1920–1935, due to a population decrease.

**Step 10:** Trends in AOs and AOL for each district were graphed.

**Trends in AO types, 1830s–2009**

**Selection of nine pastoral stations**

An investigation of trends in AO types relied on the aforementioned statistical analysis and the histories of nine pastoral stations. Four pastoral stations were selected in each district because their original area covered most of the district in 1849, based on unscaled maps. In Bland district, the four pastoral stations of Billabong, Caragabal, Lake Cowal and Oakhurst conservatively covered 68% of the district in 1849, another 11% of the district retained by the Crown. Only three other properties were named on the northern and southern boundaries of the map. In Cowra district, the four pastoral stations of Coura/Jerula, Glen Logan, Mulyan and North Logan covered approximately 83% of the district in 1849. Another four pastoral stations were named on the map. A ninth pastoral station named Booberoi was selected outside the two districts because of Wiradjuri links and a portion being currently owned by a non-local Aboriginal AO. It also provided examples of other AO types not found in the other histories, including ownership by a US-based
religious institution. The histories of each property were written up as separate accounts, segments of which are quoted in Chapter 6. Chapter 6 also includes a profile of each pastoral station.

**Data sources**
The main data sources have already been described. Additional data sources used to profile financial firms, pastoral companies and identify foreign investors came from literature cited in Chapter 6 and interview transcripts.

**Selection of trends in AO types**
Using findings based on the mapping process and the histories of nine pastoral stations, some trends in AO types were explored in detail. Why they were selected are as follows.

- Trends in state-owned land were investigated because the extent of state-owned land has implications for biodiversity conservation.
- Trends in local Res/AOs and non-local multiple property ownership were investigated because of their historical and contemporary extent.
- Trends in financial firms and NFCs were investigated because literature claimed these AO types were recent phenomena (Burch and Lawrence, 2009; Tonts et al., 2003). The investigation also served to identify a new trend (change of country-of-origin of foreign investors).
- Trends in absentee small property ownership were investigated as literature considered this a new trend (Mendham and Curtis, 2010).
- A vertically integrated non-local FC was profiled to provide further evidence for the proposition that most AO types have historical antecedents.
- A religious institution and benefactor were profiled because these AO types have historical significance (Cahill, 2007; Aaronsohn, 2000) and two US-based religious institutions owned large areas in the Lachlan.
- Trends in an AO’s commitment to pastoralism and property and the proportion of AOs who changed their residency status over time were
identified as some informants assumed AOs have less commitment to their property compared to ROs.

**Strengths and limitations of methodology**

Mapping trends in two districts provided a statistical understanding of trends in AL over 160 years, the histories of nine pastoral stations extending the time span to 180 years. To my knowledge, this has not been previously undertaken. Within the resource constraints of a Doctoral thesis the process was made possible by accessing local informant knowledge. Trends in both districts were found to be surprisingly consistent. This suggests findings are a reliable representation of the Lachlan catchment. Further investigation into landowners named on historical maps and the histories of nine properties provided additional data not captured in the statistical analysis of trends. The quantitative and qualitative findings provided historical context for the contemporary extent of AL and AO types in the Lachlan catchment and made possible an investigation into the underlying socio-political, economic and environmental factors contributing to trends (Key Question 3). The limitations of using six time intervals were that

- I was unable to pinpoint the year when AOs ceased to monopolise most land, as it occurred between 1935 and 1970.
- Some trends were unable to be investigated. For example, in Cowra Shire, there was an influx of NFCs investing in viticulture after 1990 and selling prior to 2009.
- 1849 maps were unscaled so property boundaries were approximate. Consequently, the proportion of AOL in 1849 in each district was not compared with the proportion of AOL in 2009.
- Parish maps came from different years for 1885–1900 and 1920–1935.
- Maps were known to name landowners who had sold property.
- Decision protocols for landowners with unknown residency status likely led to an underestimation of AOs and AOL.
- The 2009 maps did not name landowners so the proportion of AOs, Res/AOs and ROs could not be investigated for 2009.
Key Question 3: Factors contributing to absentee landownership

Key research question and component questions

Key Question 3: What factors contribute to absentee landownership in the Lachlan?

included the component questions

1. What underlying contextual factors contributed to trends in absentee landownership?
2. What motivates different types of absentee landowners to own rural land?

Assumptions and theoretical propositions

Assumptions in need of testing were that early land laws favoured absentee landownership (King, 1957; Weaver, 1996); later land laws encouraging residency failed to do so (Gammage, 1990; Morris and Ranken, 1883) and any factor that increases the debt of resident landowners increases absentee landownership (Johnson, 1995; Powelson, 1988).

The theoretical propositions that guided research and were tested and refined by it were

- Underlying political-economic, socio-cultural and environmental factors contribute to trends in AL. Some factors cause ROs to sell or enter a form of aggregated ownership and some factors attract AOs to retain or invest in land.
- Factors that contribute to trends in all types of landowners are political acts including colonialism, land laws, farmer support schemes and deregulation.
- Corporate investment in land for agriculture is cyclic and countercyclic.
- AO types have distinct sets of motivations.

The refined propositions are presented at the end of Chapter 7.
Distinguishing between contextual factors and motivations

To address Key Question 3, underlying factors were distinguished from personal motivations. As shown in Figure 8, motivations are generated from an interaction of contextual and personal factors (Oreg and Nov, 2008), the latter including one’s background, financial capacity (Pannell et al., 2006) and values or guiding principles (Ryan and Deci, 2000; Schwartz and Bilsky, 1987; 1990). The methodology used for exploring contextual factors will be outlined first.

Figure 8: Relationship between contextual factors and motivations

Contextual factors linked to absentee landownership in the Lachlan, 1830s–2010

Data Sources

Data sources for investigating contextual factors linked to trends in landownership were

- findings on trends in landownership in Bland and Cowra districts, 1849–2009;
- findings on extent in AL in the Lachlan LHPA, Bland and Cowra Shires in 2009;
- histories of nine pastoral stations;
literature on international events and trends, as cited in the text, and literature on interest rates (Fraser, 1991), trade (Brice, 1998), land values (Eves, 1997; 2000); trends in commodity prices, input costs, farmer debt (ABARE, 2009); and drought (Agriculture Today, 2011); and interview transcripts, where informants responded to questions on their views and personal experience regarding factors contributing to absentee or resident landownership, and their family and property history, including why property was purchased, retained or sold.

Identifying contextual factors
Identifying underlying contextual factors linked to trends in landownership relied on an iterative process based on historical sociological analysis of existing literature and thematic analysis of interview data. In the sociological re-interpretation of the literature (Neuman, 2006) non-trivial, non-tautological, sufficient but not always necessary factors (e.g. drought) and linking mechanisms (e.g. landowner debt) that correlated with trends in AL were identified. If factors and/or linking mechanisms had the same impact at different times, this analytically supported the argument that a factor (and/or linking mechanism) had a causal link to an established trend (Mahoney, 2004; Neuman, 2006; Skocpol, 1984). For instance, landowner debt, leading to foreclosures and property sales, was a linking mechanism between drought, declining terms of trade and/or economic downturns and property acquisition by capitalised AOs. The process occurred in the 1880s–1930s, 1980s–1996 and 2000–2011.

Thematic analysis of key interview data identified factors to be investigated in the literature, confirmed other factors identified from the literature and provided personal experiences and perspectives about factors. A preliminary theoretical model of factors contributing to AL was constructed. Using this iterative approach the following factors were explored.
International factors: colonialism, war, laws in other countries; global terms of trade and commodity prices; economic cycles including recession/depression, stock market crashes and inflation; urbanisation; international financial deregulation; available capital; growing demand and speculation; and vertical integration (a linking mechanism).

In-country political acts: land and tax laws; monetary policies including putting a price on land; interest rates; soldier settler schemes; farmer support schemes; agricultural deregulation; indigenous land rights.

Political economic factors: land values; input costs; need for off farm work; linking mechanisms of landowner debt and property features (size, property amalgamation, distance from town, house or (an) uninhabitable house/s).

Local events: gold rushes.

Logistics: transport; communications; regional infrastructure; technical innovations.

Environmental factors: drought; floods; good rainfall; insect, rabbit and fox plagues.

Socio-cultural factors: having a farming background; succession; demographics (e.g. age); social connections; increased education and lifestyle expectations; changing family dynamics (i.e. changing status of women and children); environmental/sustainability movement; cultural heritage.

A table was constructed showing trends for key factors. This table is presented in Appendix J. A final narrative involved interweaving information from Appendix J and quotes from interviews to create a plausible account of underlying factors contributing to trends in landownership established in response to Key Question 2b. Within the narrative, factors linked to a particular AO type or cluster of types were identified. Models of contextual factors contributing to AL and different AO types were constructed. These models were compared with the theoretical generic model constructed for AL. Each served to refine the other. The refined model of key factors contributing to AL is presented in Figure 41 (Chapter 7). Models of key factors contributing to different AO types are presented in Appendix M (Figures 48 – 52).
Strengths and limitations of methodology

An historical sociological approach enabled a wide range of factors to be considered. The 180 year time frame enabled identification of contextual factors that were short term or operated over time, repeatedly operated at different times or took time to take effect. Analysis was enriched by interview data providing a micro perspective of underlying processes. A major limitation was that because factors like drought and economic recessions occurred frequently at the same time, it was not possible to establish which factor had the greatest influence. The constructed models presented in Figure 41 and Appendix M are a limited view of all possible contextual factors and their interrelationships.

Motivations of AO types

Introduction

Motivations are social, cognitive and affective factors (Vygotsky, 1986) that are context dependent and lead an individual to express aspirations, make choices and act (Battistelli, 1997). Research into motivations of farmers and landowners identified non-utilitarian motivations but did not classify empirical findings using coherent theory (see Edwards-Jones, Deary and Willock, 1998; Rowe and Bartlett, 2001; Aslin et al., 2004). Other researchers classified motivations as extrinsic or intrinsic. Extrinsic motivations are related to an external reward or separable outcome such as remuneration, status and approval. Intrinsic motivations are related to an inherent love of the task, self fulfilment and personal values (Benabou and Tirole, 2003; Oreg and Nov, 2008). Some researchers considered extrinsic motivations are also linked to values (Ryan and Deci, 2000) or identified values related to extrinsic rewards (Schwartz and Bilksy, 1987; 1990). Then there were researchers who identified a third set of motivations related to altruism (Oreg and Nov, 2008) or pro-social motivations (Sheldon, 2004), these being neither utilitarian nor self-orientated. Consequently, Battistelli (1997) categorised motivations into utilitarian strategic motivations, self-orientated non-material self motivations and transcendent (i.e. transcending the individual). Research on values also referred to
transcendent values (Schwartz and Boehnke, 2004; Kaup, 1996). A three-way classification of motivations was adopted: extrinsic/utilitarian, intrinsic/non-material self and transcendent.

**Data sources and approach**

My investigation into AO motivations relied on interview data. AO motivations were identified from an informant directly responding to a question ‘What motivates you?’ or when an AO raised a motivation when responding to questions on social relations, managing biodiversity or economic viability.

**Step 1:** Thematic analysis of interview transcripts identified and classified motivations for each AO. Two matrices were constructed. One included 27 possible extrinsic/utilitarian motivations. They were: capital gain; run a profitable operation; tax benefit; profit from lease; off-farm work; no or uninhabitable house; town house a good investment; succession; right age; future residence; status; deregulation; economies of scale; spread risk; vertical integration; diversify investments; apply business knowledge; water rights; produce biofuel; economic benefit from carbon sequestration; biodiversity conservation enhances production; future demand; buffer zone; government requirement/s; Australia’s advantages; regional logistics; utilitarian property features. The second matrix included 13 possible intrinsic/non-material self motivations. They were:

- aesthetic/emotional/spiritual/behavioural connection/s to the property (see Jorgensen and Stedman, 2001; Hull, 1992; Kyle, Mowen and Tarrant, 2004); or to the region; socio-cultural heritage; love of space/nature/land; passion for farming; grew up on farm; dream fulfilment; likes a challenge; likes to work in a team; likes autonomy; enjoys physical work; property an escape/retreat/life balance (Aronsson, 2004; Gustafson, 2002); and recreation. This matrix also included four possible transcendent motivations. They were: family benefits over and above one’s own; support for Australian farmers/agriculture; food security without profit; and conserving biodiversity for its intrinsic values.

**Step 2:** If an AO expressed a motivation, this was noted in the appropriate column via a transcript page reference.
**Step 3:** Atypical, under-reported and contradictory motivations were identified.

**Step 4:** Using the same process I categorised other informant perceptions of AO motivations in separate matrices.

**Step 5:** The number of motivations expressed by an AO in each set of motivations was summed. A table was constructed, showing each AO’s number of motivations in each of the three categories of motivations. In each set, the AOs are presented in the same order. See Table 16 in Chapter 7. Table 16 enabled the identification of the dominant motivation set for each AO type.

**Step 6:** I compared informant perceptions of AO motivations with AOs’ self perceptions, using quotes from interview transcripts to illustrate key findings.

**Strengths and limitations of methodology and presentation**

In a one to eight hour interview and a lengthy field observation, layers of motivations were explored, as an interviewee often changed how they portrayed themselves over time. For instance, a FMC director claimed he was motivated by “Profit! Profit! Profit!” (FMC-11). Later he emphasised the importance of stewardship, agricultural research and self education. Unfortunately, it was not possible to retain this level of complexity within the Doctoral thesis. Nor could the finding that non-AO informants underestimated AOs non-material self and transcendent motivations and findings on atypical and contradictory motivations be included. The decision to omit most findings on motivations, except for those providing evidence for underlying socio-cultural factors, was based on the need to prioritise findings because of the length of this Doctoral thesis. Consequently, only quotes highlighting the importance of socio-cultural contextual factors are included in the final draft.
Key Question 4: Implications for sustainable agriculture of different types of absentee landowners

Key research question and component questions

For Key Question 4: What are the implications for sustainable agriculture of different types of absentee landowners? component questions were

1. What are the differences in practises and outcomes between types of absentee landowners?
2. Are there any practices or outcomes that are more impacted by a factor unrelated to type of absentee landowner?

Assumptions and theoretical propositions

Assumptions in need of testing were that absentee LPOs are not actively engaged in managing their land. They pose hazards to neighbouring farmers and the district (Aslin, 2006; Klepeis et al., 2009); NFCs have high management costs and AOs ‘get their pound of flesh’ from FMs (Morrison, 2009; informant from preliminary research).

The theoretical propositions and, where appropriate, rival propositions that guided research were

- Social/power relations vary with AO type.
- AL does not necessarily reduce the number of on-property residents.
- Managing biodiversity is impacted by AO type / outside agency assistance / AO or FM motivations based on valuing biodiversity / carbon trading / government requirement/s / off-farm capital / profitability.
- Outcomes for [sustainable production/profitability] are impacted by AO type / rainfall / farm operator / enterprise mix.
- Long-term viability is linked to AO type / profitability / social relations / environmental factors / motivations for owning rural land.
The refined propositions are presented at the end of Chapter 8.

**Data sources**

Literature, the histories of nine pastoral stations and interview transcripts were used to identify key historical issues. Interview transcripts and field observations provided data to qualitatively assess the contemporary implications of AO types in the Lachlan, based on 28 AOs. The methodology for field observations will now be described.

**Field observations**

Field observations enabled me to visualise properties and issues and observe informants in a natural setting. Although limited by what I knew, experienced and perceived, maximum benefit was achieved by being observant, flexible, open but sceptical and taking photographs and accurate notes (Neuman, 2006; Patton, 2002). My field notes recorded

- aspects of land management in terms of water supply (dams, rivers and irrigation,) soil, land engineering, erosion, effects of drought or flooding, crop condition, livestock management; paddock design, evidence of weeds, feral and native animals, infrastructure and biodiversity (what type/s and how it was managed) with photographs supporting field notes;
- the guide’s commentary, this typically triggered by the locality or a question from me;
- on-farm labour relations and incidental comments from on-farm labour;
- whether what I observed reflected what was claimed in the interview;
- an interviewee’s clarifications or expansion of points made during the interview; and
- my reflections.

I walked or was driven around the properties of 14 AOs by either the AO or FM. On two occasions, both were present. Usually field observations were conducted after
the interview. On three occasions the interview and field observation occurred simultaneously. Conversations were audio recorded wherever possible. Photographs were framed to avoid depicting any identifying features of the property or individual. Field notes were written during the observations with reflections being added later.

**Strengths and limitations of field observations**

Field observations gave me first-hand, detailed impressions and a visual record that could jog my memory and illustrate themes. Field observations were invaluable in eliciting spontaneous and context inspired information including being witness to some major events; expanding or clarifying points made during the interview; talking to farm workers; seeing land management practices and outcomes that could be compared with what was reported in the interviews and what was observed on other properties. My capacity to observe and record details was limited by my lack of knowledge of agronomy, and what was shown and explained.

**Assessing implications for sustainable agriculture of different AO types**

The concepts of power, the capitalist and sustainability discourses, and their applications to social relations, biodiversity management and economic viability were discussed in Chapter 2, as was the definition of sustainable agriculture. As being sustainable was defined as an on-going process of evaluation, learning and adaption in balancing social, ecological and economic relations, my qualitative investigation explored practices and outcomes of 28 AOs and 14 FMs. Investigations were limited to an assessment at the property and entity level, except for some regional level impacts for social relations and managing biodiversity.

Operationalising such a nebulous concept as sustainable agriculture is a challenge. Researchers have developed sustainability indices representing an aggregation of indicators but the selection of indicators and their scoring are inconsistent across studies; most indicators measure inputs rather than
impacts and one indicator can be crucial while others can be masked (Rao and Rogers, 2006; Rigby et al., 2001; Bossel, 1999). After exploring the use of indices I decided to forgo indices in favour of a systems approach of identifying independent, intervening and dependent variables at the property and entity level (Noe and Alroe, 2003; Sterman, 2000), in keeping with a critical realist understanding that there are multiple processes and solutions (Sayer, 1997). In conducting qualitative analysis I called variables ‘themes’, and depicted their relationship in theoretical, field work refined models.

Theme selection was based on a theme

- being identified in the literature as an important indicator for sustainable agriculture, especially in Rao and Rogers (2006); Rigby et al. (2001) and other references cited in Chapter 2, ‘Concept of sustainability’ and ‘Implications for sustainable agriculture’;
- being identified in field work/transcripts as impacting outcomes;
- reflecting a current recommended sustainable practice;
- reflecting a practice or outcome comparable across AO types;
- being an independent variable impacting a practice or outcome (e.g. rainfall); and
- having, arguably, more positive than negative implications. For example, data for ‘water storage’ was collected but not included because of its positive implications for a property but potential negative implications for a district. ‘Number employed on-farm’ was included because of its socio-economic benefits for people and the local district, despite impacting an AO’s bottom line. Geographic spread of properties was included because it enhanced an AO’s long-term viability, and thus could benefit the immediate district.

In much of the literature, natural resource management (NRM) encompasses agricultural practices (e.g. fertiliser applications, erosion prevention) and managing biodiversity (e.g. conservation of remnant native vegetation)
(Petzelka et al., 2013). Given that economic viability depends on sustainable production and this relies on the maintenance or enhancement of natural resources on which production depends (Ashby and Ashby, 2011; Barr and Cary, 1992), NRM practises related to production were examined under the sustainability arm of ‘economic viability’. This left managing native biodiversity (as opposed to agricultural biodiversity in terms of seeds and breeds) as a stand alone topic.

Emergent patterns were identified. For social relations these reflected an AO type or cluster of types. For managing biodiversity, AO type was not found to be a key factor and other factors were tested (e.g. outside agency assistance). For economic viability, patterns emerged for four clusters of AO types. These four clusters were large scale corporate AOs; local AOs; city-based AOs and Aboriginal AOs. Identified patterns were supported by data from interview transcripts. Although findings were qualitative, to describe prevalence, the number or percentage of AOs exhibiting a practice or outcome was identified, as was the non-random sample size. Key themes will now be described.

**Informant understandings of sustainable agriculture**

As my understanding of what is sustainable could differ from an AO’s understanding, I investigated informant understandings of sustainable agriculture. Based on responses to the question ‘How would you define sustainable agriculture?’ I identified the following themes: *preserving productive viability; profitability; reducing chemical use; reducing reliance on fossil fuel-based fertilisers; conserving/enhancing biodiversity; and employment.* AO, FM and other informant responses were recorded by way of a transcript page reference. Informant understandings were used to identify themes, present an overview of their understanding of sustainable agriculture in introductions for managing biodiversity and economic viability and, in some cases, to explain findings.
Assessing implications for social relations

Social relations cannot be separated from political economic relations (Commons, 1974). Hence, the term ‘social relations’ is short hand for socio-political economic relations or power relations between people, these being influenced by dominating discourses (Lukes, 2005). A brief investigation of historical social relations relied on the histories of nine pastoral stations, literature and interview transcripts. For contemporary social relations, interview transcripts were analysed using three themes related to practice: *relations within an ownership structure* (Harzing, 2000); *tenancy relations* (Broad and Fulton, 2003) and *AO-FM-Labour relations* (Roebuck, 1973; Allen and Lueck, 2002). The last theme includes sub-themes (Figure 9) derived from field work and literature. Literature raised the importance of FM autonomy (Billikopf, 2001), communication protocols (Bamberry et al., 1997) and labour issues (Tont et al., 2003). In Figure 9, FM autonomy refers to FMs being able to make day-to-day decisions, contribute strategic ideas and initiate practices. A landowner’s capacity to be open to new ideas and adopt those considered beneficial was considered ideal (Carroll, 2005).

Figure 9: Sub-themes of AO-FM-Labour relations

Themes related to social relation outcomes were *employment of non-family waged labour* (including FM employment conditions) (Rao and Rogers, 2006); *change in number of on-property residents* (field work); *community relations* (Aslin et al., 2004) and *counterfactuals*, as identified by informants and the
relevant literature reviews in Chapter 2. Data on robbery and vandalism (Aslin et al., 2004) were collected, but only briefly reported due to the need to prioritise findings.

As AL is often associated with highly stratified societies (Powelson, 1988; Mann, 1986) the aforementioned themes were interpreted using conceptual themes more equal power relations and unequal power relations (Lukes, 2009). Findings were used to test a generic theoretical model. The refined model is presented in Figure 42 (Chapter 8).

Assessing implications for managing biodiversity

Thematic analysis of interviews for managing biodiversity was premised on the view that sustainable agriculture involved maintaining or enhancing biodiversity within farming systems (Vandermeer and Perfecto, 2007; Bianchi, Boki and Tscharntke, 2006). Ideally, biodiversity-farming matrices allow coherence and continuity of biodiversity sufficient to maintain or enhance ecosystem components (Bunker and Houston, 2003; Gosnell et al., 2006; Kampf, 2002; Kuiper, 1998; Smeding and Joenje, 1999). These views, along with literature on current recommended practices for natural resource management (Curtis et al., 2008) generated three themes related to practice. These were managing remnant native vegetation; fencing for conservation purposes (remnant vegetation, rivers, creeks or newly planted tree belts); planting trees (and what types) and counterfactuals (e.g. co-ordination of tree plantings between neighbours or at the catchment level). Data for another two themes (resting land and fire precautions) were collected but not included in the final analysis due to the need to prioritise findings.

For each theme, FM initiatives and AO initiatives were identified, given FM roles are neglected in the literature (Benda-Beckmann et al., 2006; Gorton and Davidova, 2004). Other data collected were area of remnant native vegetation; area of native pasture and area planted to trees, given the importance of all three in conserving biodiversity and soils (Handreck and Black, 2005; Lyons,
2009). These data were not necessarily outcomes related to the current AO’s practices, but could include prior and current AO/FM activities. However, data served in an analysis and discussion of themes related to practices.

After discovering managing biodiversity did not relate to AO type, I explored whether findings related to

- **outside agency assistance**, which in the Australian context refers to short term funding, a supply of trees and/or labour from an external agency like Landcare or a local catchment management authority (Curtis et al., 2008; 2012);
- **Financial capacity** indicated by the scale of the operation (Trewavas, 2001); and
- **Motivations/values** of AO or FM. Motivations identified in interview transcripts linked to managing biodiversity were (1) **conserves biodiversity for its own sake**; (2) **biodiversity within farming systems has agricultural benefits**; (3) **economic benefit from carbon trading** and (4) **government requirement/s**.

Findings were cross-checked with other informant observations and were found to be consistent for 26 AOs. For two LPOs, findings on practices were inconsistent with other informant observations and the literature, but given the small sample size, findings were inconclusive. Overall findings were used to test a generic theoretical model. The refined model is presented in Figure 43 (Chapter 8).

**Assessing implications for economic viability**

Economic viability relies on sustainable production and profitability over time. I defined sustainable production as maximising production per hectare whilst maintaining or enhancing the natural resources on which production depends. Analysis relied on eight themes related to practices and three themes related to outcomes. Where relevant, FM or AO initiatives were identified. The eight themes and sub-themes related to practice were
Property selection given that economic viability can depend on one or more of the following factors: due diligence before purchase; property size; percentage of arable land; average rainfall; rainfall 2009, rainfall 2010; other water supplies; soil types.

Enterprise mix indicating operational viability. Researchers warn of the dangers of relying on a single monoculture, advocating a judicious mix (Gollop and Monahan, 1991; Lyson and Welsh, 1993; Mishra and El-Osta, 2002).

Livestock care impacting lambing and calving rates, condition of animals and relations with neighbours (field work; Aslin, 2006). Those that ran livestock without a resident caretaker were identified and how they monitored livestock was described.

Technology adoption (Whatmore et al., 1987b) included the following subthemes.

- **Farm plan, monitoring and reporting**: important for crop/enterprise rotation, benchmarking and adapting (Bunch and Lopez, 1994; Carroll, 2005). Reporting procedures are also critical for keeping AOs and investors informed (field work).
- **Direct drill**: This was broken down into direct drill into stubble; and direct drill (crop or improved pastures) into native pastures (Kirby, 2009). It can involve the use of a single tyne or disc seeder.
- **Crop rotation**: provides a disease break, while sowing legumes after cereal crops improves soil nitrogen levels (DPI, 2007).
- **Mechanization**: Controlled traffic is current recommended practice for minimizing soil compaction, maximizing moisture retention and providing a higher yield per unit area (DPI, 2007; Carroll, 2005) but has cost implications (field work).
- **Fertiliser use**: Some literature distinguishes between fossil fuel-based fertilisers and more soil friendly organic technologies (Rigby...
et al., 2001). The position taken in the Lachlan research was that no fertiliser application depletes soils (Barr and Cary, 1992) and any fertiliser application is better than this. In the long term, use of organic fertilisers and fossil fuel-based fertilisers, dependent on soil tests, may incorporate the benefits of both (Edmeades, 2003; Rosen and Allan, 2007). Having an on-farm source of recycled organic fertiliser (e.g. treated human or animal sewerage) is cost effective and reliable in the long term (Petty, 1995). No single solution was considered more sustainable, given the complexities of soil chemistry.

- **Weed control:** (Klepeis et al., 2009). The position taken was that any weed control is better than none but given the health implications of increased chemical use, openness to judicious use of biological control or other means to reduce chemical use is preferable (Van Wilgen et al., 2004).

- **Response to pests:** (e.g. locust plague) (fieldwork).

- **Sources of farming knowledge:** Given that being open to new and tested practices is critical for economic viability (Bunch and Lopez, 1994; Carroll, 2005), this theme was analysed using the following sub-themes: own experience; local/over the fence; enterprise specialist; local training programs and field days; internet; print media; membership of national agriculture or conservation organisation/s; on-property research without a public outcome and on-property research with external partners and a public dissemination of findings.

*Variable costs/hectare* included expenses that varied according to hectares farmed. They exclude infrastructure, full-time employment, lease and interest payments (DPI, 2007). Variable costs per hectare collected for crop were: contractor costs or machinery depreciation; chemicals; fertiliser; freight; seed; fuel; insurance; agronomy and selling costs. Variable costs collected for livestock were: wages (and for sheep, shearing/crutching and selling wool); selling stock; repair and maintenance; animal health; contract costs; freight;
chemical; supplementary feed and insurance. Data for annual on-farm fuel use/hectare was collected because this has increasing relevance with diesel becoming more expensive and a future price on carbon emissions. In Australia, a carbon price was introduced on 1 July, 2012, but agriculture is currently excluded from the scheme.

*Responses to drought* were investigated for crop (variety selection; seed rate, row spacing and fertiliser rate adjustment) and livestock (purchasing fodder, drought feedlot, sacrifice area and agistment). Responses involved risk management for costs (e.g. fertiliser, seed or stocking rate) and production (e.g. varieties) (DPI, 2007), as well as increasing water efficiency. Another response was the introduction of a new enterprise (field work). Data was also collected for annual on-farm water use/hectare.

*Marketing methods*: In a deregulated environment how primary producers market their produce is critical (Morrison, 2009). Marketing methods were classified standard (i.e. those used by the majority of commercial operators such as storing and selling wheat through Graincorp or selling livestock through a local sale yards) and non-standard. Findings explored the use of non-standard marketing methods that attempted to maximise the farm gate price and reduce risk related to price fluctuations. These methods included marketing to specification; producing for niche markets; value adding; closed loop; developing one’s own export markets; forward contracts (especially those that did not incur a penalty if there was a production shortfall); speculative futures or options contracts (Tomek and Peterson, 2001; field work) and direct marketing into the local area (Georges, 1990).

*Counterfactuals*: What was not practised by an AO, as identified using the above themes.
Three themes related to outcomes. These were:

*Minimum ground cover in October 2009* expressed as a percentage of plant cover in a square metre, and used to measure effectiveness of responses to drought and erosion prevention (field work).

*Production: Production* per hectare was collected to compare AO types across scale. Data were collected for wheat, barley, canola and legumes but only wheat production per hectare was compared as it was grown by all croppers. *Lambing rates* were compared for sheep producers as an indication of the efficacy of livestock practices, production and long-term viability of the operation and industry. A measure of cattle production was omitted because only two cattle producers had no other enterprise. Also, five cattle producers were breeders and four fattened cattle for resale making comparisons difficult. All production outcomes were ranked from most-to-least favourable. Findings indicated which AOs were in the top and bottom ranges of all AOs that cropped wheat or ran sheep. Outcomes were tested to see if they related to rainfall or FM initiatives rather than AO type.

*Long-term viability* including the sub-themes of

- *Net profit or loss* excluding tax and interest (DPI, 2007). Data were collected for 2009–2010 and 2010–2011. Financial viability may have been better measured by percent return on capital invested but this required data that large scale AOs were unwilling to provide. Exact figures or an indication of the size of the profit or loss were collected for all AOs.

- *Debt*: No debt was considered ideal. However, there is evidence that in a low interest rate environment farms with debt outperform farms with no debt (Carroll, 2005). An operational debt with an AO having the capacity to service interest repayments, especially if the landowner had access to off-farm capital, was considered sustainable. Having a large debt and no capital from non-
agricultural sources was less sustainable. Least sustainable was when an indebted AO had a very low income and their absentee-owned property was 90+% of their asset base.

- **Infrastructure expenditure**: a fixed cost (DPI, 2007). The view taken was that new infrastructure related to production enhanced long-term viability. When infrastructure was excessive and not production-related it could impact capital gain (field work). Data collected were infrastructure before purchase; infrastructure after purchase; cost of infrastructure since purchase and years of ownership.

- **Geographic spread** of properties was considered to enhance long-term viability by spreading climate and disease risks (Allen and Lueck, 2002).

- **Dominant motivation set** of AO type (findings for Key Question 3);

- **Future intentions for AOL** including whether the AO wished to sell, or had a 10 year or 20+ year investment horizon (Morrison, 2009).

Findings for economic viability were used to test two generic theoretical models, one for sustainable production and the other for profitability. The refined models presented in Figure 44 and Figure 45 (Chapter 8).

**Strengths and limitations of methodology**

Historical implications served to contextualise contemporary implications. Interviews provided rich information, and the transcript review process enhanced data reliability. Interviewing AOs, FMs, FMCs and others associated with AOs, enabled data triangulation and the identification of counterfactuals. Analysis of variable and fixed input costs and production on a per hectare basis enabled comparisons between AO types. Limitations were that data were based on a verbal report rather than consistent measurements and the basis of a reported fact could vary. For instance, it was important that variable inputs per hectare across cases included the same data. The review process ensured consistency. Four AOs refused to report details of variable costs per
hectare and three were unwilling to specify net losses, although they supplied enough data to assess net profit and loss between AO and enterprise types. Another limitation was that findings relied on data collected over two years when a longer period is preferable. But by far the most important limitations in examining implications for sustainable agriculture were the complexity of some themes (e.g. marketing) and having a small number of cases in each AO type. In regards to the last limitation, non-AO informant data broadened some findings beyond the limited number of cases.
PART II: RESEARCH FINDINGS
Figure 10: Lachlan River in the drought, October 2009

Figure 11: Lachlan River in flood, August 2010
Chapter 4: Types of absentee landowners

Introduction

This chapter addresses Key Question 1, ‘What are the different types of absentee landowners?’ A definition of absentee landownership based on non-residency is deconstructed using informant perceptions and a relational classification of landowners is presented and tested. This relational typology was used to classify AOs and respond to the other key questions. The chapter concludes with an assessment of four key AO attributes that vary between AO types. These attributes have direct links to an AO’s sustainable agriculture practises and outcomes, explored in Chapter 8.

Concept of absentee landownership

Identifying as an absentee landowner

Sixty-eight percent of AO informants (N=34) identified as an AO. These informants represented all city-based AOs (n=6) and Aboriginal AOs (n=3), three NFCs (n=4), two farm-based FCs (n=3), two local town-based farmers (n=3), one FC (n=3) and one aggregated AO (n=5). The reasons for identifying as an AO varied. Firstly, 44% of AO informants (N=34) agreed with a definition based on non-residency:

It’s someone who has title to the ownership of the property, be it a leasehold or freehold property and simply lives ... away from the farm. ... I think it’s a clear delineation. If you cannot step onto that farm and speak to the owner then you’re dealing with an absentee landowner (AO-FMC-21).

Other AO informants identified as an AO because they were located outside the Lachlan, and/or were non-operators, that is, “not involved in the day-to-day farm management” (AO-CL-39).

However, 32% of AO informants (N=34) did not identify as an AO. A farm-based FC strongly objected to the label: “It’s just that I own several properties, all of which I
have lived on, and I now do more work off farm than I do on farm. ... I feel the same sort of attachments to all of them” (AO-FC-29). This assumed a lack of attachment was linked to AL, contrary to 54% of AO informants (N=34) expressing strong emotional attachment to their AOL. For 18% of AOs this attachment was over and above their primary residence. But AO-FC-29 had another objection to being labelled an AO. This was that his properties were “run ... as an integrated operation” (AO-FC-29), an issue that will be discussed shortly.

Representatives of 58% of FCs, NFCs and aggregated AOs (N=12) did not identify as AOs because they employed one or more resident FMs. Two representatives of mining multinationals also raised the presence of a mine site office as disqualifying the company from being an AO. On further questioning, an overseas head office established operations, made strategic decisions about budgets and on-property practises and any profit was absorbed by the multinational’s head office. It appeared the working definition of non-residency was applicable.

In contrast, 84% of current and past FMs and two FMC directors (N=19) considered those they worked for to be AOs. This was due to 12 agreeing with a definition based on non-residency, three classifying the landowner as non-local (i.e. outside the Lachlan) and three classifying the landowner as a non-operator. For instance, an investment company’s FM’s view was “They are probably the most ... absent and abstract as you could possibly get ... because they’re an investor and ... people who are ultimately in control ... live in Sydney” (FM-AGG-35).

Reluctance to identify as an AO was in part due to stereotypes and controversy associated with the term, as expressed by a farm-based FC.

It is a value laden term that means different things to different people. I don’t think domicile is a useful basis for a definition. It means too many landowners would be classified as absentee landowners. ... In what sense is this absence relevant? ... It strikes me that there is an underlying agenda - ... that you are heading in the direction of absentee ownership equals ‘bad’ in some way and permanent occupancy equals ‘good’ (AO-FC-29).
All four Aboriginal traditional landowners accepted they were AOs in an historic sense. Three readily accepted the term in a contemporary sense, especially as ownership of two properties was contested: “[I am a] forced absentee ... totally unnecessary through the greed and misjudgement of others” (FM-A-34). However, the political consequences of identifying as an AO was felt by another traditional owner seeking land title from a non-local Aboriginal AO: “I am wary of saying we are absentee. The government might use it against us. The [Aboriginal] ... authorities keep changing. They lost the title deeds. We had them. ... [The owners] ... don’t visit the property. ... They’re Clayton owners. ... Now they want to sell our land” (AO-A-T15).

Criteria for defining an absentee landowner

Not identifying as an AO related to informant critiques of a definition of AL based on non-residency. Among a non-random sample of 61 informants, 57% questioned a definition based on non-residency alone. Their insights are discussed under three themes: location of landowner, family ownership and on-property involvement.

Location of landowner

Twenty-one percent of informants (N=61) suggested only non-local, non-resident landowners were AO, that: “the owner is ... in a totally different community” (K-AG-112). Complexities were highlighted by two informants: “I know a guy who has got a farm out Ungarie way that spends part of the year living in Bateman’s Bay and part of the year living on-farm. ... Where do you draw the line on what you call absentee?” (FM-AGG-212), and “My mother and sisters used to live in town and my father, brothers and I used to live out on the property and come to town for weekends” (KI-H-18). One way to resolve such cases is to ask landowners to declare their principal place of residence. If that is the property, then they are not an AO.
Another complexity was where a local town-based Aboriginal land council owned rural property on which an Aboriginal community lived. As residents could become members of the land council, the property was not considered absentee-owned.

Fifty-two percent of informants (N=61) disputed that local multiple property owners were absentee on land they did not live on. A FMC claimed “From a social point of view they are hardly absentee. A large proportion of farmers have more than one block. It’s part of the re-aggregation phase we’re going through” (FMC-11). Although a farm-based FC strongly disagreed with being classified a Res/AO, two farm-based FCs and a FM whose parents owned multiple properties referred to the residential property being given preferential treatment: “If there’s a tree to be planted or a dam to be desilted it happens on the home block” (FM-FC-26). For research purposes, when multiple properties shared a common boundary or were separated by a road, the owner was classified resident. For non-adjoining multiple property owners, the definition applied to all properties on which at least one member of the ownership structure did not identify as their principal place of residence.

Family ownership
In the Lachlan, many farmers operate as a family partnership, company, trust or personal superannuation fund or a combination of ownership structures. Some structures are nominal. In others, members of the ownership structure have active roles. Other arrangements involve a family member working and living on a property owned by another family member. Such complexities were reported by a local town-based retired farmer, whose son worked the farm:

Many small and moderate sized farms became rural companies in the 1950s for tax reasons. Capital gains tax was introduced in 1985. When income splitting was introduced wives became partners or two brothers or a father and son. The land could be in an individual’s name and the business could be in the name of the partnership. It works well among people with vital shared interests ... as long as everything’s perceived as fair. A number of partnerships have come undone because a wife thinks
the partnership ... is unfair. ... Share farming can work well. ... It’s a way of handing over responsibility to the son. The father owns the machinery and the land and the son puts in the labour (KI-H-15).

According to the working definition, if the resident family member is not legally part of the ownership structure, then the property is absentee-owned.

**On-property involvement**

The most common qualifier to a definition based on non-residency was the landowner’s on-property involvement, stated in terms of decisions and operations, frequency of visits and whether the land was managed at all.

Two AOs discounted residency as a consideration. A city investor defined an AO as “*someone whose primary activity is other than running that farming activity.* ... Where you actually sleep is not important. ... If your focus is elsewhere and you delegate ... I think you’re absentee“ (AO-Ci-T12). A NFC director claimed “I see residency as a separate issue to being absent. ... [We are] non-domicile [but] actively involved” (AO-NFC-211).

The more common view, shared by 43% of informants (N=61), was that an AO was a non-resident that “*gets someone else to do the work* [CSH-T13] or is “*not intimately involved in the decision making process*” (AO-FC-29). Among these informants were 13% of informants who raised ‘frequency of visits’ as a criterion: “[an AO] does not live on the property and does not regularly visit” (AO-FC-11). A non-local FC raised ‘frequency of communication’ with FMs as a criterion. He did not identify as an AO because “I’m in touch with them all the time. ... You’re probably closer to the farm than the farmer that’s on the farm because he’s inside his boundary gate. ... A lot of farmers don’t see what’s happening” (AO-FC-27).

Given the emphasis on on-property involvement, 66% of informants (N=61) claimed local town-based farmers were not AOs: “I could list 20 straight away. ... There’s probably not a house on the property or it’s an old homestead that’s not fit for living. Or ... that person is ... semi-retired ... [or has] off-farm work” (AO-TSH-115).
Others distinguished between local town-based farmers that worked on-property full-time or part-time: “An absentee landowner/manager is someone who is unable to travel to the property daily to undertake required operations/activities” (KI-AB-12) and “I’m here every day so, no, I wouldn’t class myself as an absentee” (AO-TSHF-23).

Ten percent of informants defined an AO as “someone who’s walked off and left his farm and there’s no-one looking after or running it” (FM-AGG-212). This criteria caused several informants to refer to National Parks as being AO: “They talk about National Parks taking over, well, … that’s the ultimate in absentee landlords” (AL-15). These views indicate variations in perception as to what level of on-property involvement constituted an AO.

Revisiting the definition

For 97% of informants (N=61), a landowner’s residency status was key to defining an AO. Fifty-four percent of informants conflated residency with location of primary residence and/or level of on-property involvement but 43% of informants agreed with a definition of AL based on non-residency. For instance, a town-based cropper reported “I spend every waking hour thinking about the property. I work there every day, but I’d still class myself as an absentee landowner” (AO-TLSHF-26). A stock and station agent concurred: “In the livestock industry, it’s absolutely critical that there’s someone on-site at all times. Accidents happen. Gates get left open, fences get knocked down … water … various scenarios” (KI-SS-23).

These findings supported the proposition that different perceptions of absentee landownership incorporate the concept that the landowner does not reside on all or some of the land owned. Given variations in perception regarding defining an AO in terms of distance from the property or level of on-property involvement, and that these criteria exclude farm-based FCs, and local town-based farmers, FCs, NFCs and aggregated structures, a definition based on the landowner’s primary residence was retained, but broadened to
include individual and corporate AOs and other socio-cultural contexts (Powelson, 1988; Oles, 1999; Jian-Ming, 2001, Mbonile, 2003). Consequently, the definition employed in the Lachlan research was an AO is an individual or corporate entity whose primary residence is not located on the land they own, ownership and residency determined by socio-cultural context. An agronomist reflected “I like the fact that you’re exploring the various levels of absenteeism ... the whole spectrum” (KI-AG-112). The spectrum was clarified in a theoretically-informed relational typology.

**A relational typology of landownership**

Before presenting the relational typology for classifying historical and contemporary international types of landowners, three field work inspired refinements of the dimensions ownership structure and primary purpose need explaining. These refinements relate to aggregated ownership and distinguishing between hobby farmers, lifestyle property owners (LPOs) and commercial operators.

**Aggregated ownership**

In the Lachlan, investment companies and wholly-owned subsidiaries of multinationals owned multiple properties for mining or agriculture, both types of landowning entities relying on outside capital. On the first field trip, a FMC director and a real estate agent observed:

> If you talk about modes ... there’s what you might call aggregated ownership where it’s just part of the investment vehicle and the owners ... are really only interested in it from a P and L point of view. ... Then you’ve got your different types of aggregated ownership, ranging from public listed stuff through to various unlisted types and I think the least suitable for agriculture is listed because of the need to report to shareholders every year (FMC-11).
Ninety percent of my business last year [2008] was to ... corporate operations ... using ... overseas investment money: ... superannuation funds, investment groups ... managed investment funds. ... They have Australian directors, Australian company boards, but their funds are coming from elsewhere (KI-REFM-14).

Two investment companies had “shareholders [with] the capacity to draw on funds from a number of different sectors. ... [Interviewer: banking, superannuation, managed investments?] Yep, it will all end up into an investment vehicle ... like we run” (AO-AGG-12). These insights influenced the creation of an ownership structure cell for ‘aggregated structures’ for all cases where the landowner is not the owner of capital. This allows for an expansion of empirical types, including creditors that hold land title and control on-property practices and outcomes but keep the indebted landowner as a tenant or FM (Butlin, 1950; Wells, 1989).

Indigenous aggregated ownership

Most contemporary Australian Aboriginal landowners have an incorporated ownership structure. After fieldwork generated the label ‘aggregated’, Aboriginal incorporated landowners were classified ‘indigenous aggregated’, as they had qualitative differences to other aggregated structures. In the Lachlan, there are two sub-types of indigenous aggregated ownership structures. One sub-type included local Aboriginal land councils and incorporations that relied on a government grant of Crown land, a Commonwealth entity to purchase and divest land, or a state entity to gain native title through the courts. Any capital for infrastructure or operations came from government authorities or philanthropic organisations. These entities relied on outside capital, but unlike other aggregated structures, they were not in a position to gather investors or borrow capital through normal channels.

Another sub-type was represented by two non-local Aboriginal incorporated landowners in the Lachlan research: a Commonwealth land fund and state land council. These AOs have their own capital, this being generated from an
investment portfolio, the principal having been established by the government. But these AOs were classified ‘aggregated’ as traditional owners contested landownershp. In one case, the property had not been divested to the local Aboriginal organisation as was originally planned (AO-A-T4), a traditional owner reporting: “We ran the property from 1983 to 1996. ... The property supported one manager and some traineeships. ... [Then] we were told, ‘You can’t manage your [housing] properties, you can’t manage your land’ so they took it all off us” (AO-A-T15). In another case, traditional owners were instrumental in having a regional Aboriginal land council gain land title. A traditional owner, a waged FM, one full-time and two casual Aboriginal workers lived and worked on the property in 1991–92:

Oats and wheat ... We contracted that out. ... We put up ... six new silos, we filled them and we sold a certain percentage. ... We bought cattle. ... [We] clean[ed] up the rough sheep ... and purchased a new line of sheep and got the breeding program going. ... We fenced off ... the front ... for cropping and put ... tree lines [in. It was all] funded through the region[al land council]. ... It was our dream to make it something to be really proud of (FM-A-34).

A past CEO/chairperson of the local Aboriginal land council confirmed “they was [sic] doing very, very well. ... They had a good little team” (AO-A-15). Conflict arose when a state Aboriginal AO’s regional representative “milked the silos [and] a lot of the stock. ... That’s where we started to disagree because we wouldn’t ... let him take it. He had to buy it” (FM-A-34). The state Aboriginal AO sent the representative as part of:

an assessment team ... to come down and do an audit. ... They came out with an agenda. ... The ... chairperson said, ‘Sack him’. ... We had 48 hours to get off the place. ... We had several meetings [with the regional land council]. ... The board ... spent a lot of money on solicitors and barristers. ... We fought hard. ... We said to the people, ‘... we’re losing our land here. ...’ [but] the state ... took over. ... That people from ... out of our country ... can just ... rip it from under you. It was heartbreaking (FM-A-34).

These complex webs of ownership led to all Aboriginal corporate landowners being classified as ‘indigenous aggregated’.
Defining a hobby farmer

Literature often fails to distinguish between lifestyle property owners and hobby farmers (Aslin, 2006). Fieldwork distinguished lifestyle property owners as those who do not generate any income from agriculture, in contrast to hobby farmers who attempt to do so. It was then necessary to distinguish a hobby farmer from other commercial operators. This is more difficult, given that if one classifies farms according to area or net returns, most contemporary farm businesses could be considered hobby farms (Sengupta and Osgood, 2003).

The Australian Tax Office claims a commercial producer demonstrates regular non-recreational activity that is conducted in a manner consistent with other industry practitioners and includes record keeping. The operator has appropriate knowledge and skills and there is a genuine belief profit will be generated (Taxpayers Australian Inc., 2011). In the Lachlan research, two couples identified as hobby farmers although they met the aforementioned criteria, reporting “it is a hobby but it’s also meant to be a business”. However, their primary professions were outside farming and they did not identify as farmers. Both couples had land sizes considered small in scale for their on-farm enterprises of wheat and livestock. One concluded, “a hobby farm is [not] big enough to sustain … a family. It’s a part time enterprise”. Yet this alone is not enough to define a hobby farmer, given an estimated 45% of all Australian farms generate about 30% of their income off-farm (Carroll, 2005). For on-property work, one couple share-farmed and the other contracted a neighbour part-time. In contrast, all individuals that owned properties used for commercial agriculture employed a full-time FM, share-farmed or leased out. Consequently, to be classified a hobby farmer an informant had to satisfy the following four criteria:

1. The individual does not identify as a farmer by occupation.
2. The property is relatively small in scale for the on-property enterprise/s.
3. The landowner does not employ any full-time labour.
4. On-farm income is in the low range and a minor proportion of total net income (Mues and Rodriguez, 2007; Ashby, 2011).
Four typology dimensions

Table 5 classifies historical and contemporary international landowners in a field work-refined typology using the scaled dimensions of ownership structure and primary purpose. For ownership structure, six cells arranged from most-to-least landowner autonomy are: individual/family, FC, NFC, aggregated, indigenous aggregated and state aggregated, where ‘aggregated’ refers to all structures with separate owners of capital and land. State structures are one of three forms of aggregated structures as a state authority, company or collective can involve multiple understandings of ownership (Benda-Beckmann et al., 2006), whilst capital is sourced from outside the landowning entity (i.e. through taxation). ‘Family corporate’ includes traditional lineage corporate ownership as well as modern family trusts and corporations. Within ownership structure, landowners with a farming background are distinguished from those without (Petzelka et al., 2013), and vertically integrated structures (Ville and Merrett, 2000) are distinguished from those whose principal business is unrelated to agriculture (Burch and Lawrence, 2009), as these distinctions could impact knowledge, outcomes and commitment. In Table 5, the generic type can be expanded. For example, ‘elite landowner’ includes royalty, aristocracy, military commander, political leader or official.

Within the dimension, primary purpose, six cells are arranged according to the landowner’s autonomy based on commercial potential over time, given capital is correlated with the ability to set agendas, create opportunities and make choices (Lukes, 2009; Shucksmith, 2012). The six cells are mining/infrastructure (Rasmussen, 1994); commercial agriculture/harvesting (Kollmorgen and Simonett, 1965); subsistence agriculture/harvesting (Oles, 1999; Suryanata, 1996); hobby; lifestyle (Aslin et al., 2004; Petzelka et al., 2013) and conservation (Vidal, 2008). Ranking empirical cases highlighted the need for typology flexibility, hence the two-way arrows along the dimension of primary purpose. For example, conservation (cultural and/or environmental) may be highly commercial if part of an eco-tourism venture.
Table 6 shows the scaled dimensions of local/non-local and on-property management and labour. The six cells for local/non-local include three local cells: resident on all property; local farm-based (resident on some property and non-resident on other property) and local town-based. The three non-local cells are: non-local farm-based; non-local urban-based and foreign (outside country). The local/non-local dimension can also be simplified. An AO can be classified local or non-local (i.e. residing in or outside a geographic or politically defined region). This simplification was employed when investigating extent of AL in 2009 (Chapter 5).

For on-property management and labour the first three cells relate to self-operators: self operator (nil, part-time, full-time); self operator with majority family labour and self operator with majority non-family waged labour. The next three cells relate to non-self operators: non-self operator with no other full-time labour; non-self operator with full-time labour (one or more full-time FM) and non-self operator with tenants (single lessee/renter/tender or multiple renters/share-farmers).

Depending on research purpose, cases can be ranked within a cell according to the level of autonomy possessed by the landowner or farm operator. For example, landowners who share farm can be ranked according to the landowner’s or share-farmer’s inputs and returns. If research is examining impacts of a landowner’s on-property involvement across management arrangements, cases can be ranked across cells, as indicated by the two way arrow.
Table 5: Classification of landowners using ownership structure and primary purpose

<table>
<thead>
<tr>
<th>Primary purpose</th>
<th>Mining and infrastructure</th>
<th>Commercial Agriculture / Harvesting</th>
<th>Hobby farming</th>
<th>Subsistent Agriculture / Harvesting</th>
<th>Lifestyle</th>
<th>Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual-Family</td>
<td>Investor</td>
<td>Elite landowner; Farmer; MPO; Non-farmer (e.g. investor)</td>
<td>Retired farmer; Non-farmer</td>
<td>Elite landowner; Farmer; Non-farmer</td>
<td>Lifestyle property owner</td>
<td>Elite landowner; Farmer; Non-farmer</td>
</tr>
<tr>
<td>Family corporate</td>
<td>Single or multi-purpose FC with or without AG business</td>
<td>Elite family; MPO; Traditional kinship entity (e.g. village) FC with or without AG business;</td>
<td>Traditional kinship entity e.g. village</td>
<td>FC; Traditional kinship entity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-family corporate</td>
<td>Single or multi-purpose NFC, trust, partnership with or without AG business; religious/ charitable org.</td>
<td>Non-kin village; collective; NFC, partnership, trust, with or without AG business; Religious/ charitable org.</td>
<td>Collective</td>
<td>Non-kin village; Collective</td>
<td>Collective</td>
<td>Religious/ charitable/ educational Institution; Conservation trust; NFC</td>
</tr>
<tr>
<td>Aggregated</td>
<td>Collective; multiple levels of ownership (e.g. tax farmers); Public/private multinational with/without AG business; Investment company; State/private</td>
<td></td>
<td>Collective</td>
<td></td>
<td></td>
<td>As for ‘Mining/ infrastructure’</td>
</tr>
<tr>
<td>Indigenous Aggregated</td>
<td>Indigenous corporate (1) With or (2) Without capital</td>
<td>Indigenous corporate (2)</td>
<td>Indigenous corporate (2)</td>
<td>Indigenous corporate (1/2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Aggregated</td>
<td>Historical ‘life’ tenant; State authority or collective; Foreign state authority</td>
<td>Historical ‘life’ tenant</td>
<td></td>
<td>State authority</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes for Table 5: MPO: Multiple property owner AG: Agriculture
Table 6: Scaled dimensions of *local/non-local* and *on-property management and labour*

<table>
<thead>
<tr>
<th>R</th>
<th>Local/Non-local</th>
<th>On-property management and labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Resident on all property</td>
<td>Self-operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Nil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Full-time</td>
</tr>
<tr>
<td>2</td>
<td>Local farm-based, resident/absentee owner</td>
<td>Self-operator with family labour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2+ full-time family members comprising majority of all labour)</td>
</tr>
<tr>
<td>3</td>
<td>Local town-based</td>
<td>Self-operator with non-family labour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1+ full-time non-family workers)</td>
</tr>
<tr>
<td>4</td>
<td>Non-local farm-based, resident/absentee owner</td>
<td>Non-self operator with no full-time labour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part-time labour (waged, contract, reciprocity)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Share-farmer</td>
</tr>
<tr>
<td>5</td>
<td>Non-local urban-based</td>
<td>Non-self operator with full-time labour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One full-time FM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- At least one FM and hired labour;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- FMC</td>
</tr>
<tr>
<td>6</td>
<td>Outside country</td>
<td>Non-self operator with tenants</td>
</tr>
<tr>
<td></td>
<td>Percentage of ownership &amp; country or region of origin</td>
<td>- Single lessee/rentee/tenderer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Multiple renters/share-farmers</td>
</tr>
</tbody>
</table>

Table 7 classifies 28 AOs using these two dimensions and Table 8 shows the classification of 28 AOs using all four dimensions.
Table 7: Classification of 28 AOs using local/non-local and on-property management and labour

<table>
<thead>
<tr>
<th>Local/Non-local</th>
<th>Self operator With no other f/t labour</th>
<th>Self operator with f/t family labour</th>
<th>Self operator with f/t non family labour</th>
<th>Non self operator and no f/t labour</th>
<th>Non self operator with f/t waged labour</th>
<th>Non self operator with tenants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local farm-based</td>
<td></td>
<td>1 farm-based FC</td>
<td>1 farm-based FC (2 FMs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local town-based</td>
<td>1 farmer (p/t)</td>
<td>1 hobby farmer (share-farmer)</td>
<td>1 FC (FM)</td>
<td>1 NFC (FM)</td>
<td>1 Aboriginal (lease)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 farmers (f/t)</td>
<td></td>
<td>1 investment company (FM and labour)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-local farm based</td>
<td>2 city-based lifestyle property owners (p/t)</td>
<td>1 farm-based FC</td>
<td>1 city-based hobby farmer (contractor); 1 NFC (p/t FM)</td>
<td>1 investment company; 2 FCs (multiple FMs &amp; labour); 1 Aboriginal (FMC); 1 city-based individual (FMC)</td>
<td>2 city-based individuals (lease)</td>
<td></td>
</tr>
<tr>
<td>Non-local town based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Aboriginal (lease)</td>
<td></td>
</tr>
<tr>
<td>Outside country</td>
<td></td>
<td>1 NFC (Multiple FMs)</td>
<td>1 Aboriginal (lease)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note on Table 7: **Bolded** tenancies are additional arrangements
Table 8: Classification of 28 AOs using four typology dimensions

<table>
<thead>
<tr>
<th>Ownership structure / primary purpose</th>
<th>Local/ Non-local</th>
<th>On-property management and labour</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mining/Infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregated - public multinational (2)</td>
<td>Outside country</td>
<td>FM &amp; Cs; &amp; lease out</td>
</tr>
<tr>
<td><strong>Commercial agriculture</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual/family (farmer) (3)</td>
<td>Local town</td>
<td>Self operator full-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self operator part-time</td>
</tr>
<tr>
<td>Individual/family (3)</td>
<td>Non-local city</td>
<td>FMC, multiple FMs &amp; Cs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lease out</td>
</tr>
<tr>
<td>FC (3)</td>
<td>Local farm-based</td>
<td>Self operator with F/T family &amp; non-family labour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self op. with multiple FMs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self op. with F/T family labour &amp; Cs</td>
</tr>
<tr>
<td>Vertically integrated FC (3)</td>
<td>Non-local city</td>
<td>Multiple FMs, F/T labour, C</td>
</tr>
<tr>
<td></td>
<td>Local town</td>
<td>Multiple FMs &amp; F/T labour</td>
</tr>
<tr>
<td>Vertically integrated NFC (2)</td>
<td>Non-local city</td>
<td>FM &amp; Cs</td>
</tr>
<tr>
<td></td>
<td>Local town</td>
<td>FM &amp; Cs</td>
</tr>
<tr>
<td>NFC (2)</td>
<td>Outside country</td>
<td>FMC, multiple FMs, F/T labour &amp; Cs; &amp; lease out</td>
</tr>
<tr>
<td></td>
<td>Non-local city</td>
<td>Multiple FMs</td>
</tr>
<tr>
<td>Aggregated - investment company (2)</td>
<td>Non-local city</td>
<td>FM &amp; full-time labour</td>
</tr>
<tr>
<td></td>
<td>Local town</td>
<td>Multiple FMs &amp; f/t labour</td>
</tr>
<tr>
<td>Aggregated - subsidary of public multinational (1)</td>
<td>Outside country</td>
<td>FM, full-time labour &amp; Cs</td>
</tr>
<tr>
<td>Indigenous agg. with capital (2) and Indigenous - no capital (1)</td>
<td>Non-local city (2) and local town (1)</td>
<td>FMC, FM &amp; f/t labour &amp; Cs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lease out (2)</td>
</tr>
<tr>
<td><strong>Hobby</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual/family (2)</td>
<td>Local town</td>
<td>Share farm</td>
</tr>
<tr>
<td></td>
<td>Non-local city</td>
<td>Contractor</td>
</tr>
<tr>
<td><strong>Lifestyle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual/family (2)</td>
<td>Non-local city</td>
<td>Self operator part-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self operator part-time</td>
</tr>
</tbody>
</table>
The distribution of 28 AOs is illustrated in Figures 12–15.

**Figure 12: Ownership structures**

**Figure 13: Primary purpose for owning rural land**

**Figure 14: Primary on-property management arrangement**
If the typology was to have real world application, it was necessary to test the theoretically derived dimensions in the field, as empirical findings expose variations theory cannot predict (Whatmore et al., 1987b). This section describes how the typology was tested.

**Confirmation of local/non-local and on-property management and labour.**

The dimensions of local/non-local and on-property management and labour reflected informant critiques of a definition of AL based on non-residency. Informant perceptions validated their inclusion in a typology of landownership. These dimensions also reflected the perception that there are degrees of AL: “What grades of absentee are you talking about?” (FM-AGG-212). As most informants identified foreign-based entities as AO and claimed local town-based farmers were not AO, these cases could be seen at polar ends of the continuum.

**Classifying 28 absentee landowners**

As shown in Table 8, in the Lachlan research, classifying 28 AOs using *primary purpose* resulted in 22 AOs falling into the *primary purpose* of commercial
agriculture, two into mining, two into hobby farming and two into lifestyle. Cases were more spread using the other three dimensions, as shown in Table 7 and Table 8. Most AOs were relatively simple to classify, which validated the typology. However, real world complexities required some further decisions on my part. For example, two AOs operated through personal superannuation (pension) funds. One owned 53 ha and made all decisions (AO-LP-T4). Another was based overseas and employed three Sydney-based directors on the board of the fund. The fund owned 7,449 ha inside the Lachlan and 23,000 ha outside (AO-NFC-FMT10). Hence, one ownership structure was classified ‘individual’ and the other, an overseas NFC, as the ultimate decision maker was based overseas and, unlike some pension funds, the owner of capital was the owner of land. Another AO was initially classified a farm-based FC. However, the following caused a rethink of the label:

*Primary production has been our main enterprise but ... we’re diversifying. ... We’ve ... got a fertiliser business. ... We also supply wood shavings to the chicken farms. ... We’re ... into ... urban development and setting up shopping centres. ... Whether in agriculture or something else [the company] will continue in some form (AO-FC-11).*

The director did not identify as a farmer. As the company shared more characteristics with another non-local, vertically integrated FC than other farm-based FCs, it was classified a non-local FC.

Nuances of primary purpose included a multinational having Australian and international mining interests, but owning land in the Lachlan for the primary purpose of commercial agriculture. Another two multinationals owned land in the Lachlan for the primary purpose of mining but also owned rural properties surrounding their mine site that provided a buffer between mining operations and neighbouring landowners. This land was used for agriculture and “possible mining expansion and conservation activities” (AO-AGG-13). Thus, three multinationals
represented two AO types based on their *primary purpose* of mining or commercial agriculture.

Complexities regarding the *local/non-local* dimension were two NFCs classified ‘local’ or ‘within the state’ because of the locality of one member of the *ownership structure*, despite having an overseas partner. Similarly, a managing director of an investment company was based in a local town despite other directors being interstate and the company relying on foreign investors.

Further complexities involved an AO having different *on-property management and labour* arrangements on different properties. For instance, as shown in Table 7 and Table 8, two mining multinationals and an overseas NFC leased out some land, and had a FM or foundation manage other land.

**Key attributes that varied between AO type**

Further confirming the validity of the four typology dimensions was how four key AO attributes varied with AO types. These attributes are: members within an ownership structure; off farm assets and capital; reliance on a farm operator and level of on-property involvement. These attributes were found to critically impact decisions, practices and outcomes, as will be explored in Chapter 8.

**Members within an ownership structure**

Four AO types involved an autonomous individual or couple who were life partners. These AO types were were town-based farmers, individual commercial operators, hobby farmers and LPOs. Eight AO types involved multiple members in the ownership structure that were not life partners. Of these, two AO types involved multiple family members, these being FCs and farm-based FCs. Six AO types involved multiple unrelated individuals. Among these were three multinationals and a NFC, whose ultimate decisions were made overseas (i.e. 14% of AOs (N=28). As already described, another 14% of AOs had foreign and Australian investors or
partners. For the remaining 71% of AOs (N=28), all decisions were made in Australia.

Town-based farmers operated as autonomous individuals within nominal partnerships: “I would make 80% of the decisions as far as farming practices go. ... [But] we don’t buy machinery without talking” (AO-TSHF-26). A farm-based FC also operated as an autonomous individual: “[My sister’s] involved but ... she’s a silent partner” (AO-FC-29). However, city-based individuals (N=5), whether running a commercial operation, hobby farm or lifestyle property, tended to operate as a couple. An example was a hobby farmer. The female partner (AO-HF-32a) had grown up on a farm. The couple reported:

It’s a joint enterprise (AO-HF-32b). ... [In] my parents’ generation, it was my father who called all the shots and now my mother’s ... forever saying to me, ‘Darling, ... know ... exactly what’s going on. ... I had no idea (AO-HF-32a). ... She’s the boss (AO-HF-32b). ... I disagree ... In the end, it’s your decision. ... because you’re the one earning most of the income (AO-HF-32a).

Sixty-six percent of FCs (N=6) had multiple family members, often including more than one generation, that were actively involved in operations. One farm-based FC had four board members representing three families over two generations (AO-FC-24). A non-local vertically integrated FC had five board members and eight other family members working for the company, these family members spanning four generations (AO-FC-11). In contrast, the owner of another non-local vertically integrated FC was an autonomous decision maker (AO-FC-27).

Six AO types involved unrelated individuals or/and companies within the ownership structure. These structures varied in interpersonal relationships. For example, two NFC directors reported:

Business brought us together. ... We’re also very close friends. ... We do it in collaboration and discussion. ... [Though] my colleague from Texas [is] more attune to the cattle ... husbandry side, my responsibility is more ... overseeing the finance[es] (AO-NFC-211).
We don’t mix socially, but ... we respect each other’s expertise. ... We have our debates in ... directors’ meetings ... four times a year. ... The rest of my business life, I had partners but never have I had to quite debate issues ... like [this]. ... It’s been a learning curve and ... positive. ... I’m a strong believer in a team effort (AO-S-37).

The three forms of aggregated structure (non-indigenous, indigenous and state) involved the most individuals. For instance, three Aboriginal AOs had boards of five to nine, with the majority having no farming experience. A local AO found it hard to attract people, especially young people, for its five voluntary positions (AO-A-22). A state AO was run by nine elected and well paid Aboriginal regional councillors serving four year terms, a chair and deputy-chair elected every two years. The board employed a CEO and staff. The Commonwealth AO had seven paid board members, five being Aboriginal, two having farming backgrounds (AO-A-T4). All these board members were appointed by the Minister of Aboriginal Affairs.

The Australian-based landowning board of five aggregated AOs and an overseas NFC’s superannuation fund involved three to six individuals. An investment company’s board of six: “is there to provide governance ... and to ensure that the management is doing things that the shareholders would expect” (AO-AGG-T9). Investors did not determine property purchase or sale, and did not have input into how AOL was managed, unlike the overseas headquarters of multinationals. For the other investment company, a shareholder sat on the landowning board and had input into the business plan (AO-AGG-12). In contrast, three multinationals’ overseas head offices made critical decisions. For example:

My boss had been encouraging the company to buy more land in Australia. They had already invested in NSW in 2004. ... It was all of a sudden. ... In 2008 ... [they provided] a budget for land that we could actually purchase and ... between February and ... May we bought twelve properties ... [The leasing of another] thirteen [properties was the decision of] head office in Australia (FM-AGG-12).

For two mining multinationals the local office answered to a regional office and an overseas head office. For one, a foundation ran the rural properties. It had a board
of five (a company representative, a scientist, a local landowner and two conservationists). This board liaised with two company representatives (FM-AGG-13) and “We communicate with ... the Perth Regional HO ... but they do not play an active [role]. ... The parent company and regional head office ... may take a closer interest as ... carbon related initiatives ... come into play” (AO-AGG-13). Decision processes, including communication protocols, and their impacts are further explored in Chapter 8.

Off-farm assets and capital
Nine AO types had off-farm assets and off-farm income not derived from agriculture. For instance, for 71% of AOs (N=28), the absentee-owned property in the Lachlan was less than 30% of their total asset base. Exceptions were town-based farmers, farm-based FCs and a local Aboriginal AO. Other exceptions were investment companies, although these had access to off-farm capital not derived from agriculture.

Five aggregated AOs had access to the most off-farm capital, and a local Aboriginal AO and city investor had access to the least. Four aggregated AOs and one overseas NFC had the largest asset bases (in excess of AU$1+ billion). Their Lachlan property comprised less than 2% of their asset base, despite owning 7,200–20,000 ha in the Lachlan alone. The exception was one investment company, whose 20,000 ha was 90+% of the landowner’s asset base although this excluded investors’ assets. All five aggregated AOs and an overseas NFC had access to the most off-farm capital (AU$1+ billion in 2009–2010).

Two non-local FCs had the next largest asset bases, these being about AU$250 million, with net income below $50 million, although one FC owned the largest area in the Lachlan (32,000 ha), and another 51,000 ha outside the Lachlan but inside Australia. The other FC owned 10,117 ha in the Lachlan and extensive rural land outside the Lachlan. AOL in the Lachlan was 5% –13% of their asset base.
Two non-local NFCs had asset bases less than $110 million, and incomes less than AU$2 million. Their properties of 5,208 ha and 5,261 ha were between 2% – 10% of their asset base. The local FC and NFC were considerably smaller in asset base (under $10 million) with an off-farm income of less than $2 million. Their properties of 1,200 ha and 3,238 ha were about 20% of their asset base.

Three farm-based FCs had asset bases of AU$12 – $36 million. Their net income was less than $300,000, despite all three deriving income from various sources (a contracting business; a quarry and other investments; and off-farm consultancy work). AOL ranged from 289–1700 ha, this comprising 5% – 60% of their asset base.

Two non-local Aboriginal AOs had asset bases in excess of AU$50 million, the Commonwealth AO in excess of AU$1 billion, with an annual net income from non-agricultural sources of $45 million. For these two AOs, their Lachlan property (1,070 ha and 9,890 ha) was less than 5% of their asset base, both owning extensive property outside the Lachlan. In contrast, the local Aboriginal AO’s annual income from leasing 689 ha was AU$17,000 in 2010, and the property was 90+ % of its asset base.

Three city-based individuals whose properties were used for commercial agriculture varied considerably in asset base and off-farm capital. Asset base ranged from less than AU$2 million up to AU$20+ million. Income ranged from less than $50,000 up to $2 million. Their AO Lachlan property (260–1300 ha) was 15% – 90+% of their asset base.

For a city-based hobby farmer and two LPOs, their 50–117 ha properties were 10% – 22% of their asset base, whereas the property of a local hobby farmer was 90+% of the partnership’s asset base. Off-farm income for these three AOs ranged between $100,000 and $400,000.

After the local Aboriginal AO and one city investor, the least financial were three town-based farmers, two having a total net income of less than $50,000 in 2009–2010. All three had assets less than $2 million, their property being
30% – 75% of their total assets. Their 210–486 ha properties were larger than that of a city-based hobby farmer and two LPOs, but less in scale than farm-based FCs and other corporates.

Access to off-farm capital contributed to five aggregated AOs, two NFCs and one non-local FC purchasing two to thirteen properties within a few months or years since 2002. In addition, access to off-farm capital meant 79% of AOs (N=28) across 10 AO types were not short of capital for infrastructure and operations, exceptions being Aboriginal AOs, town-based farmers and some city-based individuals.

**Reliance on a farm operator**

Two AO types were self-operators, these being LPOs and town-based farmers. Farm-based FCs self-operated and employed non-family waged labour. AOs in nine AO types were non-operators relying on one or more farm operators. Two town-based farmers were farm operators for other AOs. The tenure and management arrangements were as follows.

- Fifteen AOs (N=28) across type had a lease arrangement, four AOs leasing out their one and only property, including two Aboriginal AOs and two city-based individuals.
- 1 AO share farmed AOL: a local hobby farmer,
- 3 AOs share farmed other AOL: a farm-based FC and two town-based farmers.
- Six AOs agisted livestock (individuals, FCs and NFCs).
- A non-local NFC had off-take agreements.
- Fifteen AOs employed one or more FMs.
  - One farm-based FC employed two resident overseers.
  - Six AOs (4 aggregated AOs, a local FC and NFC) employed a full-time FM.
  - Four AOs (an investment company, two non-local FCs and a non-local NFC) employed more than one full-time FMs and additional full-time waged labour.
Three AOs (an overseas NFC, state Aboriginal AO and city investor) operated through a FMC, and this FMC employed an area FM and resident FM/overseer/s and full-time waged labour.

One FMC/AO employed a FM that worked over several properties.

- One city-based hobby farmer employed a neighbour as a part-time contractor.

Thus, AO-farm operator relations are pivotal for most AO types, as will be explored in Chapter 8.

**On property involvement**

On property involvement included frequency and length of visits and nature of on-property activities. These were linked to the local/non-local dimension and an AO’s farming experience.

**Local/non-local**

An AO’s distance from their property was somewhat mitigated as communication was often “a phone call or … email” (AO-NFC-211), and for 81% of AOs that employed a farm operator (N=16) the AO or a representative communicated with their FM/farm operator at least once a week. Forty-three percent of AOs (N=28) visited the property at least once a fortnight, although 68% of all AOs stayed less than a day.

Ninety percent of AOs located more than 500 kilometres from the property (N=10) had the least on-property involvement, 70% visiting for a few hours twice a year or less, these being three multinationals, an investment company, an overseas NFC and two Aboriginal AOs. For example:
The owner makes virtually no decisions. … We’d be in email contact maybe once a fortnight. … Once a year, he spends a week flying around to all his properties, staying half a day on each. He loves coming out and talking with the managers - walking out into a wheat crop … or seeing the ewes lambing. … He has an incredible understanding of each property. He is highly intelligent, self made, and is interested … but lets us make the decisions. … He’s the perfect absentee owner (FM-FMC-T10).

Staff from one multinational’s overseas head office had never visited the properties, while the Australian managing director based in another state visited twice a year (FM-AGG-12). For a mining multinational “global headquarters staff have visited once or twice a year, different staff each time” (FM-AGG-13). An investment company’s chief executive visited properties once or twice a year (AO-AGG-T9), lower management levels visiting up to “seven times a year” (FM-AGG-35). Over a three year period “We’ve had representatives for our shareholders visit. … We’ve actually had [two] direct shareholders visit the properties” (AO-AGG-12). Investor visits were “to see whether they want to invest” (FM-AGG-35) and “to meet people and … get a bit of a sense of how the business is going” (AO-AGG-T9).

Eight AOs based 235–430 kilometres from the property had more involvement, with 66% of city-based AOs (N=6) making the four hour 300+ kilometre drive for a long weekend every three to four weeks. In all cases, they enjoyed outdoor physical labour while staying on their property but their city-based children and friends visited infrequently. Two had less involvement: a city investor due to life circumstances (AO-CL-39), and a NFC wishing to sell (AO-FMC-21).

Ten local AOs had most involvement. For instance, the managing director of a local town-based investment company visited properties every fortnight:

Twenty percent of my time would be finance and administration work; … 20% would be working with the guys on-farm; … 20% … would be marketing; … 20% is probably with the board and the strategic direction and reporting and … 20% … is probably … development. … The real tool … is my ability to … work with people (AO-AGG-12).
Farm-based FCs and a local hobby farmer visited the absentee-owned property once a week or once a fortnight to conduct on-property tasks, while one of three family members in a local FC visited daily. Full-time town-based farmers spent most time on their AOL, with critical on-farm roles taking six to 22 hours a day, six to seven days a week. Children of 70% of local AOs (N=10) visited the property regularly to work or for recreation. On-property involvement impacted AO-farm operator relations and other decisions, as will be shown in Chapter 8.

**Farming experience**

Impacting on-property involvement was the AO’s level of farming experience. Capital investors in aggregated structures and LPOs had the least experience. Those with most experience were town-based farmers and farm-based FCs. These AO types were among 20% of AO informants (N=35) that identified as farmers (this cohort including a chief executive of an investment company). As a result of their farming background and experience, there were three exceptions to distance determining on-property involvement: two non-local vertically integrated FCs and a NFC syndicate, the last with two interstate members who visited every few months for several weeks at a time, also conducting on-farm maintenance and harvesting: “I love that type of work, don’t mind it at all” (AO-S-37).

Seventy-five percent of AOs (N=28) across 11 AO types had at least one member of the ownership structure having grown up on a farm. Exceptions were two mining multinationals, an Aboriginal AO and LPO. Forty percent of AO informants (N=35) had tertiary qualifications in agriculture or conservation and 37% of AO informants ran an agriculture-related business or worked in a related field. Consequently, 43% of AOs (N=28) wished to apply their off-farm expertise to running a farm business. Yet a farm-based childhood, experience as a jackaroo or running an agriculture-related business, did not necessarily translate into managing a farm efficiently, as observed by an FMC’s area FM:
Running a business outside farming doesn’t mean that they’re going to have a good understanding of what drives a farm business or the values required to be a good custodian of the land. Farming is high risk and needs effective and quick decisions. It is very difficult in a low input, low resource system to be profitable. Or some farms are way overcapitalised in infrastructure and equipment and machinery, but not in areas that necessarily drive profitability. Like there’s not much point growing grass unless you utilise it. [By making poor decisions] they actually end up subsidising the farm with their more profitable businesses outside. [Also] we often have a perception that city-orientated views are more green but often it’s rhetoric. [Then] you’ve got this whole handshake-is-a-contract in the country so you have a conflict of how to manage other providers (FM-FMC-23).

AOs that employed a FM had varying levels of experience in farming. Two city-based investors reported: “I bought a farm in 2000 … [and straight away] got [a FMC] involved. … I knew that I didn’t know a lot of the stuff that was necessary to make a go of this” (AO-CI-T12), and “I’m a lawyer, not a farmer … probably better to leave it to the experts. … I just get the bills” (AO-HF-32b). In contrast, many ex-farmers and FCs with extensive farming experience could have “issues … with handing over responsibility” (FMC-11). A FC’s FM reported “Absentee owners … have far greater influence in their field of expertise. … AO-FC-27 would have far more influence over the livestock … [whereas cropping] he knows very little about. … [He lets me make] … a lot of decisions” (FM-FC-26).

In between these extremes were the managing directors/chief executives of two investment companies and a multinational who owned their own farm/s. For one investment company “At least three of the six board members have substantial agricultural experience” (AO-AGG-T9). For the other:

The chairman of the board has probably 30 years farming experience … and exposure in agriculture, agro-politics, corporate agriculture. The managing director has 15 years in the agriculture industry from agronomy to … rural banking. The other directors … [are] in accounting, finance, infrastructure and … corporate investment (AO-AGG-12).
Other attributes of AOs included in the Lachlan research

Means of purchase and length of absentee ownership

Means of gaining ownership and length of ownership varied. The AOL of four AOs, (a farm-based FC, two town-based farmers and an interstate individual) had been in the family for two or more generations, three having inherited the property. All other property had been purchased on the open market. In 2010, 53% of AOs (N=28) had absentee-owned the property for more than ten years, while 29% had owned the property for less than five years. Four purchasers post-GFC were a multinational, two investment companies and an overseas NFC, although three of these had owned land outside the Lachlan prior to the GFC.

Demographics

Eighty-two percent of AO informants (N=35) were multiple (3+) generation Australian. This demographic appeared dominant in the Lachlan although there were regional variations. In Cowra Shire, some AOs were Lebanese, Italians and Greeks but “few Asians” [KI-RE-110]. Sixty two percent of AO informants (N=35) were partnered with children from that partnership compared to 29% of all young adults (18-34) being married in 2011 (ABS, 2013). This finding for AOs could be the result of a small biased sample or indicate family stability and financial viability were linked to AL. According to several informants, most city investors were couples, though “you get the solitary male at times. ... [Rarely a] female buyer” (KI-RE-110). In the Lachlan research, all couples had two incomes. However, being a member of a local farming family and inheriting property may lead to more single female being AOs, as found in historical trends described in Chapter 6.

The sample of 28 AOs comprised an educated, mature-aged, affluent cohort, with some exceptions. One exception to being well educated was the largest landowner and one of six AO informants (N=35) that attained an intermediate certificate or less. He began work as a drover at the age of 15. Sixty-six percent of AO informants were 50+ years of age. Only 14% of AOs (N=28) had an
annual net income of less than AU$50,000 in 2009–2010. Although all three LPO informants in the Lachlan research had post-graduate qualifications and were relatively affluent, preliminary research revealed less educated, affluent LPOs, including the following case, the informant’s partner an unemployed truck driver:

*In 2002 we bought 30 acres for $55,000 as a security, like an investment, because we’ve rented all our lives in Sydney, not that I want to move there, I’m a coastal strip girl. ... My husband has itchy feet. Some people are living it rough on the subdivisions but nothing like what my family lived like on the outskirts of Sydney.*

That city-based individuals come from diverse backgrounds was confirmed by an AO who subdivided a 600 ha property. Of those who purchased ten or more hectares:

*One of them … breeds horses and … the fellow works on a drilling rig for gas. ... Another fellow is from Wollongong and he’s a fitter and turner. ... Another husband and wife, ... the ... husband is an electrician and they live in the Penrith area. ... There’s ... a single fellow in his early 40’s and he works for mining companies (AO-CI-39).*

A real estate agent observed of city-based purchasers of commercial farms: “*There’s lawyers, doctors, financial institution brokers and also those that … come from the university of the big blue sky. ... [Except] you have to be affluent to buy a property of … over $1 million*” (KI-REFM-14).
Key findings

Definition of an absentee landowner

Forty-three percent of informants (N=61) supported a definition of AL based on non-residency. Major qualifiers were distance from the property and on-property involvement. Informants varied in perceptions about how much involvement qualified a landowner to be an AO while excluding local non-resident landowners would eliminate local town-based farmers, non-farmers, FCs and NFCs. For 97% of informants, non-residency was an underlying theme. Consequently, a definition based on non-residency was retained but refined. The refined definition is that an AO is an individual or corporate entity whose primary residence is not located on the land they own, ownership and residency determined by socio-cultural context. In view of socio-cultural context, a local town-based farmer who travels to their property most days is an AO but a farmer who lives in a village and owns a plot within the jurisdiction of that village is a RO.

Typology

The ability to classify historical and contemporary international types of landowners, as well as 28 AOs interviewed for the Lachlan research in a theory-derived, field work refined relational typology, confirmed that

Types of landowners can be classified in a relational typology based on an entity's ownership structure, primary purpose for owning rural land, distance of the primary residence or headquarters from the property (local/non-local) and on-property management and labour arrangements.

Degrees of absentee ownership are reflected in the local/non-local and on-property management and labour dimensions.
As all four dimensions are based on an underlying continuum of landowner autonomy in decisions and capital, the typology can be expanded to cater for diverse AO types and empirical cases can be ranked across cells for primary purpose and on-property management and labour to cater for real world variations. Ranking empirical cases enables different factors (e.g. access to capital; being an autonomous individual or working in a team; and a landowner’s contribution to one or more tenure arrangements) to be tested for their impacts.

Key attributes that varied between AO types

Four key AO attributes that varied between AO types and impacted decisions, practices and outcomes were the number and nature of members within an ownership structure; off-farm assets and income; reliance on a farm operator and level of on-property involvement. In the Lachlan research, four AO types had individual/life partner ownership structures (town-based farmers and city-based individuals who owned a commercial farm, hobby farm or lifestyle property). Eight AO types featured multiple members within an ownership structure. Of these, two AO types involved multiple family members and six AO types involved non-relatives, with aggregated and Aboriginal aggregated AOs having the most members in an ownership structure.

AOs derived substantial income unrelated to agriculture except for town-based farmers, farm-based FCs and a local Aboriginal AO. Scale of off-farm capital and assets varied, with aggregated structures having the most, followed by non-local FCs and NFCs. Only two AO types were sole self-operators. These were LPOs and town-based farmers. Farm-based FCs relied on additional waged labour. Another nine AO types relied on one or more farm operators or leased out. Otherwise, AO types varied in their on-property involvement according to the local/non-local dimension and farming experience. Investors in aggregated AOs and two non-local Aboriginal AOs had the least on-property involvement and town-based farmers had the most. Non-local FCs and a NFC with members that had farming experience had more involvement than city-based AOs residing closer to the property.
Chapter 5: 2009 extent of absentee landownership in the Lachlan River catchment

“we have this social revolution that nobody’s paid any attention to” (AL-15).

Introduction

This chapter addresses the first component question of Key Question 2: What is the extent of absentee landownership in the Lachlan River catchment? Bland and Cowra Shires are profiled, then findings are presented on the extent of absentee owners (AOs) and absentee-owned land (AOL) in 2009 within the Lachlan Livestock Health and Pest Authority (LHPA) region, and Bland and Cowra Shires.

Figure 16 shows the area covered by each database. In 2009, the Lachlan LHPA database included 6,274 occupiers of properties of ten or more ha. These properties covered 4,035,557 ha, or 48% of the catchment, another 11% of the area covered by the database being towns and properties of less than 10 ha. In Bland Shire, 892 landowners’ properties covered 887,656 ha. In Cowra Shire, 2,435 landowners’ properties covered 238,636 ha (i.e. 27% of the Bland Shire).

Profile of Bland Shire

The red clay and black/grey loam plains of Bland Shire grow the most cereals of any region in NSW. Large properties also produce wool, lambs, pigs, eucalyptus oil and/or timber. The annual mean rainfall is 482 mm and the mean temperature range is between 9.5 and 23.3 degrees Celsius. But for the 6,407 people who live in Bland Shire, these means do not reflect the rainfall and temperature extremes they experience. Half the population reside in West Wyalong, a rail and road hub for freight going between Victoria, NSW and Queensland. Substantial bank buildings and churches are the legacy of the 1890s gold rush whilst West Wyalong’s Chinese restaurants continue a long tradition of Chinese market gardeners and cooks feeding farm labour. Today’s mega supermarkets have yet to grace the town.
Figure 16: Location of Lachlan LHPA, Bland and Cowra Shires within NSW

Figure 17: Map of Bland Shire
Forty kilometres north-east of West Wyalong is Lake Cowal, a 23,310 ha ephemeral lake. Dry between the summer of 2000 until the rains of 2010, in 2002, a western portion of the lake become a goldmine. In 2009, the dry lake bed supported grey skeletons of River Red Gums (*Eucalyptus camaldulensis*), lignum (*Muehlenbeckia florulenta*) and native grasses. In 2010, the lake filled with water, black swans (*Cygnus atratus*), pelicans (*Pelecanus conspicillatus*), wild ducks (different species) and ibis (*Threskiornis molucca*).

On higher ground only remnant woodland survives, this consisting of Black Cypress Pine (*Callistis endlicheri*), Belah (*Casuarina cristata*), Myall (*Acacia pendula*), Wilga (*Geijera parriiflora*), Kurrajong (*Brachychiton populneus*), Bull Oak (*Allocasuarina luehmannii*), Grey Box (*E. woollsiana*), Bimble Box (*E. populnea*) and Fuzzy Box (*E. conica*). Along the ridges – a metaphor in these parts – are Ironbark (*E. sideroxylon*) and Dwyers Red Gum (*E. dwyeri*). There are no national parks. State forests cover 728.5 ha, the Department of Lands owning another 359.5 ha (Bland Shire Council database, 2009).
Figure 19: Lake Cowal, October, 2009

Figure 20: Entrance to Timberscombe, December, 2010
In October 2009, the shire was in the worst drought in living memory with paddock after semi bare paddock of parched wheat and grey sheep moribund in cracked dams. After the rains of 2010, the sheep were barely visible in lush green pasture. Everyone hoped for bumper crops (Field notes, 5 July, 2010). But the rains did not stop. By December, water flowed over paddock and road. Bland farmers were philosophical: ‘That’s the way it is’ and ‘We’ve seen it all before’. You had to be resilient to survive this country (Field notes, 12 December, 2010).

**Profile of Cowra Shire**

Cowra Shire covers one third the area of Bland Shire but has twice the population - 13,000 - of whom 9,500 reside in the town of Cowra. The shire’s varied topography on the west of the Great Dividing Range includes tablelands, slopes and plains of basalt, granite and metasediments. An average of 630 mm of rainfall falls annually, with the mean temperature ranging between 3.6 and 31 degrees Celsius. The Lachlan River is joined by the Belubula and Abercrombie Rivers. Remnant woodland include Black Cypress Pine (*Callistis endlicheri*), Red Stringbark (*Eucalyptus macrorhynca*), Ironbark (*E. sideroxylon*), White Box (*E. albens*), Grey Box (*E. woollsiana*), Yellow Box (*E. melliodora*), River Red Gums (*E. camaldulensis*) and River Oak (*Casuarina Cunninghamiana*).

In the drought of 2009, coming from the west, I could smell moisture. In Cowra Shire, there were more trees and substantial brick houses compared to the fibro cottages on the vast treeless expanses further west. Within 30 kilometres of Cowra were orchards and vineyards. The town of Cowra was bigger, busier and less quaint than other towns on my circuit but it has one outstanding landmark: the Japanese Gardens, a joint Japanese-Australian venture commemorating the escape of 359 Japanese from the Cowra prisoner-of-war camp in 1944 (Field notes, October, 2009).
Figure 21: Map of Cowra Shire

Figure 22: Tablelands in Cowra Shire, July, 2010
In 2009, many properties were on the market, in part the result of a collapsed wine industry. Real estate windows displayed advertisements featuring mouth watering phrases: ‘*Strong fertile red and chocolate brown soils*’ and ‘*self-watering creek flats*’ despite all irrigation having been stopped because Wyangala Dam was only 6% full (Field notes, October, 2009). The plight of Cowra’s vineyards was outside the scope of this research, as were up to thirty properties owned by the Exclusive Brethren, who “*don’t live on property because they believe the devil lives in the bush*” (KI-C-117, 2009). However, locals were more concerned about city investors purchasing subdivisions on prime agricultural land, and in 2010, Hassad Australia, whose parent company is Qatar-based, purchasing multiple properties.

**Extent of absentee ownership/occupation, 2009**

In 2009, absentee landownership (AL) was extensive in the Lachlan, as shown in Table 9 (the proportion of landowners/occupiers that were AOs) and Table 10 (the proportion of land that was absentee-owned) in each region. In the Lachlan LHPA, 50% of all occupiers of 10+ ha were AOs, another 17% being Res/AOs (i.e. resident owners (ROs) on one property and AO on others). An estimated 68% of land was absentee-occupied (based on 46.4% of all land being absentee-occupied by 68% of all occupiers).

In Bland Shire, 43% of all landowners were AO, another 5% being Res/AOs on non-adjoining property. AOL was 41.4% of all land. In Cowra Shire, 63% of all landowners were AO, another 8.5% potentially Res/AOs. AOL was 69% of all land.
Notes for Table 9 and 10 and Appendix G (Table 11 and 12):
Percentages are based on the proportion of all landowners and the proportion of all land covered by properties of 10+ ha. Mean (M) refers to the mean area owned/occupied.

Table 9: Extent of ROs, Res/AOs, local and non-local AOs, 2009

<table>
<thead>
<tr>
<th>Land owned</th>
<th>Land owners</th>
<th>ROs</th>
<th>Res/AO</th>
<th>Local AO</th>
<th>Non-local AO</th>
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<tbody>
<tr>
<td>Total statistics for each region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lachlan LHPA</td>
<td>6,274</td>
<td>1,133</td>
<td>1,052</td>
<td>3,130</td>
<td></td>
</tr>
<tr>
<td></td>
<td>85%</td>
<td>18%</td>
<td>17%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Bland Shire</td>
<td>892</td>
<td>458</td>
<td>45</td>
<td>167</td>
<td>210</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>51%</td>
<td>5%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Cowra Shire</td>
<td>1,553</td>
<td>306</td>
<td>132</td>
<td>553</td>
<td>426</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>20%</td>
<td>8.5%</td>
<td>35.6%</td>
<td>27.4%</td>
</tr>
<tr>
<td>% of total</td>
<td>Local AO-AO/Res 24%</td>
<td>43%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|  |  |  |  |  |  |
| Lachlan 10 – 40 |  |  |  |  |  |
|  | 1,324 | 441 (Res & Res/AO) | 560 |  |
|  | 21% | 7% | 9% |  |
| Bland 10 – 40 | 37 | 12 | 0 | 13 | 9 |
|  | 4% | 1% | 0% | 1.5% | 1% |
| % of total | Local AO-AO/Res 1.5% | 2.5% |
| Cowra 10 – 40 | 515 | 123 | 23 | 115 | 203 |
|  | 33% of total | 8% | 1.5% | 7.4% | 13% |
| % of total | Local AO-AO/Res 9% | 20.4% |

|  |  |  |  |  |  |
| Lachlan 40+ – 1200 |  |  |  |  |  |
|  | 4,375 | 1,458 (Res & Res/AO) | 2,286 |  |
|  | 70% of total | 23% | 36% |  |
| Bland 40+ – 1200 | 641 | 309 | 37 | 136 | 152 |
|  | 72% of total | 35% | 4% | 15% | 17% |
| % of total | Local AO-AO/Res 19% | 32% |
| Cowra 40+ – 1200 | 1,030 | 179 | 108 | 436 | 222 |
|  | 66% of total | 11.5% | 7% | 28% | 14% |
| % of total | Local AO-AO/Res 35% | 42% |

|  |  |  |  |  |  |
| Lachlan 1200+ |  |  |  |  |  |
|  | 575 | 286 (Res & Res/AO) | 220 |  |
|  | 9% of total | 4.6% | 3.5% |  |
| Bland 1200+ | 214 | 137 | 8 | 18 | 49 |
|  | 24% of total | 15% | 0.9% | 2% | 5.5% |
| % of total | Local AO-AO/Res 3% | 7.5% |
| Cowra 1200+ | 8 | 4 | 1 | 2 | 1 |
|  | .52% | 0.3% | .06% | .1% | .06% |
| % of total | Local AO-AO/Res .16% | 0.16% |

212
Table 10: Extent of ROL and AOL, 2009

<table>
<thead>
<tr>
<th>Land owned</th>
<th>Total ha</th>
<th>ROL</th>
<th>AOL of Res/AO</th>
<th>AOL of local AOs</th>
<th>AOL of non-Local AOs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lachlan LHPA</strong></td>
<td>4,035,557</td>
<td>1,738,243 incl. AO ha Res/AO</td>
<td>1,413,308</td>
<td>459,482</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td>35%</td>
<td>11.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89.4%</td>
<td>Max 43%</td>
<td>46.4% + AO ha owned by Res/AO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 643</td>
<td></td>
<td>M excl. Res/AOs’ AOL: 598</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bland Shire</strong></td>
<td>887,656</td>
<td>516,001</td>
<td>54,647</td>
<td>101,593</td>
<td>209,386</td>
</tr>
<tr>
<td>100%</td>
<td>58%</td>
<td>6%</td>
<td>11.4%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>100.1%</td>
<td>58%</td>
<td>41.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 995</td>
<td>1,026 h</td>
<td>1,214</td>
<td>608</td>
<td>997</td>
<td></td>
</tr>
<tr>
<td>M of all AOL, incl. Res/AOs’ AOL: 871 ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cowra Shire</strong></td>
<td>235,957</td>
<td>53,629</td>
<td>11,279</td>
<td>99,376</td>
<td>51,355</td>
</tr>
<tr>
<td>100%</td>
<td>23%</td>
<td>5%</td>
<td>42%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>92%</td>
<td>23%</td>
<td>69%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 152</td>
<td>122</td>
<td>85</td>
<td>180</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>M of all AOL, incl. Res/AOs’ AOL: 146</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10 – 40 ha</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lachlan 10 – 40</strong></td>
<td>33,597</td>
<td></td>
<td>6,156</td>
<td></td>
</tr>
<tr>
<td>1% of total</td>
<td></td>
<td></td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>Mean: 25</td>
<td></td>
<td></td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Bland 10 – 40</strong></td>
<td>841 ha</td>
<td>257</td>
<td>0</td>
<td>299</td>
</tr>
<tr>
<td>.09% of total</td>
<td>.03%</td>
<td>0%</td>
<td>.034%</td>
<td>.023%</td>
</tr>
<tr>
<td>% of all ha</td>
<td>.03%</td>
<td>0.06%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 23</td>
<td>21</td>
<td>0</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td><strong>Cowra 10 – 40</strong></td>
<td>10,323</td>
<td>2,707</td>
<td>285</td>
<td>2,371</td>
</tr>
<tr>
<td>4% of total</td>
<td>1%</td>
<td>0.1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>% of all ha</td>
<td>1%</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 20</td>
<td>19</td>
<td>12</td>
<td>21</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>40+ – 1200 ha</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lachlan 40+ – 1200</strong></td>
<td>2,225,368</td>
<td></td>
<td>951</td>
<td>55% of total</td>
</tr>
<tr>
<td>55% of total</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 509</td>
<td></td>
<td></td>
<td>250</td>
<td></td>
</tr>
<tr>
<td><strong>Bland 40+ – 1200</strong></td>
<td>364,224</td>
<td>196,511</td>
<td>26,272</td>
<td>65,216</td>
</tr>
<tr>
<td>41% of total</td>
<td>22%</td>
<td>3%</td>
<td>7.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>% of all ha</td>
<td>22%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 568</td>
<td>568</td>
<td>710</td>
<td>480</td>
<td>487</td>
</tr>
<tr>
<td><strong>Cowra 40+ – 1200</strong></td>
<td>214,191</td>
<td>44,496</td>
<td>10,320</td>
<td>94,098</td>
</tr>
<tr>
<td>91% of total</td>
<td>19%</td>
<td>4.4%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>% of all ha</td>
<td>19%</td>
<td>64.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 208</td>
<td>155</td>
<td>96</td>
<td>216</td>
<td>208</td>
</tr>
</tbody>
</table>
### Extent of absentee-owned land used for commercial agriculture

Most AOL was used for commercial agriculture. In Bland Shire, a minimum of 71% of all AOL was used for commercial agriculture, excluding AOL of 40+ – 1200 ha owned by AOs that were not Pty Ltd companies or Res/AOs. In Cowra Shire, a minimum of 52% of all AOL was used for commercial agriculture.

### Regional variations in extent

There were substantial regional variations in area absentee-owned and extent of non-local and local AOs, Res/AOs, ROs, absentee Pty Ltd companies and non-local small property owners.

### Area owned

Most landowners owned between 40+ – 1200 ha (i.e. 70% of all landowners in Lachlan LHPA; 72% in Bland Shire; 66% in Cowra) (Table 9). In Bland Shire, landowners tended to own larger areas (Table 10) . This meant those occupying 40+ – 1200 ha took up most land in the Lachlan LHPA (55%) and Cowra Shire (91%) but in Bland Shire, 59% of all land fell into the ownership range of 1200+ ha, with

<table>
<thead>
<tr>
<th>Land owned</th>
<th>Total ha</th>
<th>ROL</th>
<th>AOL of Res/AO</th>
<th>AOL of Local AOs</th>
<th>AOL of Non-Local AOs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1200+ ha</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lachlan 1200+</td>
<td>1,776,592</td>
<td>319,233</td>
<td>28,375</td>
<td>36,078</td>
<td>135,081</td>
</tr>
<tr>
<td>Mean: 3,090</td>
<td>2,202</td>
<td>3,547</td>
<td>2,004</td>
<td>2,758</td>
<td></td>
</tr>
<tr>
<td>Bland 1200+</td>
<td>522,591</td>
<td>319,233</td>
<td>28,375</td>
<td>36,078</td>
<td>135,081</td>
</tr>
<tr>
<td>Mean: 2,346</td>
<td>2,202</td>
<td>3,547</td>
<td>2,004</td>
<td>2,758</td>
<td></td>
</tr>
<tr>
<td>Cowra 1200+</td>
<td>11,443</td>
<td>6,426</td>
<td>674</td>
<td>2,907</td>
<td>1,436</td>
</tr>
<tr>
<td>Mean: 1,430</td>
<td>1,285</td>
<td>674</td>
<td>1,454</td>
<td>1,436</td>
<td></td>
</tr>
</tbody>
</table>
24% of all landowners in Bland Shire owning 1200+ ha, compared to only 9% of all occupiers in the Lachlan LHPA and eight landowners (0.5%) in Cowra Shire.

More landowners in Cowra Shire owned small areas of 10 – 40 ha (i.e. 33% of all landowners, compared to 21% in the Lachlan LHPA and 4% in Bland Shire). Yet small properties, even in Cowra Shire, covered a minimal area (i.e. 4% of all land in Cowra Shire, compared to 1% in Lachlan LHPA and 0.09% in Bland Shire).

**Distribution of AOs according to area owned**

In all three regions, AOs outnumbered ROs and Res/AOs owning 10 – 40 ha. For example, in this ownership range, 20.4% of all landowners in Cowra Shire were AOs and only 9.5% were ROs and Res/AOs.

In all three regions, ROs and Res/AOs outnumbered AOs owning 1200+ ha (Table 9). For instance, in Bland Shire, ROs of 1200+ ha were 15% of all landowners (another 1% being Res/AOs) resident-owning 36% of all land (M=2,202 ha) compared to AOs owning 1200+ ha being 7.5% of all landowners, although these AOs absentee-owned 19% of all land (Table 10).

For those owning 40+ – 1200 ha there were regional variations. In the Lachlan LHPA and Cowra Shire, AOs outnumbered ROs and Res/AOs (i.e. 36% of all landowners in the Lachlan LHPA were AOs compared to 23% being ROs and Res/AOs. In Cowra Shire, 42% of all landowners were AOs of 40+ – 1200 ha compared to 18.5% being ROs and Res/AOs). In Cowra Shire, these AOs and Res/AOs absentee-owned larger areas (M=197 ha) than ROs (M=155 ha).

In Bland Shire, ROs and Res/AOs outnumbered AOs of 40+ – 1200 ha (i.e. 39% of all landowners being ROs and Res/AOs, compared to 32% being AOs). AOL in this landownership range covered 19% of all land. Interestingly, Res/AOs absentee-owned more land (M=710 ha) than AOs (M=480 ha for local AOs and M=487 ha for non-local AOs), or the mean area resident-owned (588 ha).
Extent of local and non-local AOs

In 2009, AOs were at least as likely to live locally as opposed to non-locally. In the Lachlan LHPA and Cowra Shire, local AOs and Res/AOs were a higher proportion of all landowners than non-local AOs and in Cowra Shire, local AOs absentee-owned more land than non-local AOs. Not so for Bland Shire, where non-local and local AOs (including Res/AOs) were the same proportion of all landowners, but non-local AOs owned more land (Tables 9 and 10). In Cowra Shire local AOs (including Res/AOs) were 44% of all landowners and absentee-owned 47% of all land. Non-local AOs were 27% of all landowners and absentee-owned 22% of all land. In Bland Shire, non-local and local AOs (including Res/AOs) were each 24% of all landowners, but non-local AOs owned 24% of all land compared to local AOs and Res/AOs who absentee-owned only 17% of all land.

In Bland Shire, local town-based AOs comprised 14% of all landowners or 75% of all local AOs, excluding Res/AOs. Their properties covered 9% of all land (M=645 ha). Eight owned 10 – 40 ha. Another 101 (11% of all landowners) owned 40+ – 1200 ha, their land covering 5% of all land (M= 461 ha). Seventeen (2% of all landowners) owned 1200+ ha, their land covering 4% of all land (M=2,028 ha). While this analysis could not be conducted for Cowra Shire, three farmers, a real estate agent and long term residents reported the prevalence of local town-based landowners in the shire. Town-based landowners could be farmers and non-farmers (e.g. shire representatives, doctors, accountants, stock and station agents and real estate agents), FCs, NFCs and aggregated structures.

Extent of resident landownership

In Bland Shire, ROs were more extensive (51% of all landowners) than in Cowra Shire (20% of all landowners) or the Lachlan LHPA (18% of all landowners). In Bland Shire, ROL covered 58% of all land compared to 23% of all land in Cowra Shire and about 32% of all land in the Lachlan LHPA.
Extent of local Res/AOs

There were twice as many local Res/AOs in Cowra Shire than Bland Shire. In Cowra Shire, 8.5% of all landowners were local Res/AOs. They absentee-owned 10% of all land (M=85 ha). In Bland Shire, 5% of all landowners were local Res/AOs. They absentee-owned 6% of all land (M=1,214 ha).

Multiple property ownership in Cowra Shire

In Cowra Shire, historical small subdivisions resulted in 24.5% of all landowners being multiple property owners in 2009. They owned 27% of all land. Of all multiple property owners (N=379), 65% were AOs on all land (i.e. 16% of all landowners). Their AOL covered 18% of all land. These multiple property owners were twice as likely to be local AOs (i.e. 11% of all landowners compared to non-local multiple property owners being 5% of all landowners). Twenty percent of all multiple property owners owned 10 – 40 ha and 79% owned 40+ – 1200 ha. Of those owning 40+ – 1200 ha (N=299), 81% were local AOs and Res/AOs. They absentee owned twice the area owned by non-local multiple property owners.

Extent of AO Pty Ltd companies

AO Pty Ltd companies included FCs, NFCs and various aggregated types. RO Pty Ltd companies were likely to be farm-based FCs. Table 11 and Table 12 in Appendix G show that in both shires, the extent of AO Pty Ltd companies exceeded RO Pty Ltd companies and about half of all AO companies were non-local. In Bland Shire, 73% of all Pty Ltd companies and partnerships of three or more unrelated individuals were AO (N=71), with 55% of all entities being non-local. In Cowra Shire, 81% of all Pty Ltd companies were AO (N=146), with 44% of all companies being non-local.

Bland Shire AO Pty Ltd companies and partnerships owned a mean area nearly twice the area of RO Pty Ltd companies. In contrast, Cowra Shire RO Pty Ltd companies owned a mean area greater than AO Pty Ltd companies. In Bland Shire, AO Pty Ltd companies and partnerships were 5% of all landowners. They
owned 10% of all land (M=1,684 ha). RO Pty Ltd companies were 1% of all landowners. They owned 1% of all land (M=952 ha). In Cowra Shire, RO Pty Ltd companies were only 1% of all landowners but owned 4.6% of all land (M=498 ha). In comparison, AO Pty Ltd companies were 8% of all landowners owning 12% of all land (M=242 ha). However, this mean area of AO Pty Ltd companies in Cowra Shire was affected by 21 AO Pty Ltd companies owning 10 – 40 ha. Sixteen of these were non-local AOs, with no RO Pty Ltd company owning such a small parcel. These companies could have operated vineyards, orchards or grown vegetables commercially or the land could have been registered in the company’s name for tax purposes.

In both shires, most Pty Ltd companies owned 40+ – 1200 ha and those that were AOs owned more land than ROs. In Bland Shire, 68% of all Pty Ltd companies owned 40+ – 1200 ha. Of these, 48% were AOs, comprising 4% of all landowners (1% local AO; 3% non-local). They absentee-owned 2.5% of all land (M=580 ha). RO Pty Ltd companies were 1% of all landowners. They owned 0.6% of all land (M=563 ha). In Cowra Shire, 83% of all Pty Ltd companies owned 40+ – 1200 ha. Of these, 79% were AO, comprising 6% of all landowners (3% local AO; 3% non-local). They absentee-owned 11% of all land (M=278 ha). RO Pty Ltd companies owning 40+ – 1200 ha were only 1% of all landowners. They owned 2% of all land (M=272 ha).

Shires contrasted in extent of land owned by non-local Pty Ltd companies. Appendix G shows that in both shires, 4% of all landowners were non-local Pty Ltd companies. However, in Bland Shire, these owned 9.3% of all land (M=2,047 ha). This mean area was only exceeded by that of foreign entities. In contrast, in Cowra Shire, non-local Pty Ltd companies owned 6% of all land (M= 216 ha). The mean area was less than the mean area owned by ROs, Res/AO and local AO Pty Ltd companies.

That non-local Pty Ltd companies owned large areas in Bland Shire was highlighted in those owning 1200+ ha. In Cowra Shire, there was only one non-local AO that owned 1200+ ha and this AO was not registered as a Pty Ltd
company in the local government database. In Bland Shire, although non-local Pty Ltd companies and partnerships owning 1200+ ha were only 2% of all landowners, they owned 7.3% of all land (M=4,336 ha). This mean area owned exceeded all other landowner categories, except for a subset of seven Pty Ltd companies that were owned or capitalised by foreign entities. These were only 1% of all landowners but absentee-owned 4% of all land. Their mean area owned (4,588 ha) exceeded all other landowner categories. In Bland Shire, another 3.3% of all landowners were non-local AOs owning 1200+ ha. They absentee-owned 8% of all land. Some could have been Pty Ltd companies. Altogether, non-local AOs of 1200+ ha in Bland Shire amounted to only 5.3% of all landowners but owned 15% of all land.

Extent of non-local small property owners in Cowra Shire

In Cowra Shire, non-local AOs of 10 – 40 ha had a substantial presence. They were 13% of all landowners but owned only 2% of all land. These non-local AOs outnumbered ROs of 10 – 40 ha (8% of all Cowra landowners), local AOs of 10 – 40 ha (7% of all landowners) and Res/AOs of 10 – 40 ha (1.5% of all landowners). By comparison, in Bland Shire, non local AOs of 10 – 40 ha were only 1% of all landowners, owning 0.02% of all land.
Key findings

Assumption
The assumption that (Australian) agriculture is dominated by the resident family farm (Hooper et al., 2002; Australian Government, 2012) was not supported by the Lachlan findings.

Extent of absentee landownership
Absence landownership is extensive in the Lachlan in 2009. In the Lachlan LPHA, 50% of all occupiers of 10+ ha were AO on all land and AOL was an estimated 68% of all land. In Bland Shire, 43% of landowners were AO on all land and AOL covered 41.4% of all land. In Cowra Shire, a minimum of 63% of all landowners were AO on all land, and AOL covered 69% of all land.

Most AOL is used for commercial agriculture. A conservative estimate was that 71% of all AOL in Bland Shire and 52% of all AOL in Cowra Shire was used for commercial agriculture in 2009. However, this finding may not apply to other regions as there are substantial variations in extent of absentee landownership.

Variations in extent of absentee landownership
There are regional variations in extent of AL. ROs were more numerous in Bland Shire (51% of all landowners owning 58% of all land) than Cowra Shire (20% of all landowners owning 23% of all land) or the Lachlan LHPA (18% of all landowners).

The extent of AL can depend on area owned. In all three regions, for those owning 10 – 40 ha, AOs outnumbered ROs and Res/AOs, and owned more land. In all three regions, for those owning 1200+ ha, ROs and Res/AOs outnumbered AOs and owned more land. However, for those owning 40+ – 1200 ha AOs outnumbered ROs and Res/AOs, and owned more land in the Lachlan LHPA and Cowra Shire, whereas in Bland Shire, ROs and Res/AOs outnumbered AOs and owned more land.
Local AOs were at least as numerous as non-local AOs. In the Lachlan LHPA and Cowra Shire, local AOs, including Res/AOs, were more numerous and absentee-owned more land than non-local AOs. In Bland Shire, non-local AOs and local AOs (including Res/AOs) were both 24% of all landowners, but non-local AOs owned more land than local AOs. Local AOs included local town-based landowners such as farmers, non-farmers, FCs, NFCs and aggregated structures. These comprised 14% of all landowners or 75% of all local AOs in Bland Shire.

Extent of Res/AOs varied. In the Lachlan LHPA, 17% of all landowners were Res/AO, this high percentage related to the size of the region. Local Res/AOs in Bland Shire were 5% of all landowners. In Cowra Shire, they were 8.5% of all landowners.

There were substantial regional variations in AO types. In both shires, extent of AO Pty Ltd companies exceeded extent of RO Pty Ltd companies. However, in Bland Shire the mean area owned by AO Pty Ltd companies was greater than the mean area owned by RO Pty Ltd companies, whereas in Cowra Shire, the opposite was true. But the most significant regional variation occurred in an analysis of non-local Pty Ltd companies owning 1200+ ha. In Bland Shire, non-local Pty Ltd companies were few in number but owned a disproportionate share of rural land. Although only 2% of all landowners they owned 7.3% of all land. Included in this cohort were 1% of all landowners who were foreign entities. They absentee-owned 4% of all land, and owned the largest mean area of all types of landowners (4,588 ha). If one includes all non-local AOs owning 1200+ ha in Bland Shire, then non-local AL of 1200+ ha amounted to 5.3% of all landowners owning 15% of all land. This was in contrast to Cowra Shire where only one non-local AO owned 1200+ ha and this AO was not registered as a Pty Ltd company.

In Cowra Shire, non-local small property owners had a substantial presence but owned a minimal proportion of rural land. In Cowra Shire, non-local AOs of 10 – 40 ha were 13% of all landowners but owned 2% of all land. In Bland Shire, non-local AOs of 10 – 40 ha were 1% of landowners and owned 0.02% of all land.
Chapter 6: Trends in landownership in the Lachlan catchment

Introduction

This chapter addresses the second part of Key Question 2, ‘What are the trends in absentee landownership (AL) in the Lachlan River catchment?’.

Findings on extent of AL in the Lachlan Squatting District in 1849, and trends in AL in Bland and Cowra districts, 1830s–2012, are based on statistical analysis of historical maps in two districts and the histories of nine pastoral stations.

Extent of absentee occupation in the Lachlan Squatting District, 1849

In the Lachlan Squatting District of 1849, 160 individuals and partnerships leased 207 ‘runs’ ranging from 809 ha to 99,960 ha, in total covering 2,193,420 ha, likely two thirds the actual area. A minimum of 49% of all occupiers were AOs, 6% were Res/AOs and 33% were ROs, with 12% having unknown residency status. Absentee occupied land (AOL) covered a minimum 71% of the district (Table 13).

Table 13: Lessees in the Lachlan Squatting District, 1849

<table>
<thead>
<tr>
<th>Property size</th>
<th>RO</th>
<th>AO/Res</th>
<th>AO</th>
<th>Unknown residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–2965 acres (0.4–1200 ha)</td>
<td>2 (1 acre each)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2965+ acres (1200+ ha)</td>
<td>52</td>
<td>10</td>
<td>79</td>
<td>19</td>
</tr>
<tr>
<td>No. owners</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>33%</td>
<td>6%</td>
<td>49%</td>
<td>12%</td>
</tr>
<tr>
<td>Ha owned</td>
<td>% owned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>505,024</td>
<td>23%</td>
<td>71%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Mean Ha</td>
<td>8,146</td>
<td>17,465</td>
<td>7,054</td>
<td></td>
</tr>
</tbody>
</table>

Historical profiles of Bland and Cowra districts

This section profiles Bland and Cowra districts, four pastoral stations in each district, and a ninth pastoral station outside the districts but within the catchment. Figure 23 shows the location of the two districts in relation to the Lachlan Squatting District.
Profile of Bland district

Bland district covers 316,874 ha falling mainly in Bland Shire, with a southern slither of Forbes Shire and a western strip of Weddin Shire, hence its label in Figure 23. Lake Cowal is located in the north-west and West Wyalong in the south-west. Small villages include Caragabal, Barmedman, Marsden, Quandialla and Ungarie.

Squatters or their agents arrived in the 1830s. Given the illegal nature of the runs, early records are inexact and contradictory but an 1836 their claims were made legal. These legal lessees numbered nine in 1849, including the state, the number of occupiers steadily increasing to 391 in 1920–1935, post gold rush, and dropping to 345 by 1970, numbering 358 in 1990.

In the 1850s, the region became a centre for pastoralism. Commercial wheat was introduced in the 1860s, facilitated by a rail extension connecting West
Wyalong to Temora in 1903. On the Bland Plains large stations survived government subdivisons, whereas land close to West Wyalong and Lake Cowal – the lake containing water in 1914–1916 – was subdivided into ‘homestead’ blocks. Though a condition of purchase was residency, some owners never lived on their block, many selling within a few years, others leasing out or aggregating. By the 1960s, land ownership had stabilised. In 2009, many landowners were descendents of early farming families. Others were corporations that acquired multiple large properties. Within the district, the histories of the following four pastoral stations were investigated. Other details about the stations will be highlighted throughout the chapter.

*Billabong Station* was originally settled by Abel Bourke in the 1830s. Bourke ran cattle on 28,400 acres. In 1842, *Billabong* extended from the south-east shore of Lake Cowal to present day West Wyalong. In 1848, 16,000 acres was leased to John Rodd, a former overseer and resident of Bathurst. North of his holding, 16,000 acres was leased to Parramatta (Sydney) resident, John Trott. Abel Bourke survived the 1840s drought and recession and the 1852 flood, but sold thereafter, as did Rodd and Trott. The two absentee purchasers were James Marsden and William Lee, the latter selling in about 1870 to Henry Ricketson, a multiple property owner located in Victoria. Other owners were financial firms, syndicates and in the 1970s, BP Australia’s superannuation fund. Since the 1830s, *Billabong* has been owned by 19 lessees/owners, 63% being AOs, including the present owner, Leppington Pastoral Company.

*Caragabal Station* is south-west of *Billabong*. The area was claimed in 1835 by an agent of a Goulburn-based doctor, Andrew Gibson. The absentee Gibson dynasty sold in 1935, *Caragabal* being purchased by two family pastoral companies and a Sydney-based tin miner before the British-owned Scottish Australian Company purchased the property in 1952. Between 1830–2011, of *Caragabal’s* 25 landowners, 76% were AOs; including an AO who became a RO; but not including one who was a RO, became an AO and returned to live on-farm. In 2010, *Caragabal* was owned by a farm-based AO and two resident farming families.
Lake Cowal Station was located on the south-western shore of Lake Cowal, bordering Billabong Station. In the 1830s, Captain William Hovel of Goulburn established a sheep station but the first legal lessee of 16,000 acres was William Atkins, a RO. The station was a frontier – further west was ‘waste land’ and when William Atkins died his sons took over, remaining resident occupiers of a portion in 1873. However, by 1870, AO, William Lee, had purchased most of Lake Cowal. After incorporating some of Billabong (which Lee also owned), in 1875 Lee sold to an absentee partnership that included Henry Ricketson. From 1885, Lake Cowal was extensively subdivided. Its history includes 74 identified landowners, of whom 36% were AOs, including three who resided on other property in the catchment. In 2012, the area was owned by Barrick Australia, a wholly owned subsidiary of a Canadian-based mining multinational.

Oakhurst was situated south-east of Billabong. Its official 33,000 acres was claimed by resident Moses Beard in 1840. In 1852, Oakhurst was leased to Alexander Wilson of Victoria, who sold to the absentee French brothers by 1888. In 1904/1906, Oakhurst was purchased by another AO, Samuel McCaughey. McCaughey sold the property in 1909/1910 to fellow Irishman, Matthew Robinson, also an AO. Robinson became a RO, the Robinson family selling most of Oakhurst to the Scottish Australian Company in 1956, although retaining the homestead block until 1979. Overall, Oakhurst was to have 20 owners of whom 65% were AOs, although two (French and Robinson) became ROs. Since 2008, the divided station is owned by an investment company and a foreign individual.
Profile of Cowra district

Cowra district covers 74,563 ha, included the town of Cowra, and extended south to Wattamondera and north to the Belubula River. Its European history dates to the 1820s. In 1886, Cowra was connected by rail to metropolitan centres. In 1885–1900, the district’s population was 327, a time when gold was still being prospected. Despite extensive subdivisions, by 1920–1935 the population had dropped to 262, with many landowners owning multiple non-adjoining blocks. The district’s population continued to decline, with 216 landowners in 1970 and 174 in 1990. The histories of the following four properties were investigated.

Carro / Carra / Coura / Cawdra / Coirow / Cauora / Cowra Rocks, over time incorporating Coota / Cotta / Cota and Mufflon Park, before being re-named Jerula, was on the southern bank of the Lachlan River, south of the town of Cowra. Given as a land grant to an emancipated convict, Sydney-based Reverend Henry Fulton, in 1831, it remained in the family until 1857, when it was purchased by George Campbell, who became a RO after 1860. Of 77 identified landowners since 1830, 68% were AOs throughout ownership, another 6.5%, changing their residency status. In 2009, the many subdivisions were both resident- and absentee-owned.

Glen Logan and North Logan were two properties that were amalgamated under the name of North Logan in 1857 by RO, James Sloan, originally the overseer for the former AO of Glen Logan, Arthur Ranken. The properties were located on the east side of the Lachlan River, north of Cowra. Of the 39 identified landowners from 1831, 59% were AOs and 10% changed their residency status during ownership. In 2009, most of the subdivisions were absentee-owned.

Mulyan is a 3,200 acre property on prime alluvial flats on the west bank of the Lachlan River, west of Cowra. Its history involved two families: the Redferns and Fagans. Mulyan was absentee-owned from 1830 to 1912. Since then, three generations of the Fagan family have been ROs.
**Booberoi Station near Lake Cargelligo**

Outside both districts, *Booberoi Station* is on the west bank of the Lachlan River, north of Lake Cargelligo. In the 1830s, it was claimed by Isaac Shepherd, a member of the NSW Legislative Assembly, resident of Ryde (Sydney). Shepherd sold *Booberoi* to interstate multiple property owners, John Smith & Company. *Booberoi* had another two AOs before its 6,400 ha freehold and 40,000 ha leasehold was purchased by Alexander Haley in 1879–80. Haley was *Booberoi*‘s only RO, although this could have been on a part-time basis. Subsequent owners were Sydney industrialist, F.W. Hughes, the South Australian company, Mitchell and Sons, and the Wiradjuri Regional Land Council. In 2012, *Booberoi* was owned by AgReserves Australia (the trading name of a US-based Mormon group) and the NSW Aboriginal Land Council. Of *Booberoi*‘s 11 owners/lessees, nine or 10 were AOs, given Haley’s sons’ residency status is unknown, although they likely lived in Melbourne.

**Trends in absentee landownership in two districts, 1849–2009**

**Maps, tables & graphs of trends in absentee landownership, 1849–2009**

The following maps, tables and graphs show trends in landownership between 1849 and 2009 for Bland and Cowra districts. Figures 24–29 are the mapped areas of AOL in Bland district in 1849, 1885–1900, 1920–1935, 1970, 1990 and 2009. Statistics presented in Table 14 are based on these maps. Figures 30–35 are the mapped areas of AOL in Cowra district for the same time intervals. Statistics presented in Table 15 are based on these maps. As landowners were not named on 2009 maps, the residency status of landowners in 2009 could not be accurately investigated. Based on Tables 14 and 15, Figures 36–39 graph the trends in AOs (1849–1990) and AOL (1849–2009).

<table>
<thead>
<tr>
<th>Colour codes for Figures 24–35</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blue:</strong></td>
</tr>
<tr>
<td>Land absentee-owned by individuals</td>
</tr>
<tr>
<td><strong>Purple:</strong></td>
</tr>
<tr>
<td>Land absentee-owned by pastoral companies, financial firms and pension funds (1849–1935)</td>
</tr>
<tr>
<td><strong>Green:</strong></td>
</tr>
<tr>
<td>State-owned land</td>
</tr>
<tr>
<td>Dotted areas:</td>
</tr>
<tr>
<td>Land owned by those with unknown residency.</td>
</tr>
</tbody>
</table>

228
Table 14: Landowners/lessees and hectares owned in Bland district, 1849–2009

<table>
<thead>
<tr>
<th>Year</th>
<th>No. owners</th>
<th>% of owners</th>
<th>RO</th>
<th>Res/AO</th>
<th>AO</th>
<th>Aggreg</th>
<th>State</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1849</td>
<td>3</td>
<td>33%</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>52,614</td>
<td>16.6%</td>
<td>209,870</td>
<td>0</td>
<td>54,391</td>
<td>0%</td>
<td>17.2%</td>
<td>0%</td>
</tr>
<tr>
<td>1885–1900</td>
<td>144</td>
<td>60.5%</td>
<td>24</td>
<td>43</td>
<td>11</td>
<td>1</td>
<td>0.42%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>99,215</td>
<td>31%</td>
<td>114,084</td>
<td>24,805</td>
<td>70,800</td>
<td>8%</td>
<td>22%</td>
<td>2.5%</td>
</tr>
<tr>
<td>1920–1935</td>
<td>277</td>
<td>71%</td>
<td>37</td>
<td>50</td>
<td>12</td>
<td>2</td>
<td>0.5%</td>
<td>3.6%</td>
</tr>
<tr>
<td></td>
<td>120,180</td>
<td>38%</td>
<td>97,797 ha</td>
<td>65,616</td>
<td>25,296</td>
<td>8%</td>
<td>2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>1970</td>
<td>206</td>
<td>60%</td>
<td>53</td>
<td>83</td>
<td>‘1’</td>
<td>2</td>
<td>0.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>220,795</td>
<td>70%</td>
<td>87,207</td>
<td>7,986</td>
<td>886</td>
<td>2.5%</td>
<td>0.2%</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>227</td>
<td>63%</td>
<td>26</td>
<td>104</td>
<td>‘1’</td>
<td>0</td>
<td>0.3%</td>
<td>0%</td>
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<tr>
<td></td>
<td>226,938</td>
<td>71.6%</td>
<td>83,208</td>
<td>6,728</td>
<td>0</td>
<td>2%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Hectares</td>
<td>60.6%</td>
<td>116,229</td>
<td>7,575</td>
<td>1,149</td>
<td>2.4%</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total % AO ha</td>
<td>39.4%</td>
<td>191,921</td>
<td>116,229</td>
<td>7,575</td>
<td>1,149</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 15: Landowners/lessees and hectares owned in Cowra district, 1849–2009

<table>
<thead>
<tr>
<th>Unit</th>
<th>RO</th>
<th>Res/AO</th>
<th>AO</th>
<th>Aggreg.</th>
<th>State</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1849</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>% of owners</td>
<td>33%</td>
<td>0%</td>
<td>56%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Total % AOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56%</td>
</tr>
<tr>
<td>No. ha</td>
<td>10,712</td>
<td>61,855</td>
<td>0</td>
<td>0</td>
<td>1,995</td>
<td></td>
</tr>
<tr>
<td>% ha</td>
<td>14%</td>
<td>83%</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Total % AO ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>1885–1900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>203</td>
<td>44</td>
<td>50</td>
<td>3</td>
<td>‘1’</td>
<td>26</td>
</tr>
<tr>
<td>% of owners</td>
<td>62%</td>
<td>13%</td>
<td>15%</td>
<td>0.9%</td>
<td>0.3%</td>
<td>8%</td>
</tr>
<tr>
<td>Total % AOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.2%</td>
</tr>
<tr>
<td>No. ha</td>
<td>31,840</td>
<td>26,703</td>
<td>2,445</td>
<td>10,184</td>
<td>3,391</td>
<td></td>
</tr>
<tr>
<td>% ha</td>
<td>42%</td>
<td>36%</td>
<td>3%</td>
<td>14%</td>
<td>4.5%</td>
<td></td>
</tr>
<tr>
<td>Total % AO ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>53%</td>
</tr>
<tr>
<td>1920–1935</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>139</td>
<td>59</td>
<td>48</td>
<td>8</td>
<td>‘1’</td>
<td>7</td>
</tr>
<tr>
<td>% of owners</td>
<td>53%</td>
<td>23%</td>
<td>18%</td>
<td>3%</td>
<td>0.4%</td>
<td>3%</td>
</tr>
<tr>
<td>Total % AOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.4%</td>
</tr>
<tr>
<td>No. ha</td>
<td>23,078</td>
<td>28,810</td>
<td>19,550</td>
<td>1,915</td>
<td>1,210</td>
<td></td>
</tr>
<tr>
<td>% ha</td>
<td>31%</td>
<td>39%</td>
<td>26%</td>
<td>2.5%</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>Total % AO ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67.5%</td>
</tr>
<tr>
<td>1970</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>161</td>
<td>20</td>
<td>33</td>
<td>‘1’</td>
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<tr>
<td>% of owners</td>
<td>74.5%</td>
<td>9%</td>
<td>15.3%</td>
<td>0.5%</td>
<td>0.5%</td>
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<td>Total % AOs</td>
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<td>15.8%</td>
</tr>
<tr>
<td>No. ha</td>
<td>62,973</td>
<td>11,314</td>
<td>201</td>
<td>75</td>
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<td></td>
</tr>
<tr>
<td>% ha</td>
<td>84%</td>
<td>15%</td>
<td>0.3%</td>
<td>0.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total % AO ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15.3%</td>
</tr>
<tr>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>118</td>
<td>11</td>
<td>41</td>
<td>‘1’</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>% of owners</td>
<td>68%</td>
<td>6%</td>
<td>23.6%</td>
<td>0.6%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Total % AOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24%</td>
</tr>
<tr>
<td>No. ha</td>
<td>57,432</td>
<td>16,008</td>
<td>357</td>
<td>766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% ha</td>
<td>77%</td>
<td>21.5%</td>
<td>0.5%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total % AO ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22%</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hectares</td>
<td>29,782</td>
<td>40,242</td>
<td>1,288</td>
<td>124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% hectares</td>
<td>42%</td>
<td>56%</td>
<td>2%</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total % AO ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58%</td>
</tr>
</tbody>
</table>
Figure 36: Bland district landowners: % AO, Res/AO and RO, 1849–1990

Figure 37: Cowra district landowners: % AO, Res/AO and RO, 1849–1990
Three phases in absentee landownership

Based on Tables 12 and 13, the histories of nine pastoral stations and the 1861 Robertson Land Acts (discussed in Chapter 7), since European occupation of the Lachlan catchment there were three phases in AL.

Phase 1: 1830s–1860s

In the early colonial era of Phase 1 (1830s–1860s), AOs outnumbered resident landowners (ROs) and owned more land. In 1849, in Bland district, 67% of all lessees (N=9) were AOs, including the state. In Cowra district, 56% of all lessees/landowners were AOs (N=9), excluding one owner with unknown residency status. AOL covered approximately 80% of each district.

Phase 2: 1860s–1970

In Phase 2 (1860s–1970), ROs increased as a proportion of all landowners and by 1885–1900, outnumbered AOs in both districts. However, AOs continued to own more land until after 1935. In 1885–1900, in Bland district, ROs were 61% and AOs were 24% of all landowners (another 10% being Res/AOs). Yet AOL covered 66% of the district. Likewise, in Cowra district, ROs were 62% of all landowners and AOs were 16% (another 13% being Res/AOs), with 8% having unknown residency status. But AOL covered a minimum of 53% of Cowra district.

Between 1885 and 1935 this pattern continued although there were slight variations between districts. By 1920–1935, in Bland district, ROs were 71% of all landowners (i.e. an increase of 10%) and AOs were 16.5% (another 9.5% of landowners being Res/AOs). But AOL still covered 60% of the district, despite this being 6% less than in 1885–1900. In Cowra district, by 1920–1935, ROs had decreased by 9% to 53% of all landowners. AOs increased to 21% (with another 23% of landowners being Res/AOs), although the increase from 15% to 21% was not statistically significant as there were 50 AOs in 1885–1900 and 48 AOs in 1920–1935. Yet, the increase in AOL was significant. Between 1885 and 1935, AOL increased by 14.5% to 67.5% of all land.
By 1970, in both districts, ROs outnumbered AOs and owned more land, the latter unprecedented. Nevertheless, there were some differences between districts. In Bland district, between 1920–1935 and 1970, ROs decreased from 71% to 60% of all landowners, despite ROL increasing from 38% to 70% of all land. AOs increased from 16.5% to 24% of all landowners, with AOL covering 30% of the district.

In contrast, in Cowra district, by 1970, AOs were only 16% of all landowners, and AOL was reduced to 15% of the district (compared to 30% in Bland district). Yet, in terms of actual numbers of landowners, in 1970 there were less ROs in Cowra district than there were in 1885–1900 (i.e. 161 ROs in 1970 compared to 203 in 1885–1900). Thus, in both districts the trend was towards resident landownership, but in 1970, the extent of AOs and AOL in Bland district was significantly more than in Cowra district.

**Phase 3: 1970–2009**

In Phase 3 (1970–2009), there was a reversal of this trend towards resident landownership, with AL increasing in both districts. Between 1970 and 2009, in Bland district, AOL increased from 30% to 39.4%, and in Cowra district, AOL increased from 15% to 58% of all land. The most dramatic increase occurred between 1990 and 2009. In Bland district, the extent of AOL increased from 28% to 39.4% of all land. Even more dramatic was the increase in Cowra district. Between 1990 and 2009 AOL increased from 22% to 58% of all land.

**A comparison of extent in 1849 and 2009**

In 2009, AL had reached the high extent of 1849. In the Lachlan Squatting District of 1849 and the Lachlan LHPA region of 2009, there was no difference between the proportion of occupiers who were AO, this being 49% in 1849 and 50% in 2009. Similarly there was no difference in the proportion of land that was absentee-occupied, this being 71% in 1849 and an estimated 68% of all land in 2009.
A comparison of extent of AL in the Lachlan Squatting District of 1849 and Bland and Cowra Shires in 2009 confirms that extent of AL in 2009 had reached the high extent of AL in 1849. In Bland Shire, the proportion of landowners that were AOs in 2009 (43%) was comparable to 49% being AOs in 184, while the proportion of all landowners that were AOs in Cowra Shire in 2009 (63%) was significantly greater than their proportion in 1849. Although AOL in Bland Shire in 2009 (41.4%) was less than the proportion of all land that was absentee-owned in the Lachlan Squatting District of 1849 (71%), in Cowra Shire, the extent of AOL (69% of all land) in 2009 was no different to that of 1849.

Nevertheless, there were some important differences in patterns of landowners. Firstly, land was held by fewer entities in 1849 compared to 2009. In 1849, the mean area of AOL in the Lachlan Squatting District was 29 times larger than mean area of all AOL in the Lachlan LHPA in 2009 (i.e. 17,465 ha compared to 598 ha). A second difference was that in 1849, only 6% of all landowners in the Lachlan Squatting District were Res/AOs compared to 17% in the Lachlan LHPA in 2009. A third difference was that in 1849 most AOs lived outside the Lachlan catchment, whether in Sydney, a regional town, interstate or Britain, whereas in 2009, AOs were at least as likely to live locally. A fourth difference was that in 1849 most occupiers were individuals. There were no corporations owning land in the Lachlan, whereas by 2009, overseas and in-country corporations had a substantial presence. A fifth difference was that in 1849, no individual owned 10–40 ha. In 2009, 21% of all landowners in the Lachlan LHPA owned 10–40 ha.

Trends in AO types

The four pastoral stations in each district covered 68% to 83% of the district. Consequently, the residency status of their successive owners supported district level findings, as can be seen from Table 16 (Appendix H). Of the 273 identified landowners, 58% were AOs and 38% were ROs throughout ownership. The only property on which ROs exceeded AOs in number between the 1830s and 2012 was the area covered by Lake Cowal Station. Going
beyond these statistics, the histories of nine pastoral stations and historical maps indicated trends in different AO types.

**Extent of state-owned land**

Tables 14 and 15 show the extent of state-owned land followed a similar trend in both districts. State-owned land increased in area between 1849 and 1885–1900, and then decreased until 1990. The increase in state-owned land between 1990 and 2009 (from 2% to 2.4% of Bland district and 0.5% to 2% of Cowra district) does not appear to be a significant factor in the dramatic increase in AL since 1990.

**The primary purpose of historical AOs**

Throughout the nineteenth and twentieth century, the primary purpose of most AOs was commercial agriculture, namely pastoralism. For this purpose, in the Lachlan Squatting District of 1849, landowners absentee-owned a mean area double that which was resident-owned (17,465 ha compared to 8,146 ha). All nine pastoral stations ran cattle and sheep. For example, on *North Logan*:

Initially, cattle were the main enterprise. These were droved to Port Phillip (Sydney) across the Great Dividing Range. Over the years, sheep replaced cattle. Wheat was grown for domestic consumption until 1850, when commercial wheat was sown. By 1890, Ivie Sloan, son of James Sloan, had established a Hereford stud, a Shorthorn stud, and a Clydesdale and Arab horse stud. *North Logan*’s walers (a horse bred for strength and versatility) were exported to the British cavalry in India.

Even after the Federation drought, the Australian Mercantile Land and Finance Company (AMLF) ran 10,000 Merino sheep on *Billabong*, and on *Caragabal* and adjoining *Tregalana*, the Gibson brothers ran 36,400 sheep. Subdivisions of *Lake Cowal Station* were likewise used for commercial agriculture:

From 1885, the government resumed portions of *Lake Cowal*. The selectors of newly created homestead blocks often selected more than one portion of heavily timbered Box, Ironbark and Cypress Pine. When cleared, the loams and clays proved beneficial for growing wheat. ... By 1900, 4,003 acres were
sold to James Palmer, a farmer near Forbes. ... In 1916, Key Perry, resident of Peak Hill, purchased 8,000 acres, employing a manager. ... AOs that remained throughout the 1920s included the local town-based stock and station agent, Tommy Dean. Dean increased his holding from 613 acres to 1,500 acres. ... On T.J. Wilson’s death in 1982, his property was inherited by his absentee daughters. They employed an overseer before leasing out. ... In the 1960s the 3,175 acre property of Drayton was owned by two Sydney-based women, JB Van Hassett and Jane Backhaus. The women employed a farm manager before leasing out.

In addition, Billabong and North Logan ran a dairy, which produced butter for subsistence and a Sydney market. Most large stations grew vegetables and fruit for subsistence, often employing Chinese market gardeners. On Glen Logan:

Water was stored in wooden casks, the women making jams and jellies from fruit, and candles and soap from tallow, as well as preserving meat in brine.

Across all nine stations, AOs invested in infrastructure and other improvements, at times when undercapitalised resident landowners were reducing expenditure or selling. For example, Matthew Robinson, AO of Oakhurst from 1909/1910 until 1925, when he took up residency, had labourers sink bores, rabbit proof paddocks, enhance sheep facilities, and grow wheat and oats to supplement native grasses. He also conserved shelter belts of Yellow Box, Belah and Myall trees.

Historical AO types

Historically, AO types varied between districts. In Bland district, individuals, FCs, NFCs and aggregated structures based in Britain, interstate, and within the state (either in Sydney or a regional town), had an historical presence, as shown in Table 17 (Appendix I). In Cowra district, historically, the dominant AO types were local individual/family operations and FCs, either living on another property, in the township of Cowra or in another regional town. However, the first two owners of Mulyan were based in Britain, as shown in Table 18 (Appendix I).
Multiple property owners

In the nineteenth and early twentieth centuries, many local and non-local landowners owned multiple properties in the Lachlan catchment. In the Lachlan Squatting District of 1849, 20% of all lessees had multiple properties within the district. Of these, 75% (n=32) were AO on all property and 6% were Res/AO. Five Res/AOs employed a relative as a FM. For example, Edward Ryan leased five stations covering 54,666 ha in the Lachlan. He lived on one, and a relative lived and worked as a FM on another.

Among multiple property owners were Res/AOs. The extent of local Res/AOs peaked by 1970 and therefore did not contribute to an increase in AL. In Cowra district, local Res/AOs reached a peak in 1920–1935, when Res/AOs were 23% of all landowners. In Bland district local Res/AOs reached a peak in 1970, when Res/AOs were 15% of all landowners. After 1970, there was a decrease in local Res/AOs in both districts. Between 1970 and 1990, in Bland district, Res/AOs decreased from 15.4% to 7% of all landowners and in Cowra district, Res/AOs decreased from 9% to 6% of all landowners.

In the histories of nine pastoral stations the majority of multiple property owners between the 1830s and 2012 were non-local. Of 273 landowners, there were 25 local Res/AOs, compared to 35 non-local multiple property owners (14 located in a regional town outside the catchment, nine located in Sydney and 12 located interstate) (Appendix I).

Financial firms

In the Lachlan of the nineteenth and early twentieth centuries, financial firms included joint stock (investment) companies, banks, pension funds and trusts acquired land title and played a major role in pastoralism. In 1849, no leases in the Lachlan Squatting District were held by financial firms. By 1885, 15 financial firms and two pastoral companies (the latter bolded in Table 16) held leases and/or licences to 5.6 million ha or 52% of all land covered by pastoral leases in the
Lachlan (Hanson, 1889). Table 19 shows the names of these firms and the number of their Lachlan holdings.

Financial firms increased the area they owned in both districts between 1885–1900 and 1920–1935. By 1885–1900, in Bland district, 11 financial firms (5% of all landowners) held legal land title to 8% of the district. By 1920–1935, 12 financial firms (3% of all landowners) held title to 21% of the district. In Cowra district, in 1885–1900, three financial firms (0.9% of all landowners) held title to 3% of the district. By 1920–1935, eight financial firms (3% of all landowners) held title to 26% of the district.

Table 19: Banks, other financial firms and pastoral companies, 1885 (Hanson, 1889)

<table>
<thead>
<tr>
<th>Name of Company</th>
<th>Lachlan holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Joint Stock Bank</td>
<td>7</td>
</tr>
<tr>
<td>Australasian Mortgage &amp; Agency Company</td>
<td>10</td>
</tr>
<tr>
<td>Australian Mortgage, Land &amp; Finance Company</td>
<td>14</td>
</tr>
<tr>
<td>Australian &amp; New Zealand Mortgage Company</td>
<td>3</td>
</tr>
<tr>
<td>Bank of New South Wales</td>
<td>21</td>
</tr>
<tr>
<td>Bank of New Zealand</td>
<td>1</td>
</tr>
<tr>
<td>British and Australian Trust &amp; Loan Company</td>
<td>1</td>
</tr>
<tr>
<td>City Bank</td>
<td>3</td>
</tr>
<tr>
<td>Commercial Banking Company of Sydney</td>
<td>15</td>
</tr>
<tr>
<td>Dalgety &amp; Company</td>
<td>1</td>
</tr>
<tr>
<td>English, Scottish &amp; Australian Chartered Bank</td>
<td>2</td>
</tr>
<tr>
<td>Goldsborough, Richard &amp; Company</td>
<td>6</td>
</tr>
<tr>
<td>City Bank of Melbourne</td>
<td>1</td>
</tr>
<tr>
<td>Mercantile Bank of Sydney</td>
<td>2</td>
</tr>
<tr>
<td>New Zealand Loan &amp; Mercantile Agency Co.</td>
<td>19</td>
</tr>
<tr>
<td>Union Bank of Australia</td>
<td>15</td>
</tr>
<tr>
<td>Union Mortgage &amp; Agency Co. of Australia</td>
<td>2</td>
</tr>
<tr>
<td>15 financial firms &amp; two pastoral companies</td>
<td>123 (45% of total)</td>
</tr>
</tbody>
</table>

Of the 15 financial firms named on district maps, seven were non-banks. Of the seven, two were established, capitalised and managed from Britain: the AMLF and New Zealand Loan and Mercantile Agency. Five non-banks were established in Australia, including four mutual societies. Two survive to this day. One is the Australian Mutual Provident Society (AMP), established in 1848 and incorporated in 1857. Between 1983 and 2003, AMP was the sole owner of Stanbroke Pastoral
Company, one of the largest beef producers in the world (AMP, personal communication, October, 2011). The other is Perpetual Trustees, established in 1886 to act as an executor/trustee of peoples’ finances and estates (Perpetual Trustees, 2012).

Eight institutions were banks. Of these, two were established and managed from Britain, these being the Bank of Australasia and Union Bank of Australia. Others relied on British banks and individual investors but were established in Australia, these being the Australian Joint Stock Bank Ltd, Commercial Banking Company and the government-established Bank of NSW, Commonwealth Banking Company of Sydney, City Bank of Sydney and the Rural Bank of NSW (Bailey, 1959; Butlin, 1968; Merrett, 1997). A financial institution and bank will now be described in detail.

The Australian Mercantile Land and Finance Company (AMLF) was registered in Britain in 1863, and financed by a network of Scottish solicitors and accountants acting for small investors. It proved a successful long-term venture. Between 1865 and 1900, it was one of the top 10 institutions operating in Australian pastoralism. It lent money and held land in its own right. In 1971, it was taken over by Woodhall Trust (UK), who also acquired Australian Estates from CSR Ltd in 1981. Thus AMLF was a prime player in Australian pastoralism for 118 years (Butlin, 1950; GABR #1, 2006; Prentis, 2008).

The Commercial Banking Company of Sydney was established in 1834 by an Aberdeen Scot, Lesslie Duguid, in association with Sydney merchants, professionals and landholders. The bank was incorporated in 1848 to acquire land for agricultural and grazing operations and to extend loans for such purposes at an interest of 10% to 20%. The bank was represented in Britain by the Commercial Bank of Scotland and the London Joint Stock Bank. Between 1865 and 1900 it had the second largest pastoral investment in NSW after the Bank of NSW. In 1981 it amalgamated with the National Bank of Australasia Ltd (Butlin, 1950; GABR #2, 2006; MacMillan, 1960; Payne, 1967).
The histories of nine pastoral stations illustrate the involvement of financial firms. For example, AMLF co-financed Henry Ricketson’s purchase and operations of *Billabong* (1870–1927) and *Lake Cowal Station* (1875–1930s):

In about 1870, William Lee sold *Billabong* to Henry Ricketson, a Riverina grazier that had made money as a stock dealer on the Victorian goldfields in partnership with James Tyson, another large scale AO. Ricketson was a wool man, so as well as running beef cattle and a dairy, he introduced Merino sheep, financed by his stock agent, wool broker and bank, the AMLF. In 1875, Ricketson and Henry Glinn/Ghinn purchased the lease for *Lake Cowal Station*’s 66,370 ha. After 1884, *Lake Cowal* was split into 31,926 ha, annually leased for 591.5 pounds, and a resumed 28,626 ha, annually licenced for 295 pounds. But Ricketson was in debt, having acquired another 58,494 ha outside the Lachlan, and under 1884 *NSW Subdivision of Runs Act*, he was required to fence the boundaries of all his properties. By 1885, Ricketson shared land title for *Billabong* with AMLF. In the 1890s, sections of *Billabong* were sold to Nielson and Vinecombe, who became resident landowners, and to two West Wyalong-based owners: the McFadzean brothers and Conrad Hilderbrand. Upon Ricketson’s death in 1900, AMLF managed the stations. In 1927, AMLF sold *Billabong* to a Melbourne syndicate, and throughout the 1930s, AMLF sold off subdivisions of *Lake Cowal*.

Many historians describe the corporatisation of Australian pastoralism in the nineteenth century (Prentis, 2008; Wells, 1989), but Butlin (1950) maintained it was mostly encumbered ownership. However, a solicitor’s submission to Morris and Ranken (1883) stated “the mortgagee … is the absolute owner of the land, and can deal with it as he thinks proper” (p. 85). Even Butlin (1950) acknowledged financial firms renewed leases and conditionally purchased and when loaning capital these firms not only required the transfer of land title and ownership of all infrastructure, but the pastoralist became a tenant paying a weekly rental on top of interest payments. Company representatives regularly inspected the property and gave ‘advice’, and the company was legally entitled to ‘proceeds … over and above current commitments … and in the event of foreclosure, to the proceeds of sale in excess of indebtedness’ (Butlin, 1950, p. 108). For banks, the pastoralist forwarded all wool for disposal by the bank on a commission basis. Non-banks held title on all stock to a prescribed number and yield from that number was transferred to the company. They also controlled purchases of all station requirements (Butlin, 1950). Wells (1989) called it modern capitalist ownership where, ‘the property object has
no specific owner but is subject to a variety of legally enforceable claims’ (Wells, 1989, p. 82). Moreover, financial firms continued to invest in the Lachlan in the twentieth century. An example is a pension fund managed by BP Australia that purchased Billabong:

With wool prices falling in the late 1960s, and after the death of his wife, in 1974, resident owner Bob Sanderson sold Billabong to BP Australia Nominees. BP also purchased land around Ungarie and Lake Cargelligo as part of their pension fund investment strategy. Darling Collett and Company managed the properties. Billabong ran 20,000 Merino sheep and 2,000 head of cattle, another 2,800 hectares being share cropped. But with falling wool prices, the mod-1970s cattle market crash and a flood, BP Australia sold Billabong in 1980 for $2.785 million ($262 a hectare) to Leppington Pastoral Company.

British pastoral companies

British pastoral companies were joint-stock companies – the predecessors of modern investment companies. They operated in the Lachlan from the 1850s, one being the Scottish Australian Company. The company was established in Britain in 1839 after that ubiquitous Scot, Lesslie Duguid, encouraged Aberdeen lawyers and accountants to form a joint stock company specifically for ‘The acquiring of land, either by purchase or otherwise, ... for agricultural or grazing operations ... and ... the granting of loans or advances on the mortgage of real property’ (MacMillan, 1960, p. 20). Several investors had already made a fortune investing in land and agriculture in the US in the 1830s. Within months, the founders had 348 investors from every class of people. The British board of 14 extraordinary directors included nine prestigious landowners, professionals and military officers. Another 14 ordinary directors were lawyers and merchants tasked with the company’s management. Shares were sold for one pound each and voting was one share, one vote. The company even sold shares to colonialists appointed to an Australian management committee, this being an enlightened devolution of control for the 1850s.

Until 1884, the Sydney-based manager was Robert Morehead. Morehead used the latitude given him to good effect, often resisting the contradictory
decisions that emanated from Aberdeen. In the 1840s depression, Morehead accumulated thousands of acres from Victoria to Queensland. The former landholders were engaged as managers, the company financing all restocking and improvements. Although company directors criticised Morehead for investing too much in land, Morehead’s investments were vindicated after the 1850s gold rushes and increase in the wool price. The company expanded, bringing out Scottish farmers to work on their properties. In 1972, the company’s tax domicile changed from London to Sydney. But having owned some 60 stations in its 134 year history, the Scottish was in debt and ripe for a corporate takeover. There were several offers, the company finally merging with Marra Developments Ltd in 1974. By the time the Scottish Australian Company delisted in 1984, all its properties had been sold (GABR #3, 2006; MacMillan, 1960; Morrison, 2009; Payne, 1967).

Between 1949 and 1978, the Scottish Australian became the largest landowner in Bland district. After purchasing land from Res/AO Jack Maslin in 1949, the Hazeldean Pastoral Company in 1952, Staniford in 1953/54 and Matthew Robinson in 1956, the company owned 19,849 ha, which they named Caragabal Station. The station ran 35,000 Merino sheep and share cropped 2,023 ha, the latter helped by four wheel drive tractors and modern tillage gear. But in 1965, the Scottish mortgaged their properties to AMP and in 1977, the company sold the portion of Caragabal known as Timbercombe to the Australian Farming Company, set up with English investment money and chaired by ex-chair of the AMLF, Harry Anderson. The rest of Caragabal Station was subdivided into 13 portions. These were auctioned between November 1977 and February 1978. Although other large properties tended to remain in corporate hands, Caragabal’s subdivided blocks were purchased by six resident farming families and five AOs:

Five resident family farm operations purchased six portions: the Ridleys (4,275 ha), McAhons (1,567 ha), McCaskeys, Pellow (1,511 ha) and Tullochs (1,512 ha). Local farmer, James Maslin, grandson of Fred Maslin, and owner of Warrakimbo’s 10,117 ha, purchased 3,312 ha, one portion not adjoining Warrakimbo, making him a Res/AO. Other blocks were sold to AOs David Englert, former farm manager on Caragabal, and then resident
farm manager on Timberscombe (635 ha); Harry Davies, a multiple property owner from Quandialla (443 ha); Bernard Lenehan, resident of Bathurst (1,698 ha), and Peter Allen, resident of West Wyalong (3,949 ha).

Australian Estates was another British pastoral company that operated in the Lachlan. Formed in London in 1894, in 1927 it established the NSW Pastoral Company that was financed and managed by British investors wishing to acquire rural properties in the colony. Jemalong Station, west of Forbes, was one of the Company’s first purchases. After World War II, Australian Estates expanded, but in 1975, it was taken over by CSR Ltd (GABR #4, 2006; ICA, 2011).

Other companies operating in the Lachlan were established in Australia, but relied on British investors. These included Dalgety & Company, established in 1848 by the Sydney-based Scot, Frederick Dalgety. Dalgety was a wool broker. He returned to Britain permanently in 1859, but in 1884, he incorporated the company, establishing a joint-stock company relying on British investors. By 1910, Dalgety was the largest firm operating in Australia and the 62nd largest company in the world. In 1964, it remained in the top ten firms operating in Australia. But in 1976–77 it divested most of its pastoral interests and in 1983, Dalgety Ltd (UK) merged with three other companies. Its remaining pastoral holdings were sold to Westfarmers after 1993 (Butlin, 1950; GABR #5, 2006; Hartwell, 1972; Ville and Merrett, 2000).


Vertically integrated FC

An historical vertically integrated FC bears striking similarities with a contemporary AO included in the Lachlan research:
In 1925, Booberoi was sold to Sydney industrialist, F.W. Hughes. Born in 1869, the fourteen year old Hughes worked as a farm hand, progressing to wool sorter, then wool valuer. By the time he purchased Booberoi he was a giant of wool and meat processing with factories in Botany (Sydney). He owned at least ten stations, moving half a million sheep between them. Booberoi was the focus of his Western Lease country because of its proximity to the railway. Twenty shearer sheared up to 200,000 sheep a year. In the Great Depression, Booberoi employed 500 workers. During this time Hughes had kilometres of irrigation channels excavated by 40 horse teams, the channels supplied by a pump station at Booberoi Weir installed by Alexander Haley in 1901. In the 1940s, the small, dapper, reclusive Hughes was exporting wool, meat and tanned goods to Japan and North America. After his death in 1950, F.W. Hughes Industries ran his properties, selling Booberoi in 1957 to G.H. Mitchell and Sons.

**Religious institution**

In 2012, two US religious institutions owned multiple properties around Cowra, Condobolin and Lake Cargelligo. An example was the current owner of Booberoi:

In 1997, South Australia-based G.H. Mitchell and Sons sold Booberoi to AgReserves Australia, the trading name for the US-based Church of Jesus Christ of Latter Day Saints (Mormons). They also purchased Kooba, Benerembah and Bringagee outside the Lachlan, the land deal being the largest in Southern Australia until that point in time. ... In 1999, Booberoi had a workforce of nine, with seven families living on the property. The intent was to irrigate for fodder crops, maize, cotton and soy bean but drought prevented this. Instead, the station was used to background Angus breeders and from 2007, Wagyu for the Japanese market. The last resident farm manager, Scott Hughes, left in 2004. Since then, a local farmer has been a part-time caretaker.

**Benefactor**

One owner of Billabong was a benefactor. In 1884, William Angliss arrived in Queensland from England via New York. Two years later he opened a butcher’s shop in Melbourne. Exporting frozen meat to soldiers serving in the Boer War, Angliss purchased a number of stations, often with partners, including the cattle king, Sidney Kidman. By the 1930s, Angliss owned the largest personally controlled meat enterprise in the British Empire (Beever, 1979):
In 1927, AMLF sold *Billabong* to a syndicate consisting of the Melbourne-based meat industry magnate and pastoralist, William Angliss, and pastoral entrepreneur, Henry Talbot Sanderson, and two of his brothers, their father being the Scottish lord, Sir Robert Sanderson, financial advisor to the AMLF and NSW government. After a few years, Robert Sanderson took over the property, except for a 2,023 ha outstation retained by William Angliss. Angliss used *Yoathmurra* to provide disadvantaged English youth an opportunity to work on a sheep station. Two sponsored youths from the UK charitable organisation *Little Brothers*, Arthur Finch and Arthur Carney, became resident share farmers. They purchased *Yoathmurra* in 1936 before selling in the 1950s.

**AOs’ commitment to a property and pastoralism**

AOs varied in their commitment to pastoralism. Those involved for less than ten years included Benjamin Boyd, a Sydney-based entrepreneur that leased 48,563 ha in the Lachlan Squatting District in 1849 and 14 stations outside the district, having rallied British investors and established the Royal Bank of Australia and a shipping company before arriving in the colony in 1842. His endeavours proved unprofitable and when investors demanded their money back, Boyd sold everything and left the colony in 1849. But resident lessees could also be short-term. In 1860, Ben Hall and his brother-in-law leased *Sandy Creek Station* between Forbes and Grenfell. They ran cattle which they sold to gold diggers on Lambing Flat (modern day Young). In 1862, Hall participated in the largest robbery in Australian history. Thus began Ben Hall’s career as a highwayman until he was shot dead in May 1865. Other AOs who occupied property for less than ten years included James Palmer (1900–1907); Samuel McCaughey (1904/06–1909/10); the family pastoral company, T.A. Fields (1935–1942); Jack Gibson (a few years in the 1940s); HPR Coles (1936–38); BP Australia (1974–1980); Peter Allen (1978–1984/85); Australian Farming Company (*Timberscombe*, 1977–1984, and *Oakhurst*’s homestead block, 1979–1984); John Elliot (1984–1985) and Alan McKenzie (1884/85–1990) in Bland district, and in Cowra district, town-based Phillip Squire, who purchased portions of *Jerula* in 1938, to subdivide and sell in 1939.

Other AOs had a long-term commitment. By 1885, fourteen AOs in the Lachlan Squatting District in 1849 remained lessees in NSW, these being 61% of those that did so (N=23). Of these, five continued to lease in the Lachlan, including William...
Broughton, an AO who increased his holdings in the Lachlan from 5,423 ha in 1849 to 220,050 ha in 1885. Otherwise, replacing early AOs were the likes of William Oswald Gilchrist (b.1843; d. 1920), a Sydney-based merchant, whose company imported Scottish labour, invested in properties and exported wool, and who, by 1885, leased 10,870 ha south of Forbes in his own name, and in syndicate, an additional 252,886 ha near Forbes and Parkes, as well as 44,749 ha outside the catchment but in NSW. The Kidman family also owned different properties in the Lachlan. Sidney Kidman owned Lachlan property in the 1860s, while the Kidman family company owned a 32,000 ha property from 1993 until 2005.

AO families could own properties over generations, as did three generations of the Gibson family (see Appendix K). On nine pastoral stations, 27% of all AOs (N=172) owned a property for 20+ years. In Bland district they included William Lee (Lake Cowal, 1856–1875); Henry Ricketson (Billabong and Lake Cowal, 1870/75–1900, AMLF running the properties until 1927/1930s); Alexander Wilson (Oakhurst, 1852–1885/1888), T.E. Dean (a portion of Lake Cowal for 30 years); the Young family (a portion of Lake Cowal, 1947–1978); Matthew Robinson and his family (Caragabal or Caragabal’s homestead block, 1888–1979) and Leppington Pastoral Company (Billabong, 1980–2012). In Cowra district, Britain-based Doctor William Redfern and his estate owned Mulyan from 1830 to 1886 despite never laying eyes on the property. In 1886, Redfern’s trustees sold Mulyan to John Fagan, who absentee-owned Mulyan until his death in 1912. Twentieth century examples included Harold Cornock, co-owner of Franklins national grocery chain from 1954–late 1970s, and owner of North Logan from the early 1980s to 2000. A long term owner of Jerula was E.A. Emery (1938–1972). Booberoi Station had a series of NFC and FC owners of 20+ years, including H.W. Hughes (1925–1957), and G.H. Mitchell & Sons (1957–1997).

**AOs’ capacity to change residency status over time**

AOs could change their residency status over time. On nine stations, at least 9.6% of all AOs (N=172) did so. Six were AOs who became ROs; six were ROs who moved off-farm; one was a RO, who became an AO, then returned to the property, and
two were AOs who became ROs, then moved off-farm. Excluded from these statistics were AOs’ descendants who became ROs and ROs’ descendants who became AOs. For example, Arthur Ranken was an AO for seven years, RO for 10 years and AO for another 10 years. Matthew Robinson was an AO for 15 years and resident for up to four years:

Five years after arriving in the colony, in 1831, the Scottish lowlander, Arthur Ranken, took up a land grant of 2,560 acres on the Lachlan River, north of Cowra, leasing another 5,000 acres and acquiring a further 2,280 acres with financial backing from his brother. He called his property *Glen Logan* but until 1837/1838 he preferred to live in Bathurst, leaving his servant, James Sloan, to manage the property. After marrying, Ranken built a stone house on *Glen Logan*, where he and his wife lived for 10 years. But droughts, floods and fires, coupled with the 1840s depression, sent Ranken bankrupt. In 1847, Ranken mortgaged *Glen Logan* to John Tindale, a Bathurst resident, and took a job managing a property on the Hunter River owned by the Australian Agricultural Company. James Sloan leased *Glen Logan*, before purchasing the property in 1857.

Samuel McCaughey, sold *Oakhurst*’s 30,000 acres in 1909–1910 to his farm manager, Matthew Robinson. A fellow Irishman, in 1881 Matthew Robinson had migrated to NSW to work as a jackaroo on one of McCaughey’s stations. After being entrusted to manage all of McCaughey’s holdings, he purchased *Oakhurst*, continuing to manage McCaughey’s properties until 1912, when in partnership with T.W. Vincent, he purchased three of them, adding another two in 1914. … Selling three stations to Australian Sheep Farms Limited in 1925, Robinson retired to *Oakhurst*, running Merino sheep and shorthorn cattle. He died in Sydney in 1929.

**New trends in absentee landownership**

Three new trends since 1970 are the extent of non-local absentee small property owners, the country-of-origin of foreign investors and Aboriginal aggregated landownership.

**Extent of non-local AOs of 10 – 40 ha**

Absentee small property owners had an historical presence in Cowra district but not in Bland district. In Bland district only two or three landowners in 1885–1900 and 1920–1935 owned less than 40 ha. All were resident. In Cowra district in 1885–
1900, 21% of all landowners (N=327) owned 40 ha or less. Seventeen percent of these (n=66) were AOs, comprising 3% of all landowners. Many were local AOs. In 1920–1935, 16% of all landowners (N=262) owned 40 ha or less. Twelve percent of these (n=43) were AOs, 7% (3) being women. From their surnames they most likely were related to other landowners in the district.

Historically, small blocks were often subsistent, a family growing vegetables and running a few cows, chooks and horses. Income came from seasonal off-farm work such as shearing, farm labouring, share farming, or work as a farm manager or on a government funded rail, road or dam project. There is a possibility some were lifestyle blocks. Even so, the 2% to 3% of all landowners being absentee small property owners in Cowra district was negligible compared to 20% of all landowners in Cowra Shire being AO on small properties in 2009, 13% of all landowners being non-local AOs of 10–40 ha. Thus, non-local absentee small property ownership is a new trend, if only in extent.

**Country-of-origin of foreign investors**

Until the 1980s, foreign investors in the Lachlan came from Britain. This is changing. In 1988, Oakley Holdings, a Japanese subsidiary of Nippon Meat Packers, the largest meat distributor in Japan, purchased four properties in Australia including Walla Wallah near Forbes. Of 20 known foreign companies operating in the Lachlan in 2010 (i.e. excluding individuals and small partnerships), 50% were from Asia and the Middle East (e.g. Tiger Group; Sumitomo, and including 5% or one firm from the Middle East: Qatar-based Hassad Australia); 40% were from North America and continental Europe (e.g. North American based Barrick Australia; Cargill/BFB Pty Ltd; US pension fund, Westchester Group; with 5% or one firm Swiss-based Glencore International) and 10% were from Britain (Rio Tinto; UK Pension fund, MHPF) (field work; Coorey, 2011; Cowie, 2011; Moir, 2011; PRDnationwide, 2012).

**Aboriginal aggregated ownership**

Until European occupation, Wiradjuri clans held collective traditional ownership over defined territories where they travelled seasonal routes and camped at
particular sites for up to two months at a time (MacDonald, 1998; Read, 1988; AO-A-15). European occupation dispossessed them of their territory, although a few worked their own small farms and others camped and worked on properties covering their traditional land, as illustrated by the histories of Glen Logan/North Logan and Booberoi:

Soon after arriving in the area, James Sloan befriended a local tattooed and tubercled Wiradjuri chief, calling him Duke of North Logan and giving him a brass plate to wear around his neck. Over time, the chief took the name ‘Billy Sloan’, his wives and extended family seasonally camping by the river, their nightly singing heard by the occupants of the slab hut, and later, the grander pise house. In the early days, work of ring barking, clearing, post-splitting, fencing and shepherding was done by Wiradjuri in return for food and tobacco, along with three convicts. Later, Sloan employed Scottish immigrants, but during the 1850s gold rushes, shepherds left the land, lured by the gold fields. During these times, many stations relied on Wiradjuri labour.

Booberoi is located 15 kilometres north of Euabalong, a village nestled into a bend of the Lachlan River where the Wiradjuri population maintained language and traditions into the early twentieth century. Nearby are traditional campsites and Box trees scarred from Wiradjuri cutting bark to make shelters, shields, canoes and coolamons. A former Euabalong resident observed “My grandmother is ninety-two. … When she was a kid she remembers black and white children playing together. … There was no segregation. … Growing up in Euabalong … Kooni’s Corner … was where all the Aborigines waited for work” (AO-A-14). For generations, Euabalong’s residents worked on Booberoi. During Alexander Haley’s tenure (1879/80–1914) “Grandfather said ‘old Haley’ always ran his property properly, not from overseas or a city office. He knew and loved every inch of the place. … With an Aboriginal boy he … camped where night caught them” (Riley, 1981, p. 30). The boy was called Jimmy Booberoi. Mr. Haley told Kit Riley’s grandfather “Ned, I thought I was an educated man … but Jimmy could put all my education into a cocked hat and still have room to spare. … He taught me everything I know about the land and many more things as well. … I could never have lasted 12 months … without [him]’ (Riley, 1981, p. 30).

In 1912, Haley fell ill. Before departing for Melbourne, he told his farm manager to make sure Jimmy always had a job on Booberoi. Jimmy remained on the station for the rest of his life. Haley died in 1914, his sons selling Booberoi in 1925 to Sydney industrialist, F.W. Hughes. During Hughes’ ownership, a Wiradjuri informant’s grandmother worked as a cook on Booberoi. Other Wiradjuri women worked as rouseabouts, the men working as stockmen and shearers (FM-A-34). When G.H. Mitchell and Sons owned Booberoi (1957 - 1997), an Aboriginal informant “was a … young and
silly stockman riding horses, breaking in calves, getting the sheep in for shearing. There was 12 or 15 blokes working, white and black fellas mixed” (AO-A-15). FM-A-34’s father worked on Booberoi as a jackaroo, earning extra money hunting and selling rabbits. As elders, he and a cousin were instrumental in the Wiradjuri Regional Land Council acquiring a section of Booberoi on 21 November, 1987, in the hope that it would ‘create a new economic base for the community’ (Koorier, Newsletter of the NSW Ministry of Aboriginal Affairs, December, 1987). The 9,890 ha property was renamed Barooga Karrai, after a Wiradjuri warrior, its management and operation funded by a Regional Land Fund (Pollack, 2001). In 1992, land title was transferred to the NSW Aboriginal Land Council.

Figure 40: Entrance to Barooga Karrai, 2009

Since 1980, four properties used for commercial agriculture were acquired by urban-based Commonwealth, state and local Aboriginal aggregated structures in the Lachlan. The three absentee-owned properties covered 11,650 ha (0.3% of the Lachlan LHPA). Thus, Aboriginal aggregated ownership is a new AO type.
Key findings

Assumptions
The assumption that resident family operations have dominated the history of Australian agriculture (Australian Government, 2012) is ahistorical. It is probably based on the increase in numbers of resident landowners after 1861, the prevalence of resident landownership post-World War II until the 1970s and stories and poems by the likes of Henry Lawson. Findings also contradicted the assumptions that investment by non-family corporations in Australian agriculture is a recent phenomenon (Tonts et al., 2003) and the contemporary extent of financial firm investment in land and agriculture is unprecedented (Burch and Lawrence, 2009). However, findings were consistent with increased (absentee) small property ownership is a recent trend in landownership (Mendham and Curtis, 2010).

Trends in extent
Absentee occupation of the Lachlan in the nineteenth century was extensive. In 1849, 49% of occupiers in the Lachlan Squatting District were AO, another 6% being Res/AO, AOL consisting of 71% of all land.

Over time, resident landownership increased. Between the 1830s and 2009, there were three historical phases replicated in two contrasting districts. In Phase 1 (1830s–1860s) AOs occupied most land and in some districts, comprised the majority of landowners. During Phase 2 (1860s–1970) resident landownership increased. By 1885-1900 ROs outnumbered AOs, but AOs continued to occupy most land until at least 1935. By 1970, ROs were in the majority and occupied most land, the latter unprecedented. During Phase 3 (1970–2009) AL increased, the most dramatic increase occurring in 1990–2009.

By 2009, absentee landownership had reached the high levels of 1849. At the regional level, AO were 49% of all landowners in 1849 and 50% in 2009. AOL covered 71% of the region in 1849 and an estimated 68% of the region in 2009.
Comparing the extent of AL in the Lachlan Squatting District of 1849 and in two shires in 2009 confirms these findings. There was no statistical difference in the proportion of landowners who were AO in Bland Shire in 2009 (43% of all landowners) to that in 1849, while the proportion of AOs in Cowra Shire in 2009 (63% of all landowners) was significantly higher than in the Lachlan Squatting District of 1849. AOL in Cowra Shire in 2009 had reached the extent of AOL in 1849 (69% in Cowra Shire), although in Bland Shire AOL (41% of all land) had yet to do so.

Important differences in patterns of landownership between 1849 and 2009 included that the concentration of AL was 29 times higher in 1849 than 2009, Res/AOs were three times more numerous in 2009 than 1849; local AOs were more numerous in 2009 compared to 1849 and the corporate presence in 2009 was in contrast to most AOs being individuals in 1849, although this changed in the 1850s.

**Trends in AO types**

*Historically, most AOs were involved in commercial agriculture and most contemporary AO types have historical antecedents.* Historical AO types included local, interstate and British-based individuals, partnerships, farm-based and vertically integrated FCs, NFCs, aggregated AOs and the state. Aggregated AOs included pastoral (joint stock/investment) companies, banks and other financial firms such as private investment companies and public mutual societies.

AOs could have a short-term commitment to a property (less than ten years) but *AOs could have a long-term* (i.e. 20+ years or generational) *commitment to a property.* Twenty-seventy percent of all AOs on nine pastoral stations (N=172) owned the same property for 20+ years. As well, *AOs could change their residency status over time,* as did 10% of all AOs on nine pastoral stations.

Field work generated propositions were that *state-ownership and local Res/AOs did not contribute to the increase in absentee landownership in either Bland or Cowra districts, 1970–2009.* In both districts, state-ownership only
slightly increased between 1990 and 2009 and the proportion of landowners who were local Res/AOs had peaked by 1970 (the peak occurring in Cowra district in 1920–35, at 23% of all landowners, and in Bland district in 1970, at 15% of all landowners). In the histories of nine large pastoral stations, non-local multiple property owners were more numerous than local multiple property owners, which indicates trends for non-local Res/AOs may differ to that of local Res/AOs.

In the Lachlan, *British owned or financed pastoral companies, banks and other financial firms played a major role in nineteenth and twentieth century pastoralism*. By 1885, they held land title to 52% of the Lachlan region. Their AOL increased between 1885–1900 and 1920–1935 in Bland district from 8% to 21% of all land, and in Cowra district from 3% to 26% of all land.

*Unprecedented trends since 1970 are the extent of non-local AOs of small lifestyle properties in Cowra Shire, the country-of-origin of foreign investors and Aboriginal aggregated landownership*. Non-local absentee small property owners in Cowra Shire in 2009 were 13% of all landowners, which far exceeded 3% of all landowners in Cowra district in 1885–1900 being AOs, including local AOs. Since 1980, the country-of-origin of foreign investors has changed from 100% British to 50% Asian and Middle Eastern, 40% other European and North American and 10% British in 2010 (N=20). As well, Aboriginal aggregated ownership was established.
Chapter 7: Underlying factors contributing to trends in landownership in the Lachlan catchment, 1830s–2012

Introduction

This chapter addresses the third key question, ‘What factors contribute to absentee landownership (AL) in the Lachlan?’. An historical sociological reading of the literature and secondary data identified underlying political, economic, environmental and socio-cultural factors linked to trends in landownership and particular AO types since European occupation of the Lachlan, these trends having been established in Chapter 6 and summarised in Table 20. Table 21 (Appendix J) outlines the events and trends for all key factors described in this chapter.

Notes on Table 20:
The mean (M) areas owned for Cowra in 1990, are likely to be overestimates as the 1990 map did not name all landowners. Bracketted percentages are Bland and Cowra Shire statistics. All other statistics are for Bland and Cowra districts. R/AO is an abbreviation of Res/AO. Bolded numbers are maximum proportions, excluding district AOL in 1849. Bolded numbers are maximum proportions, excluding district AOL in 1849.

Table 20: Overview of historical trends

<table>
<thead>
<tr>
<th>District parameters</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>% AO Bland</td>
<td>67%</td>
<td>24%</td>
<td>17%</td>
</tr>
<tr>
<td>% AO Cowra</td>
<td>56%</td>
<td>16%</td>
<td>21%</td>
</tr>
<tr>
<td>% R/AO Bland</td>
<td>0%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>% R/AO Cowra</td>
<td>0%</td>
<td>13%</td>
<td>23%</td>
</tr>
<tr>
<td>% AOL Bland</td>
<td>83%</td>
<td>66%</td>
<td>60%</td>
</tr>
<tr>
<td>% AOL Cowra</td>
<td>83%</td>
<td>53%</td>
<td>68%</td>
</tr>
<tr>
<td>M ha Bland</td>
<td>35,208</td>
<td>1,331</td>
<td>808</td>
</tr>
<tr>
<td>M ha AO Bland</td>
<td>41,974</td>
<td>1,781</td>
<td>1,651</td>
</tr>
<tr>
<td>M ha RO Bland</td>
<td>17,538</td>
<td>591</td>
<td>383</td>
</tr>
<tr>
<td>M ha Cowra</td>
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<td>285</td>
</tr>
<tr>
<td>M ha AO Cowra</td>
<td>12,371</td>
<td>300</td>
<td>421</td>
</tr>
<tr>
<td>M ha RO Cowra</td>
<td>3,571</td>
<td>129</td>
<td>117</td>
</tr>
</tbody>
</table>
Phase 1: 1830s–1860s

Overview
The early colonial era (1830s–1860s) ended when the 1861 Robertson Land Acts came into effect throughout the 1860s. During the early colonial era, the prevalence of absentee occupation in the form of British and Australian interstate, regional and city-based individuals, partnerships and corporations was linked to international political economic factors, colonial land laws, land values, monetary policies and regional logistics. All served to dispossess the Wiradjuri people.

International political economic factors
By the nineteenth century, Europe’s colonial tentacles were global in spread, supported by the state and trade. Britain had become a major textile exporter. But the Napoleonic Wars (1799–1815) had interrupted wool supplies from Spain and Saxony (Diamond, 2005) and by 1839, the scale of British investment in North America (Rasmussen, 1994; Zhang et al., 2005) caused some US states to legislate against foreign ownership, while confidence was dampened by on-going conflict in Canada (Hodgson et al., 1999; Johnson, 1995). In the 1850s, demand for wool and textiles grew, partly because of the Crimean War (1853–1856), and the US Civil War (1861–1865) and British investors looked for new places to invest. They turned their attention to a vast under-populated, under-capitalised country that had become a colony for the transportation of convicts in 1788, and which, by the 1820s, was producing quality Merino wool.

Colonialism and regional logistics
In the colony of NSW, when Surveyor General, John Oxley, led a team over the Great Dividing Range and along the Lachlan River in 1817, their eyes feasted on open wooded grasslands created by 40,000 years of Wiradjuri ‘firestick farming’ (Barr and Cary, 1992; Cathcart, 2009). Although outside the limits of legal settlement, a weak government and inadequate police force were unable
to stem the flow of adventurers and agents sent by the Sydney-based political elite or town-based gentry with enough capital to pay for agents and livestock and exploit the ‘waste’ lands. Opportunists included military commanders such as Captain William Hovel, parliamentarians like Isaac Shepherd and Sir William Wentworth, as well as a Goulbourn doctor, Andrew Gibson.

The rugged nature of outback living contributed to AL (Davison, McLeary and McCarty, 1987). First contacts with the Wiradjuri were mixed, Kabaila (1996) warning against cultural stereotypes. Wiradjuri enabled many Europeans to survive (Musgrave, 1979), yet confrontation was inevitable, the Wiradjuri not realising the gift of a few trinkets gave newcomers exclusive possession of their hunting grounds and sacred sites (Connor, 2002). When disease and violence wiped out whole clans no other clan set foot on the dead clan’s territory (Read, 1988; Proudfoot and Roche, 2005). Survivors became absentee traditional landowners: raiders and station workers, a few families taking up leases of two to five hectares for subsistence use, the majority camped on Crown land (Beckham, 1848–1849; Marriott, 1988).

Between Europeans, boundary disputes were frequent and sorted by the prevailing ethos, ‘Let him take who has the power, and let him keep who can’ (Weaver, 1996, p. 989–990). Under these conditions, and with the terrible forties recession (1841–1846) and drought (1843–1850), few wished to subject their family to living in an isolated slab hut, their children home schooled, as was the experience of James Sloan’s family on North Logan.

Although most AOs were from the capitalised elite, in Cowra district, recipients of land grants included emancipated convicts. One was Dr. William Redfern, who was convicted of complicity for advising crew to remain united in their appeal against poor conditions on board ship in 1797 during the Napoleonic Wars. In 1928, he had returned to England and successfully petitioned the King to allow emancipated convicts the right to own land in the colony. Dr. Redfern remained in England but in 1930 was granted the estate of Mulyan, the doctor never laying eyes on the property. Left to manage his estate was another emancipated convict, John Grant,
who lived in Hartley. In 1831, two other emancipated convicts, Simeon Lord and Henry Fulton, were also granted land in Cowra district. Both were based in Sydney, Reverend Fulton having also been a political prisoner, convicted of sedition for supporting the Irish Nationalists in their rebellion against British Rule in 1798.

The illegal claims of early ‘squatters’ were made legal by the 1836 Act of Council. An annual ten pound ‘licence to depasture’ gave land claimants the right to run livestock over any amount of land (Dorsett and Godden, 1999). This high fee favoured capitalised AOs. The British parliament’s 1842 Sale of Waste Lands Act allowed land to be auctioned for a minimum of one pound per uncleared acre, prohibitive for all but the capitalised. The British parliament’s 1846 Act for regulating the Sale of Waste Lands belonging to the Crown in the Colonies and the colonial government’s 1847 Orders in Council authorising 14 year leases in the Lachlan, required an annual fee of ten pounds for up to a prescribed number of acres (invariably underestimated) and livestock. Lessees were able to purchase 640 acres every 25 square miles. As a result of the cost, wealthy Sydney-based lessees like William Wentworth talked of ‘ruin or rebellion’ (King, 1957, p. 54) despite their land increasing in value (Baker, 1958).

The colony’s vast acreages and the global market for wool – a light weight, durable commodity on which no export duty was charged – attracted British aristocrats such as Robert Campbell and Robert Sanderson, British military commanders like Major West and British entrepreneurs like Ben Boyd. From 1843, livestock and wool became legitimate security for short-term loans (Wells, 1989) with interest rates of up to 20%. NSW Banks could not accept land as collateral until after 1850, so it was left up to British financial firms and pastoral companies (Butlin, 1968), established by lawyers and accountants in Britain’s textile heartland, and Sydney-based stock and station agents, wool processors and marketers like Frederick Dalgety and Thomas Mort, to advance credit and directly invest in land and pastoralism (King, 1957; MacMillan, 1960; Payne, 1967).
Those that lost land during the highland and lowland clearances and other enterprising individuals from Britain’s working class, migrated, working as agents, overseers and labourers. Initially paid in land and/or cattle, some became absentee landowners or multiple property occupiers, who resided on one of their properties, among the latter being James Sloan, John Grant and Matthew Robinson.

**Gold rushes**

Coinciding with the rise in wool prices from 1855, the gold rushes of the 1850s and beyond involved the export of gold to Britain, further fuelling British firms and individuals to invest in the Lachlan (Payne, 1967; Wells, 1989). Henry Ricketson and James Tyson made fortunes on the Victorian fields and became interstate multiple property owners in the Lachlan catchment. The gold fields were magnets to farm labour and immigrants. Only capitalised AOs could afford the gold rush-inspired costs of waged labour, although ROs benefited from unpaid family labour. Meanwhile, ex-miners and Sydney liberals demanded an end to AOs’ monopoly of the land. To secure existing investments, the landowner dominated NSW Parliament (Karr, 1974) introduced the Torrens system of registered land title in 1858 (Cahill, 2007). Yet populist pressure and political intent to populate the bush culminated in the 1861 Robertson Land Acts, these Acts heralding Phase 2.

**Phase 2: 1860s–1970**

**Overview**

In Phase 2, land and tax laws, and farmer support schemes favoured ROs. But AOs continued to own the majority of land until after 1935 due to family succession and harsh conditions of outback life, as well as international economic downturns, drought and increased input costs. These last three factors benefitted capitalised AOs that lent money and assumed ownership or purchased land. Nevertheless, high commodity prices during World War II and the Korean War, as well as good rainfall and terms of trade in the 1950s and
1960s, helped ROs to retain land and expand, leading to resident landownership’s zenith in 1970.

Factors contributing to resident landownership

From the 1860s, land laws, tax laws and farmer support schemes encouraged residency. The 1861 Crown Land Alienation Act (NSW) enabled conditional selection and purchase of up to 320 acres (130 ha) of unsurveyed Crown land. Residency was a condition for owners to gain freehold title after three years (Gammage, 1990). As fourteen year leases expired throughout the decade, the two 1861 Robertson Land Acts (the other related to leasing) came into effect. Subsequent land and tax acts also favoured residency. These included the 1884 Subdivision of Runs Act (Hanson, 1889; Wells, 1989), the 1885 Land Tax Act and the 1904 Closer Settlement Act (Gammage, 1990). Subdivisions and gold rushes attracted ROs, leading to ROs comprising 61% of all landowners in Bland district and 62% in Cowra district by 1885-1900. ROs were also favoured by the 1910 Land Tax Act that gave ROs a tax exemption of up to 5,000 pounds (Heaton, 1925). The 1917 Act for Soldier Settlement Subdivisions enabled war veterans to select a block by ballot and purchase the land via interest free payments over five years. Yet in NSW, only 48% of all soldier settler blocks were occupied (Powell, 1981). For others, “[there was] a lot of heart break of soldier settlers that battled away on unproductive blocks too small in too dry a climates” (AL-15) and many sold during the 1920s. Another soldier settlement scheme was devised for returned World War II soldiers, again increasing residency, but as an AO reported: “[My father] was a clerk in the Department of Lands … for … 47 ½ years. … He was involved with … the subdivision[s] … for soldier settlers … and [was] concerned that the subdivisions weren’t done correctly. … So often the size … was inadequate (AO-CL-39). Most subdivisions fell well short of Morris and Ranken’s (1883) recommended minimum 2,560 to 5,760 acres (1,036 to 2,331 ha) to support a family in the Lachlan.

To prevent foreclosures and keep farmers on the land during successive recessions and droughts, the Federal government established farmer support
schemes. In 1914, the government put a reserve price on wool. Although primary producers received good commodity prices during World War I, prices dropped in the 1920s and from 1932, the Labor Government established statutory marketing bodies with monopoly powers to maintain prices for wheat, wool, dairy, raisins and meat. Also in 1932 the Government introduced the *Moratorium Act* (on debt) and the *Farmer Relief Act*, establishing a Farmers Relief Board, later called the Rural Reconstruction Board. Even so, by 1940 farmers were being helped to leave unviable farms, or amalgamate (Harmer, R., 2010; Ville and Merrett, 2000; Wilkinson, 1996).

As a result of these political interventions, ROs increased in number in Bland district between 1885–1900 and 1920–35 but not in Cowra district, where extensive subdivisions increased Res/AOs to 23% of all landowners compared to 10% of all landowners in Bland district in 1920–35. The Depression appears to have hit Cowra worse, as most of those on small subdivisions were reliant on off-farm income, this causing a decrease in the overall population, and a decrease in ROs by 9% of all landowners and an increase in AOL by 14.5% of all land, between 1885 and 1935. Certainly banks and other financial firms had more of a presence in Cowra district by 1920–35 (26% of all land, compared to 21% of all land in Bland district). While no doubt farmers in Bland district were also hit hard by both the Depression and drought, some were more cushioned by the gold rush of the 1890s–1920; the district being connected by rail to Temora in 1903; and larger property sizes, leading to ROs being full-time farmers.

But three decades of favourable terms of trade and two decades of good rainfall turned the tide for ROs. During World War II, Britain took all the wheat, wool and meat Australian farmers could produce. In the 1950s all landowners benefited from beneficial rain and commodity prices. Wool prices soared during the Korean War (1950–53) and good prices continued into the 1960s. The 1960s Green Revolution increased production and enabled expansion. Land values were reasonable and the introduction of tractors after World War II made cropping easier: “*There were still plenty of blokes that farmed with horse teams up until the start of the Second World War, but … invariably mechanisation is speeded up by war. … The carry over*”
... was that ... trucks were better, tractors were better” (AL-15). Consequently, in the “40s/50s ... it used to only take you two or three years to pay a property off. .... The ground wasn’t very dear and the commodity prices [were] good enough” (AO-TSHF-23) and “in the 60s ... one good wheat crop ... could nearly pay for a property” (AL-15).

This combination of factors enabled ROs to consolidate, as they did in Cowra district, the mean area of ROL in 1920–1935 being 117 ha, this rising to 348 ha by 1970. In Bland district, some ROs purchased non-adjoining property, leading to local Res/AOs’ height in 1970 (15.4% of all landowners, an increase of 6% since 1920–1935). The process was described by an absentee lessee, referring to his father:

He’d lived in country towns as a boy, went away to war. ... In ‘49 he ... used war service payments to buy a property and ... for the first year, worked ... for his old mentor and ... set up his small property on a part-time basis, eventually got married and moved onto the property. ... The property was 980 acres.... There was a four room homestead ... and a couple of old sheds. He and [some mates] set about clearing the country with a horse, pulling down ring barked trees and fencing. ... His greatest joy was to buy a second-hand 14 horse power tractor, ... a Massey Harris. ... He bought his next property in 1958. ... It was a small not-quite-adjoining ... 640 acre ... soldier settler block. ...[Then] in ’66, a property became available not far to the east ... [and because of the government’s limit on land accumulation my parents approached] my mother’s uncle, ... a successful ageing businessman in Sydney, ... and said, ‘Would you be interested in investing in a property, and we’ll lease it from you? ... [In about 1973, that property of] 970 acres ... was transferred into my name. ... We formed a farming partnership and ... in ’76 ... we bought two properties [from] a neighbour, ... 900 acres each, ... so that built us up to 4,300 acres (AL-15).

Factors contributing to absentee landownership

Despite an increasing number of ROs, capitalised AOs continued to own more land until after 1935 as a result of family succession, their commitment to pastoralism, entrepreneurial endeavour, the ability to flout land laws, pay high land values, and ride through droughts and economic downturns, or benefit from the misfortune of other landowners.
Succession contributed to AL. Many a family absentee-owned one or more properties for three generations or more, as shown in Appendix K, an account of the Gibson family’s ownership of Caragabal. Other absentee family-run pastoral companies included the Fields and Litchfields, owners of Caragabal, 1935-1949, as well as Res/AOs like the Campbells of Jerula and the Sloans of North Logan, their descendants still owning land in 2009.

After the 1861 Land Act, absentee lessees circumvented the residency requirement when purchasing land. Common practices were ‘dummying’ (registering land in different family members’ or workers’ names for three years) and ‘peacocking’ (outbidding in an auction, paying the 10% deposit, abandoning the purchase, then waiting for the land to be sold at a reduced price) (King, 1957; Weaver, 1996). Moreover, conditional selection effectively priced land at two pounds an acre. Compare this to the 1862 Homestead Act in the US giving 160 acres to settlers with five years residency (Zhang et al., 2005), and in the 1880s, Argentinean land selling for a few cents an acre (Powelson, 1988). Those who could afford the price were large scale AOs, Res/AOs, urban capitalists (Karr, 1974) and local town-based business people (Wells, 1989).

Isolation, climate and the hard work of clearing regrowth also deterred undercapitalised selectors. Of the 130,000 conditional purchases in NSW between 1861 and 1883, only 18,000 homesteads were built, and not all were occupied. Land aggregation continued (Morris and Ranken, 1883; Gammage, 1990), and areas that retained large stations maintained AOL in 1885–1900, as did Bland district, AOL covering 66% in Bland compared to 53% of all land in Cowra district. Yet land aggregation often meant going into debt, and from the 1870s, drought, recession and increased input costs led to increased debt, even for capitalised AOs. Droughts occurred in 1864–66, the late 1870s, 1885–1888, 1895–1896, 1900–1905 (known as the Federation Drought), 1913–1915, 1918–1920, 1925–1929 and 1935–1937. Some capitalised AOs with a geographic spread of properties survived better than others, as did the legendary Sidney Kidman (b. 1857 – d. 1953) but then there were the international, and locally manifested, economic downturns of 1873–1879, 1882–1885, 1887–1888,

In addition, while rail and water infrastructure were improving, so was the need to become more productive. Capitalised AOs purchased more stock, introduced pastures, bores, dams and machine shearing, as did Matthew Robinson on Caragabal. But privilege did not buy immunity from the effects of overstocking, introduced weeds, rabbit and fox plagues (Barr and Cary, 1992), or the added cost of fencing boundaries, stipulated in the NSW 1884 Subdivision of Runs Act. The cost of fencing particularly impacted ROs of smaller properties (Karr, 1974).

Wool prices cushioned impacts until their decline from 1877. After this, the diabolical combination of the aforementioned factors increased foreclosures. Between 1870 and 1935, British and Australian institutions gained land title over vast areas (52% of the Lachlan region in 1885), increasing the area they held title to in Bland and Cowra districts, 1885–1935. By 1910, of the ten top firms operating in Australia, seven were British pastoral and finance companies. One was the British managed Australian Mortgage Land and Finance Company Ltd (AMLF) (Ville and Merrett, 2000). A real estate agent confirmed “As people went broke the properties were taken over by the likes of Dalgety; Pitt, Son and Badgery; AMLF; Elders; and Winchcombe Carson” (KI-RE-T11).

The compound effects of a global market for wool, vertical integration, regional logistics, the need for children to be formally educated, succession and government intervention on AL were highlighted by a personal account, spanning from the 1840s until 1986, presented in Appendix L. Appendix L indicates that while some were going bankrupt, others were doing well due to geographic spread and vertical integration. They included Irishman, Samuel McCaughey, who had walked 322 kilometres to his first station job after
arriving in the colony of Victoria in 1856. In 1860, he joined a partnership of three to purchase a property on the Murrumbidgee River. Over 40 odd years, he owned 12 stations covering 1,315,242 ha. Like Angliss, McCaughey became a member of parliament and an outstanding philanthropist. Then there were entrepreneurial working class immigrants like John Fagan, born on a ship to NSW in 1841. Having worked as a stage coach driver, mail service provider and hotel licensee, he purchased 60,000 acres in 1870, before purchasing Mulyan in 1886. In 1909, he purchased the 13,055 acre Breakfast Creek Station near Wattamondara.

War also caused temporary AL, the result of Australians being called away to the Boer War (1899–1902), World War I (1914–1918), World War II (1939–1945), Korean War (1950–1953), Malaysian Emergency (1950–1960) and Vietnam War (1962–1975). Thus, the nephew of Matthew Robinson, also called Matthew Robinson, who inherited Caragabal Station, was an AO during his service in World War II.

Good terms of trade during the 1940s, 50s and 60s, and good rainfall in the 1950s encouraged investment by FCs, NFCs and aggregated structures, hence the increase in AOL in Bland district between 1935 and 1970 (at which time AOL covered 30% of the district compared to 15% of Cowra district). An example was the Scottish Australian Company’s land accumulation between 1849 and 1956.

Yet heralding Phase 3, all landowners were hit by the drought of 1963–1972, and wool and wheat prices falling from 1968, just as the Green Revolution’s fertilisers and chemicals were increasing costs. Worst hit were undercapitalised ROs of small blocks and local Res/AOs. According to numerous informants, in Phase 3 “absentee ownership ... is a direct result of returned soldier settlement programs creating unviable blocks” (AO-FC-27).

Overview
During Phase 3, some factors contributed to British corporations selling between 1977 and 1988; and other factors contributed to farmers becoming AOs; ROs and local Res/AOs selling and different AO types purchasing land, especially after 1990. However, there are also factors that could limit AL.

Factors linked to corporate exit, 1977–1988
International financial restructuring and economic turbulence in the 1970s had a devastating impact on British financial firms and pastoral companies that had been operating in Australian pastoralism for more than 100 years. International financial deregulation (also called liberalisation) changed the way business was conducted, especially in terms of capital flows. Changes led to economic crises and company mergers, internationally and across industries (Harford, 2005; McMichael, 2005; Ovtchinnikov, 2010).

In 1971, the USA pulled out of the Bretton Woods Agreement established in 1944 to stabilise international monetary policy, leading to oil price rises, inflation (Hammes and Wills, 2003) and the British pound being floated and devalued against the US dollar. This compounded inflation and interest rate volatility in Britain (Bordo and Eichengreen, 1991). Having relinquished most of its colonies by the 1960s, Britain joined the European Economic Community in 1973 and Australia lost its favoured trading status. Meanwhile, the Australian dollar remaining pegged to the US dollar until 1983. This combination of factors led to a decline in British investment in Australian land and agriculture and by the 1970s, British companies like the Scottish Australian and Australian Estates were indebted, in contrast to their capitalised position as money lenders in the nineteenth and early twentieth centuries. Despite reasonable rainfall in the 1970s, they were impacted by skyrocketing interest rates from 1973, a stock market crash and the recessions of 1973–75 and 1980–82. Having misevaluated their assets (Dong, Hirshleifer, Richardson and Teoh, 2006; Thomas, M., 2009), the resultant fire sales to poor
performing bidders meant mergers were followed by delistings. Across industries, these eventualities were unrelated to market-timing (Dong et. al., 2006; Harford, 2005; Ovtchinnikov, 2010). Thus, moving the Scottish Australian’s tax domicile to Sydney in 1972 and its 1974 merger did not prevent it delisting in 1984. Corporate sales in 1980–1985, after only one to eight years of ownership (e.g. Australian Farming Company, BP Australia and John Elliot) were not the result of poor commodity prices, as these had improved since the mid–1970s. The sales were likely in view of capital gain, given rising land values between 1976 and 1984. Then came the 1987 stock market crash. A FM had worked for 17 years for a company involved in international finance. Using overseas money it had purchased property across three states but the company was forced to sell after the 1987 crash (KI-REFM-14). Thus, the decline in AOL in Bland district, from 30% to 28% of all land, 1970–1990, reflected corporate purchases prior to 1970, corporate sales, 1977–1988 and other corporations purchasing land. Examples of corporate purchasing land during this volatile time include Twynam Agricultural Group in 1979 and Leppington Pastoral Company in 1980. Both had long-term investment horizons.

Suffering from the same economic turbulence and a three generation syndrome (Morrison, 2009) Australian FCs likewise sold:

The big ... well known ... stud properties ... changed hands. ... They were probably top heavy with management and too much labour - ... spending too much and not making enough. Poor management decisions as far as not selling stock at appropriate times (AL-15).

A sudden decline in land values in 1985, and stagnant land prices between 1985 and 2000 attracted other NFCs and often non-local family farm operations wishing to expand into cheaper areas. For example, a NFC syndicate saw “an investment opportunity ... in the early nineties when the wool price failed. ... We decided ... let’s buy a cheap property” (AO-S-37). Thus, rising, low or stagnant land values caused some corporations to sell and others to purchase, indicating a cyclic and counter-cyclic pattern to corporate investment.
Factors contributing to farmers becoming AOs

Across three historical phases farmers could be Res/AO multiple property owners, or live in town or interstate. Succession played a role. For example, a farm-based FC owned land “because my … grandfather and … father owned the land and gave it to me” (AO-FC-29). AL was also the consequence of an inheritor having established a life elsewhere, as did one AO in the Lachlan research. He had been a farmer until the mid-1980s but the farm could not support two families so he took his family interstate, where he established a successful real estate business. His parents remained on the farm until their late 80s. When his parents died, he inherited the property, to which he is very attached, and continued his parent’s lease arrangement.

Two town-based farmers inherited or purchased land from their family, the land having no house. One subdivided the original area and “sold … 1,900 [of 2,500 acres] to pay out my brother and … sister” (AOFMKI-TSH-115). The other’s family had two properties. He had grown up on one, moved into town, then purchased the other in 1990: “I was supposed to pay Dad interest … [but] he used to take it off the value of the farm” (AO-TSHF-23). Another town-based farmer had purchased a property with a house that was “beyond repair so basically we decided to … invest … in town, so it’s a separate asset” (AO-TLSHF-26).

Anecdotal evidence suggests “in the last 30 to 40 years there are a growing number of farmers who live in town. … I put the increase … down to mostly economic reasons – their partner is working off farm or they and their partner work off farm” (RF-T6). All three town-based farmers worked off-property, either full-time or in one or more share farm or lease arrangements. Two had partners working in town.

An underlying socio-cultural factor was increased lifestyle expectations. During field trips, I saw many small, isolated fibro houses – very hot in summer and cold in winter. This provided context for the observation “lots of women were not content to just live in ordinary old circumstances” (AL-15). Women’s increased domestic and work status led to a change in relationship dynamics between farmers and their
partners (Davidson and Elliston, 2005). As an agronomist reported, many women preferred town life: “His wife wanted to move to town and so they did” (KI-AG-111). All three town-based farmers expressed town conveniences in terms of family benefits, for example, “when the kids were going to school ... they could walk to school and to whatever else they were doing. My wife didn’t have to drive into town twice a day” (AO-TSHF-23). Notwithstanding town attractions, all three local town-based farmers expressed a passion for farming, a love of open spaces and the landscape they had partly created. All three enjoyed being an autonomous operator and spending time alone on-farm.

AL was also the outcome of a landowner retiring into town. In some instances, a son became the farm operator in a transitional arrangement (as described in Chapter 4). In other instances, the retired farmer sold, for reasons described next. A model of these multiple factors contributing to farmers living in a local town is presented in Figure 48 (Appendix M).

Factors linked to resident landowners selling, 1980s–2009

In Phase 3, for an increase in AL, ROs and local Res/AOs had to sell. Factors contributing to ROs selling included declining terms of trade and high interest rates until 1996, age and no succession plan, and after 2000, deregulation and drought. After 2000, those wishing to sell took advantage of rising land values.

The price of oil had risen after international financial deregulation in 1971 but it rose further after 1973, when the Organisation of Petroleum Exporting Countries (OPEC) announced an oil embargo on Israel’s allies in retaliation for the USA helping Israel in the Yom Kippur War. Another hike occurred after the Iranian revolution in 1979 (Gisser and Goodwin, 1986). Oil price rises directly impacted fuel and fertiliser costs (Piesse and Thirtle, 2009). Farm gate prices did not keep up. For example, in 2010, wool sold for half the 1980s price (i.e. $6.50/kg compared to $12/kg) (FM-FC-26). But land values continued to rise. The cost-price squeeze was reported by a Bland agronomist and Cowra rural banker:
In the mid 90s ... they paid $200 an acre. ... Wheat cost $250 an acre to grow ... [and] wheat prices [were] $110 a metric tonne for APW [Australian Premium White]. ... In 2009 ... the land is ... $900 an acre ... and the cost to grow wheat is $425 an acre ... The yields [are down and APW] wheat [is selling for] $150 a tonne (KI-AG-17).

Before June, 2008, prime hard wheat was selling for $400/tonne, but ... fuel reached $140 a barrel. Chemical went from $4 to $13 a litre. Fertiliser went from $500 to $1300 a tonne. ... The small landowner[s] ... only survive if they have minimal debt and off-farm capital. ... If their labour is free at least their costs are not as great as the big corporations (KI-B-T3).

Modern machinery was increasingly expensive and “to justify the cost ... you need ... a lot of acres” (FM-AGG-212). Terms of trade achieved a high in 1973-74 but have been below 50% of this high since 1990. Since 2003, they have declined further. Simply put “The costs are beating us” (KI-RE-110). With rising interest rates between 1973 and 1996, indebted ROs and local Res/AOs sold:

Basically interest rates ... went from 7% to 17% in about four years. ... [When] the wool market crashed [in 1989]... our assets ... [went] from being an average of $70 ... to $5 a unit in about three months. ... Interest rates just went crazy. I think the ... worst ... was in about ’93 when we were paying 23% on our overdraft. ... Basically we sold the properties. ... My parents retired. My brother and I went our separate ways. We walked away with a bit of machinery and some livestock. ... [laughs] In my case, after working ... from ’72 to ’95 (AL-15).

Hence, local Res/AOs did not contribute to an increase in AL since 1970.

Before 2000, declining terms of trade were somewhat cushioned by farmer support schemes (Wilkinson, 2009). Wheat growers operated through a centralised wheat marketing board and the wool price crash of 1970–1971 inspired the establishment of the Australian Wool Corporation for the purchase, stockpile and sale of wool at a reserve price. But after Britain joined the European Economic Community in 1973, and the US and EEC moved to protect their domestic markets (Morrison, 2009), alternative markets had to be found. The Australian Federal government began pushing for global free trade, auspiced in 1947 by the General Agreement on Tariffs and Trade (GATT), culminating in the 1986–1993 Uruguay Round and the
establishment of the World Trade Organisation in 1995. For free trade, farmer support schemes had to be dismantled. The Australian government began adopting neoliberal policies (Pritchard, 2005a; 2005b), involving deregulation. The wool corporation was disbanded in 1991, despite wool prices falling below production costs. In 1999, the Australian Wheat Board (AWB) became a private company owned by wheat growers. In 2001, AWB Limited offered public shares on the Australian Stock Exchange. A single desk marketing monopoly continued until 2007 (Botterill, 2007) but in 2008, ownership was consolidated into one type of share. In 2010, the company was purchased by Agrium, a Canadian-based global agribusiness. In 2011, Agrium sold the handling and trading business to US-based Cargill, one of the largest private companies in the world. Since 2000, Australian and New Zealand farmers receive the lowest level of government support in the OECD, with major competitors like Japan, the EU, Russian Federation and USA continuing to receive far greater subsidies (OECD, 2011). All informants claimed “if we were on a level playing field ... we can compete” (AO-NFC-211). Most impacted were those without alternative marketing strategies, these more likely to be ROs and local Res/AOs. A commonly held view was:

Our governments [say], ‘Go out and compete’, and we’ve done it, and every other bugger is not. ... You hear the rationalists ... say, ‘... we can import it’. But ... we’re going to import it from the countries that you’re paying the ... peasants bugger all. ... You don’t know what their health standards are. ... We’re exporting all of our environmental problems (AL-15).

On top of these factors, between 1997 and 2010, landowners experienced the worst drought since European settlement. Drought was “sucking the life out of people” (KI-AG-13). It was devastating yields: “The average wheat yield for Cowra is 3.7 tonnes/ha. ... In 2009, they were getting 1.25 tonnes/ha” (KI-B-T3). A RO reported “The property’s been in my husband’s family for three generations ... [but] we’ve had enough. We want out. The drought’s killing everything” (RF-T5, 2010). A regional real estate manager observed “All sorts of farmers are selling - the ageing farmer wanting to retire, the one property owner and the highly geared. The drought is a major factor” (KI-RE-T11).
Declining terms of trade and drought meant Australian farmer debt rose from AU$1,290 million in 1965 to $62,167 million in 2009. Just as debt caused foreclosures and property sales between the 1870s and 1930s, so did debt contribute to foreclosures (KI-RE-110) and property sales since 1990:

[I] was working as a contractor to a bank ... for four years ... in the early 1990s. ... I managed 13,500 hectares at any one time. ... I had to go in and look at my employer gaining the maximum ... capital return for their investment. ... Dress up that property. ... The first thing I addressed was the house ... to attract city investors. ... The bank sold the land, recouped whatever they could loss wise. The [former landowners] exited farming and at the time there was government subsidies for exiting land, yeah, if you were below X amount of assets (AOFMKI-TSH-115).

Nor did ageing farmers wish to expand (FM-FC-25). They often moved into town before selling, in one case to a multinational:

*Ten farms ... were actually absentee farms already. ... They all lived in town. ... Most of these farms have been in the families for a long time. ... Every farm that we bought was from old people. ... Every one of them has ... retired. [Interviewer: And they had no next generation to take it on?] Here, for example, they only had a daughter and she’s not into farming. The others – they were old bachelors. ... Another couple ... they didn’t have any children (FM-AGG-12).*

If the next generation lacked interest in farming, the landowner was more likely to sell: “I’ve got two sons that have no interest whatsoever in coming back on the land. ... One bloke’s working in Canberra, ... and the other bloke’s doing finance in Sydney” (FM-AGG-212). A managing director of an investment company observed:

*[There’s a] generation of farmers who have told their sons and daughters to go to uni and get a ... career and don’t come back to the farm. ... That trend ... will only change if there is an environment that is attractive enough for them to ... work in (AO-AGG-12).*

Since 2000, rising land values was another incentive to sell, the causes of which were outlined by a regional real estate manager:
Rural land values rise when the world wide economy is strong, commodity prices are firm or rising, and investment strategies for rural land are promoted. ... Over the last fifteen years ... for properties of less than 40 hectares, land values have increased in regular incremental steps. ... For ... working farms - there have been periods of significant increase, followed by plateaus .... Between 1995 and 2000 the market was flat. .... Between 2000 and 2007 land values doubled, and in some cases trebled. ... It was easy to write a prospectus painting rural land as an attractive financial investment. ... It occurred despite a drought. ... There was a lot of investment from individuals with a non-farming background, ... corporate investors, ... and from family farm operations expanding into other districts ... due to succession planning, [or] ... for economies of scale (KI-RE-T11, 2010).

As an ex-landowner reported: “The selling of the farm was commercially based. ... By taking the offer and investing the money ... we’ve assured ourselves a good retirement. ... Six neighbours ... [also sold to] big corporations” (FM-AGG-212). A model of multiple factors contributing to ROs selling and capitalised AOs purchasing is presented in Figure 49 (Appendix M).

**Factors attracting absentee investment since 1990**

Factors contributing to the dramatic rise in AL since 1990 varied between AO types. This section describes factors contributing to corporate investment; city-based individuals investing for lifestyle, hobby or commercial reasons; and Aboriginal aggregated ownership.

**Factors contributing to corporate investment**

The expansion of Asian markets since the 1990s (Brice, 1998), and future projections that demand will increase has attracted aggregated AOs, NFCs and FCs, as the following accounts confirm:

*The interest to invest in agriculture is really driven by the ... growing global population and the demand particularly out of the likes of China, ... India and [other] Asian countries ... for ... agricultural produce and land (AO-AGG-12).*

*I’ve confidence in the sheep industry because ... you’ve got a huge Muslim population ... [and] people want choice. ... I’ve just come back from India and...*
Bangladesh ... Their production’s dropping by about 2% a year. ... [The] country is worn out. ... Farmland’s getting taken up ... [by] urban sprawl. ... I think we’re dead set going to get short of food. ... I know it’s been said 30 years ago. ... They didn’t believe how much we’d improve our farming. ... [but] it’s getting harder to get to the next stage (AO-FC-27).

Foreign investment was enhanced by the available capital at the disposal of multinationals, banks and pension funds, the latter a consequence of governments in industrialised countries encouraging self-funded retirement. Pension funds invested directly or indirectly in land, the latter through an Australian investment company. For example, a FMC managed properties for a US pension fund that had invested in and outside the Lachlan: “[The fund has] around the world ... invested US$480 billion into food production and within Australia, ... having been in the business for 14 months, ... [is] now in the top ten landholders” (AO-FMC-21, 2010). One investment company had commenced negotiations with investors in 2004, because “I think it’s fair to say that people had overlooked agriculture as an investment class ... [especially as] the returns from agriculture have a very low level of correlation with the returns from other asset classes” (AO-AGG-T9). The 2008 GFC, following the grain price spike of 2007–2008, caused a further rethink in investment strategies: “In the GFC other assets ... might have ... reduced by 30, 40, 50 percent or ... more, whereas land in the last couple of years may have gone down by 10 to 15 percent” (AO-AGG-12, 2010). Another spike in grain prices in 2010 caused by drought in the Northern Hemisphere, in the midst of stock market volatility, caused others to invest (Moir, 2011).

Australia was attractive to foreign investors because Australia was “counter-seasonal and ... close to Asia” (FM-AGG-11); had a “stable economy, ... good Intellectual Property, good socioeconomic factors” (AO-FMC-21); and good “quarantine systems ... [including our] natural barrier ... and ... Compulsory National Livestock Identification System. ... [Then there are our] skills in managing livestock” (AO-AGG-T9). Other attractions were Australia’s “fresh food image” (FM-AGG-35) and “there are only a few places in the world where you can invest where it’s politically dead certain. ... Some of those places are extremely expensive like America or New Zealand, ... Europe and England” (FMC-11).
Another attraction was that the Australian Federal Government has no law preventing a foreign non-state entity purchasing rural land if the value of the property does not exceed AU$244 million (FIRB, 2012). As a FMC director observed:

There are almost no boundaries as to what an overseas investment group can procure in Australian agriculture. It’s simply another name on another portfolio, another sub-company and it’s game on. What we’re seeing are not whole companies coming to Australia... we’re seeing whole countries (AO-FMC-21).

While deregulation exposed small operators to global terms of trade, it benefited 25% of AOs (N=28) in the Lachlan research. An FM for a multinational grain trader who was an AO in the Lachlan reported “one of the reasons why they first came... here was because they could see that the grain market was going to be deregulated” (FM-AGG-12). As a result of deregulation, other forms of marketing were opening up, as reported by a FMC that had two deals with overseas investors, another four in the pipeline, whereby “You want us to grow oil seed, ... wheat ... fruits and vegetables ... you pay for our farm inputs and ... take 20% return on the [net profit], and you’ve bought yourself the crop” (AO-FMC-21).

The regional assets of the Lachlan also attracted investment. City-based individuals targeted properties within driving distance of a metropolitan centre and corporations were attracted by the region’s history of production, infrastructure and location. For example, three aggregated croppers (two included in the research) invested in an area known as “the golden triangle” (FM-AGG-212) because of its soils and rainfall, despite both being variable. The Lachlan’s grain storage facilities and its road and rail routes to Sydney, Melbourne and Brisbane were other assets (AO-FC-11; AO-AGG-12). Three mining multinationals had increased AL by purchasing land. Meanwhile there was an increase in “the number of people that have... jobs in... the mines – ... not only [in]... Parkes and West Wyalong” (AL-15).

Three aggregated AOs in the Lachlan research purchased land in 2008. High land values were not a deterrent because “there is an anticipation that capital growth is
about to get significantly greater on scalable properties” (AO-FMC-21). Nor did declining terms of trade deter them. Corporate directors considered they had advantages in the “capital intensive industry” (AO-AGG-12) agriculture had become. Scale enabled them to spread fixed costs and bargain with the head office of suppliers to reduce purchase prices. Off-farm capital enabled them to weather commodity price fluctuations, and despite predictions of continued declines (Carroll, 2005), large scale AOs were optimistic:

The highs [in grain prices] … ceased in 2008 …[but that] is really just a reflection of the global economy. … Fundamental demand … is still there. … There are potentially diminishing returns for people who are not at the pointy end of production. Those … in the top percentage of production … [will] make a return equal to any other sector of investment (AO-AGG-12, 2009).

Five large scale AOs were vertically integrated in output, which maximised returns. A multinational shipped and marketed grain internationally, its Australian subsidiary relying on the parent company’s “contracts into certain countries” (FM-AGG-12). An investment company focused on “the production of grains in a closed loop marketing environment … to … create …[a] comparative advantage” (AO-AGG-12). A non-local FC had “a wool business … a sheepskin business, … two abattoirs, … a train business … [and] our own markets overseas” (AO-FC-27). A non-local NFC was vertically integrated in both inputs and outputs:

Our business … is geared around two nodes. One is … a … recycle park … creating a paddock to plate and back again closed loop. … Our wool combing site is the largest potassium mine in Australia. [From this] we manufacture … an amazing fertiliser. … We use sewerage sludge from local communities … [and] we [rail in] sewerage. … The other [business is] … a sophisticated integrated model of growing food on scale … containerising it and exporting it (AO-FMC-21).

Drought was not a deterrent because “droughts don’t last forever. … Long-term, we have to live with droughts” (FM-AGG-12), especially as ten AOs in the Lachlan research had geographic spread: “Some people may define geographic diversification as 100 kilometres. … Some people might consider that to be Western Australia versus NSW and others might see that as being Argentina versus
Australia” (AO-AGG-12). All three levels of spread were represented by AOs in the Lachlan research.

Factors contributing to city-based individuals investing in rural land

City-based individuals investing in rural land for commercial agriculture, hobby farms and lifestyle properties were also undeterred by drought, declining terms of trade or increased land values, the last partly because rural land values were perceived as relatively cheap compared to city prices. After 1996 “the major influence was probably the drop in interest rates” (KI-RE-110).

In addition, socio-cultural factors were important influences. In the Lachlan research, 38% of city investors, including partners (N=8), had grown up on a farm. A FMC director reported:

I have a client who has a beautiful property. ... He asked me about ... my own farm ... and I said, ‘Oh, it was my great-great-grandfather’s. ... It’s very much the family home’, and he looked at me wistfully and he said, ‘Yes, you just can’t buy that can you?’ But that’s what he is trying to buy because he grew up on a farm ... and his father died and he had to sell. ... That is a real motivation for a lot of wealthy people (FMC-11).

Other AOs were influenced by the environmental/sustainability movement, as reported by a LPO:

I just love almost every aspect of it. ... I like the space ... I love the trees down by the river, the birds. ... I’m always happy driving out here and I’m always unhappy driving back to the city. ... It certainly blends into my philosophy, ... [which] has probably been stable for about 30 years. ... To not make too much of an impact on the planet; to try and live sustainably and ... leave something for the next generation (AO-LP-T14).

The importance of socio-cultural factors cannot be understated. Seventy-one percent of AOs (N=34) expressed ‘a love of space/nature/land’; 61% of AOs expressed ‘a passion for farming’, in both instances, across nine AO types. Forty-six percent of AOs saw their property as a place of retreat or escape from the city or business pressures, as a LPO reported: “It’s a relief from the city life. Totally
different mindset. ... More relaxed. More able to be part of nature. ... It’s almost like you change channels” (AO-LP-210a). Thirty six percent were attracted by the challenge of making a success of a commercial agricultural operation. Thirty four percent of AO informants (N=35) had grown up in the Lachlan. Another 29% had friends in the Lachlan or had previously worked in the region. In analysing the motivations of AOs, as shown in Table 22, only 10 large scale AOs and two non-local Aboriginal AOs held a dominance of utilitarian motivations. Farm-based FCs and local town-based farmers, an FC and NFC had an equal weighting of utilitarian and non-material self motivations. All city or town-based individuals held a dominance of non-material self motivations. A local Aboriginal AO was unique in having a balance of utilitarian, non-material self and transcendent motivations.

Furthermore, even though utilitarian motivations were the dominant set for large scale AOs (aggregated, non-local FCs and NFCs), representatives expressed non-material self and transcendent motivations, despite these not necessarily being shared by all members of the ownership structure. For example, an investment company’s managing director and a multinational’s FM reported: “My long-term goals are to be in agriculture sector and to contribute to the industry, contribute to the communities” (AO-AGG-12) and “The [Australian] general manager ... cares about Australian farmers and by leasing their properties and contracting them to do the work he is keeping them in work and in the district (FM-AGG-11).

Notes on Table 22
In Table 22 the number of motivations expressed by an AO in each set of motivations is presented in the same order. For example, the first aggregated AO expressed 10 utilitarian motivations, four non-material self motivations and one transcendent motivation. Highlighted blue cells indicate the dominant set for an AO type or cluster.
Table 22: Motivation set for an AO type or cluster

<table>
<thead>
<tr>
<th>AO case / type</th>
<th>Utilitarian</th>
<th>Non-material self</th>
<th>Transcendent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total possible</td>
<td>27</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>5 aggregated</td>
<td>10 / 11 / 12 / 7 / 7</td>
<td>4 / 3 / 7 / 1 / 1</td>
<td>1 / 1 / 2 / 3 / 2</td>
</tr>
<tr>
<td>Non-local 2FC/3NFC</td>
<td>11 / 7 / 9 / 7 / 6</td>
<td>8 / 1 / 7 / 6 / 3</td>
<td>0 / 0 / 1 / 0 / 1</td>
</tr>
<tr>
<td>Farm-based FC</td>
<td>7 / 7 / 5</td>
<td>11 / 6 / 6</td>
<td>2 / 0 / 1</td>
</tr>
<tr>
<td>Local FC/NFC</td>
<td>8 / 8</td>
<td>8 / 9</td>
<td>2 / 1</td>
</tr>
<tr>
<td>Town-based farmer</td>
<td>8 / 7 / 6</td>
<td>7 / 7 / 8</td>
<td>1 / 1 / 3</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>3 / 6 / 4</td>
<td>3 / 1 / 1</td>
<td>2 / 1 / 1</td>
</tr>
<tr>
<td>City-based commercial</td>
<td>5 / 5 / 5</td>
<td>8 / 11 / 7</td>
<td>1 / 0 / 1</td>
</tr>
<tr>
<td>Hobby farmer</td>
<td>6 / 4</td>
<td>11 / 10</td>
<td>1 / 0</td>
</tr>
<tr>
<td>LPO</td>
<td>5 / 4</td>
<td>7 / 5</td>
<td>2 / 0</td>
</tr>
</tbody>
</table>

Figure 50 (Appendix M) presents a model of factors attracting AOs to invest in land for commercial agriculture across three phases of AL. In Phase 3, an additional factor was low interest rates after 1996. A model of factors contributing to lifestyle property ownership in particular is presented in Figure 51 (Appendix M).

**Aboriginal land rights**

An international movement towards indigenous rights in the 1960s led to a reappraisal of discriminations faced by Aboriginal Australians. Discriminations included Wiradjuri being forced onto reserves from 1882; Aboriginals being excluded from the right to vote in Commonwealth elections from 1902–1962; and from 1915, an amendment to the 1909 *Aborigines Protection Act* allowing the removal of Aboriginal children from their parents. From 1936–1967, all Aboriginal people were subject to a curfew. From 1943–1964, NSW granted some Aboriginals ‘Exemption Rights’, more commonly known as the dog tag system. After passing a questionnaire, the ‘dog tag’ gave individuals the right to live and work in town, send their children to school, receive an old age pension and purchase alcohol (Read, 1988). But then came the 1974 *Aboriginal Land Fund Act* (NSW) that enabled incorporated Aboriginal organisations to purchase land. The 1983 *NSW Aboriginal Land Rights Act* also allowed available Crown land to be transferred to an Aboriginal incorporation as a lease in perpetuity. In 1995, the self funded Indigenous Land Corporation...
(ILC) was established, with “a statutory requirement to buy land” (AO-A-T4). The land was held as freehold title. Land was purchased for “indigenous people ... to create an economic base ... [the land being run] as a business, ... creating profits ...[and] for cultural reasons, so returning land to its traditional owners” (AO-A-T4). Both the Commonwealth land fund and state Aboriginal land councils were tasked with these potentially contradictory purposes, these non-local entities relying on interest generated by investment portfolios. In contrast, local Aboriginal incorporations and land councils relied on land being divested to them. In south east Australia, apart from Aboriginal missions being divested to local land councils, landownership was usually the result of private land purchases, as proving ‘native title’ or an on-going connection was more difficult than for those in northern Australia.

Factors limiting absentee landownership
A continued increase in AL is not inevitable. Firstly, there are multiple examples where one AO type replaces another, for example, regarding Billabong an FC (Leppington Pastoral Company) replaced a NFC (BP); and regarding Booberoi, an Aboriginal AO (Wiradjuri Regional Land Council) and religious institution (AgReserves Australia) replaced a FC (G.H. Mitchell and Sons), this limiting expansion of AOL.

There are also limiting factors for particular AO types. City investment could be dampened with the introduction of new land laws designed to prevent further subdivision, and a new tax law. For example, in Cowra Shire, a 2006 Local Environmental Plan (LEP) restricts the building of a dwelling on less than 400 ha (KI-SH-18; KI-RE-110), impacting those intending their property to be a future residence, as did 21% of AOs (N=28). Likewise, the introduction of an Australian Federal tax law in 2009 means a landowner earning an off-farm income in excess of AU$250,000 can no longer claim non-commercial losses after five years of no on-farm profit (ATO, 2011). A hobby farmer observed “I used to negatively gear it. I can’t do that now. ... There’ll be fewer ... off-farm landowners ... because ... it’s less affordable” (AO-HF-32b).
Age was another limiting factor, city investors reporting “Certainly, there is a window. ... Maybe early 70s would be the end of it if you keep your health” (AO-HF-32b). Those wishing to move to the country intended to keep a city residence for rental income but also, in case they returned to the city. Another factor observed by a real estate agent was “a lot of Sydney people - ... the younger ones ... are starting to say, ‘We’d rather a [city] lifestyle’” (KI-REFM-14). This preference may increase as less people come from rural backgrounds.

Investment by corporate and farm-based FCs was impacted by other constraining factors, as observed by regional real estate manager:

*The drought and Global Financial Crisis have tightened up finances and slowed the market. ... The non-family corporates who bought in 2008–2009 have not aggressively expanded ... although in 2010 new non-family corporates ... and high equity large family farm operations ... are buying in* (KI-RE-T11).

Perhaps the most critical factor potentially limiting corporate investment, is if land values and input costs continue to outstrip productivity and net returns, especially given investor expectations, as reported by the managing director of an investment company:

*Any sophisticated investor would be looking for a double digit EBIT [Earnings Before Interest and Taxes] return ... on their investment. ... Just on production. ... Then all investors ... have a view on what they believe the capital appreciation of their asset is. ... So that's the challenge for people managing investments in agriculture* (AO-AGG-12).

Numerous informants considered these expectations excessive for crop and livestock operations in the Lachlan. A FMC director reported “our target returns, including capital gain, would be 10 to 12%. ... Capital gain would be ... 6 to 8%. ... But ... there’s still a significant effect of time of purchase” (FMC-11). An agronomist warned:
The corporations are very confident that land values will remain high and that gives them their equity ... but ... we saw high land values when wool was really good. ... One farm ... [of] about 12,000 acres - was bought in the late 80s for $200 an acre. ... [In] about 92–93, ... it was passed in for $28 an acre (KI-AG-17).

The managing director of a vertically integrated FC concluded ‘Land has outpriced its productivity. ... Therefore food has got to go up” (AO-FC-27). Yet this has implications for global food security.

Speculation about future world food and land shortages remains controversial, counter-arguments having implications for future corporate investment. Counter-arguments include “There’s far more likely to be other crises, be it water, famine ... driven more by greed and ... political [crises] before there’s a food crisis” (FM-FMC-23) and “We can always produce more. ... A global shortage of cropping lands is not the issue. Poor people don’t have money to buy food. They aren’t consumers and have no power or influence – that’s the issue” (KI-AG-17).

Another potential limiting factor is that “Australian agriculture is tipped to be something like 250,000 people short of ... labour” (AO-FMC-21). There were also impacts of deregulation, for example, on infrastructure development: “We should be looking at a 10 year strategy. ... Bangladesh [is] making longer [term] decisions than us” (AO-FC-27).

Some informants predicted “agriculture will be more akin to the ... 1870s, 80s and 90s, where we had big pastoral houses controlling vast areas” (AO-CL-39), and that corporate agriculture was “ a transition that the industry’s going through that brings it into line with the rest of the business world” (AO-AGG-12), but most informants saw corporate investment to be cyclic. For example, a regional real estate manager observed:

Institutional investors tend to have a time horizon, and will probably reassess their investment five to ten years after their initial outlay. ... Primary production usually has an annual return of 2 to 4%. This is not the biggest bang for their buck. It means institutional investors are likely to look
elsewhere in the long-term. What may override this is a world food crisis, which is probably 50:50 real and a beat up. ... [And] no-one knows how a low carbon economy is going to affect agriculture (KI-RE-T11).

Findings for 1977–1988 indicate corporate investment was both cyclic and counter-cyclic. Part of the pattern is that business failures have a long history in the Lachlan. A more recent example is Queensland Paulownia Forests Ltd, established in 1995, and purchasing 2,150 ha near Forbes in 2004 and 2006. In 2007, the company went into voluntary administration and investors lost their money (KI-REFM-14; KI-AG-112).

In addition to the multiple factors that challenge all primary producers, Aboriginal landowners, particularly in south east Australia, have additional constraints. Since 2001, the Commonwealth land fund has increasingly emphasised economic viability, introducing four conditions for the purchase and/or divestment of land to local Aboriginal aggregated structures. These conditions are that the entity has to prove financial viability, capacity and community benefits and “all new acquisitions [have] to generate 10 new [full-time] jobs, so there really aren’t many farms that can sustain 10 workers” (AO-A-T4). As a result, “we haven’t had more applications than there’s been money” (AO-A-T4).

A local Aboriginal AO had difficulty gaining land title to a property originally purchased for them but never divested (AO-A-T4). When making an application to regain management of the property they received “help from a bloke in ICC [Indigenous Coordination Centre] and another bloke who used to work for ATSIC” (AO-A-T15). However, the submission was rejected because it relied “on ... the lease income ... [when] they weren’t the owners. ... No ... other funding or ... income [had been] organised. ... The benefits for indigenous people were either non-existent or not able to be quantified (AO-A-T4). A year later the local organisation was told “we’re really encouraging you to use this property because no indigenous people are gaining benefits from it and under our Act, that means that we really shouldn’t be holding a title ... i.e. we should sell it” (AO-A-T4). A model of factors
contributing to and constraining Aboriginal aggregated ownership is presented in Figure 52 (Appendix M).

Figure 41 (below) presents a refined model of underlying factors contributing to AL in general.

**Colour code for Figure 41**
Black: Underlying factor  
Grey: Linking mechanism

Figure 41: Model of underlying factors contributing to absentee landownership
Key findings

Assumptions
Findings supported assumptions that early land laws favoured AL and any factor that increases farm debt increased AL. However, the 1880s–1950s literature concluding nineteenth century land laws failed to encourage residency missed the long-term impacts of land laws and farmer support schemes (1860s–2000), coupled with favourable terms of trade and rainfall (1950s–1960s) that culminated in ROs outnumbering AOs and owning more land in 1970.

Factors contributing to absentee landownership
Findings were consistent with the following generic propositions:

Political-economic, socio-cultural and environmental factors (e.g. drought) contributed to trends in AL, some factors causing ROs to sell or enter a form of aggregated ownership and some factors attracting AOs to retain or invest in land.

Factors that contribute to trends in all types of landowners were colonialism, land laws, farmer support schemes and deregulation as well as international terms of trade, economic cycles and technical innovation.

In Phase 1 (1830s–1860s) the prevalence of absentee occupation by British and interstate, regional and city-based individuals, partnerships and corporations was linked to colonialism, war and laws in other countries and rising commodity prices, influenced by global trade, as well as regional logistics, land laws, land values and monetary policies. Plentiful land, land grants and paying agents and overseers in land and livestock enabled those with less status, including emancipated convicts, to become AOs and Res/AOs. All served to dispossess the Wiradjuri people.
In Phase 2 (1860s–1970) increased resident ownership for non-Aboriginals was linked to land and tax laws, government support schemes, high demand during World Wars I and II and the Korean War, and technical innovations, good rainfall and terms of trade, and low interest rates in the 1950s–1960s. These factors led to the zenith of resident landownership in 1970. Yet, AOs continued to monopolise most land until at least 1935. This was linked to family succession and land purchases (which often flouted residency requirements), entrepreneurial endeavours, as well as indebted landowners losing land title to capitalised AOs as a result of foreclosures or property sales. Rising input costs, drought and economic downturns contributed to landowner debt, as did unviable property sizes, and therefore contributed to the purchase of property by capitalised AOs.

In Phase 3 (1970–2009) corporations sold properties between 1977 and 1988 as a result of international financial deregulation, economic crises and corporate indebtedness, unlike their capitalised position in the nineteenth and early twentieth centuries when, as creditors, they benefited from high interest rates. Rising land values, 1979–1985 influenced both corporate sales and purchases. This supported the proposition that corporate investment is cyclic and counter-cyclic.

Factors contributed to farmers living in town included property features such as inheriting or purchasing a property that had no (inhabitable) house, town conveniences and the age of the farmer. Drought, declining terms of trade and rising interest rates increased the need for off-farm work, while changing lifestyle expectations, in part related to the increased domestic and work status of women and need for children to be educated, also contributed to farmers living in town.

For other AO types to increase, ROs and local Res/AOs had to sell. Declining terms of trade for agricultural commodities, debt and high interest rates until 1996 contributed to foreclosures and land sales, as did farmers’ age and lack of succession, and after 2000, deregulation, drought and rising land values.
The dramatic increase in AL since the 1990s was related to factors that varied between AO types or cluster of types. Low interest rates after 1996 contributed to family farm expansion and city-based investment. The latter cohort were additionally influenced by a thriving urban economy, relatively cheap rural land values, and investor demographics including age, income and having a rural background. City investors sought a retreat into a more natural environment, but changes in land and tax laws, age and disinterest could limit future investment.

Renewed corporate interest was linked to growing demand and future projections, available international capital, deregulation and both the GFC and stock market instability highlighting the need to diversify investments. Australia’s relatively cheap land, political stability, lack of restrictions on foreign ownership and history of production attracted investors. Scale, vertical integration and geographic spread gave capitalised corporates optimism in the face of rising land values, declining terms of trade and drought. Nevertheless, factors that could limit corporate investment include drought, economic crises, a lack of regional infrastructure and farm labour, business failures and land values and input costs outstripping productivity and net returns, given investors’ high expectations for a return on capital invested.

After 200 years of dispossession, indigenous land rights and land funds established Aboriginal aggregated ownership. Factors limiting local Aboriginal aggregated ownership of rural land were the need to prove financial viability, capacity and community benefits, and employ ten full-time workers, in the midst of poor advice and support.

On the micro level, AO types have distinct sets of motivations. Ten large scale AOs and two non-local Aboriginal AOs held a dominance of utilitarian motivations. Farm-based FCs and town-based farmers had an equal weighting of utilitarian and non-material self motivations. All city-based individuals and a local hobby farmer held a dominance of non-material self motivations. A local Aboriginal AO was unique in having an equal weighting of utilitarian, non-material self and transcendent motivations.
Chapter 8: Implications for sustainable agriculture of different types of absentee landowners

Introduction

This chapter addresses the fourth key question, ‘What are the implications for sustainable agriculture of different types of absentee landowners (AOs)?’ Findings are based on an information rich, qualitative investigation. Brief appraisals of historical implications are derived from the histories of nine pastoral stations. Contemporary implications are explored for 28 AOs, based on 14 field observations and interviews with 35 AO informants, 14 FMs and two FMCs, as well as lessees, agricultural consultants, contractors and others who work with AOs. The criteria for selecting themes for analysis were outlined in Chapter 3. Four key political economic attributes AOs brought to managing their absentee-owned land (AOL) were outlined in Chapter 4. This chapter shows how variations in these and other attributes of different AO types had implications for sustainable agriculture. While 28 AOs represent a small number of cases, some findings were confirmed and broadened with data provided by non-AO informants. Table 25 (Appendix R) profiles the 28 AOs according to their sustainability practices and outcomes. These practices and outcomes will now be compared for different AO types in terms of the three interdependent arms of sustainability: social relations, managing biodiversity and economic viability.

Social relations

Historical relations

Historical social relations within an ownership structure and between an AO, FM and farm labour were hierarchical. Once an annual budget was approved companies like Australian Estates left tactical decisions to the FM, whereas the Australian Pastoral Company micromanaged their FMs (Morrison, 2009). For example, F.W. Hughes (owner of Booberoi) personally selected all shearers. On-property, a FM had dictatorial authority over an often large labour force (Morrison,
Numerous informants observed “There was a real culture ... of class separation. ... The jackaroos lived at the homestead. ... At the bottom ... [were the] shedhands and shearers” (FM-AGG-35). Poor pay and conditions led to industrial action by shearers in the 1890s, but FM wages were also low. For instance, along with a house, car, fuel and phone, in 1971, one FM received $3,000 annually (KI-REFM-14) and in 2000, a FM received $50,000 (Morrison, 2009). This was despite FMs being “key to all operations ... [with] the power to ... make or break a company” (KI-REFM-14).

Contemporary social relations

Contemporary power relations within ownership structures, tenancy arrangements and between an AO, FM and farm labour varied with AO type, as did four outcomes: employment of non-family waged labour; change in number of on-property residents and community relations.

For 28 contemporary AOs, power relations within an ownership structure and between an AO and farm operator/s impacted interpersonal relations, on-property practices and outcomes and even the long-term viability of the operation. More equitable power relations had beneficial outcomes, including an exchange of ideas and each party given responsibility and validation. Unequal power relations within an ownership structure and between an AO and FM were more commonly found when one party was a multigenerational FC, non-local Aboriginal AO or multinational. In relation to AO-FM power relations, these ownership structures were in the dominant position. In contrast, the farm operator dominated power relations for city investors that lacked farming experience.

Power relations within an ownership structure

For eight AO types with multiple members in an ownership structure, members contributed “their own professional qualifications and personality” (FMC-11) and “range of contacts” (AO-S-37), but there was potential for “not having a compatible partnership. ... Agreeing” (AO-S-37). For example, the
NFC syndicate experienced disunity within the ownership structure in the 1990s. When a member of the syndicate caused a high turnover of FMs, the member was replaced by another representative of the company that formed part of the syndicate (AO-S-37).

Disunity within an FC was particularly fraught as members found it difficult to resign or vote a family member off the board (AO-FC-24). For two FCs, unity of purpose was enhanced by the patriarchal head not being autocratic. For example, “We all have the same desire to go in the same direction ... but [my brother and I] may have differences of opinion on how to get there. ... My father’s a very good mediator” (AO-FC-24). A farm-based FC had included four family members across two generations that worked six properties: “everyone had their separate roles ... generally on separate properties. ... [Our father] wasn’t like ... a lot of my mates’ [fathers]. ... We did the job. ... If Dad wanted something done a certain way, he’d ... do it” (AO-FC-21).

In contrast, within a local FC there were “inconsistent visions” (AO-FC-25b) between three family members. One was focused on cropping and two from the next generation wished to devote more capital and land to livestock. Consequently, “[The FM] will talk to me about decisions that mightn’t agree with ... and I just tell him to go and do it ... [my way]” (AO-FC-25a). During the drought, the FM considered overstocking and lack of fodder impacted the condition of livestock and lambing rates. In 2009–2010, this AO had the lowest lambing rate (72%) of nine AOs involved sheep production (FM-FC-25). In another case, a FC experienced past tension when a son wished to introduce direct drilling, GPS and different spray techniques. The son was allowed to experiment on one property (AO-FC-11).

Disunity within Aboriginal AOs arose from multiple sources, including contested ownership. In two cases this led to traditional owners losing management of the property, one property being leased out and another changing ownership. Another source of disunity was “people who don’t come from country can’t talk about that country” (KI-A-T8). This was very
contentious given the dislocation of Aboriginal people. One traditional owner suggested elders must be included in the ownership structure, which was not the case for two non-local Aboriginal AOs. A lack of operating capital also caused conflict. For example, an Aboriginal family that was in a local Aboriginal AO managed a property but they were sacked for selling livestock to pay wages (AO-A-22). The need for consensus was another challenge, outlined by an FMC managing an Aboriginal owned property, resulting in the CEO being sacked and discontinuation of a profitable project:

*Through my connections in Japan ... we contacted [name] in Hokkaido.* ... [We arranged a meeting in Australia but] the only person who [was] going for [it] was [CEO 1]. ... [He] took a personal desire to grow that project. ... So we established a brand called ‘Outback Beef’. ... We had terrific results on the trials that we did into Hokkaido. ... They would take as much as we ... could produce (AO-FMC-21). ... We bought a foundation herd of ... 136 cows. ... We were aiming ... [for] 5,000 ... [and to] involve young Aboriginal people. ... [In the] pilot project ... we returned 24% ... on their money (FM-FMCA-22). ... [But CEO 1 was taking] the [Aboriginal AO] into unchartered waters. ... Investing into the herd was ... outside his mandate (AO-FMC-21).

Differences between a multinational’s head office and in-country subsidiary involved unequal power relations. For example, a multinational’s FM reported “I’ve been working on ... buy[ing] all of our own equipment and ... head office in Melbourne ... [is] right behind me, ... but ... head office overseas ... won’t let us do it” (FM-AGG-12). The decision affected timeliness, standard of work and net returns. Other factors led to the resignation of the Australian managing director.

**Power relations in tenancy arrangements**

In all AO types there were AOs involved in a tenancy arrangement whether this was leasing, share farming and/or agistment. Leasing was the most common arrangement and served different purposes for different AO clusters. For two Aboriginal AOs and an interstate individual, leasing out their property provided a stable income. For large scale AOs, leasing in or out some property was a risk management strategy. For instance, an overseas NFC leased one of four Lachlan properties for an annual income of AU$330,283 (FM-FMC-T10). For town-based farmers and farm-based FCs, leasing and/or share farming
enabled expansion. For example, three share crop arrangements and two leases enabled a town-based cropper to increase his cropping area from 486 ha to 2,065 ha, this justifying the purchase of new machinery (AO-TSHF-26).

How tenancies were negotiated varied between AO types. For two farm-based FCs, two town-based farmers, a local hobby farmer and city-based inheritor and former farmer, lease and share farm arrangements were handshake deals with people who knew each other well. Terms were negotiated and renegotiated by either party. For example: “Originally I paid a set amount per quarter. I now pay a small amount on a monthly basis, but in lieu ... I do ... repairs and maintenance” (AL-15). Arrangements could often involve an exchange of ideas. For instance, a town-based farmer changed farm practices as a result of share farming with a city-based retired market gardener from 1981 to 1992: “We always used to burn stubble. ... He wanted the mulch kept on the ground. ... He ... was one of the first to [use] lime ... in this area. ... It was a good learning experience” (AO-TSHF-23).

Unequal power relations led to tenancy arrangements being determined by the more powerful party, for example, when one party was a multinational or a non-Aboriginal lessee or share farmer on land owned by an Aboriginal aggregated entity. Lease contracts with multinationals were lengthy written documents that could contain non-standard guidelines (AO-FC-29). One example was a mining multinational that had strict, monitored stipulations that the lessee set aside some of their own land for regeneration and, on leased land, implement rotational cell grazing and use tractor exhaust emissions instead of other forms of fertiliser (FM-AGG-13). Another multinational only leased in “arable land so we don’t lease houses and roadways. [And the owners are] not allowed to have stock on their properties” (FM-AGG-12). In this case, resident lessors were employed as contractors. Conflicts occurred when the multinational demanded machinery upgrades and because “[One lessor] was used to being his own boss” (FM-AGG-12).

The chairperson of an Aboriginal AO had difficulty re-negotiating a new lease with a non-Aboriginal lessee, who paid $17,000 annually, despite sending: “out
my stock and station agent to … evaluate the property for the lease” (AO-A-22) and using a mediator. The lessee refused to pay the recommended price: “[Written into the lease] they’re supposed to … improve the property … but they’re saying … the soil’s not up to scratch” (AO-A-22). Another lease condition was to train an Aboriginal worker, whose wage was paid by the AO:

*The lessee wasn’t coming down telling him what to do. … [The worker] … looked forward to the day that he’d manage it … but … said, ‘… I’m not learning anything. … I don’t want to rip … the Aboriginal company off.’ … So he quit. … [The lessee] said, ‘Sorry … we might have slipped up a bit’ (AO-A-22).*

Unequal power relations led to inequitable or unclear terms for a local Aboriginal AO’s past share farming experience:

*It was a rip off. … It was our land, our equipment. … We paid to have … professionals sow it. … We’d … pay for some of the fertiliser. … We paid for the baler and then [the share farmer] would get half of the bales. … He was always … saying, ‘… I’ll just do that for you’, then send us a bill (AO-A-22).*

Like other tenancies, agisting livestock on a weekly basis (e.g. AU$4 per head for cattle) was usually a handshake deal with people who knew each other. All worked well, except for two past experiences on an Aboriginal owned property, the first between the FM and a representative of the Aboriginal AO, who “wanted us to hold so many cattle for an agent friend of his. … [After] a fortnight … the blues started. That was agistment in our book” (FM-A-34). Another incident involved cattle being agisted for an interstate non-Aboriginal cattle owner. The Aboriginal overseer notified the FMC of the poor condition of the cattle. The FMC notified the cattle owner in writing. When up to 30% of the herd were not found in a muster, the cattle owner accused the overseer of theft. Police and a consultant were called in. According to the consultant, after further mustering, most of the missing animals were found including “a lot of deceased animals” (KI-AG-112). If it was not for the FMC’s written evidence the Aboriginal AO would have incurred costs (AO-FMC-21; KI-AG-112).
Unequal power relations are not always disadvantageous, depending on the values of the more powerful party. For example, a FMC managed the leases of 13 properties owned by five wealthy German business people:

*There have been years where we have not levied rent ... then picked up that rent in the subsequent two years ... [without] interest. ... We have always stepped up to the capital costs of any infrastructure ... [and] conservation work. ... We have paid for ... lime applications. ... OH&S is a big deal. ... [The German owners are] not sellers ... I said [to one], ‘We should sell it’, and he said, ‘... We’ve not sold land since the sixteenth century and we’re not about to begin now.’ ... I see a departure between those who own land and those who farm land (AO-FMC-21).*

If this departure is to be sustainable, then each party needs to be able to negotiate equitable terms that are clearly understood and addressed, while many individuals may not be in a position to forgo lease revenue in a poor season.

**Power relations for AO-FM-labour**

Differences between AO types for AO-FM relations and FM-labour relations were highlighted in an examination of 15 AOs who employed FMs, a city-based hobby farmer who employed a contractor and a farm-based FC, the representative having previously worked as a farm operator for his landowning father.

**AO-FM relations**

Two FMCs managed properties for three AOs across three AO types. The arrangement involved an area FM and resident FM/overseer. Eleven AOs directly employed FMs. Of these, four large scale AOs employed more than one FM, either as a FM and assistant manager/s; a FM, crop manager and livestock manager, or a crop manager and livestock manager with no overall FM. As well, a farm-based FC employed two overseers on separate properties. All 15 AOs and 14 FMs reported the benefits of working in a team: “Resident farming is very lonely. ... I’ve definitely been helped by working in a team. I’ve learnt a lot about financial management” (FM-AGG-35) and “I rely a lot on [the FMC’s] networks” (FM-FMC-T10). However, “if the owners haven’t got the same goals as ... the manager ... it can be difficult”
Sources of tension included working for a company with a culture of “you do not question a directive or argue with anyone more senior to you” (KI-REFM-14); micromanaging the FM; unresolved conflicts of interest and delays in decisions. AO-FM relations differed between AO types according to the level of FM autonomy; delineation of roles, communication protocols and decision timeliness.

**Level of FM autonomy**

Efficiency and job satisfaction were enhanced when a capable FM could make day-to-day decisions without the need to consult an AO. Even more ideal was when a capable FM was given the opportunity to introduce sustainable practices with beneficial outcomes, as did 64% of 14 FMs working for 15 AOs. But AO types varied in the level of autonomy given a FM. FCs (farm-based or otherwise) gave their FMs the least autonomy whereas FMCs, NFCs and aggregated AOs gave their FMs critical input into farm plans and all but one left day-to-day decisions to the FM. Among these AOs, an investment company gave their area FMs complete autonomy.

Friction increased with micromanagement. For example, a farm advisor regularly came across friction between a landowning father and his operator son (KI-AG-13). A farm-based FC confirmed “my father always had final say” (AO-FC-29). His father expected his son to be hands-on, whereas the tertiary educated son was a strategic thinker. In his father’s absence, the son initiated an alternative, beneficial marketing arrangement (AO-FC-29). Yet, employing two overseers, the son continued the tradition of making all decisions regarding “movement and management of ... stock, [and] when [the cattle] are ... sold. ... I do all the soil testing ... [and decide about] fertiliser, ... what’s sown, ... how, ... when ... [and] where. ... I do all the bookwork — ... all the sales ... [and] purchases. ... I leave them decisions ... about how to organise their days” (AO-FC-29). This AO employed highly sustainable practices that achieved excellent outcomes. Other FMs had worked for farm-based FCs that employed less sustainable practices and were not interested in learning new ways:
The previous people I worked for were a family operation. There were more ties as to what you could or couldn’t do. ... They didn’t seem to listen. ... Everyone’s different but ... if they don’t look outside the four corner posts they don’t necessarily come up with ideas, whereas, here, when there’s a board meeting, they’ll say, ... ‘It’s a drought, how can we turn it to our advantage?’ That’s how we came up with the drought feedlot. ... This is as close as I’ll get to owning my own property (FM-S-37).

Micromanagement by a non-local FC led to a high turnover of FMs: “A manager on this place is more like a foreman. ... The boss flies in, and goes for a drive in the ute and jots down what needs to be done. ... In fourteen years, they’ve gone through nine managers on two properties” (FM-FC-16). In contrast, an investment company’s area FMs on 14 aggregations had complete autonomy, this being written into the company’s charter. The chief executive observed “We’ve moved away from ... the traditional hierarchy. ... The most successful farm management operation in Australia is the family farm and we’ve tried to emulate that model. ... The best thing we can do from ... head office ... is to assist by providing very good systems ... and ... support” (AO-AGG-T9). The area FM confirmed “I’m responsible for the business plan. ... It [can] be challenged ... [and] they ... check and audit ... but ... people are well paid, expected to work hard and are given ownership. ... That’s the recipe for success” (FM-AGG-35).

Accounts in Appendix N show how one FMC gave their area FMs autonomy from business plan to marketing, although the business plan required AO approval. The FM of a mining multinational was also given autonomy. However, the FM was subject to a budget devised by an overseas head office and the multinational’s health and safety standards that were devised for mining rather than agriculture. Post GFC, the overseas head office scaled back all operations by 6.5% and “the company likes half a percent variation in any cost. I’ve got 1000% variation” (FM-AGG-28). In 2010–2011, sowing was delayed when the overseas head office demanded multiple non-standard machinery modifications (e.g. ceramic coated exhausts and fibre glass shielded turbo engines!). The FM reported “I was very angry. ... We offered to plant at night, but they wouldn’t let me” (FM-AGG-28).
An exception to NFCs and aggregated AOs giving FMs a high level of autonomy was another multinational, whose FM was required to daily consult the Australian head office “for most decisions” (FM-AGG-12). This was difficult given “the office staff have ... weekends ... but farming doesn’t stop for weekends” (FM-AGG-12). A farm worker reported “More decisions should be left to FM-AGG-12” (FM-AGG-12b).

Except for this FM, impacting a FM’s level of autonomy was a FM’s tertiary qualifications and/or experience (see Table 23 in Appendix O). A traditional view was that a top FM was taught by a top FM (KI-SS-23), but these days “[Top FMs] have got to have formal training ... [and] hands-on experience” (FMC-11). A FM’s computer skills for farm planning, monitoring and reporting to an AO had become increasingly important (AO-S-37). According to a chief executive of an investment company, tertiary training led to “a difference in their grasp on new technologies ... [and] analysing their businesses” (AO-AGG-T9). Six AOs (three FCs, a NFC syndicate, an investment company and mining multinational) employed FMs that had learnt through practical experience. The farm-based FC’s overseers were second and fourth generation workers for that FC. The FM for the investment company had owned property he now managed as “you’re looking to retain the knowledge” (AO-AGG-12). The FM for the mining multinational had 35 years experience and was up-to-date with leading edge technologies. However he was one of four FMs working for these AOs, whose computer literacy was an issue. However, he was also one of two of the six FMs that had initiated new practices.

FMs for nine AOs (FMC/AO, Aboriginal AO, city investor, overseas NFC, non-local FC, two multinationals, an investment company and local NFC) had tertiary qualifications and extensive experience. Three FMs ran their own farm. One had been the former landowner of land he now managed for an investment company. All were computer literate and seven had initiated new, beneficial practices. Yet, new technologies pose even greater challenges for achieving a balance between FM autonomy and AO support: “Satellite imagery [enables an AO] ... [to] look at images ... and ... say, ‘What’s happening in those paddocks ...?’ ... [But] if they’re too interventionist ... [they] won’t keep staff” (AO-CL-39).
**Defined roles, communication protocols and decision timeliness**

Clearly delineated roles and communication protocols, especially when AOs employ multiple FMs, enhanced operational efficiency. Two FMCs and five aggregated structures had clearly defined roles and communication protocols, as described by a managing director of an investment company:

> It’s really about … your management systems and protocols. … We make … decisions as a management team - … the managing director, … farm manager, … agronomist and the marketing team. We sit down … and say, ‘Okay, we’ve got these … end user … contracts. … The farm manager … works closely with the agronomists … to allow us … the right mix of crops. … He’ll take responsibility for working through the acquisition[s] … [and] getting that product onto farm. … Whilst the contractors report directly to the farm manager, the assistant managers … have … the largest interaction with [them.] … I would talk to those [assistant] managers once … a fortnight. … It’s more part of team building. … The [main] line of … communication is through the farm manager … [but] we’re looking [for] feedback. … The information flow’s got to be two ways (AO-AGG-12).

Appendix N provides other accounts of defined roles and communication protocols for one operation from the perspective of a FMC, area FM and city investor.

Within aggregated structures, FMs often had to consult with a representative who did not have final say, and for mining multinationals, a representative without an agricultural background. The most lengthy decision process occurred within a mining multinational, whose plans for their rural properties “change regularly” (FM-AGG-13) and needed to be “revenue neutral” (FM-AGG-13). Projects were proposed by the foundation or an outside agency and to go ahead:

> We need approval from both the company and the [foundation] board. … We have board meetings four times a year. … [If the foundation likes a project] … [I] identify the partners, … funding opportunities, … [and] logistics. … If it [is] on company land, we … go to the company … [or we] negotiate with the landholder (FM-AGG-13).
Accounts by two FMs who worked for NFCs highlight the need for communication protocols. One reported “You need to treat each boss equally. ... Repeat yourself three times” (FM-S-37). To avoid conflicting instructions, another FM discussed an issue with one partner and then emailed the other “‘This is what [Partner 2] and I talked about, you need to talk to [Partner 2.] ... I’ll do whatever agreement you come to’” (FM-NFC-24).

Decision timeliness varied among NFCs, and depended on protocols and personalities. For example, a budget decision for a local NFC could take up to four weeks because of “time constraints ... and I can’t do [a] cash flow until I get back to the office” (AO-NFC-211). In comparison, all six FCs made fast decisions, a view endorsed by all four FMs who worked for FCs. Yet, three FCs had ill-defined communication protocols. This could leave the FM unable to act, or having to respond to a vague instruction (FM-FC-26) or conflicting instructions (FM-FC-25), sometimes leading to unresolved conflicts of interest, as will be described shortly.

Also impacting AO-FM relations was an AO’s response to mistakes and uncontrollable events, as reported by an FM:

I put [in 1000 hectares of] ... dual purpose wheat ... [and] came back out and, by jove, it was a swarm of locusts. ... I said, ‘[AO-FC-27], you’ve lost the lot. ... $100,000’. ... He says, ‘There was nothing you could do about it’. ... I said to him, ‘You’re the first bloke ... I’ve worked for ... who could just roll with the punches’. ... You can respect a bloke like that. ... Put in the hard yards (FM-FC-26).

**FM-labour relations**

On-property labour relations were critical for a smooth running operation. Most FMs worked a 50–60 hour week, and an 18–22 hour day during sowing and harvesting. FMs reported “I’m on call 24 hours a day” (AO-FC-16) and “[I have] no recreation time” (FM-AGG-12). Along with appropriate support from an AO, a FM needed good people skills, as reported by an investment company’s ex-landowning FM:
It’s different dealing with family and dealing with people in the corporate environment. ... We’re a very close-knit family. ... Never really had a harsh word. ... [A FM for a corporate] needs to have ... people skills ... because there are so many different personalities. ... I think it would be very easy ... where things could turn pear-shaped. ... It’s a challenge at times and I’m pretty lucky that AO-AGG-12’s got some very good people skills. ... If we have ... a bloke wanting to resign ... [or] guys ... [having] a blue ... [because one nearly caused an] accident ... AO-AGG-12’s a good one to fob it off onto or get some advice from. ... [Also, my assistant FM]’s very much on the same wavelength. ... Works the house down. I don’t think I’d survive without him (FM-AGG-212).

Difficulties between multiple FMs occurred for an Aboriginal AO and two non-local FCs. For the Aboriginal AO, FMs on separate properties were “very protective about their own little spot” (FM-FMCA-22). This prevented economies of labour, machinery and production (AO-FMC-21). On a non-local FC’s property, the cropping manager and livestock manager had no protocols to resolve conflicts of interests:

[Between the stock manager and me] the roles have never been clearly defined. ... AO-FC-27 wasn’t into petty squabbles about who’s in charge. ... ‘It’s my company ... and everybody works for me’. [The livestock manager and I] ... discuss when the livestock can come onto a crop and ... be taken off ... and [generally] work it out ... [but] if you don’t have a common goal, ... [if there’s a] possibility of duck shoving responsibility because no-one is ... in charge, ... [or if you see a problem] it’s not my position to ... tell him ... and ... he’s not going to listen. ... Who do you report it to [without appearing] petty? (FM-FC-26).

A good FM needed to balance being able to make critical decisions and creating a team in which everyone was accountable. An FM for an investment company reported: “I want to hear feedback and I ... involve the men in the decisions ... with monthly meetings. ... [But staff] have got to be multi skilled ... [and] I expect each worker to be accountable for their actions (FM-AGG-35). A field observation on another property provided a graphic example of what can happen when there is a lack of accountability. Being shown into a woolshed, we discovered 200 pregnant ewes that had been accidentally left in the shed for a week. Two men had been scanning 9,000 ewes over five days. After another worker was tasked to put the sheep in the shed he had been instructed to do a job on another part of the
property. A week later, at least 100 ewes lay on the ground. Most were dead, as were the lambs beside them. Some were still alive and kicking. We dragged these to their feet but most were blind and too weak to stand (Field notes, July, 2010).

A common observation was that FCs had problematic relations with non-family waged labour, as reported by a FM: “In a family operation ... when there are conflicts between fathers and sons, the managers and workmen are the first ones to cop it. Or the son returns home and takes it out on the workmen” (FM-S-37).

Another difference was that aggregated AOs, FMCs and a local NFC worked to strict health and safety standards compared to individual operators and some FCs: “OH&S is probably the number one practice ... that I see as ... the biggest shift from when I owned [the property]” (FM-AGG-35).

For 90% of large scale AOs (N=10), and three other AOs, on-property labour relations included liaising with cropping contractors. Two aggregated AOs sourced contractors from former landowners or lessors. These were among five large scale AOs that required contractors to conduct costly machinery updates:

We’ve given them a window of time to convert ... We have three primary contractors who would have invested in excess of ... $10 million ... with variable rate technology, ... GPS gear, ... a three metre tram line, ... [and 333 mm] row spacing. ... We want a timed sowing implement ... and then our harvesters will be fully compliant ... with ... full yield mapping capacity (AO-AGG-12).

(Note: For yield mapping, yield monitoring software is installed in the harvester to measure the grain and grain moisture flowing through the auger. The information is used to predict yield potential and soil nutrient variability for future crop management.)

Large scale croppers also used non-local contractors: “If [our contractors] fall behind ... [or] we want to have specific equipment ... [we bring in] harvesters ... from southern Queensland. ... [Extra] sowing contractors are ... from the southern Riverina” (FM-AGG-12). In contrast, FMCs, local corporations and city investors
tended to use a local “contractor business, or ... farmer who has equipment” (FM-FMC-23).

Timeliness in sowing, spraying and harvesting could determine crop survival. Problems arose if contractors resisted upgrades (FM-AGG-12) or if contractors were unreliable, for instance, when they contracted other contractors, or were overcommitted or undercapitalised, the last preventing routine maintenance (FM-FC-26; FM-NFC-24). Three FMs had experienced problems with contractors, and the AO held the FM accountable. For example, a FM for a multinational reported:

[A contractor] cut fences to spray and harvest ... [and] sprayed in a high wind, and it rained afterwards, but he didn’t tell me, so the area wasn’t resprayed before sowing. ... [It] cost the company a lot of money. ... I [told] the bosses I wanted [the contractor] sacked, but ... I was threatened with the sack if the problems were not sorted (FM-AGG-12).

From the contractor’s point of view, problems arose if an AO went bankrupt or had difficulties paying (KI-AG-112); if the FM was slow in making decisions or hired other contractors, thus reducing the promised acreage (AO-FC-25), or when there was “a farm manager, a second ... and a third in charge all telling you different things. It’s best if you take orders from one, and quote him to the others” (AO-FC-21). Another contractor reported:

A resident owner [is] ... sometimes set in their ways. ... The ... corporates and so on, are up with the new ways of doing things. ... Sometimes the absentee landowner is quicker to pay ... [with] terms like 30 days. ... The resident owner may need to wait until he’s sold the grain. ... There’s no difference ... [in] the ... 18 or 20 hour days [or rate of pay]. ... The landowner supplies the fuel and chemicals. ... All my work is a handshake. ... I’ve never had a problem (CSH-T13).

Employment of non-family waged labour

All AOs that did not lease out all their property employed non-family waged labour full-time, contract and/or casual, as distinct from unpaid family labour. Across enterprise types, for non-self operators, labour was the highest cost, although the amount of labour varied with AO type. Of 15 AOs that employed one or more FMs,
twelve employed other full-time labour. Eighty percent of large scale AOs (N=10) employed the most labour (i.e. two to eight full-time individuals), with mixed cropping and livestock operations tending to employ more per hectare. However, the FM/former landowner of a cropping only investment company reported “It’s probably employing just as many or more than [the family farm operations it replaced]” (FM-AGG-212). AL meant, “more people ... have ... risk free salaries” (AO-CI-T12).

For city investors running a commercial agricultural operation, an FM observed “The problem for a city investor is that they pay $6 million for a farm, a farm manager costs $60,000 a year and a consultant, $25,000 a year” (FM-AGG-35). One estimation was that a city investor needed at least 2,000 ha to afford a full-time FM (KI-SS-23). A city-based AO with less scale ran a very labour intensive operation, for example, one person per 250 ha , as shown in Table 25 (Appendix Q). In contrast, city-based hobby farmers and LPOs employed casual labour, but on a per hectare basis, could provide more employment than other AO types, especially if renovating or building a house, or subdividing land. A LPO reported “I never argue about the price” (AO-LP-210b). ...“We look at it as buying goodwill” (AO-LP-210a). According to a real estate, employment by LPOs had “a [beneficial] domino effect on the town” (KI-RE-110).

For town-based farmers and farm-based FCs, labour costs potentially limited expansion (KI-AB-12). To reduce costs and keep casual labour to a minimum, 67% (N=6) relied on unpaid family labour, including female partners, and 33% reported bartering labour. For instance, a farm-based FC used unskilled labour costing AU$120 a day, even if it meant driving into town to pick them up, as “agricultural contractors ... would cost me $400” (AO-FC-21). Town-based farmers employed the least waged labour. Worse off were a local Aboriginal AO and other traditional landowners when self-managing a property. These people had problems paying wages, while incorporated regulations required members of a local Aboriginal AO to be voluntary (AO-A-22).
Despite wages being an issue for many landowners, farm wages are generally lower than urban wages (Slee, 1994; ABS b, 2010), including the salary packages of FMs compared to their urban equivalents (see Corporate service managers, 2013). From Table 23 (Appendix O) it can be seen that the 26 FMs and overseers associated with 15 AOs, 19 received a house, electricity, land line, mobile, work vehicle and fuel. Others lived in town or on their own property. Irrespective of residency status, FMs’ salaries ranged from AU$35,000 to more than AU$149,000, eight AOs across four AO types paying a bonus on performance or profit.

FMs’ salaries varied with AO type. Farm-based FCs and a local FC paid their FMs the lowest (AU$35,000), although the local FC paid a bonus based on profit. The farm-based FC reported “They don’t work for me for the money. … I could never afford [more]” (AO-FC-29). Two non-local FCs paid FMs the same as three aggregated AOs and two NFCs. This meant 50% of FMs (N=14) received AU$60,000–$80,000. Only five FMs (working for two FMCs, a mining multinational and an investment company) received in excess of AU$100,000, considered the minimum wage for a top FM (KI-SS-23).

**Change in number of on-property residents**

AL does not appear to be a major factor behind any decrease in the rural population. In the Lachlan research, 68% of AOs (N=28) had not decreased the number of on-property residents since property purchase or subdivision (Table 25 in Appendix Q). This 68% included 43% where the number of on-property residents increased, in 14% of cases, by seven or eight people. Smaller family sizes led to another 21% having less on-property residents since property purchase. The last cohort were among 29% of AOs where there was a reduction in the number of on-property residents, one AO having an unknown change. AO types that reduced numbers of on-property residents were town-based farmers, farm-based FCs and two mining multinationals. Findings were impacted by 54% of AOs having resident farm labour or a resident lessee; 50% having purchased AOL; 14% renting out one or more houses and 14% buying a subdivided block. An example of subdivision was the original farming family
remaining in the homestead; two resident-owned blocks adding four ROs; and two blocks being absentee-owned (AO-LP-210).

**Community relations**

Maintenance of on-property residents for 68% of AOs; proximity of local AOs (N=9) and a city-based hobby farmer’s past connections to the area enhanced utilitarian relations with neighbours. Utilitarian relations included being able to negotiate tenancies; help with escaped or injured livestock; maintain fences; combating fire, weeds and feral animals; inform neighbours of a spray event and share water infrastructure, machinery, labour and knowledge. For example, when they self-managed, a local Aboriginal AO reported good relations: “Farmers are like that. They’ll give you a hand if you need it. It’s mainly been advice” (AO-A-22).

Secondly, although the sample of five city-based investors was not representative of the diversity within this cohort, 80% placed great value in socialising with neighbours, more so than other AO types, despite rural culture being a steep learning curve for some, especially women (AO-LP-210). Interest in socialising was partly because two wished the property to be a future residence, but also because city-based family and friends visited infrequently.

Thirdly, locals viewed non-mining aggregated AOs as secretive about investors, practices and net returns. A FM for a multinational reported:

> A lot of people don’t like us because we’re a corporate. … Some of the contractors go around bad mouthing us. … We made all the contractors have press wheels. … They all think it’s stupid. … We have confidentiality clauses [about] what we’re … using with our fertiliser, so … people make up stories (FM-AGG-12).

In contrast, two mining multinationals fostered community relations because of mixed reactions to their acquisition of agricultural land, and the increased noise, dust, 24-hour light and high wages elevating local expectations and
house prices. For example, a foundation of one mining multinational had multiple community engagements:

We’ve worked with the Wiradjuri people ... [for them to regain] access to their traditional country. ... We conducted TAFE courses ... and ... a number of [Wiradjuri] have ... gained employment. ... Part of the Native Title Agreement [involves] ... provid[ing] ... funds ... [for off-site Aboriginal] employment, training and business opportunities. ... Their corporation ... employ[s] ... people ... [in] horticulture, ... furniture making, ... recycling, ... [a] postal contract, ... manufactur[ing] bricks ... [and] building houses. ... We now have two or three school visits a week and a full-time education officer, with [support from] the Department of Education. ... That the local community has come on board is indicated in the amount they have contributed. ... Of the nearly $9 million worth of projects [2002–2009], the Lachlan CMA has contributed 28%, the community 27%, the ... foundation 15.5%, the CSIRO 10% and the company 1.46% in direct cash payments. ... Landholders ... contribute fencing, ... structural works ... and ... land. ... About 95 landholders [have been involved in various activities] (FM-AGG-13).

The community liaison officer had taken his brief beyond what was initially envisaged, supported by the FM and others. Consequently “the company ... from the CEO ... in Canada ... all the way down ... is actually interested in using what we’ve done as a role model for other projects” (AO-AGG-13).

A fifth set of community relations related to the litany of criticisms levelled at absentee LPOs highlighting the perils of mixed farming-amenity landscapes in Cowra Shire. However, from both the AOs’ and ROs’ perspectives, impacting neighbour relations were issues associated with uncontrolled weeds, livestock and pet dogs; machinery and motorbike noise; conflicts over fire hazards, rural protocols, chemical spraying, locked gates, and movements of stock and machinery (AOFMKI-T-115; KI-CV-16; AO-LP-210).

Counterfactuals

There were four counterfactuals related to social relations. In contrast to historical accounts, not one of the ten large scale AOs share farmed and many informants observed tenancy arrangements were “not as common as [they] could be” (RF-T6,
2010). No external agency fostered such arrangements (KI-RE-110), a non-local FC having observed different tenancy arrangements overseas, for example:

In Alabama ... [people owned] a 25 acre ... chook farm. ... The company [supplies] the chook[s], and all they done was check the feed ... and water. ... They’d just go to work and the chickens [are picked up]. ... Another guy ... had 30 acres ... [of] tomatoes. ... [The company plants and harvests them] (AO-FC-27).

Only one AO (an Aboriginal AO) employed waged Aboriginal workers, in stark contrast to their historical involvement and employment on northern Australian properties. Nor did Aboriginal informants have farm management experience prior to landownership. In contrast, 30% of all FMs on a Commonwealth Aboriginal AO’s properties in Northern Australia were Aboriginal (AO-A-T4).

Whereas partners of town-based farmers and hobby farmers made valuable contributions moving machinery (AO-TSHL-26) and caring for livestock (AO-TSH-23; AO-HFT-38), corporate agriculture focused on cropping and livestock in the Lachlan involved a masculinisation of the workforce. Only one AO employed a woman full-time on-property and only one AO (a farm-based FC) employed women as cropping contractors: “It’s like McLeod’s Daughters. ... There’s four ... lady ... drivers. ... They’re generally better with the gear. ... Rouseabouts - ... a lot of the time they’re ladies” (AO-FC-21). Four AOs employed women casually. An investment company’s area FM, who had formerly worked the property in partnership with his wife, observed “In this business ... my wife’s not involved. ... I see that as a problem. ... I’m actually ... saying ... to the company ... ‘you must engage the wives’” (FM-AGG-35).

Another counterfactual was that three multinational head offices had international interests (AO-AGG-12; FM-AGG-12), for example, one multinational had agricultural interests in “Paraguay, United Kingdom, Russia, Black Sea [and] Argentina” (FM-AGG-12) but the Australian boards and FMs had no links to these. This prevented an exchange of ideas. For instance, a mining multinational’s
foundation members were in a prime position to help establish similar structures elsewhere.

**Model of factors impacting social relations**
A refined model of factors impacting social relations is presented in Figure 42.

Figure 42: Model for social relations

**Managing biodiversity**
Although the histories of nine pastoral stations indicated some AOs conserved tree belts in the early years, managing biodiversity within farming landscapes is considered the next frontier in agriculture as “most farmers are interested in good NRM, it’s just their views about what is good for the ecology vary” (KI-AG-13). Five informants reported “successful ... agriculture is based around decreasing biodiversity” (FMC-11). Eleven AOs and four FMs viewed sustainable agriculture as “agriculture that’s compatible with fully functioning ecosystems. ... Even croppers ... have to realise that a patchwork landscape ... is ... beneficial” (AO-FC-29). Biodiversity management included managing remnant vegetation, fencing for conservation purposes, tree planting and counterfactuals.
Practices and outcomes

Active biodiversity management was not linked to AO type. In descending order it was linked to outside agency assistance; the AO or FM considering managing biodiversity had intrinsic values and agricultural benefits; the prospect of carbon trading; and government requirements. Work was not linked to having substantial off-farm capital and land, as production priorities of large scale AOs tended to overshadow biodiversity management.

Fifty three percent of AOs (N=28) across 10 AO types had done some work to manage or expand biodiversity. Fourteen of the 15 AOs who had done work, (the exception being a mining multinational) had received materials, labour and/or cash from an outside agency such as Landcare, Rivercare, Greening Australia, Lachlan CMA or a foundation. Networking with such an agency was via the FM for seven AOs, five self operators and two non-self operating AOs. In another case, the outside agency approached the AO. Thus, FMs played a key role in managing biodiversity. For example, the fencing of remnant vegetation on property owned by an overseas NFC was the result of the FMC keeping “our finger on the pulse and when money becomes available we will see if it’s applicable to ... our client’s properties” (FMC-11).

Seven AOs (i.e. 47% of 15) that had done extensive, on-going biodiversity management beyond outside agency assistance are later referred to as ‘top conservationists’. For three (an investment company, farm-based FC and a town-based farmer), the FM and two self operators were motivated by valuing biodiversity for its intrinsic values and agricultural benefits. All three were primarily reliant on income from agriculture and work had been conducted throughout the drought over 14 to 30+ years. For the investment company, it was “having an educated investor base” (AO-AGG-T9), and a committed former landowner/area FM who sowed native pasture, kept clumped trees in crop paddocks for shelter and to link existing remnant native vegetation on the property. The former landowner/area FM reported that as a result of work conducted by himself and the investment company:
We have a lot more timber around our watercourses. ... We'd probably done close to $300,000 worth of mostly CMA projects. ... We fenced off the riparian zone ... and put water [troughs] in, and the fencing’s allowed us to manage ... perennials. [The CMA contributed] about $150,000 and [I] put in $75,000 and ... the current owner ... $75,000. ... It’s a manager’s decision but [the company is] very focussed on ... [being] sustainable. ... What’s probably more important is what’s been happening with our ... [native] grasses - ... the whole suit. ... We’ll get ... the native birds and predators ... and I’m hoping ... we’ll end up with a ... more sustainable future with less chemical (FM-AGG-35).

Another top conservationist was a farm-based FC with 85% of 2,365 ha covered by remnant vegetation and native grasses. Riparian and other remnant vegetation was fenced, spot sprayed or crash grazed. Being sustainable was a process of realisation. In the 1970s, the FC had planted a pine forest. In 2011, this was harvested. Replanting will be to native trees from on-property seed as “I don’t want outside genetics coming in” (AO-FC-29). Another top conservationist was a town-based farmer who had fenced remnant vegetation and tree belts, and crash grazed these areas, while a lack of capital had not prevented the planting of native pasture, despite seed expense. The planting of local tree species was ongoing:

In ‘92 I started sowing some tree lots, ... fencing them out ... just for the aesthetic. ... There was no subsidy. ... Every year I try and sow a block of trees down. ... Superb parrots – they’re supposed to be nearly extinct, ... [and] crimson rosellas [are coming back]. ... Now anytime I sow trees, I’m putting ... saltbush in for fodder (AO-TSHF-23).

Four of the seven top conservationists (a LPO, a local FC and two mining multinationals) were additionally influenced by a future carbon market. For example, the local FC had planted and fenced 8% of the property (260 ha) to local trees (AO-FC-25) and was the only AO linking an on-property tree corridor to external forests/remnant vegetation. In addition to being influenced by a future carbon market, the two mining multinationals were influenced by a government requirement to create an “offsite\(^2\) offset ... [of] wildlife corridors ... [and] biodiversity” (AO-AGG-28). Initiatives by their FMs exceeded government

\(^2\) Offsite refers to land external to the mine site.
requirements. At company expense, one FM had planted 40,000 trees from local seed in 1997, and subsequently 10,000 trees a year in 50 metre wide belts around paddock perimeters. Two casual workers were paid to plant trees and one was paid to regularly spray for weeds. The FM was the only cropper that retained dead trees for habitat purposes by pushing them into paddock corners, despite this being a legal requirement. In the case of the other mining multinational, because a past mining operation’s waste cyanide had killed water birds, in 1996 the NSW State Government had rejected its application to mine. In 1998, the multinational negotiated a Memorandum of Understanding with four environmental groups and in 2000, established a foundation. On rural properties, the foundation had used multiple funding sources to fence:

[designated] conservation areas … using remnants of native communities … [and, with] expensive … revegetation [from local seed, create] corridors for wildlife. … [Other] areas [are] rotational graz[ed] … [or] cropped. … The aim [is] … to … restore the ecological function … [and] demonstrate that we can have agricultural production and conservation operating in balance … [and that] it’s … economical viable … in an arid / semi-arid environment. … Conservation areas [could also be] carbon … [and] biodiversity sinks (FM-AGG-13).

Mining companies paid a bond to the government to ensure rehabilitation of the mine site after mine closure. However, a farm-based FC that leased land from a third mining multinational observed “there’s no provision for ongoing management … and … who’s going to enforce [it?]” (AO-FC-29). One FM working for a mining multinational proposed to the company that he could plant Mallee for carbon sequestration, electricity generation and Eucalyptus oil but head office had yet to approve his plan (FM-AGG-28). The other multinational’s FM had a personal interest. His family’s former properties were “covered by the mine’s pit, processing facility, waste rock dumps and tailings dams. … After mine closure … I have a responsibility … to … make the properties … a showcase of sustainability” (FM-AGG-13).
Another two AOs had planted Mallee and received capital benefits from an existing state-based carbon scheme. These were an AO/FMC and an Aboriginal AO who employed the same FMC. For the AO/FMC:

_The C. property was [purchased] with the view of carbon sequestration._ ... _We’ve planted one and a half million ... oil Mallee ... under the NSW Greenhouse Abatement Certificate._ ... _We were paid ... upfront._ ... _Effectively [we purchased] 50% of the farm by utilising only 15% of the land (AO-FMC-21)._ 

Access to substantial land and off-farm capital was not linked to managing biodiversity. Production priorities tended to overshadow conservation work despite large scale AOs having sizable areas of remnant vegetation (see Table 24 in Appendix P), as reported by the managing director of an investment company:

_We’re focussing on production._ ... _Once we’ve got all the reconfiguration work done, then we can look at planting trees ... ‘cause the trees don’t pay the way._ ... _We’re actively looking ... to plant ... for carbon sequestration ... [but] until there’s clear guidelines ... it’s pretty hard to really look at it as a serious investment (AO-AGG-12)._ 

Apart from the work conducted by the previously mentioned investment company and two mining multinationals, outside agency assistance had been instrumental for some work being conducted on property owned by another three large scale AOs. However, four large scale AOs had conducted no work. Of these, a multinational and investment company cropped all arable land, despite both FMs being conservationists, as reflected in the following account:

_I am a bit of an environmentalist. ... I’ve got some ... old growth timbers._ ... _They are not fenced off but I’m going to do that._ ... _I want to plant ... trees and shrubs along the boundaries and ... creek lines._ ... _I’d like to introduce Integrated Pest Management and Natural Sequence Farming._ ... _[My Australian boss] said, ‘Yeah, do what you want to do’ [but there’s a] lack of capital. Drought. Lack of time (FM-AGG-12)._ 

Two non-local, large scale FCs cropped and ran livestock. Ten percent and 15% of each property (i.e. 1,500 ha and 3,200 ha) was covered by remnant vegetation but areas were not fenced, weeded or crash grazed. One FC had not fenced a 45
kilometre river front because “you then build up a huge amount of rubbish. ...
You’ve always got to ... know when to stock it ... [but] to say that the stock is going
to damage the riverbanks - that’s rubbish” (AO-FC-27). The FM estimated the cost
of fencing and putting in water troughs would be AU$1.5 million and “It’s a matter
of having enough largesse in the system ... because there’s nothing in it for us. ... As
soon as you take sheep away, then everything just grows like buggery ... Cypress
Pine, Black Wattle, ... River Red Gum” (FM-FC-26). This observation contradicted
current recommended practice of growing or preserving native trees along river
banks. Neither the FM nor the AO had investigated the possibility of outside agency
assistance.

These two non-local vertically integrated FCs had not planted trees, despite tree
belts or tree clumps being beneficial for biodiversity, livestock shelter, windbreaks,
salinity and moisture retention (FM-AGG-35; FM-AGG-212; FM-FC-26). However, a
lack of tree planting by one non-local FC was partly due to the previous AO
(another non-local FC) having planted 640 hectares with 40,000 trees in the late
1990s, Landcare providing labour, this being another example of
values/motivations influencing a large scale AO. But the FM reported, “when it got
dry ... it was one of the first things you jettison. ... It was just a budget cut” (FM-FC-
26). Thus, profitability influenced any biodiversity work conducted by large scale
AOs. Subsequently, “AO-FC-27 doesn’t show ... interest in planting trees” (FM-FC-
26). AO-FC-27’s response was “There’s been a lot of trees planted. ... It’s probably
overdone but ... one thing you’ve got to look at it is ... subsoil moisture” (AO-FC-27).
This was a valid point. For example, the Mallee on an FMC-owned property “were
planted ... in very, very dry conditions and the survival rate was around 30 or 40
percent” (AO-FMC-21).

That production priorities were paramount for large scale AOs was unsurprising,
given the dominance of extrinsic/utilitarian motivations for this cohort, especially
as remnant vegetation and tree plantings require ongoing management; there is a
lack of ecological benefit in planting narrow tree belts or planting everything at one
time, and trees are “good for the ecology. ... [but] definitely cost your yield. ... Now
we’re told that birds need more than 50 metres, so where do you stop?” (FM-AGG-28).

Another nine AOs, including four lessors/lessees and a city-based hobby farmer, had conducted no biodiversity management. The city-based hobby farmer’s property had a short-term shrub belt planted by a previous AO. The belt was weed infested so the current AO replanted a portion to Lucerne, and had no interest in planting trees because the property was small and the owners were already struggling with the lack of profit (AO-HF-32). That four lessors/lessees had done no work would indicate leasing out negatively impacted biodiversity management, as did a lack of operating capital for a local Aboriginal AO and city investor.

The properties of three Aboriginal AOs had the highest proportion of remnant native vegetation and native pasture of all AOs (46% to 85% of their properties). Three city-based investors, including two LPOs, had 20% to 30% of their property covered by remnant native vegetation. A farm advisor confirmed many LPOs were on “some very aesthetic, biodiverse land, rich in ecosystems” (KI-AG-13). Of these six AOs, 50% had conducted some work.

**Counterfactuals**
Forty seven percent of all AOs (N=28) had not conducted work related to managing biodiversity. A second counterfactual was that a minimum of 54% AOs were unaware of endangered species on their properties, “so it’s not something that we’re actively managing” (AO-AGG-12). A third counterfactual was that only one AO had planted a tree corridor that was linked to external forest or remnant vegetation.

**Model of factors impacting managing biodiversity**
Figure 43 is a refined model of factors impacting biodiversity management.
Implications for economic viability

The most common understanding of sustainable agriculture, shared by 50% of all AOs and FMs (N=49), was that sustainable agriculture is maintaining or enhancing the land’s long-term productive viability and profitability.

Historically, AOs monopolised the best pastures and water sources and significantly contributed to the Australian pastoral industry, but all landowners, resident and absentee alike, in conducting conventional farming practices such as overstocking, land clearing and ploughing, compacted and eroded soils, and spread weeds and pest animals. By “the 1940s we’d have days of dust storms. The fences would be covered in sand” (Robinson, B., 2010). Despite more sustainable practices being introduced from the 1950s, on property purchase, 54% of 28 AOs reported their property/ies to be “over-cropped, … [and] overgrazed” (AO-FMC-21) and soils to have “high acidity, low phosphorous. Very low nitrogen” (AO-TLSHF-26). Of these, 60% (n=15) purchased ROL. Similarly, 46% (N=28) claimed that on purchase, their property had been weed infested, 62% of these (n=13) purchasing ROL. Twenty-four out
of 28 AOs claimed their properties had poorly maintained infrastructure at the time of purchase. A FMC observed “agriculture’s infrastructure is falling to bits. ... The corporates ... [and] wealthy city people ... are bringing capital in” (FMC-11). Twelve informants reported “if that’s your purchase price, you probably want at least that again” (KI-AG-112) and “Someone will buy a farm for one million and they spend $500,000 on stock. ... Immediately ... profitability is reduced because it’s undercapitalised” (FM-FMC-23). That 79% of AOs (N=28) across 10 AO types were not short of off-farm capital meant they had “choices. ... As a family farmer, sometimes you don’t” (FM-AGG-35). How this impacted economic viability was explored for ten large scale AOs, nine local AOs, six city-based AOs and three Aboriginal AOs.

Uniform practices and outcomes are described first. Differences between AO clusters related to property selection, enterprise mix, livestock care, technology adoption, variable costs and marketing. Differences in outcomes related to minimum ground cover in October, 2009; production and long-term viability. Counterfactuals are considered last. Data is presented in Table 25 (Appendix Q).

**Practices and outcomes across AO type**

For those practising agriculture, including two hobby farmers, five findings were unrelated to AO type.

**Finding 1:** All AOs practicing agriculture employed currently recommended production practices. These included improving water efficiency; soil testing; fertiliser applications; direct drilling into unburnt stubble; crop and/or pasture rotations; control of pest animals and managing risks during the drought. Seventy-eight percent of fertiliser users (N=23) used monoammonium phosphate (MAP) and/or diammonium phosphate (DAP) at 80 to 125 kg/ha. Only three AOs raised their unsustainability:
Granular urea – we mine it in developing countries at great exploitation of people and safety. It has a carbon footprint\(^3\) that you can’t step over by bringing it 10,000 or more kilometres to Australian ports. We put it out on farmland at a rate of well, typically ... 46% nitrogen. Highly ... acidic and the effect on soil borne microbes is horrendous. ... Within a few months ... the urea volatilises ... in the form of ... nitrous oxide, which ... is only 30 times worse than CO2. ... Hey, but it made the plant green (AO-FMC-21).

In practise, 53% of fertiliser users (N=23) across AO types practicing commercial agriculture had reduced or eradicated standard fertilisers because of the negative impacts on soil microbes and “exorbitant ... prices” (FM-NFC-24). The latter consideration related to the cost-price squeeze and managing risks in the drought. All who did not lease out thought their practices had improved soils and productivity. All 28 AOs controlled weeds, 29% having reduced chemical use by using biological alternatives, manual labour or relying on (improved) native pastures. Fifty-seven percent of AOs (N=28) ran mixed crop and livestock enterprises, exceptions being three town-based farmers that focused on crop or livestock.

Finding 2: Across AO type, rainfall had the greatest impact on production. In the drought of 2009–2010, no AO achieved their target yield. For wheat production, operations in the drier west achieved 0.06 to 1.5 t/ha, except for a mining multinational, whose excellent FM achieved 2.4 t/ha, the second top rate among all 14 wheat producers. Operations in the east achieved 1.5 to 2.5 t/ha, except for a city-based hobby farmer, who achieved 0.35/ha. In contrast, in 2010–2011, 87% of 15 AOs that sowed wheat achieved 3+ t/ha.

Finding 3: On-farm practices and outcomes were impacted by the quality of the FM or operator. Six AOs had experienced past FMs whose poor practices had negatively impacted outcomes, as highlighted by two accounts, first from an assistant FM:

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\(^3\) A carbon footprint is defined as the annual amount of carbon dioxide (and sometimes methane) emitted by a person, organisation, event, process or population.
The last manager lasted two and a half months. … We would start work at 7 am but he wouldn’t turn up. I’d tell the boys what to do. … He’d drive into town to pick up parts at lunch time, … spend the afternoon at the pub … and not come back until after dark – without the parts. … At the end he decided to take a couple of days off without telling anyone (FM-FC-16).

The FM was sacked. Having gone through two FMs in 2009–2010, the operation achieved the lowest production per hectare of wheat of all 14 wheat producers. Similarly, the operation of an NFC syndicate was impacted by a past livestock overseer: “Near enough was good enough. … Lambing percentage was down. He didn’t look after them. … Sell sheep and he’d leave them penned up for three days” (AO-S-37). The replacement overseer was:

*doing an amazing job. … We fluked it. … Just by more efficient managing, reducing our stock deaths to less than 3%. They used to be out to 5%. … Without a doubt [he’s responsible for our lambing ratio being] up to 120% and … for twins 160%. … Understands the nutrition. … Just understands stock* (AO-S-37).

**Finding 4:** All eight AOs, who made a net return in the drought of 2009–2010, were focused on livestock.

**Finding 5:** Extensive biodiversity management did not negatively impact profitability. In the drought of 2009–2010, four of eight AOs that made a profit were among six top conservationists that practised commercial agriculture. Confounding this finding was that these AOs were more focused on livestock than crop. Profitability was also the consequence of fenced riparian areas having never been as productive as other areas (AO-FC-29) and remnant vegetation in the fenced riparian areas being strategically grazed. In addition, these AOs employed highly sustainable production practices. For instance, 33% of non-standard fertiliser users (N=12) were top conservationists, these four being among nine AOs/FMs that added lime and gypsum at regular intervals. The three top conservationists that did not make a profit in 2009–2010 were a mining multinational and a local FC that cropped, and a LPO.
Advantages and disadvantages of corporate agriculture (N=10)

Five aggregated AOs, three non-local NFCs and two non-local FCs had advantages and disadvantages associated with owning large scale operations. Eight had a geographic spread of properties in and outside the Lachlan catchment. Their large Lachlan properties had a minimum of 85% of arable land. However, nine operated in areas of high rainfall variability and one multinational had to purchase water off-property, the only AO to do so (FM-AGG-12), despite being one of three AOs (the other two being investment companies) that conducted extensive due diligence before property purchase.

Seven large scale AOs ran mixed crops and sheep, three also running cattle. Three of four croppers were large scale AOs. They grew wheat, canola, barley and legumes despite the Lachlan catchment being where “you write off three crops in ten” (AO-FMC-21). A mining multinational and an investment company were the only AOs that grew biofuels.

Livestock care

Eighty-six percent of large scale livestock producers (N=7) employed a resident FM and other farm labour to care for livestock. Three large scale sheep producers had a competent livestock handler and two other workers per 10,000 sheep. Seventy-one percent of large scale livestock producers grew native grasses. Since the drought, two FMs (working for an investment company and overseas NFC) began direct drilling Brassica, Phalaris, Lucerne, clovers, medics and/or grazing oats into native grasses and fertilising these paddocks. This reduced or eradicated the need to purchase fodder. These AOs strategically grazed and gathered livestock in sacrifice areas when ground cover fell below 40%.

Because of the drought, a NFC syndicate introduced a drought feedlot as well as a lamb feedlot (AO-S-37). A non-local FC introduced a lamb feedlot partly “to manage the Old Bloke, my competitor ... because he won’t give me any rain” (AO-FC-27), and, according to the FM:
[The lamb feedlot’s] been a bit of pipe dream ... [of AO-FC-27’s]. ... It’s been in development for ... 18 months. ... He believes that it has the potential to produce ... [a] throughput of ... 300,000 a year ... [in] 40 X 40 [metre] ... pens, ... 450 head per pen. ... They[’re] on three different mixes ... grown here - ... oaten hay ... wheat, barley, ... lupins ... [and] canola meal. ... There’s a vet they’re consulting ... [and the person who’s running it has] been on a few field trips. ... [The site was chosen by AO-FC-27] because the soil’s well drained, close proximity to the silo, the workshop and ... good ... sealed roads (FM-FC-26).

The only large scale AO that ran livestock without a resident caretaker sacked the FM because he “lease[d] ... a neighbouring ... paddock ... utilising our ... machinery, our farm inputs. ... [When] ... we dismissed him ... he wrecked [the house]. ... Doors [were] kicked in (AO-FMC-21). Subsequently the AO took a hands-off approach, and became one of nine AOs that experienced theft, 66% of these AOs having no on-property resident. The removal of panels along a main road resulted in 400 head of “predominantly Bos indicus cattle ... built for speed [escaping]. Over the ensuing ... weeks, we had numerous crews out ... mustering” (AO-FMC-21).

Technology adoption
All large scale AOs adopted expensive leading edge technologies and were widely networked with national agricultural organisations. Networks led four to conduct research with external partners, this research having a public outcome.

Farm plans and monitoring procedures are critical for future performance-based practices and quality assurance programs (FM-FMC-23). FMCs and investment companies had the most rigorous plans and monitoring procedures as they also had to report to AOs or shareholders “on a monthly basis, on a quarterly basis, on a six monthly [and] an annual basis” (AO-AGG-12). For plans, monitoring and reporting, eight large scale AOs relied on sophisticated software packages. A managing director of an investment company reported:

A software program ... allows us to do gross margin analysis on a paddock by paddock basis so we track the applications, the movement of machinery, the spraying, the harvesting, the storage ... to ... meet our ... quality assurance programs ... and ... to do our gross margin financial analysis on the paddocks (AO-AGG-12).
Comparing his family operation, the investment company’s FM observed “We didn’t keep the detail that they keep here” (FM-AGG-212). Another investment company’s area FM streamlined data entry so “time in the office. ... [is] kept to ... two hours a day” (FM-AGG-35). An exception to having a farm plan and keeping records was a non-local FC:

[The former FC] budgeted 12 months in advance ... [and] an overrun on that budget [had] to be justified. ... With AO-FC-27 it’s a day-by-day sort of exercise. ... There’s nothing forecast. ... No budgeting. ... We don’t actually keep ... a lot of records. ... If I ever left the joint ... a lot of knowledge would go with me (FM-FC-27).

Eight large scale AOs used GPS and compatible machines for controlled traffic. For this purpose, a multinational and investment company dismantled up to 50 kilometres of fences and added up to 50 kilometres of laneways. This had implications for enterprise change or property sale, given that two large scale livestock operations had added up to 50 kilometres of fences for strategic or rotational cell grazing. When sowing, three large scale AOs used press wheels for moisture retention and soil/fertiliser/seed contact and three used disc seeders, one in addition to the single tyne. Two used yield mapping and variable rate technology.

Fifty percent of non-standard fertiliser users (N=12) were large scale AOs. Thirty-eight percent of those that reduced standard fertilisers by using alternatives (n=8) included an investment company that used trace elements, seed activators and biological products (AO-AGG-12) and a mining multinational’s FM who was trialling two organic liquid fertilisers in addition to spreading straw for 14 years (FM-AGG-28). Noteworthy, 75% of AOs that eradicated standard fertilisers (n=4) were large scale AOs. They were a non-local NFC using organic liquid fertilisers (AO-FMC-21); a mining multinational using BioAgtive Emissions technology (i.e. tractor exhaust) (FM-AGG-13) and a multinational grain grower, the FM using a “liquid fertiliser program ... that is more friendly to the soil, but also it’s prescription farming so ... we sap test ...
and soil test ... through the growing season and ... if the paddock is lacking in zinc ... or calcium, we'll ... put that on as a foliar spray” (FM-AGG-12).

Eight large scale AOs conducted frequent soil and sap tests and employed more than one consultant but sprayed crop up to twice as many times as other AOs (i.e. five times for canola and four times for barley and wheat). Three also aerial sprayed. Nevertheless, 38% of AOs (N=8) that reduced chemical usage were large scale AOs. In all three cases it was the FM’s initiative. A multinational’s FM used biological control and two FMs had introduced improved native pastures that only needed spraying for weeds every three years. Lucerne was sprayed once a year (FM-FMC-T10).

Access to substantial off-farm capital also enabled effective responses to unpredictable events such as a locust plague. An investment company’s area FM reported:

On the 20th April the hoppers ... killed everything. ... I would have been devastated ... [if] it had cost me. What our head office said was ‘Let’s ... work out what we’re going to do ...’. We did the gross margin on the wheat at the new price. ... Not worth worrying about. ... Sheep prices had doubled since Christmas ... so we actually put ... permanent pastures into all of that cereal cropping country. ... What made it easier was [there was no] personal worry about ... cash [flow.] You actually make better decisions (FM-AGG-35).

Being sustainable is a process and five large scale AOs were well networked with national agriculture organisations4, the other five having a widely networked foundation, FMC or FM. Some connections led four to form research partnerships with outside organisations, 80% of all AOs (N=5) to do so. Two were mining multinationals. In partnership with the CSIRO and Department of Primary Industries (DPI), one FM had replicated trials of new varieties of barley and wheat, different row spacings and fertiliser rates, and was “trialling two ... biological ... liquid

4 Organisations included AgForce; Commonwealth Research Centres (CRC); Commonwealth Scientific and Industrial Research Organisation (CSIRO); Grains Research and Development Corporation (GRDC), including Central West Farming Systems, Central West Conservation Farming Association (CWCFA) and Conservation Farmers Inc (CFI); the Kondinin Group; Meat and Livestock Australia (MLA) and the National Farmers Federation.
fertilisers – ... GAIA ...[and] the other one’s Australian Soil Planters” (FM-AGG-28).

Another’s foundation had:

around 34 projects ... with ... CSIRO, ... universities ... and other organisations like ... Natural Sequence Farming Consortium. ... [One project is looking at] pasture cropping ... into native pastureland. ... [A CSIRO project is looking at] native grassland population dynamics. ... [It is showing a] recruitment of ... the more palatable, more productive ... [native] annuals and perennials ... [and the maintenance of] ground cover (FM-AGG-13).

In 2009, a managing director of a FMC claimed “I’d like to have a business ... [with] enough resources that we could do research ... [Interviewer: Unless you pooled resources.] With those bastards! [Laughs] They’re our competitors ... but there’s definitely opportunity for that” (FMC-11). In 2010, research commenced on a property managed by this FMC, as reported by the FM: “Agri Tech is trialling alternative forms of fertiliser ... and ... doing canola trials. ... [The research will be publicly disseminated] through Agri Tech and DPI” (FM-FMC-T10). Intent on gaining a competitive edge, another three large scale AOs conducted their own research that would not be publically disseminated.

While no large scale AO attended short courses or field days, of the 15 AOs that sent FMs and workers on courses, 86% were large scale AOs, as “it’s important that we foster and develop people in our business” (AO-AGG-T9). FMs reported “I’ve had training in negotiation skills and ... general business” (FM-AGG-35) and “We’ve all done a ... Prograze course, ... chemical training course, an OH&S course and a First Aid Course” (FM-FMC-T10).

Variable costs

Seven large scale AOs had higher variable costs per hectare (e.g. $395–$444/ha for cropping) than all but one small scale AO, this being a hobby farmer. Variable costs excluded administration costs, including three or more salaries for directors, except for one non-local FC. Compare these variable costs to $220 for a town-based farmer, excluding uncosted labour, and $238 for a local FC, including farm labour. This was despite large AOs bargaining with head office when purchasing bulk inputs even when supplied by a local
distributor. Higher variable costs related to use of spray frequency, including
the use of aerial spraying; the nature and frequency of soil and sap tests;
fertiliser applications; use of consultants; and employing contractors with the
latest machinery, but, as will be shown, did not necessarily translate into
higher production per hectare.

Marketing
Large scale AOs purchased and sold livestock at more beneficial rates based on
quantity (KI-SS-23). Scale generated markets (FM-AGG-212) and for crop,
increased a producer’s quota (based on production potential) for the number
of virtual commodity trades allowed (AO-TSHFL-26). Five benefited from
vertically integration as outlined in Chapter 7. Another three used non-
standard methods to achieve premium prices. For example, an investment
comp any reported that apart from “Forty-five percent of our production ...
[being] in a closed loop arrangement with end users ... [wheat is sold via]
forward contract, ... price at harvest ... [or] post-harvest” (AO-AGG-12). This
company was one of two AOs that forward sold wheat, the other being an
overseas NFC, on the advice of the FMC, during the grain price spike of 2010
(FM-FMC-T10). Why so few forward sold wheat was because “there’s nothing
worse than buying a forward contract and not having the wheat to supply” (KI-
AG-17). A NFC syndicate reported “I haven’t got a full grasp of swaps⁵ (AO-S-
37).

Three large scale AOs employed non-standard lamb marketing methods including
the vertically integrated non-local FC that processed all lamb products and directly
supplied domestic and international markets (AO-FC-27) and a NFC syndicate with
“a policy ... to avoid the middleman. ... [When] Woolworths ... did a dirty on us ...
[we] found another market” (AO-S-37).

⁵ In a swap, if a farmer agrees to supply 400 tonne at $400/tonne, then if the price goes
higher, they can sell at the higher price, and if they don’t make the yield, the higher price
partially offsets the loss from having to make up the capital equivalent of their production
shortfall at the agreed price. If the price falls, they can still get the contracted price, but
they have to pay the agreed price for whatever they don’t supply (KI-B-T3).
Production outcomes
Large scale AOs had mixed production outcomes. Only one maintained a minimum ground cover above 50% in October 2009, this being one of eight AOs to do so. Those eight excluded an investment company and hobby farmer that claimed a minimum 100% ground cover for crop. From field observations on nearby properties this was unlikely. Yet, ground cover at the height of the drought varied and a multinational’s FM contributed their relatively good ground cover to no livestock, press wheels, liquid fertiliser and applying inputs according to need (FM-AGG-12).

As can be seen in Table 25 (Appendix Q), in 2009–2010, wheat production for large scale AOs ranged from 0.06 t/ha to 2.4 t/ha, with two large scale entities being among the top three of 14 wheat producers (an overseas NFC in the east and a mining multinational). Both these AOs employed top FMs, the multinational FM having employed highly sustainable practices over 14 years. But three large scale AOs achieved the lowest production per hectare, including the non-local FC that had gone through two FMs. In 2010–2011, one large scale cropper (a NFC syndicate) was among the top three wheat producers. Two were in the bottom range (N=14). Better results were achieved by three large scale sheep producers, with lambing percentages in 2009–2011 between 116% and 140%. One of these was among the top four lamb producers (N=9). All had excellent livestock managers.

Long-term viability
Of six AOs practicing commercial agriculture that made a loss over two years (2009–2011), 50% were large scale AOs. Two large scale croppers made the largest EBIT losses of all 28 AOs. In the drought of 2009–2010, only 20% of large scale AOs (N=10) made a net return. In 2010–2011, 70% made a net return, excluding two croppers and the FMC/AO. Despite a spike in grain prices, rain caused flooding so some grain could not be harvested and other grain was downgraded. If previous drought years were taken into account, only one large scale AO made a net return since 2002/8.
Nevertheless, large scale AOs had the financial capacity to survive seasonal and commodity price cycles whilst investors could be replaced in investment companies (AO-AGG-12), emulating the Scottish Australian model. The three multinationals had diverse global investments. As an FMC observed:

“Investments made by Glencore, BFB, Cargill, … Deutsche Bank – … so … they’ve spent … $50 million. It’s nothing in that world” (FMC-11). Seven were without debt to external institutions. The other three had access to substantial off-farm capital so debt was sustainable, as a non-local FC and NFC syndicate reported: “Everywhere I’ve got, runs at losses and profits” (AO-FC-27) and “[our] overdraft [is] … a bit over a million. … We’re very conservatively borrowed … [and] we have huge offsets against tax” (AO-S-37).

Large scale AOs spread fixed costs (e.g. infrastructure upgrades and full-time labour) so per hectare these costs were less than for other AOs despite five having conducted major infrastructure upgrades costing between half to one million Australian dollars in less than six years. These upgrades were production related, enhancing cropping practices, monitoring (e.g. weigh bridges), grain storage and livestock handling and were deemed to have long-term benefits. The major exceptions to spending on production-related infrastructure were three multinationals (including two mining multinationals) that had spent up to AU$120,000 on their rural properties since 1980, 2002 and 2008.

Outside the ten large scale AOs interviewed for this research, there were two examples of large scale AOs initiating enterprises unsuited to the environment. One was AgReserves Australia, as described in Chapter 6. Another was the previous AO of 32,000 ha. Upon purchasing the property in 1994 the AO spent $6 million on irrigation infrastructure to grow cotton. The last cotton crop was sown in 2001, when water allocations were discontinued because of the drought. Drought had taught the FM (employed by the previous and current AO) “you’ve got to work with the environment. … [Take] a softly, softly approach” (FM-FC-26).
Being large scale also meant routine maintenance and infrastructure upgrades were costly (FM-FC-26), as was a change in enterprise type. Cost of mistakes increased “exponentially with scale” (FMC-11). There was potential for key decision-makers to lose control of details (AO-AGG-12; AO-AGG-T9). Six large scale AOs were top heavy with management, having three to six highly paid managing directors as well as other administrative staff. Levels of management could lack incentive or not take responsibility for decisions (FMC-11; FM-AGG-13). Then there was “the responsibility of managing other peoples’ money [and the] cost of compliance” (AO-AGG-T9). An FMC director, whose company managed 40 properties in and outside the Lachlan, observed “There’s not much evidence that once farms get over that ... 10 to 20 million dollar capital stage there’s huge economies of scale” (FMC-11). An investment company’s chief executive reported “If our business doubled tomorrow, then certainly there’d be some risks” (AO-AGG-T9). This AO minimised management costs by having an autonomous area FM for each of its 14 aggregations spread across three states.

Although a fair number of large scale AOs had adopted biological alternatives to standard fertilisers and chemicals, they also had high variable costs/ha and for some, this did not translate into top production/ha. In such cases, their cost per unit of output was high. Nevertheless, in 2011, only two large scale AOs wished to sell. These were an AO/FMC because of a lack of profit and the distance between the head office and the property, and a NFC syndicate that had owned the property since 1994. A syndicate member reported “I’m 67, it’s time to … retire. … I’ll miss it a lot … but life moves on” (AO-S-37). For corporate croppers, the years of financial losses caused many observers to conclude “There will be a day of reckoning” (FM-AGG-35). While one investment company had a 30 year investment horizon (AO-AGG-T9) two large scale croppers had ten year investment horizons (FM-AGG-12; AO-AGG-12). There was potential for investors to lose interest if investment was purely based on a high return on capital invested.
Local AOs (N=9)

Three farm-based FCs, three town-based farmers, and a local town-based FC, NFC and hobby farmer employed cost-effective, sustainable practices. All achieved a net return in 2009–2011. Yet, those relying on primary production needed a return greater than 5% to support a family, only one AO achieving this.

Four cropped and ran sheep; two ran sheep; two ran cattle and a town-based farmer cropped. Thus, 56% were not as diversified as 70% of large scale AOs. However, two had introduced a totally new enterprise, the only AOs to do so. A NFC cattle producer established a lamb feedlot and in response to drought, a farm-based FC introduced winter lettuces, the business growing exponentially (AO-FC-24).

Livestock care

Eighty-nine percent of those who ran livestock without a resident caretaker (n=9 or 41% of all livestock producers) were local AOs or lessees. Two farm-based FCs visited their AOL once a week. It was less than ideal with fences coming down, livestock escaping, livestock suffering from disease or extreme weather events left unattended, “sheep getting stuck in the trough, … pipes bursting, pumps stopping, … [and livestock running out of] … feed … [or] water” (AO-FC-21). Consequently, these AOs only ran dry sheep on AOL. In contrast, a town-based farmer spent 6.5 days a week on-property and could stay overnight during lambing (AO-TSH-23). Another checked his sheep “every couple of days” (AOFMI-TSH-115). During lambing, a local town-based hobby farmer and FC’s non-resident FM visited every day.

Technology adoption

Local AOs used less expensive technologies compared to large scale AOs, except for the high tech inputs supplied by the businesses of a local FC and NFC. Seven owned their own machinery, which cost less than hiring contractors. Although all minimised soil compaction and maximised sowing accuracy, six did not employ GPS, the cost not worth the extra 2% accuracy (AO-TSHFL-26). Two farm-based FCs
and a NFC had sophisticated farm plans and monitoring procedures, but two town-based farmers and a hobby farmer did not. For example, one had no computer and reported “I work it out as I go” (AO-TSHF-23). One farm-based FC was developing computer literacy (AO-FC-21).

Local AOs were 57% of all those that direct drilled into native pasture (N=7). Two farm-based FCs were the only AOs that pasture cropped, direct drilling wheat (AO-FC-21) or a high intensity legume (AO-FC-24) into native pasture. This increased pasture biodiversity and humus, reduced fertiliser rates and chemical sprays, cut costs by a third, and was predicted to achieve 50% – 80% of a normal crop yield (KI-AG-13). A farm-based FC and town-based farmer direct drilled or top dressed improved pastures into native pasture and fertilised these (AO-FC-29; AO-TSHF-23), this practice requiring less fertiliser and chemical. These and other practices (e.g. spot spraying or use of an organic soil conditioner) meant 66% of local AOs (N=9) had reduced or eradicated standard fertilisers and chemicals. A town-based farmer only used organic Guano and was the only AO to eliminate chemicals, except for one occasion in the last 10 years (AO-TSHF-23). One farm-based FC wished to manufacture bio-char, but government regulations prevented this (AO-FC-24). The organic town-based farmer and a farm-based FC rotational cell grazed. This required less fertiliser and “even though you’ve got a concentration of animals ... because they’re being moved onto fresh pasture so often, their health improves” (AO-CL-39). These two were the only AOs that no longer mulesed or drenched sheep, and the only AOs that planted saltbush (AO-TSHF-23; AO-FC-21). The salt bush helped salt-scalded areas grass up and was proving “a very good ... high protein feed so it ... seems to get good lamb percentages ...[Also] I started to notice little native blue wrens and finches. ... Last year, I sowed another 10 hectares of saltbush ... [as part of] an EverGraze trial” (AO-TSHF-23).

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6 EverGraze is part of research into new farming systems to increase profits of livestock enterprises in Southern Australia, funded and managed by Australia Wool Innovation Ltd (AWI), CRC-FFI (my scholarship provider) and Meat & Livestock Australia (MLA).
For six local AOs, updating practices was linked to attending short courses and field days. A farm-based FC reported “[I’m] A bit of a field day junkie. … [A] pasture cropping [training day held by the] Lachlan CMA” (AO-FC-21) started him pasture cropping all AOL. A field day in 2003 convinced a cropper to update machinery for direct drilling (AO-TSHF-26). A local NFC’s FM sowed a “Mediterranean fescue and Lucerne mix, which I’ve never tried before. I [saw it at] a field day. … Most of my information … [comes from] field days” (FM-NFC-24). In contrast, a FC’s FM had not received advice or training in transitioning feed when establishing a drought feedlot. Pregnant ewes were kept in the feedlot and oversized lambs were born dead.

Three town-based farmers and one farm-based FC did not belong to any agricultural organisation. Two farm-based FCs were well connected with national organisations and conducted research without a public outcome, one part of a progeny test group for one of the largest Angus studs in Australia (AO-FC-29). The other attended courses, “through the University of California at Davis” (AO-FC-24) and elsewhere. The FC and NFC also had good networks with agricultural organisations. In addition, the FC and a farm-based FC belonged to conservation organisations (e.g. Caring for Country and Carbon Culture).

Marketing

Seven local AOs used standard marketing strategies. One exception was a farm-based FC that implemented full traceability and marketed by description to a feedlot supplying a Japanese market and paying a 10%–15% premium (AO-FC-29). The other exception was a town-based cropper who had a canola contract with Cargill, no agency offering a similar contract for wheat:

*Cargill have their own … variety of canola. … It’s a hybrid, but … not GM. … You pay for the seed … out of your return. … I can … lock in my price at any [time, and] they give you … $40 a tonne … on top of the port contract price. … There are no tonnes committed. It’s purely hectare based* (AO-TLSHF-26).
Production outcomes

A FC and NFC had a minimum ground cover of 20% – 40% in October, 2009 but three farm-based FCs and two town-based farmers maintained a minimum of 60%, and two achieved a minimum of 80% (Table 25 in Appendix Q). All had reduced erosion, two by obtaining permission to batter eroded creek banks “and smooth them off and get grass growing” (AO-TSHF-23).

In 2009–2010, of 14 wheat producers, no local AO was in the top three per hectare but nor were any among the bottom three. In 2010–2011, a farm-based FC and local FC were the top two wheat producers per hectare (N=15), with 6.5 t/ha and 5 t/ha. However, a farm-based FC that pasture cropped was among the bottom three. The AOL was “rained out. All the crop gone. My brother’s two harvesters were bogged in the flood. Our fences were washed out. The flies got into the sheep. Then the worms. I’m thinking ‘Bring back the dust’” (AO-FC-21). On finding that native pastures were taking too much moisture from the crop, and achieving only 0.4 t/ha in 2011–2012, in 2012 the AO returned to conservation farming (direct drilling into unburnt stubble).

In 2009–2010, a town-based farmer and farm-based FC achieved the highest lambing rates (130%) of nine lamb producers, and in 2010–2011, three local AOs were among four AOs that achieved the highest lambing rates (124% – 150%). In both years, the organic town-based farmer (also one of the top conservationists) achieved the best lambing rate of all.

Long-term viability

All local AOs made a profit 2009–2011. Even in 2009–2010, 63% of AOs that made a net profit (N=8) were three farm-based FCs and two town-based farmers, net returns before tax on farm produce ranging from AU$30,000 to $140,000. However, these returns were not enough to support one or more families in the ownership structure for 78% of local AOs (N=9). A lack of scale was problematic for three town-based farmers as well as a hobby farmer, and 78% were in debt. The indebted NFC and FC were in a better position than other indebted local AOs as:
“We’re not striving for an income. ... We’re looking for results ... on some of the trial work we may do ... [and it’s] an interest (AO-NFC-211). For the FC, in the “past 10 years we haven’t made a profit. ... We wouldn’t have those farms if we didn’t have this business because you couldn’t afford to have them” (AO-FC-25b, 2010). Both had invested in production related infrastructure throughout the drought. For example, the NFC had spent AU$600,000 over six years.

But 57% of indebted local AOs (n=7) relied mainly on primary production. For one, going into debt was an accounting decision (AO-FC-24) but for another “Our interest bill is horrendous” (AO-FC-21). A cropper lived in hope that “one good year could turn that around” (AO-TLSHF-26). The AOL for an indebted local town-based hobby farmer was 90+% of his asset base, but he and his partner worked off-farm, and share farmed with a parent.

Only one local AO wished to sell the AOL because a new enterprise re-focused attention on the base farm (AO-FC-24). Resilience was likely linked to this cohort’s abundance of non-material self as well as utilitarian motivations, with three local AOs being top conservationists.

**Variations in city-based individuals across three AO types (N=6)**

Six city-based individuals included three AOs whose properties were used for commercial agriculture, one hobby farmer and two LPOs. Four ran mixed crop and livestock. Practices and outcomes were impacted by primary purpose, lack of farming experience, running a small scale operation and/or lack of capital.

**Technology adoption and marketing**

Two LPOs and two lessees did not fertilise, although one LPO was intent on making the property viable. After purchase:
I did write a business plan. I decided [to] grow cherries. ... A local chap ... planted ... [1.5 ha] but alas, ... in the first year ... we lost [the cherries] because of frost ... and every year subsequently ... the birds picked the cherries for us. ... I probably burned about $50,000. ... [In] 2000 ... I put off the manager. ... His whole enterprise went belly up and he left the district (AO-LP-T14).

This LPO received AU$1,000 annually from a neighbour who agisted cattle on his land. Wishing to be viable, sustainable and use his off-farm expertise he decided:

*to grow trees and to harvest wood or await a price on carbon. ... [I've planted] about 10,000 ... local ... Blakely’s and River Red Gums ... [and] Boxes. ... [Many have] self-seeded. ... [I’ve also put] up a 10 kilowatt solar generator ... [with] the potential to [install] ten of them. ... Each generator has an income of $10,000 per year (AO-LP-T14).

As highlighted by this LPO’s experience in growing cherries, when lacking farming experience and networks, city-based investors were reliant on the expertise of advisors and farm operators. One city investor benefited from FMC input (AO-CL-T12) but a hobby farmer reported “It’s hard to get advice from traditional agronomists ... about bio-organic[s]. ... We talked ... about slashing the wheaten hay ... and ... leaving it as mulch. ... His answer was, ‘Well most people ... can’t really afford to ... leave it’” (AO-HF-32b). This was an example of unequal power relations based on knowledge, the AO subject to the knowledge and expertise of the consultant and contractor. Another city investor lacked the capital to fertilise, initiate a breeding program and rotational cell grazing (AO-CL-39).

City-based individuals accessed information through print media and the internet but were not networked with agricultural organisations and did not attend training days. This was confirmed by various consultants (KI-AG-13; KI-AG-111; KI-AG-112). A lack of knowledge could also disadvantage them in marketing (KI-SS-23).

**Production**

Fifty percent of city-based individuals (N=6) had a minimum ground cover of 70% in October 2009, including two LPOs. A FMC managed property was the top wheat
producer in 2009–2010, achieving 2.5 t/ha, tying fourth in 2010 with 4 t/ha. However, lambing rates were 98% both years (FM-FMC-23). This was likely due to production intensity, whilst a lack of scale led to high variable inputs per hectare ($390) for crop, although not as high as a hobby farmer’s $643/ha, the highest of all AOs. Not only was the hobby farmer attempting to crop and profit on 117 ha, albeit in the wetter east, wheat production in 2009–2010 was tenth (0.35 t/ha) of 14 growers and in 2010–2011, seventh (3.8 t/ha) of 15 growers.

Long-term viability

Only 33% of city-based individuals (N=6) made a net profit in 2009–2011, these being an interstate individual that leased out and a city investor employing a FMC. Even after introducing two new enterprises (Lucerne and lambs) in 2010–2011, the hobby farmer was unable to make a profit. Four city-based investors were in debt, but all earned off-farm income. Impacting profitability, city investors across three AO types could overspend on non-productive infrastructure. For example, a hobby farmer and city investor running a commercial farm spent between AU$200,000 and $1 million renovating house and garden (AO- HF-32; AO-CI-T12). A third city investor upgraded roads, powerlines, fences and dams in view of subdivision, only to have the market dry up (AO-CL-39). For these three AOs, infrastructure costs per hectare exceeded all other AOs. Other informants reported city-based investor excesses such as constructing dams for aesthetics (KI-E-19), and constructing unnecessary sheds (KI-RE-110) and cattle yards (FM-FMC-23).

One city-based individual wished to sell because of financial difficulties (AO-CL-39). City based LPOs had less utilitarian and non-material self motivations than most AO types, one motivation ‘being of an appropriate age’. This was in reference to being of sufficient health to travel to and from, manage and enjoy their rural property. This and other socio-cultural factors, including the infrequent visits of city-based family and friends, could lead to property sales.
Aboriginal AOs (N=3)

Property selection
No Aboriginal-owned property was selected for its economic viability although a 9,890 ha property was “a bit of showpiece ... when the moisture’s there you can plant nails and grow babies” (FM-FMCA-22). The other two were not commercially viable. A local Aboriginal AO reported:

*It’s just hill country. ... You can only farm 30% of it. ... They bought the stock and the machinery. ... All the stock had footrot so ... we had to have all the stock destroyed and ... our property was impounded. ... And the machinery - ... Fred Flintstone could ride them* (AO-A-22).

Technology adoption, production and marketing
When three Aboriginal-owned properties were self-managed all lacked farm plans and in two cases, all property files were lost: “They certainly didn’t survive the reincarnations of the various organisations” (AO-A-T4). Long-term plans were further hindered by two AOs being subject to “elections all the time ... and if they don’t like ya, bang you’re out” (AO-A-15) or a succession of CEOs (AO-FMC-21).

Practices and outcomes suffered from a lack of operating capital, training and networks. For a Commonwealth land fund “the national budget for land acquisition is $10 million and for land management it’s $3 million. ... [That] $3 million ... [pays] for a tractor, ... fencing material, ... water tanks and septic systems” (AO-A-T4). There was no funding for start-up costs, including wages because “we can’t ... replicate the functions of another agency. So there are agencies ... that can provide wage subsidies, ... but the land’s got to generate enough surplus to meet the shortfall” (AO-A-T4). These other agencies provided short-term funds for specific projects. Even for a capitalised Aboriginal AO “A lack of timely funding prevented ... farm managers” from spraying crop or drenching sheep (FM-FMCA-22). That with sufficient technical support and operating capital, an Aboriginal worker could become a capable FM and achieve good results was highlighted by a FMC’s employment of an Aboriginal FM in 2006. The FM had:
been a farmhand … [for] 10 or 15 years … [and had] a good reputation. … Best employee I’ve had. … He takes … a proprietary interest … and he has an opinion. … He … [asks] ‘Why are you doing it this way?’ … He’s aware of all the latest technology. … A hard worker! … He’s the best fencer I’ve ever seen and his diligence to crop is incredible. … That property [has] benefited tremendously [from] him being there (FM-FMCA-22).

The FMC introduced direct drilling and an organic liquid seed dressing. In 2009–2010, the property produced 0.5 t/ha of wheat, exceeding the production of four AOs in higher rainfall areas. However, marketing for Aboriginal AOs was impacted by a lack of knowledge and networks (AO-A-22; AO-A-15; AO-A-14) and need for consensus (AO-FMC-21).

**Long-term viability**

All three Aboriginal AOs had no debt but this was overshadowed by a lack of operating capital and knowledge of farming for all three AOs. By 2010–2011, all three properties were leased out. In two cases, the leases did not economically benefit the local Aboriginal community. At least one party within each ownership structure wished to sell although the local Aboriginal AO would only sell if the property was replaced. The problem was “you go into it with nothing and you walk away with nothing … [and] they’re making the rules harder and harder … so it’s a Catch 22” (AO-A-22).

**Counterfactuals**

There were five counterfactuals related to economic viability. No AO was certified organic. No AO was self sufficient in fuel or organic fertilisers, although one AO used sewerage and recycled potassium on a property outside the Lachlan, and no AO directly marketed into the local district.

Annual fuel and water use per hectare were either unknown or inaccurately reported by informants. Quoted annual fuel usage varied from five to 33 litres/ha across enterprise type. Apart from reporting issues, which could
relate to recording costs rather than litres, variations could be the result of spray and fertiliser frequency, and distances machinery travelled.

For water, livestock producers either admitted not knowing or calculated a figure per head that varied between informants. Croppers were more definitive but quoted rates varied, most falling between 150–398 litres/ha. Aggregated AOs quoted more than others. This was likely related to spray frequency and fertiliser delivery systems. If the whole operation was considered, mining multinationals consumed the most water, as reported by one:

We have licences to extract 3,650 mega litres of water from the Bland Creek Paleochannel from four production bores. We ... use our full entitlement. ... Recycling and reclamation of water ... is a high priority. We also ... [buy] water from irrigation farmers. ... The drawdown of the water table caused some concern. ... We have financially reimbursed those who needed to dig deeper bores ... [and] we have allowed properties to draw stock and domestic allocations from our bore field (AO-AGG-13).

Models of factors impacting economic viability

Figure 44 and 45 present refined models of factors impacting sustainable production and profitability.
Figure 44: Model for production per hectare

Figure 45: Model for profitability
Key findings

Assumptions
The assumption that LPOs are not actively engaged in managing their land (Aslin et al., 2004) was not the case for two LPOs, but given the small sample, this assumption was not reliably tested. Assumptions that NFCs have high management costs and AOs ‘get their pound of flesh’ from FMs (Morrison, 2009) were consistent with findings, as outlined below.

Implications for social relations

More equitable social relations (within an ownership structure; in tenancy arrangements and in AO-FM-farm labour relations) allowed an exchange of ideas and sense of ownership, enhancing practices and outcomes. Conflict at any level impacted interpersonal relations, on-property practices and outcomes and, potentially, an entity’s long-term viability.

Historically, social relations were hierarchical. Contemporary social relations varied with AO type. Unequal power relations within an ownership structure and between an AO and farm operator were found in some FCs, Aboriginal AOs, multinationals and city investors who lacked farming experience.

Allowing a FM autonomy in making decisions varied between AO types. FCs tended to give FMs the least autonomy. Those given autonomy tended to have tertiary qualifications as well as practical experience. Consultation and some level of FM autonomy enabled 64% of FMs (N=14) to introduce sustainable practices with beneficial outcomes. When FMs lacked autonomy, practices depended on the expertise of the landowner. When the landowner lacked knowledge, practices depended on the expertise of the farm operator.

FCs were quickest to make decisions but four FCs lacked defined roles and communication protocols. Decisions by aggregated AOs and AOs with FMCs
involved more parties and took more time but these structures had more clearly defined roles and communication protocols.

_AOs provide non-family waged labour_ (as opposed to unpaid family labour), _the amount varying with AO type_. Large scale mixed enterprises employed the most full-time labour but city investors could employ more labour per hectare. Three town-based farmers and a farm-based FC kept wage costs to a minimum, potentially limiting expansion. When self-managed, Aboriginal AOs had difficulty paying labour. Otherwise, a farm-based FC paid overseers the least and could not afford more. One investment company, two FMCs and a mining multinational paid FM$s$ the most. Aggregated AOs and FMCs set the highest on-property health and safety standards.

_AL did not necessarily decrease the number of on-property residents_. Sixty-eight percent of AOs (N=28) maintained or increased the number of residents since property purchase. AO types that reduced on-property residents were mining multinationals, farm-based FC$s$ and town-based farmers on AOL.

_On-property residents and proximity of local AOs facilitated utilitarian relations with neighbours_. In contrast, aggregated AOs were viewed as secretive, although mixed community reactions led mining multinationals to foster community relations.

Four counterfactuals were the underutilisation of tenancy arrangements, as well as female and Aboriginal labour in large scale enterprises, while no director or FM working for a multinational had contact with their equivalent in other countries.

**Implications for managing biodiversity**

53% of AOs (N=28) managed biodiversity. _Active biodiversity management was not related to AO type or access to off-farm capital. It was related to outside agency assistance_ (for 15); _believing biodiversity had intrinsic values and agricultural_
benefits (for seven); an existing or future carbon market (for six) and environmental regulations (for two). Counterfactuals were that 47% of all AOs had not conducted any conservation work and only one AO linked a tree corridor to external forest/remnant native vegetation.

Implications for economic viability

Economic viability was impacted by AO type, rainfall, the farm operator and enterprise mix. However, five implications for economic viability were unrelated to AO type. These were that (1) All absentee commercial operators employed current recommended sustainable practices to maintain the land’s productive viability. Practices included improving water efficiency, direct drilling, applying fertilisers, weed control and managing risks. (2) In 2009–2011, rainfall had the greatest impact on production and profit, although farm practices over an extended period could mitigate impacts. (3) The farm operator significantly impacted production practices and outcomes. (4) All those who made a profit in the drought of 2009–2010 were focused on livestock. (5) For six AOs, extensive biodiversity management had not negatively impacted profitability. In 2009–2010, 50% that made a net profit (N=8) were among seven top conservationists.

Ten large scale AOs (five aggregated AOs; three non-local NFCs and two non-local FCs) had advantages and disadvantages associated with scale. All ten spread fixed costs. Eight had geographic spread outside the Lachlan, detailed farm plans and monitoring procedures that informed future practices, an AO and/or investors. All accessed leading edge technologies, six having reduced or eradicated fossil fuel fertilisers and three having reduced chemicals used for weeds by using leading edge practices. Only one ran livestock without a resident caretaker. All AOs or their FMs were well networked with national agricultural organisations and four conducted research with a public outcome. All were advantaged in marketing, five by vertical integration.
In an effort to maximise yields, large scale AOs had high variable costs per hectare. The use of consultants, contractors, spray frequency, aerial spraying, the nature and frequency of fertilisers applications, soil and sap tests contributed to costs, these excluding administrative costs. Six were top heavy with three to six highly paid managing directors, apart from other staff. There were two examples of large scale AOs (outside the ten) imposing enterprises unsuited to the environment. Mistakes, maintenance and changing direction were expensive and attention to detail and accountability were potential hazards. Large scale AOs had mixed production outcomes. Three were among six AOs that made a loss in 2009–2011. Two croppers made the largest losses of all AOs. Their investors had ten year investment horizons.

Nine local AOs employed cost effective, sustainable technologies with favourable production outcomes. Seven local AOs owned their own machinery (cheaper than using contractors) and all had lower variable costs per hectare compared to large scale AOs. Highly sustainable practices included alternative fertilisers and improving native pastures, two initiating new enterprises. One town-based sheep producer relied on organic fertiliser, had eliminated chemical and, along with a farm-based FC, planted saltbush, rotational cell grazed and no longer mulesed or drenched sheep. Practices benefited from training and field days. Four were networked with national organisations. Local AOs were among the top wheat producers and achieved the top lambing rates 2009–2011, despite local AOs and lessees being 89% of those who ran livestock without a resident caretaker (N=9). All local AOs made a net profit in 2009–2011. Even in 2009–2010, 63% that made a net profit (N=8) were local AOs. However, seven were in debt, four relying solely on primary production. Although 66% did not make sufficient on-farm income to support a family, with multiple utilitarian and non-material self motivations this cohort was committed to agriculture.

Practises and outcomes for six city-based investors’ were impacted by primary purpose, tenancy arrangements, lack of farming experience, lack of scale and a lack of capital. For example, the properties of two LPOs and two lessors were not
fertilised. Two small scale operations had high variable costs per hectare. City-based individuals did not attend training or field days and found it difficult to implement alternative practices without a knowledgable farm operator. Three had the highest expenditure per hectare of infrastructure unrelated to production. Two made a profit in 2009–2011.

When self-managed, practices on three Aborginal-owned properties were impacted by a lack of operating capital and technical support, this overshadowing a lack of debt. Two of three properties were not commercially viable. An excellent Aboriginal FM, with FMC support, turned around one property. By 2010–2011 all three were leased out, two leases not financially benefitting the local Aboriginal community.

Counterfactuals were that no AO in the Lachlan research was self sufficient in fertiliser or fuel; no AO direct marketed into the local district and many AOs did not have a clear understanding of their annual fuel and water use per hectare.
PART III: DISCUSSION & CONCLUSION
Figure 46: Sheep waiting to be drenched watched over by their alpaca guardians on an investment company’s 7,200 ha property.

Figure 47: Growing mustard for biofuel with the crop perimeter impacted by a 50 metre wide tree belt separated from the cropped area by a five metre laneway on a mining multinational’s 2,700 ha cultivated area.
Introduction

Throughout history, owning substantial land has conferred social, cultural, political and economic power (Mann, 1986; Powelson, 1988). Consequently, ‘Loosening existing relationships so as to provide maneuvering room to build new ones is a difficult undertaking’ (Schagler, 2006, p.307). In the twenty-first century, who owns rural land and how they use that land are critical, given that landowners will contribute one way or another to the challenges facing agriculture, food and water security, social equity, land rights, biodiversity conservation (Cotula et al., 2009; Cotula, 2012; Hamblin, 2009) and even political economic systems (Moore, 1967). Within such a context, this Doctoral thesis made four contributions to knowledge. These were (1) constructing an inclusive theoretically informed relational typology for classifying historical and contemporary international types of landowners; (2) identifying trends in landownership since European occupation of the Lachlan River catchment, and establishing that the extent of absentee landownership (AL) in 2009 had reached the high extent of 1849; (3) identifying the socio-political economic and environmental factors that contribute to trends in landownership; and (4) identifying implications for sustainable agriculture of different types of absentee landowners (AOs). The following discussion of these contributions includes how they relate to existing literature, and the concepts of power, capitalism and sustainability.

Classifying different types of landowners

In an interconnected world in which people are placing increasing demands on natural resources, accurate understandings of the nature, extent, trends, practices and implications of different types of landowners are necessary for appropriate policy development from a local to an international scale. Such understandings require systematic investigations that benefit from clear definitions and a coherent conceptual framework that is not time, space or research specific. As literature contains multiple understandings of what
constitutes an AO (Petzelka and Marquart-Pyatt, 2011; Petzelka et al., 2013; Mbonile, 2003; Shaffer and Meade, 1997; Veblen, 1997), the first step was to clarify the concept. Given that a landowner’s residency status was fundamental for 97% of informants (N=61) and all authors except Veblen (1997) I proposed a refined definition based on non-residency. My definition was ‘An AO is an individual or corporate entity whose primary residence is not located on the land they own, ownership and residency determined by socio-cultural context’. As with every definition, there are fuzzy boundaries, but this definition accounts for diverse circumstances. For instance, a person whose work takes them away from their primary residence, as in the case of a fly-in fly-out miner, is a resident owner (RO), but a chief decision-maker who has relocated to an urban centre is an AO, even if other family members reside on the land (Mbonile, 2003; Oles, 1999). Likewise, a farmer who lives in a village and commutes to one or more plots within the jurisdiction of the village is a RO (Chao, 1981; Jian-Ming, 2001) but if the plot lies outside the jurisdiction of the village, or if members of a nomadic group no longer live within their traditional territory, or a farmer lives in a local town, they are AOs.

Defining AL in this way leads to most types of landowners being classified AOs. Only individuals or corporates that are primarily located on the land they or their lineage, village or collective owns are ROs. While these resident types comprise a high proportion of all landowners (FAO, 2010) they generally own smaller areas compared to urban-based state authorities, aristocracies, political elites, religious institutions (Cahill, 2007) and corporations (Swinnen et al., 2006). This insight impacts discourses about contemporary landownership. My research indicated commonly accepted views in and outside the academic literature lack an historically-informed and nuanced understanding of landownership. One example is that in researching the 180 year histories of nine pastoral stations, a minimum of 10% of all AOs (N=172) changed their residency status over time. International studies outside Britain and the USA (for example, Mbonile, 2003; Oles, 1999; Roebuck, 1973) likewise found mobility or absence often a ‘partial and conditional state of affairs, an
uncertain predicament that entails neither a clear sense of membership in one’s community of origin nor an uncomplicated conviction of having left it behind’ (Ferguson, 1992, p. 90). Future research in industrialised countries may benefit from these and other understandings.

If definitions are imperfect, then typologies are even less accurate reflections of reality (Weisberg, 1974) but are useful in understanding complex systems. The relational typology presented in this thesis caters for historical and contemporary international types of landowners, in keeping with Mills’ (2000) advice to imagine the range of alternatives that might exist. Some academics might argue that the inclusiveness of this typology is too ambitious, that it is best to restrict a typology of landowners to those with capitalist relations or located within a region. This is like saying it is too ambitious to classify evolving and extant animal and plant species. By only including landowning structures with capitalist relations, one excludes types of landowners outside those relations and narrows the options for testing existing systems and feasible alternatives. Likewise, by only considering landowning structures within a region a researcher limits the possibilities of consistent meta-analysis and discounts the multinational character of some investors in land and agriculture (Anseeuw et al., 2012). Only by developing a universally accepted system of classification can researchers consistently test for relationships between independent, dependent and intervening variables (Gorton and Davidova, 2004).

In the relational typology, the underlying continuum of landowner autonomy, reflecting a diffusion of capital and decisions from least-to-most, and three of the four theory-derived dimensions were inspired by Whatmore et al.’s (1987b) continuum of subsumption and set of relations for UK farm businesses. My four socio-political economic theory-derived dimensions proved sufficient to classify empirical cases in the Lachlan study according to their ownership structure, primary purpose for owning land, local/non-local distance of the primary residence or headquarters from the property and on-property management and labour. The last two dimensions reflected degrees
of absentee landownership. The distinction between NFCs and aggregated structures, the latter involving a separation of land and capital ownership, or multiple understandings of ownership, was an important insight, given that land management requires a unity of purpose, ideally over 20 to 30 years or more (Morrison, 2009).

The underlying continuum gives the typology fluidity without loss of integrity. Within each mutually exclusive cell, types can be hierarchically expanded to cater for diverse ownership structures, primary purposes and on-property management structures, as occurs in Linneaus’s systems. For example, the empirical ownership structures in Table 5 (Chapter 4) do not include the different types of hobby farmers (Gentner and Tanaka, 2002), co-operatives (Chaddock and Cook, 2004), socialist collectives (Benda-Beckmann et al., 2006), elite individuals (Powelson, 1988), aggregated structures (Burch and Lawrence, 2009; Moir, 2011) or state structures (Cotula et al., 2009). The primary purpose of infrastructure/mining can be expanded to include other industries influenced by the capitalist discourse and the primary purpose of conservation can be expanded to distinguish carbon off set/trading, eco-tourism, passive conservation (e.g. Australian National Parks) and costly, active conservation influenced by the sustainability discourse. In so doing, the commercial potential, and therefore the ability to create opportunities and make choices (Shucksmith, 2012) of conservation within a carbon trading scheme may exceed that of a hobby farm or commercial agricultural operation. Use of a single underlying continuum allows cases to be ranked within or between cells for testing inputs, practices and outcomes, as indicated by the two-way arrows in Table 5 and Table 6 (Chapter 4).

To enhance the practical applications of the typology, unlike Whatmore et al.’s (1987b) set of relations, empirical cases rather than ideal types are classified. Again, unlike Whatmore et al.’s (1987b) set of relations, in my typology a landowner can be ranked independently along each dimension. This caters for diverse circumstances, for example, a resident landowner (RO) that leases out.
The inclusion of ROs in the local/non-local dimension allows an AO type to be compared with their resident counterpart, for example, resident and absentee individual/family commercial operations. A simplified version of the local/non-local dimension enables landowners to be classified ‘local’ or ‘non-local’ (i.e. within or outside a geographic or political boundary), as I did when investigating extent of AL in the Lachlan in 2009. The dimension is also useful in distinguishing what AO types are included in different studies, including the different forms of foreign ownership (e.g. multinational, investor, partnership etc). For instance, some studies exclude local AOs, making comparisons between studies difficult (Petzelka et al., 2013).

The dimension on-property management and labour allows for vital comparative analysis regarding the impacts of landowner and farm operator inputs between or within different management structures, for example, between operations employing one or more farm managers; a single share-farmer or renter; and multiple share-farmers or renters. These management structures reflect different power relations (Mearns, 1999). Some US studies found subordinate landowner/dominant tenant relations, but these studies did not interview the tenant (Petzelka and Marquart-Pyatt, 2011) or test for intervening variables (e.g. knowledge and experience) of all parties. Nor has there been any examination of the impacts of independent variables such as labour and environmental laws in different regions on the one ownership structure.

In Chapter 4, left unspecified was how commercial potential over time for different primary purposes could be assessed. One possible measure is percentage return on capital investment over 30 years - not long when considering rural land uses can cause insidious as well as dramatic environmental, social and political degradation (Diamond, 2005; Falconer, 1995; Khalidi, 1984). In this light, the commercial potential of a mine may or may not compare favourably with that of a successful agricultural enterprise, say, if the life of the mine is 15 years and the cost of remedial work after mine
closure, including restoration of water quality and quantity, is taken into account, these costings influenced by the sustainability discourse.

While the underlying continuum of landowner autonomy reflects the qualities that provide the probability power will be exercised (Weber in Uphoff, 1989) the typology dimensions highlight different forms of power, all of which occur within and outside capitalist relations, these being power based on the individual, collective, bureaucracy and capital. Each has advantages and disadvantages (Alker, 1973). They also interact, either reinforcing or setting limits on the other. For example, in considering a landowner’s primary purpose, a landowner’s ability to make choices is impacted by their economic viability (Shucksmith, 2012). In this regard, a foreign multinational with diverse transnational enterprises has more scope than a local Aboriginal aggregated AO, whose property is 90+% of their asset base and total net income. However, opportunities and choices are constrained or expanded by dynamics within the ownership structure, and between the ownership structure and those they employ. The same multinational must negotiate within and between tiers of management, including head office, an in-country subsidiary, one or more FMs and teams of contractors. This requires either autocratic authority or complex negotiations, the success of the latter dependent on having good communication and negotiation skills at every level. When all is working well, FMs in the Lachlan research expounded the merits of working in a team, exchanging ideas and being technically and economically supported. However, when the team was dysfunctional and there were unresolved conflicts of interest within or between any tier, the autonomy of a local farmer is appealing. Yet, ‘being one’s own boss’, while more powerful in the sense of not needing to consult or negotiate, and therefore highly prized by autonomous farmers in the Lachlan research and elsewhere (Wilcock et al., 1999; Cahill, 2007), exposes an individual to often unshared initiatives, responsibilities and pressures (Veblen, 1997). Thus, different power relations, as reflected by the typology, was predicted to have implications for practices and outcomes, on and off-property. In the Lachlan research, this proved to be so.
The relational typology also served to highlight multiple types of landowners neglected by contemporary research, including many AO types involved in commercial agriculture and conservation. Western academic literature has focused on small property owners including lifestyle property owners (LPOs), non-industrial private forest owners and hobby farmers (Petzelka et al., 2013) or different types of foreign investors (Anseeuw et al., 2012; Cotula et al., 2009). A critical exclusion from contemporary literature, given an international trend towards urbanisation, is the cohort of local town-based landowners, including farmers, non-farming individuals (such as doctors, solicitors and council representatives) and non-farm based family and non-family corporations. Some of these local-town based AOs were found to have access to off-farm capital, knowledge and networks that contributed to them investing in infrastructure and cost efficient leading edge practices. All were productive and were more likely to make a profit during the drought compared to large scale non-local AOs, although this net profit before tax was not necessarily enough to support all members within the ownership structure. Nevertheless, the prevalence and attributes of local town-based AOs suggest they are an important resource for future farming.

Informed by power, and the capitalist and sustainability courses, the typology proved a valuable research tool. It served to classify historical as well as contemporary AOs. For example, historical co-ownership by a financial firm and indebted landowner was classified ‘aggregated’. The typology also led to the identification of four key socio-political economic attributes that reflected meaningful differences between AO types, consistent with Allen and Lueck’s (2002) observations. All four attributes (number and nature of members within an ownership structure; off-farm assets and capital; reliance on a farm operator; and a landowner’s on-property involvement) were found to have direct links to variations in practices and outcomes. When examining underlying factors contributing to trends in landownership, different sets of factors were found to impact different landowner types. Meaningful differences were also reflected in AO-FM social relations and the economic viability of four AO cohorts. Findings on sustainable production and profitability for large scale, local, city-based and Aboriginal AOs indicate
research based on a larger sample would expose the advantages and disadvantages of different landowner types, suggesting the benefits of maintaining and expanding pluralist ownership and management structures. More encompassing than Whatmore et al.’s (1987b) set of relations and less complex than Spencer and Stewart’s (1973) matrices the relational typology constructed for this Doctoral thesis could prove a useful tool for future research on landownership and land use across time and place. Such research is becoming increasingly critical for generating informed policies related to land and water rights; land zoning; education and training; labour, tenancy and environmental laws; food security; marketing, distribution and infrastructure.

**Trends in landownership since European occupation of the Lachlan River catchment**

Despite global food production needing to double by 2050 (Hamblin, 2009), internationally, numbers of farmers are declining (ABS, 2012) and AL is increasing (Jian-Ming, 2001). One Lachlan informant referred to the increase in AL as a revolution. Although there is some academic investigation into aspects of this ‘revolution’ (Anseeuw et al., 2012; Grover, 2006; Jian-Ming, 2001; Petzelka et al., 2013; Moir, 2011), and much media attention surrounding increased foreign ownership (Coorey, 2011; Cowie, 2011; Crittendon, 2011; GRAIN, 2009), most studies are ahistorical (Hoggart and Paniagua, 2001), making it difficult to assess the recent upsurge in AL (Cotula et al, 2009). Consequently, another contribution to knowledge, one without precedent, was providing historical context for contemporary discourses by establishing trends in landownership since European occupation of the Lachlan River catchment.

A key finding was that many contemporary trends appear to be manifestations of long term patterns, including those that arouse considerable passion, such as foreign ownership. Nowhere is this more apparent than in the finding that the extent of AL in 2009 had reached the high extent of AL in 1849, when AOs were 49% of all lessees and AOL covered 71% of all land.
The lack of accurate statistics on the contemporary extent of AOs as a proportion of all landowners and AOL as a proportion of all land, means findings on the extent of AL in 2009 was a contribution in itself. In the Lachlan River catchment – the second most agriculturally productive region in NSW – 50% of all occupiers were AO and about 68% of all land was absentee-occupied, with two shires supporting these figures, albeit varying on either side. Yet, contrary to impressions gained by reading the contemporary literature (Klepeis et al., 2009; Petrzelka et al., 2013), most AOL was used for commercial agriculture.

The overall extensiveness of AL in the Lachlan in 1849 was comparable to available figures for nineteenth and early twentieth centuries Europe, USA, South America, Africa and parts of Asia (Powelson, 1988; Rassmussen, 1994). The overall extensiveness of AL in the Lachlan in 2009 was comparable to Kollmorgen and Simonett’s (1965) 1960s assessment for Kansas, USA, but exceeds the mean statistics for the corn belt counties of the US (Bruynis, 2007). If land rented out is any indication of AL, then extent of AOL in the Lachlan catchment compares with the national statistics for Germany, France, Phillipines, Sweden and Turkey (46% – 68% of all arable land), but exceeds that of Canada, Egypt, Syria, UK and USA (12% – 38% of all arable land) (references in Table 2, Chapter 2). However, these comparisons may not be valid. For instance, Ashby (2003) reported only 6% of all land in Australia was rented out. Thus, further research is required to establish if findings for the Lachlan catchment in 1849 and 2009 are generalisable. If so, it would suggest that the impacts of neoliberal capitalism since the 1970s are as dramatic as the impacts of colonial capitalism and the establishment of private property ownership in the nineteenth century (Powelson, 1988).

According to one informant (AO-FC-29) the Lachlan findings on extent of AL are the outcome of a definition based on non-residency that includes local town-based farmers and local multiple property owners. Many informants did not consider these to be AOs. But also included in the findings were non-local AOs (24% of all landowners in Bland Shire and 27% of all landowners in Cowra Shire), who owned 24% and 22% of all land. As well, local and non-local FCS, NFCs and aggregated
structures were found to be 6% and 8% of all landowners owning 10% and 13% of all land in Bland and Cowra Shires. This last finding appears contrary to the claim that 99% of all Australian broadacre farms are owner-operated (ABS, 2003), although is comparable with Tonts et al.’s (2003) statistic that 6% of all Australian farms were owned by corporations. The shire statistics for corporate ownership of rural land were less than the national statistics for Portugal, Argentina, the Slovak and Czech Republics (i.e. 17% – 63% of all farmland) (Cahill, 2007; Swinnen et al., 2006), but exceeded the US statistic, that 8% of all farmland was owned by various business structures (US, 2009). The US statistic was likely impacted by nine states prohibiting NFC ownership of rural land (Johnson, 1995).

Just as significant were the statistical findings on trends in landownership spanning 160 years based on convergent data in two contrasting districts. The Lachlan findings confirm what scattered studies suggest, that in the nineteenth century until sometime after 1935, AOs owned most land and that resident owner operators, although increasing in number from the 1860s in the Lachlan, owned far less land than AOs (Powelson, 1988; Cahill, 2007). This period, no doubt extending until after World War II and the soldier settlement scheme in Australia, corresponds to the first international food regime, associated with colonialism, global trade, a reliance on credit and the corporatisation of agriculture and other industries (Huggin, 2011; Veblen, 1997).

Political interventions in the form of land and tax laws and farmer support schemes, beginning in 1861/62 in Australia and the USA, and adopted before and after World War II in other countries, increased resident ownership. By 1970 ROs represented not only the majority of landowners but, unprecedented in the history of the Lachlan, owned most of the land. Yet this zenith of resident landownership appears as short lived as the second international food regime lasting from World War II until the 1970s (Huggins 2011), to which it corresponds. That ROs comprised the majority of all landowners in the Lachlan since 1885–1900, and the recent pre-eminence of ROL, has led to a prevailing view that ROs were the mainstay of Australian agriculture (Australian Government, 2012). The Lachlan findings
contradict this view, as does other historical research (Gammage, 1990; Karr, 1974).

Corresponding with the third international food regime, beginning with international financial liberalisation in the 1970s (McMichael, 2005), AL increased in the Lachlan, the most dramatic increase occurring after 1990. The increase in AL involved various AO types, from lifestyle property owners to multinationals. This observation, and that there was a spike in large corporate land purchases in 2008 and 2009, was consistent with the literature (Anseeuw et al., 2012; Petrzelka et al., 2013).

In light of historical trends it is unsurprising that most contemporary AO types had historical antecedents in the Lachlan, including financial institutions (e.g. AMLF; Perpetual Trustees); pension funds (e.g. AMP and BP superannuation fund); investment companies (e.g. Scottish Australian Company); NFCs (e.g. Dalgety & Company) and vertically integrated FCs (F.W. Hughes). These findings contradict contemporary literature maintaining that corporate agriculture is a recent phenomenon in Australia (Tonts et al, 2003) and the international extent of investment by financial firms in land for agricultural purposes is unprecedented (Burch and Lawrence, 2009). These views are ahistorical for the Lachlan, but also for other parts of Australia (Cuddy, 1976; Moir, 2011), the USA (Hodgson et al., 1999; Johnson, 1995; Rasmussen, 1994), South America, Africa and Asia (Powelson, 1988). The rise of capitalism caused an expansion these AO types in the nineteenth century. While financial firms and speculative ventures continue to evolve (McMichael, 2001; Piesse and Thurtle, 2009) their antecedents in the form of banks and joint-stock financial and pastoral companies and mutual societies held title to far more land in 1885 than they do now, and only expanded in the area they held land title to between 1885 and 1935. Thus, when investigating trends in landownership spanning 180 years, I was reminded of Moore’s (1967) observation, that sociologists’ penchant for studying change overlooks the real ‘spook’ in need of explanation, that of social continuity (p. 485). Likewise, Hoggart and Paniagua (2001) asked ‘What rural restructuring?’.
Yet, along with the aforementioned continuities, there were discontinuities in the rural landscape (Munton, 1995) and between the first and third international corporate regimes (Cotula, 2012). Some were reflected in the Lachlan research. Firstly, absentee-owned land concentration was 29 times higher in 1849 than in 2009, as measured by mean area absentee-owned. Even so, since 1980, 12 AOs (N=28) accumulated large areas and 58% of these AOs had acquired their Lachlan property since 2004. Increased concentration of landownership is an international trend (McMichael, 2005) and has significant political economic and social implications. For instance, in NSW, back in the 1850s, it was a growing resentment towards an absentee squattocracy monopolising land that inspired multiple segments of society to pressure the NSW government to introduce land laws favouring resident ownership (Baker, 1958; Barr and Cary, 1992; Karr, 1974; Wells, 1989). In other places, transformations were not so benign (Moore, 1967; Harambolous et al., 2009).

Another important difference between 1849 and 2009 was that the majority of AOs in 1849 lived outside the catchment whereas by 2009, AOs were at least as likely to live locally. In Bland Shire, 14% of all landowners lived in a local town. This statistic is comparable to a 2001 national statistic indicating 13% of all Australian farming families lived in urban areas (ABS, 2003). While local town-based farmers had a historical presence, anecdotal evidence suggests their numbers are increasing. Their extensiveness, along with many AOs employing resident FMs, and 68% of 28 AOs having not reduced the number of residents on the original area since property purchase, suggests AL may not be as disruptive to rural communities as studies like Goldschmidt (1978), Shucksmith (2012) and Talbot (2003) suggest. Other literature points to factors unrelated to AL as having more of an impact on rural communities (Bruynis, 2007; Lyson et al., 2001). Numerous informants in the Lachlan considered migration to cities, drought, declining terms of trade and mechanisation had depleted the rural population more than AL.

In the academic literature emanating from the USA, Britain and Australia, there appears to be a disproportionate focus on AOs of lifestyle properties and small non-industrial private forests (Petzrelka et al., 2013) considering the proportion of
land they own in the Lachlan. Whilst it was historically unprecedented in Cowra Shire for 13% of all landowners to be non-local AOs owning 10–40 ha in 2009, the trend in Russia began in the nineteenth century (Struyk and Angeleci, 1996). Yet even in Cowra Shire, these AOs only owned 2% of all land. Throughout the Lachlan, only 1% to 4% of all land was taken up by owners of 10–40 ha in 2009, and some of this land was used for intensive agriculture. To highlight the negligible area covered by these properties, one non-local vertically integrated FC owned a 32,000 ha property with a 45 kilometre river frontage and extensive irrigation infrastructure. Compare this to the total area of 33,597 ha owned by 1,324 resident and absentee owners of 10–40 ha throughout the Lachlan LHPA. Whilst some lifestyle properties are larger than 40 ha, to evaluate their impacts, it is critical to assess the area these often unproductive properties cover as a proportion of all land. Only then can one truly assess these landowners’ impacts on rural power relations (Sturzaker and Shucksmith, 2011); conservation practices (Klepeis et al., 2009); and agricultural production (Bunker and Houston, 2003). The Russians have always used their rural retreats to grow food (Powelson, 1988). Small scale primary industries and tenancy arrangements described in Chapter 8 could make lifestyle properties more productive. That most of these properties are net liabilities suggests their owners may be open to such ideas.

Since the 1980s, an unprecedented trend is the change in the country-of-origin of foreign investors. Before the 1980s, most foreign investment was British, although outside the Lachlan, in the 1950s and 1960s there was an influx of American investment in rural land (Cuddy, 1976; Cypher, 1996). The recent international upsurge in foreign investment has been likened to a colonial land grab (GRAIN, 2009) but a more nuanced interpretation is required, at least for industrialised countries like Australia. In 2010, of all known foreign entities that owned land in the Lachlan, 45% were from Asia (N=20), a finding consistent with Anseeuw et al.’s (2012) observation that there are regional patterns to foreign investment and most foreign investors in Asia are Asian. Differences between the contemporary and historical land grab includes that the colonised of Asia and the Middle East are now acquiring land in Australia. They do not have the political economic power to make laws and monetary policies as did the British in colonial Australia. However, this is
arguable, especially regarding mining companies and other multinationals in relation to environment, labour and tax laws, given the capacity for foreign investors to influence the political economies of any country (Anseeuw et al., 2009; Cotula et al., 2009). In the Lachlan in 2011, another 35% of all foreign investors were from North America, a finding somewhat consistent with De Laperouse (2010). The hegemony of US corporations is a feature of the third international food regime. Certainly, the international financial restructuring that began this regime in the 1970s (McMichael, 2005) caused the demise of British firms that had operated in Australian pastoralism since the mid nineteenth century.

Consequently, by 2011, only 10% of all known foreign investors in the Lachlan were British-based, although outside the Lachlan, in 2009, Terra Firma, a British-based private equity firm, purchased 5.6 million hectares in Australia (Terra Firma, 2013).

In Bland Shire, only 4% of all land had some level of foreign investment. This figure excludes foreign individuals and major corporate acquisitions in neighbouring shires. Consequently, the extent of foreign ownership in Bland Shire was less than the national statistic of 11.3% of all arable land (Moir, 2011), and likely less than the area being acquired through long term leases in northern Australia (Cahill, 2007) and Africa (Anseeuw et al., 2012), although it exceeds the 1% of US agricultural land held in foreign ownership for two decades (US, 2007).

In Australia, it is the Asian and Middle Eastern investors that receive most media attention. Other discourses revolve around some investors being sovereign entities (of which there was one in the Lachlan) and agricultural land being purchased by multinational mining companies (of which there are three in the Lachlan). Concern that these developments will negatively impact Australian farmers’ access to land and water, as well as concern regarding national food, water and political security, has led the Australian government to establish a working group to discuss the development of a national foreign ownership register for agricultural land (Bradbury and Ludwig, 2012), and further refine what constitutes a sovereign entity (FIRB, 2013). Yet these measures do not address tax avoidance by multinationals, especially those that market and distribute their own produce. Nor do these measures ensure viable on- and off-property socio-political economic relations and
environmental guarantees. In the Lachlan, foreign AOs enter lease contracts at the market rate, unlike in eastern Europe (Swinnen et al., 2006), but there were accounts of four multinationals dictating non-standard requirements within the lease arrangement. In the Lachlan, foreign AOs involved in crop and livestock employ Australian farm managers (FMs) and labour on Australian wages, unlike the casualisation of the workforce elsewhere in Australia (Tonts et al., 2003) and Africa (Anseeuw et al., 2012; McMichael, 2005), but again, foreign head offices could dictate budget cuts and non-standard demands on FMs. The Lachlan research highlighted the importance of AO-FM-farm labour relations. It was shown these varied between AO types and could potentially impact the long term viability of an operation. Operations benefitted from communication protocols that enabled consultation, timely decisions and accountability, all of which require parties to accommodate the socio-cultural milieu of the other. A former FM had worked for a foreign firm where this did not occur. To ensure long term viability, such considerations are important in light of cultural differences in how multinationals operate, dependent on their country-of-origin, even between European countries (Harzing, 2006).

A third trend without historical precedent was modern indigenous aggregated ownership, established in the Lachlan in 1980. In 2009, 0.3% of all land in the Lachlan LHPA was owned by Aboriginal entities, higher than 0.1% throughout NSW (Adams, 2004) but lower than 20% of Australia’s territory (Alexandra and Stanley, 2007). Most of the land, consisting of three properties, was absentee-owned. In two cases, ownership was contested by traditional landowners. In all three cases, when land was managed by local Aboriginals, there was a lack of capacity building, operating capital and on-going technical support. This view was reported by traditional owners, as well as a FM and managing director of a FMC that took over the management of one property, and is consistent with the literature (Alexandra and Stanley, 2007; Altman, 2004; Dale, 1993; Lane and Dale, 1995). By 2010, all three properties were leased out. Two leases were not benefitting the local Aboriginal community, the original intention of land rights and Aboriginal land funds. A number of Aboriginal informants observed that Aboriginals in south east Australia are less
supported compared to their Northern Australian counterparts. This view is consistent with Pollack (2001), but no literature has explored the conflicts of interest between traditional landowners represented by local Aboriginal organisations and state and Commonwealth aggregated landowners, or their representatives, or how the Commonwealth land fund has more than enough money to purchase land but no authority has funds for on-going operational support, including wages. This is critical given Aboriginal aggregated structures have no access to normal credit channels. Nor has any literature highlighted the increasing difficulties to acquire land faced by local Aboriginal organisations because of the prerequisites to prove capacity, financial viability and employ ten full-time workers. Such hurdles are in urgent need of addressing if local Aboriginal communities are to benefit from owning rural land for the purpose of agriculture.

That AL has been historically extensive is not surprising given the link between the accumulation of land, capital and political power (Mann, 1986; Powelson, 1988; Veblen, 1997; Cahill, 2007; Cotula, 2012), and the co-evolution of capitalism and private property ownership (Commons, 1974; Gilsenan, 1984; Buheiry, 1984). Logic dictates that the dominance of the capitalist discourse in the twenty-first century will further increase AL in the absence of a political will to distribute land and address the cost-price squeeze of farming (Deininger et al., 2006; Jian-Ming, 2001; Quan, 2005; Riddell, 2000). Yet, minimising the state and its capacity to intervene, as advocated by Adam Smith (1806), is fundamental to the prevailing discourse (McMichael, 2005; Pritchard, 2005a/b), and despite the discontinuities between the first and third regimes, the continuities are significant (McMichael, 2005; Veblin, 1997). If the Lachlan findings prove generalisable, that trends in landownership since the nineteenth century correspond to the first, second and third international regimes, then the ramifications of land, capital and political power accumulation in the nineteenth and early twentieth centuries (Haralambous et al., 2009; Moore, 1967; Powelson, 1988; Roebuck, 1973) may offer important insights for the current regime.
Underlying factors contributing to trends in landownership in the Lachlan River catchment

Identifying underlying social, political, economic and environmental factors contributing to trends in landownership spanning 180 years was also unprecedented, although the likes of Oles (1999) provide historical overviews for a region. The Lachlan investigation into the international, national and regional factors contributing to landownership informs current and future trends. Findings benefitted from a critical realist’s preference for multiple contingent factors rather than universal laws or subjective understandings. Whilst many underlying factors were identified in the international literature, sources were scattered over time and place. Having already referred to a number of critical factors in the previous section, I would now like to focus on factors that are not highlighted in the literature, that have contemporary relevance or that can only be assessed over time.

As is the tendency of imperialism, the British transplanted Old World traditions to the colony of NSW resulting in the high extent of AL in the Lachlan. A short period of anarchy outside the limits of settlement, followed by the imposition of colonial land laws and monetary policies, along with marriage and succession, consolidated landownership among capitalised AOs including British aristocrats, a colonial political elite, military commanders, and by the 1850s, British and Australian companies and banks. However, colateral features of colonising the New World (Australia and the Americas) such as plentiful land and opportunities for capitalist endeavour (Aaronsohn, 2000; Powelson, 1988; Rennie, 1978) led all classes of people to become AOs, Res/AOs and ROs in the Lachlan, including former servants; those benefitting from country-of-origin connections; and those who made fortunes on the gold fields or through other entrepreneurial endeavours. Unique to Australia were emancipated convicts becoming AOs, among them being former political prisoners. No literature has focused on this cohort of landowners. That access to land and opportunities based on individual endeavour, as well as
inheritance and connections, creates a prosperous society (Cahill, 2007) is behind a concern for entrenched concentrations of landownership.

From 1861, successive land laws dictated the subdivision of large properties in order to increase resident landownership. Despite these laws being enacted with good intentions, in practice policies were executed without heed to advice given in commissioned reports like Morris and Ranken’s (1883) about the minimum viable areas needed to support a family. Many informants considered the excessively small subdivisions from 1861 to post World War II were directly linked to increased AL since 1970. In 2009, that more AOs than ROs owned 10–40 ha and more ROs than AOs owned 1200+ ha supports this view, although confounding factors include that small properties are more affordable for more city-based individuals. That subdivisions were determined without consideration of conditions on the ground, emphasises the need for informed policies.

A major factor contributing to a dramatic change in the fortunes of British firms operating in Australian pastoralism for more than 100 years was international financial restructuring in the 1970s. This critical discontinuity is largely ignored by literature on landownership and the general media, perhaps because of the dominance of the capitalist discourse, although the discontinuity is discussed in literature on international regimes (McMichael, 2005) and that with a broader political economic focus (Dong et al., 2006; Harford, 2005; Ovtchinnokov, 2010). For instance, Raup’s (1973) study of US corporate agriculture proposed other reasons, including the Green Revolution discrediting the Malthusian view, as contributing to corporations exiting US agriculture in the early 1970s. Unlike the capitalised positions of British corporations in the nineteenth and early twentieth centuries, when as money lenders these corporations benefited from high interest rates, by the 1970s British corporations were in debt and the economic upheavals of the 1970s, particularly apparent in Britain, crippled them. By the 1990s, all had sold their Australian properties. Thus, international financial restructuring could impact current or future investment at least as dramatically as the increase in investment in land and agriculture since the 2008 Global Financial Crisis (Anseeuw et al., 2012; De Laperouse, 2010; Moir, 2011). An exit of corporate investment
could also occur if share markets and economies stabilise, especially if speculation about rising commodity prices and land values fails to materialise and investors do not receive an expected return on their invested capital (Allen and Leuck, 2002; Cotula et al., 2009; Raup, 1973). Evidence that a corporate exit from land and agriculture is possible is found in past cycles, these partly explaining why foreign and other corporate investment in US land has remained more or less constant since the 1970s. In the Lachlan, most contemporary large scale corporate and aggregated structures had ten year investment horizons. The majority were top heavy with managing directors and administrative staff and made large net losses during the drought. It is therefore dangerous to assume that corporate investment in land for agricultural purposes is a long term strategy for solving national and global food security issues.

Drought was another major factor behind the persistence of AOL throughout the nineteenth and early twentieth centuries in the Lachlan. Its sheer regularity was enough to test the hardiest local landowner, who, when unable to meet debt repayments was forced to sell. Purchasers were often capitalised AOs. Drought uncannily coincided with every international, locally manifested economic downturn in the nineteenth and early twentieth centuries. Whilst the drought of the first decade of the twenty-first century did not coincide with an economic downturn, it directly followed international deregulation in the 1970s and agricultural deregulation in Australia in the 1990s. Yet despite the regular, devastating impacts of drought on trends in landownership, the worst drought since European settlement of Australia (1997-2009) did not deter city-based investors and corporations from investing in land for agriculture or lifestyle purposes. Perhaps this was because the impacts of drought receive so little attention in the literature, an exception being Diamond (2005). Another set of reasons is that these AOs were responding to factors unrelated to agriculture (e.g. the GFC; demand and speculation; and socio-cultural factors). With hindsight, this may well be hubris, for, in examining the implications for sustainable agriculture, large scale corporate landowners were particularly vulnerable to drought. Thus, the impacts of drought cannot be underestimated, especially given the extent of investment
in drought prone regions of Australia and sub-Saharan Africa (Anseeuw et al., 2012).

Studying trends spanning 180 years affords insights not possible in short-term studies. One insight was that political interventions in Western capitalist democracies like Australia can be slower to take effect than deregulation. In two Lachlan districts, it took 110 years of land laws and farmer support schemes, three decades of favourable terms of trade and two decades of good rainfall for ROs to own more land than AOs. It took 20 years of agricultural deregulation and 13 years of low interest rates and drought, to reinstate AOs as a major presence. Yet, the same capitalist forces that led to an increase in AL may also restrain investment. The Lachlan research identified that investors of all persuasions could be deterred if land values and input costs continue to outstrip productivity and net returns. The managing director of a vertically integrated FC suggested commodity prices needed to rise to make agriculture a more viable industry. Williams and Williamson (1985) predicted this rise if corporate agriculture assumes more importance. Whilst there are multiple factors behind commodity price fluctuations, including the ever increasing avenues for speculation since 2002 (Piesse and Thrtle, 2009), even if commodity prices increase, many primary producers may not benefit (Veblen, 1997). If they do benefit, commodity price rises have implications for world food security. One solution is for investors to focus on countries offering cheap land and labour, as is occurring in Africa and South America (Anseeuw et al, 2012; Cotula et al., 2009). A more sustainable solution for increasing the viability of agriculture would be to tackle overproduction by subsidised producers and high costs associated with inputs and production intensity, export marketing, storage and waste (George, 1990; McMichael, 2005).

Lastly, the raft of socio-cultural factors underlying trends in landownership is not wholly appreciated within the capitalist or sustainability discourses. Landownership has always been tied to socio-cultural meanings (Oles, 1999). This was highlighted by the Lachlan finding that only 12 AOs – all large in scale – had more utilitarian motivations than non-utilitarian motivations, and even managing directors of some of these AOs expressed non-material self and transcendental motivations, the
latter including a wish to contribute to Australian agriculture and support Australian farmers. All those expressing these motivations had grown up on a farm. Other AO types either had a balance of utilitarian and non-utilitarian motivations or a dominance of non-material self motivations. Historically, isolation, conflict with other land claimants and Aborigines, and lack of amenities contributed to AL, while lifestyle expectations, having a farming background and being social connected to a region were important factors influencing the purchase of rural land by city-based individuals. Yet, the ageing of the post-war baby boom generation and increased urbanisation, leading to fewer people having a farming background or being socially connected to a rural area, and more people preferring a city lifestyle, along with changes to land and tax laws, could curb investment in rural land. If different types of landowners stop investing, this impacts land values and the ability of farmers to borrow against their property, and therefore operate effectively. That there are critical factors that could limit different types of landownership is an important insight, one with multiple implications, including the possibility of a reduced area of cultivation despite increased demand, as has occurred historically (Rafeq, 1984; Seikaly, 1984) and in the 1980s, in China (Jian-Ming, 2001).

**Implications for sustainable agriculture of different types of absentee landowners**

With an international upsurge in different types of AOs, the implications for sustainable agriculture are crucial. My qualitative investigation benefitted from seeing the AO and farm operator as integral parts of a complex self organising system, in which decisions are made for multiple reasons derived from the prevailing capitalist, sustainability and socio-cultural discourses although not necessarily based on all contingencies (Noe and Alroe, 2003). The models depicted in Figures 42, 43, 44 and 45 showed different aspects of the system. These models serve as summaries of the qualitative findings based on 28 AOs, 14 FMs, two FMCs, and others associated with AOs, which were in keeping with a critical realist’s nuanced understanding of what is sustainable (Sayer, 1997).
Although findings for managing biodiversity and economic viability warrant further investigation, the insights generated by my research were considered another contribution to knowledge for three reasons. Firstly, scant attention has been paid to social relations in the literature, whether these are within a non-family ownership structure or in AO-FM, FM-FM or AO-FM-farm labour relations. For example, the impacts of the AO-FM relationship and the FM on economic viability are often omitted from research (Gorton and Davidova, 2004). Secondly, there is no literature on the biodiversity management practices and outcomes of large scale FCs, NFCs and aggregated landowners. Thirdly, on balance, findings suggest that AL may not be as problematic as some literature portrays, though there are some critical caveats.

The Lachlan research showed the various ways social relations within an ownership structure and between an AO and farm operator/s, as well as the quality of the FM, impacted interpersonal relations, on-property practices and outcomes and, consequently, the long-term viability of an operation. Such findings will assume greater importance if the separation of ownership and operations increases. The findings also validated the typology dimensions of ownership structure and on-property management and labour for investigating sustainable agriculture.

Contemporary social relations among 28 AOs in the Lachlan tended to be less hierarchical than historical relations, except for the unequal power relations found in three multinationals, some FCs and experienced by Aboriginal aggregated structures. In light of more equal power relations and clear communication protocols having beneficial outcomes for all parties, these findings are significant. Already discussed were relations for multinationals. Two FCs that functioned well across generations featured non-autocratic fathers. Intergenerational conflict within three FCs was identified by Willock et al. (1999), while findings were consistent with Bamberry et al. (1997) and Barr et al.’s (2005) observation that differences in education led to the younger generation wishing to introduce new practices. What no study seems to have pursued is what occurs if conflicts of interest are not resolved. I found it impacted operations (e.g. a multinational’s demand for non-standard machinery updates delaying sowing); or outcomes (e.g. 
the discontinuation of a profitable enterprise for an Aboriginal AO). Disunity led to individuals resigning (e.g. the managing director of a multinational’s subsidiary); being sacked (e.g. a CEO working for an Aboriginal AO); low production (e.g. a FC’s low lambing rate); a high FM turnover (having a negative impact on production); or land being leased out (e.g. an Aboriginal AO) or transferred to another owner, as what occurred between two Aboriginal AOs.

There is extensive literature on the importance of farm management for any agricultural operation (Lee and Reeve, 1991; Seckler and Young, 1978), but the literature focuses on resident farmers and ignores the critical role of non-landowning FMs (Gorton and Davidova, 2004). Employing a FM or FMs was a common historical and contemporary practice in the Lachlan. A FM could make or break an operation. Indeed, selecting the right FM seems to be as important as selecting the right land. In the AO-FM relationship, each plays vital roles, yet power relations varied. City investors who lacked farming experience were disadvantaged in their negotiations with a farm operator, and practices and outcomes were limited to the knowledge of the farm operator. Entities that employed a highly qualified FM or FMC had beneficial outcomes, with 64% of FMs (N=14) having introduced new practices related to managing biodiversity and economic viability. Knowledgeable AOs and FMs could exchange ideas and negotiate for the implementation of beneficial practices but micromanagement could have negative impacts, including a high FM turnover. No FM liked to be micromanaged, a finding consistent with Billikopf (2001).

Other insights regarding AO-FM relations are that FCs (farm-based and otherwise) tended to make decisions more quickly than other AO types but FMCS, NFCs and some aggregated structures tended to have clearer communication protocols and more detailed farm plans, reporting and monitoring procedures that served to bench-mark performance for future farm plans and keep AOs and investors informed. One investment company tried to incorporate the advantages of family and non-family farming operations, minimising tiers and administration costs by having a highly autonomous area FM run an aggregation, these numbering 14 and
spread across three states. Such insights were unable to be contextualised in any literature.

At least a dozen informants referred to AOs bringing capital into agriculture and the community, although concern was expressed about AOs that never visited their property or had a limited understanding of rural culture or running an agricultural business. In the Lachlan research, 67% of 12 AO types employed full-time waged labour and large scale operations employed the most (although not on a per hectare basis), labour being their largest cost. This was inconsistent with findings by Clark (2008) but indicated an increase in AOs could lead to a spread of assured salaries for a broader cross section of people compared to family operations. The Lachlan study found the most effective FMs were able to combine timely decisions with the ability to create a team environment in which people were consulted, but were also held accountable for delegated tasks. However, findings on employment conditions may not be replicated in other enterprises (Tonts et al., 2003) or countries (Anseeuw et al., 2012; Winson, 1996). Having non-exploitative labour relations is an important caveat on the benefits of AL.

The reliance on waged labour when there is a growing shortage of farm labour (ABS, 2006; Barr and Cary, 1992; Clark, 2008) could also constrain future investment. One way of addressing the shortage of labour is through higher wages. Two counterfactuals offer additional solutions, if validated outside the Lachlan research. One counterfactual was that Aboriginal labour was underrepresented, unlike their historical involvement and contemporary employment on properties in Northern Australia. Another counterfactual was that corporate agriculture involved a masculinisation of the on-property workforce for cropping and livestock enterprises in the Lachlan. Only one of 10 large scale corporates employed a full-time female on the property and not one employed a female contractor, although females were given casual work. This is in contrast to females comprising 28% to 30% of Australian farmers or the farm workforce (ABS, 2011; Elix and Lambert, 2000).
There is excellent research on tenancies (Allen and Lueck, 2002; Broad and Fulton, 2003; Mearns, 1999). Findings that when parties differed markedly in socio-political economic power, tenancy arrangements are dictated by the more powerful party were consistent with other studies (Baumann, 2000; Mearns, 1999; Suryanata, 1996; Swinnen et al. 2006), although studies demonstrating the subordinate position of some landowners in relation to tenants (Petrzelka and Marquart-Pyatt, 2011) only interviewed individual AOs and not other AO types or tenants. Nor did the Petrzelka and Marquart-Pyatt (2011) clarify some critical socio-political economic attributes for either party.

Inaction is another form of power (Lukes, 2005) and was demonstrated in the Lachlan study by a lessee not teaching and instructing an Aboriginal worker, which was part of the lease agreement. When involved in leasing, share farming or agisting, Aboriginal landowners and FMs were disadvantaged in their ability to negotiate, while the importance of values as an intervening variable in all tenancy arrangements was highlighted by several German investors’ willingness to inject capital into their leased out properties, whether for infrastructure, soil health or conservation. Thus, another caveat on the benefits of AL is when there are unequal power relations in tenancy arrangements and no recourse for mediation, which can lead to exploitation, poor practices and poor outcomes for the less powerful.

Qualitative findings on biodiversity management and economic viability also provide valuable insights, albeit in need of further testing. Across AO types the sustainability discourse had infiltrated production practices more than biodiversity management. Whereas only 53% of all AOs (N=28) had maintained or enhanced native biodiversity on their property, all AOs practicing agriculture employed current recommended sustainable practices. However, both statistics exceed the proportions of AOs adopting current recommended practices in natural resource management found in other studies, for example, those cited in Petrzelka et al. (2012). A possible reason for this is that many AOs in the Lachlan study had a farming background, which increased the likelihood of conservation work (Petrzelka et al., 2012). Otherwise, my findings were inconsistent with Petrzelka et al.’s (2012) findings that adoption of
conservation practices increased with larger land sizes. A possible reason was Petrzelka et al.’s (2012) study excluded corporate structures.

The Lachlan River catchment has only 512,337 hectares of forest and remnant native vegetation in an area of 85,000 square kilometres (personal communications with NSW Forests and Lachlan CMA, 2011). The area of state owned land decreased dramatically after 1900, and only slightly increased after 1990. This indicates that maintenance or enhancement of biodiversity will have to be conducted on private property. For this to occur, the Lachlan findings provide five pieces of evidence in support of the importance of various political economic interventions, as occurs in China, Europe and the US (Jian-Ming, 2001; Munton, 1995). Firstly, outside agencies contributed to conservation work for all but one AO. Secondly, there was potential for a suitably designed carbon market to expand conservation work, as indicated by six AOs conducting some work with this in mind. Thirdly, government requirements meant two mining multinationals had conducted extensive biodiversity management programs. Fourthly, no lessee/lessor had conducted biodiversity management. This finding was consistent with Broad and Fulton (2003) who concluded that tenancy arrangements lacked a cost sharing program for conservation work. A fifth finding was that large scale AOs’ production priorities tended to overshadow biodiversity management unless there was an economic benefit, despite often owning large areas of remnant native vegetation. This last finding is in contrast to Trewavas’s (2001) assumption that increased scale and off-farm capital provide conservation opportunities. No other study has investigated the on-property native biodiversity practices and outcomes of large scale corporate landowners. The Lachlan research found two exceptions to this very important finding for 11 large scale AOs, including the former FC that owned 32,000 ha. Otherwise, the lack of corporate interest in maintaining and enhancing biodiversity, despite FMs promoting these ideas, highlights another caveat on the benefits of AL, that is, the importance of environmental laws, requirements, interventions and support for all landowners to maintain and enhance native biodiversity.
That seven top conservationists were motivated by valuing biodiversity for its intrinsic values as well as its agricultural benefits, whether these motivations came from the AO or FM, was consistent with values being an important factor behind natural resource management, as identified by Curtis and Mendham (2012); Edwards-Jones et al. (1998) and Willock et al., (1999). That the Lachlan conservationists had conducted work throughout the drought and were well represented in those who achieved a net return in 2009–2010 suggests that biodiversity management may even enhance profitability, or at least be practiced by landowners employing other leading edge practices. Again, the critical role of FMs was highlighted in FMs having initiated or expanded conservation work for 78% of all non-operators (N=9) that had done some biodiversity management.

In light of increased corporate investment in land for agricultural purposes (Anseeuw et al., 2012; Clark, 2008) findings regarding the practises and outcomes of large scale corporate agriculture were consistent with the literature that they employ leading edge technologies (Allen and Lueck, 2002) but have high input costs (Clark, 2008) and variable production per hectare (Benjamin, 1995; Carroll, 2005; Gorton and Davidova, 2004; Lutz and Binswanger, 1998). What could not be contextualised by other literature and which are positive developments if they can be generalised beyond the 10 large scale corporate in the Lachlan research, was the attempts of about half of the large scale AOs to reduce or eliminate fossil fuel-based fertilisers and chemicals by using organic alternatives or other leading edge practices, along with four having entered into research partnerships with a public outcome.

Some important counterfactuals regarding economic viability shed light on the interaction of the capitalist and sustainability discourses. In the Lachlan research, only one AO had eradicated chemicals and inorganic fertilisers, in contrast to 7.4% of all cultivatable land in Europe being subject to organic regimes (Rohner-Thielen, 2010). No AO was self-sufficient in organic fertilisers, unlike 46% of AOs in a Tanzanian study (Mbonile, 2003). Nor was any AO directly marketing into the local district. It seems the sustainability discourse
had not overturned the capitalist discourse in areas that may improve the profitability of the landowner rather than the profitability of agribusinesses and supermarkets.

In terms of the agency and structure discourse, the Lachlan findings provided numerous instances of human agency making a difference. Examples include FM/Cs and self-operators instigating new sustainable practices with beneficial outcomes and FM/Cs and AOs initiating on-property research with an outside partner. But perhaps the most graphic example is the initiatives of individuals working for a mining multinational’s foundation. Relying on multiple networks and funding sources, these individuals had taken the foundation’s work in conservation, research, education and employment beyond anything the company had envisaged. This case not only illustrates individual initiatives, but the roles a highly capitalised AO can potentially play in the local community and wider industry, as noted by Tonts et al. (2003). Yet, a counterfactual for three multinationals was that no regional director or FM of an in-country subsidiary liaised with their counterparts in any overseas subsidiary, unlike some multinational types (Harzing, 2000). This prevents an exchange of ideas, including the mechanics of establishing a similar foundation elsewhere.

Ultimately, the Lachlan findings highlighted the critical nature of social relations in any endeavour, and any thought that capital and technology can provide all solutions needs tempering with the knowledge that in agriculture the laws of capitalism must contend with the laws of nature. An even broader insight arising from this social research is that clashes between the sustainability and capitalist discourses, and their resolutions, may be as crucial for the twenty-first century as were the clashes and partial resolutions of the capitalist and socialist discourses of the twentieth century.
Chapter 10: Conclusion

Introduction

In this chapter I restate my research questions and present a summary of key findings and contributions to knowledge. I then reflect on my research design, after which, I discuss the implications of my research for policy makers and future research.

Key research questions

Research into absentee ownership of rural land: types, trends and implications involved responding to four key questions. These were

1. What are the different types of absentee landowners?
2. What is the extent and trends of absentee landownership in the Lachlan River catchment of New South Wales, Australia?
3. What factors contribute to absentee landownership in the Lachlan?
4. What are the implications for sustainable agriculture of different types of absentee landowners in the Lachlan?

Key findings

AO Types

Definition of an absentee landowner

Given that researchers and informants varied in their understandings of absentee landownership, I clarified the definition of an AO as, ‘An absentee landowner is an individual or corporate entity whose primary residence is not located on the land they own, ownership and residency determined by the socio-cultural context’.
Classification of landowners

A relational typology was constructed for classifying international types of landowners. The typology employed a single continuum of landowner autonomy underlying four theory-derived dimensions: *ownership structure* distinguishing capital owners and landowners where appropriate; *primary purpose* for owning rural land; *local/non-local* referring to the distance between the primary residence/headquarters and the property, and *on-property management and labour*. All landowners could be placed in mutually exclusive cells and ranked within and across cells according to the landowner’s autonomy in decisions and capital. Within each cell, empirical types can be expanded to cater for diverse *ownership structures, primary purposes* and *on-property management* arrangements. By enabling systematic comparisons across types of landowners, including AOs and their resident counterparts, the typology could prove a useful research tool for studying landownership across time and place.

Key attributes of AO types

Four key attributes that varied between AO types were the number of members within an ownership structure, access to off-farm capital, reliance on a farm operator and a landowner’s on-property involvement. Variations in these attributes for different AO types impacted practices and outcomes for sustainable agriculture.

Extent of absentee landownership in the Lachlan in 2009

Extent of absentee landownership in three regions

AL is extensive in the Lachlan. In 2009, in the Lachlan Livestock Health and Pest Authority (LHPA) area, 50% of all occupiers of 10+ ha were AO on all land with AOL covering 68% of all land. In Bland Shire, 43% of landowners were AO on all land, AOL covering 41.4% of all land. In Cowra Shire, 63% of all landowners were AO on all land, AOL covering 69% of all land. Other landowners/occupiers were resident
on one property and absentee on other property (i.e. Res/AOs). Most absentee-owned land was used for commercial agriculture.

**Regional variations in extent**

There are regional variations in extent of AL. ROs were more numerous in Bland Shire (51% of all landowners owning 58% of all land) than in Cowra Shire (20% of all landowners owning 23% of all land) or the Lachlan LHPA (18% of all landowners).

The extent of AL can depend on area owned. In all three databases, for those owning 10 – 40 ha, AOs outnumbered residents (ROs) and Res/AOs and AOL covered more area. For landowners owning 1200+ ha, ROs and Res/AOs outnumbered AOs, and ROL covered more area. For those owning 40+ – 1200 ha, in the Lachlan LHPA and Cowra Shire, AOs outnumbered ROs and Res/AOs, and AOL covered more area. In Bland Shire, ROs and Res/AO outnumbered AOs and ROL covered more area.

In 2009, AOs were at least as likely to live locally (i.e. within the boundaries of the database). In the Lachlan LHPA and Cowra Shire, local AOs and Res/AOs absentee-owned more land than non-local AOs. In Bland Shire, non-local AOs owned more land than local AOs.

There are substantial regional variations in AO types. For example, in Bland Shire, non-local Pty Ltd companies owning 1200+ ha were few (2% of all landowners) but owned a disproportionate amount of land (7.3% of all land). Foreign land and/or capital owners owned the most land. Although only 1% of all landowners they owned 4% of all land. In Cowra Shire only one non-local AO owned 1200+ ha. Non-local small property owners had a substantial presence in Cowra Shire (13% of all landowners) although they owned only 2% of all land. In contrast, in Bland Shire, non-local AOs of 10 – 40 ha were only 1% of landowners owning 0.02% of all land.
Trends in absentee landownership in the Lachlan, 1849–2009

Trends in extent of absentee landownership

Absentee occupation of the Lachlan in the nineteenth century was extensive. In 1849, 49% of occupiers in the Lachlan Squatting District were AO, another 6% being Res/AO. AOL covered 71% of the district.

Three phases in landownership were identified in two contrasting districts. During Phase 1 (1830s–1860s) AOs occupied most land. During Phase 2 (1860s–1970), resident landownership increased, ROs becoming more numerous than AOs by 1885–1900, but AOs continued to occupy most land until after 1935. By 1970 ROs were in the majority and occupied the most land. During Phase 3 (1970–2009) AL increased, the most dramatic increase occurring since 1990. By 2009, AL had reached the high level of 1849.

Discontinuities in patterns of landownership between 1849 and 2009 included that the concentration of AL was 29 times higher in 1849 than 2009, Res/AOs were three times more numerous in 2009 than 1849; local AOs were more numerous in 2009 compared to 1849 and there was a corporate presence in 2009, in contrast to most AOs being individuals in 1849, although this changed in the 1850s.

Trends in AO types

In the Lachlan, most contemporary AO types had historical antecedents. All AO types could have a short-term (less than ten years) or long-term (i.e. 20+ years) commitment to pastoralism or a property. For example, 27% of all AOs on nine pastoral stations (N= 172) owned the same property for 20+ years while 10% of all absentee individuals/families changed their residency status within a lifetime.

British owned or financed pastoral companies and financial firms played a major role in nineteenth and twentieth century pastoralism. By 1885, they held land title to 52% of the Lachlan region covered by leases. The area to
which they held land title increased between 1885–1900 and 1920–1935 from 8% to 21% of Bland district, and from 3% to 26% of Cowra district.

State-ownership and local Res/AOs did not contribute to an increase in AOL after 1970. Unprecedented trends since 1970 are the extent of non-local AOs of small lifestyle properties in Cowra Shire, the change in the country-of-origin of foreign investors from British to majority Asian, and Aboriginal aggregated landownership.

**Factors contributing to absentee landownership in the Lachlan, 1849–2009**

In Phase 1 (1830s–1860s) the prevalence of absentee occupation in the Lachlan catchment was linked to colonialism, global trade and rising commodity prices; war and laws in other countries; regional logistics; state land laws, land values and monetary policies. Plentiful land, land grants, paying overseers in land and livestock and entrepreneurial endeavours enabled those with less status to become AOs and Res/AOs. All served to dispossess the Wiradjuri people.

In Phase 2 (1860s–1970) increased residency for non-indigenous landowners was linked to land laws, tax laws, government support schemes, high demand during two World Wars and the Korean War, technical innovations, and in the 1950s and 1960s, good rainfall and terms of trade, coupled with low interest rates. These factors led to a zenith in resident landownership in 1970. Yet, AOs continued to occupy most land until after 1935. This was linked to family succession, land purchases that avoided the residency requirement, as well as foreclosures and sales by indebted resident landowners. Rising input costs, drought and international economic downturns contributed to landowner debt, land title being transferred to or purchased by capitalised AOs, including financial firms and pastoral companies.

In Phase 3 (1970–2009) increased AL was linked to farmers moving into town, family farm expansion and ROs selling. ROs sold as a result of debt due to declining
terms of trade and high interest rates until 1996, and, in the first decade of the twenty-first century, drought. Additional factors were the farmer’s age and no succession. International financial restructuring in the 1970s, economic turbulence in Britain and the indebtedness of British corporations caused merges and delistings so British corporations exited from Australian agriculture between 1977 and 1988. Since the 1990s, growing demand, available capital and agricultural deregulation favouring large scale, vertically integrated AOs, as well as the GFC and a volatile stock market, renewed corporate investment in land and agriculture. However, corporate investment is cyclic and counter-cyclic.

Non-local family farm operations and city-based individuals also purchased property after interest rates declined in 1996. City investors were influenced by having capital to invest, being the right age, wishing to own a rural retreat and for some, the challenge of running a successful commercial operation. Indigenous land rights and land funds established Aboriginal aggregated ownership. However, other factors may limit different AO types investing in land, for example, drought, new land and tax laws, as well as land values and input costs outstripping productivity and net returns.

**Implications for sustainable agriculture of different AO types**

**Implications for social relations**

More equitable social relations between members within an ownership structure, or in a tenancy arrangement and in AO-FM-farm labour relations allowed for an exchange of ideas. Conflict at any level impacted interpersonal relations, practices and outcomes and, consequently, the long-term viability of the operation. Historically, social relations were hierarchical, with the FM being the on-farm dictator. Contemporary relations varied with AO type. Three Aboriginal AOs and two multinationals had the most unequal social relations within the ownership structure, in tenancy arrangements and in AO-FM relations. Two FCs and two city investors had unequal AO-FM relations, the FCs giving no autonomy to FMs. City investors were constrained by the
knowledge of their farm operator. Beneficial practices or outcomes required one or other party to be knowledgable and experienced.

FMs were critical to AOs practicing commercial agriculture. Consultation and some level of FM autonomy enabled 64% of FMs (N=14) to introduce sustainable practices with beneficial outcomes. All but two of these FMs who had initiated practises had tertiary qualifications as well as practical experience. FCs were quickest to make decisions, but could be hampered by ill-defined roles, poor communication protocols and micromanagement of FMs. Decisions in aggregated structures involved more parties and could be dictatorial but roles and communication protocols were more clearly defined.

Employment of non-family waged labour (as opposed to unpaid family labour) varied between AO types. Large scale mixed enterprises employed the most full-time and contract labour. Per hectare, city investors could employ more full-time or casual labour. Town-based farmers and farm-based FCs kept wage costs to a minimum, potentially limiting expansion. When self-managed, Aboriginal AOs had difficulty paying labour. FMCs and aggregated structures paid FMs the most and a farm-based FC and local FC paid FMs the least. Aggregated AOs and FMCs set high health and safety standards. Counterfactuals were that tenancies were underutilised and women and Aboriginal people were underrepresented in full-time and contract labour.

AL did not necessarily decrease the number of people living on the original area of land. Sixty-eight percent of AOs (N=28) maintained or increased the number of residents since property purchase. AO types that reduced the number of on-property residents were mining multinationals, farm-based FCs and town-based farmers. On-property residents and proximity of local AOs facilitated utilitarian relations with neighbours. Aggregated AOs were viewed as secretive although mixed community reactions led mining multinationals to foster community relations.
Implications for managing biodiversity

53% of AOs (N=28) managed biodiversity. Active biodiversity management was not related to AO type or access to off-farm capital. It was related to outside agency assistance (for 15); believing biodiversity had intrinsic values and agricultural benefits (for seven); an existing or future carbon market (for six) and government requirements (for two mining multinationals). Counterfactuals were that 47% of all AOs had not conducted any conservation work and only one AO linked a tree corridor to external forest/remnant native vegetation.

Implications for economic viability

Five findings were not related to AO type. All absentee commercial operators employed current recommended practices to maintain the productive viability of the land. Rainfall had the greatest impact on production. The knowledge and capabilities of the farm operator was the next most important factor impacting production outcomes. All those who made a profit in the drought of 2009–2010 were focused on livestock. In 2009–2010, 50% that made a net profit (N=8) were among seven AOs who actively managed biodiversity.

Production practices and outcomes varied between four clusters of AO types. Ten AOs had advantages and disadvantages associated with being large in scale. Scale gave these AOs geographic spread and the ability to spread fixed costs. Eighty percent had detailed farm plans and monitoring procedures that informed future practices, the AO and/or investors. All ten AOs accessed leading edge technologies. Sixty percent had reduced or eliminated the use of fossil fuel-based fertilisers and 30% had reduced chemical use by using leading edge practices. Only one ran livestock without a resident caretaker. All AOs or their FMs were well networked with agricultural organisations and four were among five AOs that conducted research with a public outcome, including two mining multinationals. All were advantaged in marketing, five by vertical integration. However, large scale AOs had high variable costs per hectare. The use of consultants, contractors, aerial spraying, spray frequency, the nature and frequency of fertiliser applications, soil and sap tests contributed to costs,
which excluded administrative costs. Six were top heavy with management, having three to six managing directors and administrative staff. Two large scale AOs (outside the ten interviewed) imposed enterprises unsuited to the environment. Mistakes, maintenance and changing direction were expensive and attention to detail and accountability were potential hazards. Large scale AOs had mixed outcomes for ground cover and wheat production per hectare. Three were among six AOs that made a loss in 2009–2011. Two croppers made the largest losses of all AOs. For those with ten year investment horizons, investors could lose interest if only interested in a return on capital invested.

Nine local AOs employed cost effective, sustainable technologies with favourable production outcomes. However, net return did not support all members of the ownership structure for 78% of local AOs (N=9). Seven local AOs owned their own machinery, which was cheaper than using contractors, and all had low variable costs per hectare compared to large scale AOs. All used highly sustainable practices that benefited from training and field days and four local AOs were networked with national organisations. Local AOs were among the top wheat producers and achieved the top lamimg rates in 2009–2011, despite comprising 89% of those who ran livestock without a resident caretaker (n=9). All local AOs made a net profit 2009–2011. Three local AOs were among seven top conservationists. Seven local AOs were in debt, four of these relying on primary production.

Production practices and outcomes for six city-based investors’ were impacted by primary purpose, lack of farming experience, lack of scale, and in one case, a lack of capital. For example, two LPOs and two lessees did not fertilise and the two lifestyle properties and a hobby farm were net liabilities. Being small in scale, two AOs had high variable costs per hectare. City-based individuals were not well networked and did not attend training or field days. They were dependent on the knowledge of a farm operator or consultant. Three had overspent on non-productive infrastructure. Two made a profit in 2009–2011. Age was a consideration in owning a rural property. This could lead to property turnover.
When self-managed, practices on Aboriginal-owned properties were impacted by a lack of operating capital and technical support, this overshadowing a lack of debt. Two of three properties were not commercially viable. An excellent Aboriginal FM, with FMC support, turned around one property. By 2010–2011 all three properties were leased out. In two cases, the lease revenue did not benefit the local Aboriginal community.

**Key contributions to knowledge**

This Doctoral thesis made four key contributions to knowledge. The first was the development of a relational typology for historical and contemporary international types of landowners. The second was establishing trends in landownership since European occupation of the Lachlan River catchment and finding that AL in 2009 had reached the high levels of 1849. A third contribution was identifying the multiple underlying factors that contribute to trends in landownership, including international financial restructuring and drought. A fourth contribution was identifying the implications for sustainable agriculture of different AO types.

**Strengths and weaknesses of the research design**

Given the complexity and scope of this research, a major strength of the research design was the use of theoretical propositions to guide research. These propositions were identified from the literature and preliminary fieldwork and were tested, refined and expanded throughout data collection and analysis. A second strength was the use of the concepts of power, capitalism and sustainability. These informed the construction of a typology, data analysis and synthesis.

This multidisciplinary social research benefited from clearly defined data sets, chains of evidence and methods of analysis. By using multiple data sets and scales of inquiry I was able to triangulate data to ensure findings were accurate and
reliable. For quantitative data I relied on populations rather than random samples, and paired cases in space and time, as well as a hierarchy of cases - a region in 2009 and 1849, paired shires and paired districts. These data enabled a reliable investigation of the historical and contemporary extent of AL.

There were three important limitations to my examination of extent of AL in 2009. Because I relied on existing databases rather than collecting purpose-specific data I was unable to analyse the extent of specific AO types such as LPOs, FCs, NFCs and aggregated AOs. Because two of three databases were analysed by in-house staff, I was unable to change my predetermined landownership ranges of 10 – 40 ha, 40+ – 1200 ha and 1200+ ha. In-house analysis also led to 32% of all occupiers in the Lachlan LHPA in 2009 being excluded from the statistic provided me on the extent of AOL. Consequently, the extent of AOL in 2009 at the regional level was an estimate based on 68% of all occupiers.

Triangulated data sources for investigating historical trends in AL in two districts involved the examination of historical maps, archives, secondary data, literature, local histories and newspapers, as well as interviews with living informants. Relying on living informants made the mammoth task of identifying the residency status of 2,381 named landowners on ten composite maps and the status of properties on the 2009 maps possible within the resource contraints of a Doctoral thesis. A weakness in assessing historical trends at six time intervals was not being able to pinpoint when AOs ceased to own the most land after 1935.

The historical investigation of the extent of AOs and AOL at six time intervals in two districts was enhanced by an investigation of the histories of nine pastoral stations. These histories, other literature and interviews provided insights into trends in AL between time intervals and details of historical AO types. Interviews provided personal insights into factors contributing to AL. Triangulation of data sources validated the selection of contextual factors contributing to AL, although factors identified may not be exhaustive.
In-depth, semi-structured interviews provided depth of data and a transcript review process ensured data reliability and validity. Recruitment through websites, snowballing and serendipitous processes and selecting AO types and cases within an AO type using purposive and critical case sampling based on predetermined criteria ensured the small non-random sample represented a broad range of perspectives. Interviews with non-AOs, including traditional Wiradjuri landowners, FMCs, FMs, lessees, consultants, contractors, real estate agents and others, and field observations provided breadth of data, a way of cross-checking data sources and the ability to broaden some findings beyond the small non-random sample. Interviews enhanced the construction of the typology and investigations into the history of AL and counterfactuals. Including Aboriginal AOs contextualised findings for this AO type and further highlighted the importance of power relations within an ownership structure, tenancy arrangement or between an AO and FM. In exploring implications for sustainable agriculture, differences in findings between managing biodiversity and managing natural resources that support production justified the separation of these topics. Otherwise practices related to production could have masked findings related to managing biodiversity.

By far the greatest limitation of the Lachlan research was the small, non-random sample of 28 AOs. This sample size meant there were a small number of cases in each AO type. This limited the capacity to make reliable comparisons across types, particularly when investigating their implications for sustainable agriculture. To cope with the small sample size in each AO type, in analysing economic viability I combined similar types to form four cohorts. Even so, the sample size in each cohort remained small (N=3,6,9 or 10). The sample sizes prevented me from identifying some demographics to ensure anonymity, although these data were not critical to the investigation.

Another limitation of relying on interviews rather than survey data was the exclusion of resident landowners. This meant I focused on a comparison of AO types rather than a comparison of a type of AO and their resident counterpart, whether these be lifestyle property owners, hobby farmers, individual commercial operators and/or FCs. Due to resource constraints I also had to exclude some
important AO types such as religious institutions, state authorities and conservation trusts.

Whatever the sample size, a major weakness of both interview and survey data is that it is reported data rather than data based on objective, consistent measurement. While field observations and interviewing FMs and other non-AO informants could confirm some data or identify counterfactuals, these aspects of the research were inadequate for clarifying data such as annual water and fuel use per hectare. Another limitation was the short time frame of research when outcomes are best measured over longer time frames. These limitations mean that my findings on AO types implications for managing biodiversity and economic viability are preliminary and in need of further testing.

Interview analysis was strengthened by the use of themes and sub-themes that could be refined from field work, on-going literature reviews and models created from key literature. Thematic analysis also benefitted from the use of theory, for example, a theory-based relational classification of landowners and motivations (the latter classifying motivations extrinsic/utilitarian, intrinsic/non-material self and transcendental). Such features of the research design took analysis beyond empirical observation. The construction of matrices for key data proved invaluable for cross tabulation and accessing data, the latter also enhanced by my electronic filing systems. Comparing inputs and outcomes on a per hectare basis afforded a comparison across scale and landowner type. Not using sustainability indices avoided over-simplifying a complex process. Devising models based on empirical findings, then comparing these with generic theoretical models, tested the validity of themes and their interrelationships. The refined models served as a summary of interactions. Whether NVivo software would have improved analysis is unknown. Certainly there was a large amount of data from diverse sources in need of coding.

A telephone or mail survey of a large random sample of landowners would have greatly benefited this research. However, privacy issues prevented me from obtaining access to a database that could provide a random sample. A survey would have enlarged the number of AO types and cases within each type and, most
importantly, allowed a comparison between AO types and their resident counterparts. These features would have enhanced the testing of the typology, and a comparative analysis of attributes, motivations, practices and outcomes of different types of landowners. Yet, a survey would not have elicited nuanced data on the history of AL, the motivations for owning land or relations within an ownership structure and AO-FM-farm labour relations and may not have identified the important contributions made by FMs. Moreover, a survey may not have captured some AO types such as multinationals, investment companies, non-local FCs, NFCs and Aboriginal AOs, especially if the survey was mailed. A telephone survey may be more successful in capturing these AO types as personal contact greatly influenced participation. Also, because of resource constraints, conducting a survey would have necessitated the exclusion of the historical components of this research.

As research design is often a compromise between breadth and depth within the available time and other resource constraints, I think the strengths of the research design outweigh its weaknesses in generating a useful research tool and counter-stereotypic findings that contribute to current discourses on landownership. However, the ambitious scope of the research means I had to compromise some depth in the final presentation of literature reviews, findings and the discussion. Some findings, especially regarding motivations for owning rural land, had to be omitted from the Doctoral thesis. At least the scope of this Doctoral thesis highlighted numerous topics for policy makers and future research.

**Recommendations for policy-makers**

In many respects, AL may not be as problematic as some public and academic discourses portray but there are some important caveats that highlight policy considerations. Foremost is the need to collect accurate data to inform policy development. If policy is not based on well grounded data (Munton, 1995), then good intentions can have unintended consequences, as did the historical enforcement of unviable subdivisions. Other areas for policy consideration
centre on land rights, land zoning and land subdivisions, as well as laws related to the environment, tenancies and labour.

Given the lack of national and regional statistics on AL and AO types, I suggest that the Australian Bureau of Statistics (ABS), Australian Bureau of Agricultural and Resource Economics (ABARES), now Australian Bureau of Agricultural Research, and the Livestock Health and Pest Authorities (LHPAs) (which in NSW is about to be amalgamated with the local Catchment Management Authority and Department of Agriculture to form Local Land Services), as well as Eurostat and the US Economic Research Service are in prime positions to collect regional and national statistics on types of rural landowners, the area they own, who manages the land and how the land is used. This would clarify the extent of AL and the ways land is being managed. Based on outcomes, appropriate policies targeting all or specific types of landowners could be developed, whether these relate to foreign ownership or the need to stagger or stop mining operations that jeopardise future water quality and supply, especially on the driest continent in the world, Australia.

With the increase in AL, the Lachlan research highlighted the need for well trained, capable FMs, preferably tertiary educated as well as practically experienced, who have local knowledge, computer literacy (as identified by Sørensen et al., 2010) and people skills (emphasised by Billikopf, 2001). Appropriate wages would make the career more attractive. There is also a need for businesses that support and mediate various tenancies.

Importantly, policies at the catchment level need to be developed for long term biodiversity management programs on private property, especially targeting and supporting landowners who own large areas of remnant native vegetation, including corporations and Aboriginal landowners, as well as those with a high percentage of remnant native vegetation, such as some LPOs.

Critical for local Aboriginal landowners is the need to encourage young people to train in areas of farm management and conservation and for programs to
enable capacity building to occur before land is acquired. There is also the need for start-up capital and on-going, quality technical support after acquisition. For instance, Aboriginal AOs often received inadequate advice, as illustrated when traditional owners made an unsuccessful application to manage land that was originally purchased for them. Warranting investigation is the feasibility of multiple tenancies, small business credit schemes and on-going mentoring by respected consultants and local land managers.

City-based investors of all persuasions need information on the pitfalls of absentee landownership, including the perils of undercapitalisation in production and overcapitalisation in non-productive infrastructure; zoning requirements; alternative business models; current recommended production and biodiversity practices; local flora and fauna, both endangered natives and pests; fire precautions and contact details for relevant service providers. Along with other types of landowners, those running commercial operations need information about different marketing alternatives. Workshops and seminars could be city-based, held on weekends or information could be provided over the internet by federal and state authorities, farmer organisations, agriculture-focused media and other service providers.

The Lachlan research highlighted the importance of seminars, training days, on-farm tours and other forms of education to update the knowledge and practices of landowners and farm operators. On-going research, funding and development are required for these programs to remain current. Distance education, aided by modern telecommunications, opens up cost-effective possibilities. Such courses have already impacted production practices. Courses linking biodiversity management and production and alternative marketing strategies appear critical.

In the cost-price squeeze of modern agriculture, a commodity’s farm gate price is crucial for the economic viability of the operation. Alternative marketing strategies need to be developed, supported and disseminated. Systems of direct marketing of the raw or value added commodity by an individual, group or their agent, including selling into the local district or via the internet, need support and dissemination.
Other gaps in marketing alternatives were identified. For instance, why is there a hectare-based contract for canola but not for wheat?

Regarding managing biodiversity, outside agency assistance appears critical. Unlike Europe, the USA and China, where landowners are compensated for setting aside land and/or conducting conservation work (Munton, 1995; Jian-Ming, 2001) Australian landowners rely on short term funding that requires extensive landowner input. This needs to be addressed if biodiversity is to be maintained or enhanced at a property and catchment scale. What form assistance takes is potentially broadened since Australia introduced a carbon price on 1 July, 2012. How biodiversity management on private land can contribute to this market has yet to be formulated, especially as agriculture is part of the problem. Within a suitably designed market, if companies with a carbon problem were linked to landowners willing to extend their biodiversity management, some mutually benefitting business models could develop.

Agriculture relies on infrastructure and requires long term planning. In a deregulated environment, roads, rails, abattoirs and other businesses servicing the agricultural sector have not been maintained. Long term bipartisan plans are required to service Australian agriculture and farmers.

Recommendations for future research

Research into AL could take investigations beyond national and regional statistics collected by the aforementioned government authorities to inform policy development and private investment. Future quantitative and qualitative research in different regions could test the extent of AL, trends in landownership and underlying factors contributing to trends in landownership identified in the Lachlan research and conduct a more thorough exploration of the impacts of local and national commodity prices, land markets, input costs and droughts.
Research on the implications for sustainable agriculture of different types of landowners (resident and absentee) and the roles of FMs, share-farming and renting is critical in light of the international increase in AL. Survey methodology, consistently covering independent, intervening and dependent variables included in the Lachlan research, and some important additional ones (e.g. cost per unit of production; percentage return on capital invested) would allow comparisons between different types of landowners, including one type of AO and their resident counterpart, and those who employ a FM or have single or multiple tenancy arrangements. Ideally, surveys would be large scale and conducted at five or ten yearly intervals. In Australia, a prime source of information for some variables already exists in LHPA databases. Surveys could examine farm employment and residency levels, demographics and wages; the economic trail of inputs purchases (e.g. local firms could be independent or mere distributors for non-local firms); annual fuel and water use per hectare for different enterprises; and the implications of extensive biodiversity management for running profitable farm businesses.

Qualitative and quantitative research of social relations must be given more attention, given people are a critical component of all systems associated with landownership and agriculture. Most likely benefitting from qualitative methods is a comparative analysis of individual, collective and capital based power relations, including relations between aristocracies or political elites and their tenant cultivators, and their impacts on practices and outcomes. There is also a need for comparative analysis of social/power relations between capital investors and landowners in investment companies and multinationals that manage large areas of land. Differences in operations between ownership structures (including state authorities, state/private hybrids and superannuation companies) that own rural land within a country and between countries would generate relevant findings for assessing commercial potential over time, implications for sustainable agriculture and associated natural resources such as water and future investment. Comparing impacts of the host country’s land, labour, tax and environment laws on practices and outcomes would inform government policy and enlighten not
only the topic of AL but also the debate about political intervention versus minimal political interference. Examining factors behind business failures would also provide important insights, while comparing practices and outcomes of resident and absentee Aboriginal landowners with or without access to capital, information and training would inform ways forward for disadvantaged landowners or those whose customary rights are vulnerable in the current neoliberal environment.

A comparative analysis of historical trends in AL in different regions since the nineteenth century, and comparing Old World and New World trends and implications, would further inform contemporary implications of AO types. For instance, I suspect many European FCs and NFCs have aristocratic feudal roots. Among them are landowners who benefit from the subsidies provided to landowners from the European Union (Cahill, 2007). Such investigations would address ‘who is creating history for whom at whose expense?’ (Peters, 2006, p. 92).

If nothing else, the Lachlan research highlights that types of landownership needs more focused, systematic attention, as does the interaction between the capitalist and sustainability discourses. This interaction could be studied via a comparative analysis of the socio-political, economic and environmental impacts of international investment in land for agricultural and conservation purposes (Quan, 2008).
References


Berney, L. (1997). Collecting retrospective data: accuracy of recall after 50 years judged against historical records. Social Science and Medicine, 45 (10), 1519–1525.


## Appendices

### Appendix A: Methodologies used in past studies

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<tr>
<th>Data sources</th>
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Appendix A continued: Methodologies used in past studies

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CONSENT FORM

Name of Research Project  
**Absentee ownership of rural land: types, trends and implications.**

Contact details of principal researcher (PhD candidate)  
Gina Lennox  
PO Box 366, Bermagui, NSW, 2546  
Ph: (02) 649 40079  
Email: ginalennox@gmail.com

The purpose of the research has been explained to me and I have read and understood the information sheet given to me.

*From the statements below, please cross out and initial whatever statement does not apply.*

I permit Gina Lennox to interview me as part of this project on the understanding that any information or personal details about me gathered in the course of this research are confidential and that neither my name, nor any other identifying information about me will be used or published.

I permit the interview to be recorded on an audio digital recorder.

I permit Gina Lennox to interview the FM / caretaker / individual who leases / rents / share farms / does contract work on my property. *(Please cross out which is irrelevant & initial)*

I am willing for Gina Lennox to be shown around the property to conduct field observations.

I permit Gina Lennox to take photographs of the property that will avoid depicting features that will identify the property and that if a photograph is used in her Doctoral thesis, a published article or a conference presentation the caption accompanying the photograph will not identify me or the property.
Appendix B continued: Letter of consent

I understand that I am free to withdraw my participation in the research at any time, and that if I do, I will not be subject to any penalty or discriminatory treatment.

I understand that Charles Sturt University’s Human Research Ethics Committee has approved this study and that if I have any complaints or concerns about this research I can contact:

Executive Officer, Human Research Ethics Committee,
Office of Academic Governance, Charles Sturt University
Panorama Avenue, Bathurst NSW 2795
Phone: 61 2 6338 4628    Fax: 61 2 6338 4194

Signed by: ___________________________   Date: ________________
Appendix C: Examples of field notes

Example One (Unrequited curiosity)

AO-REFM-14, 16 October, 2009: At the end of the interview I asked if he would be willing to approach any of the Australian representatives of foreign investors to ask if they would be willing to talk to me, and it was a categorical ‘no’ – he believed none of them would talk. For him, confidentiality was a big issue. I was left to wonder, if people are feeling okay about these transactions, why the secrecy? What is interesting is that most of these purchases by foreign investors fall under the radar of the Foreign Investment Review Board. [Name of local historian] says the secrecy is a reaction to resentment of ‘foreigners buying up the farm’, that people fear that big investors will monopolise resources, that there is a cultural ideal that everyone should have the opportunity to own land. ‘At least the mining companies are concerned about their PR, but the big anonymous investors don’t care. They are only interested in profit’. Does anyone know how much of Australia is owned by foreigners? ... I would love to know where the foreign money is coming from and how much negative, zero or negligible profit they are willing to tolerate.

Example Two (Preliminary analysis)

23 October, 2009: With two big time players interviewed, the Australian component of their enterprise is run by people who very much want to see a functioning rural Australia. I am very interested in presenting this human face. ... Foreign ownership doesn’t concern them. They see themselves as part of a global soup where money and schemes come from anywhere and join forces to make things happen. However, I have my reservations about the viability of their operations. ... I come away thinking that ... the priorities are drought, drought drought, then commodity prices, then, as some vague distant challenge, the emissions trading scheme. Apart from foreign ownership, absentee ownership is well down on the list of concerns.
Appendix D: AO/FM interview guide

Definitions: How would you define an AO? Do you see yourself as one? Do you see town-based farmers and local multiple property owners as AOs? How would you define sustainable agriculture? How many years do you consider ‘long-term’ in agriculture? What are the advantages and disadvantages of being an AO? What prior expertise did you have in agriculture? Where is your primary residence or office? How often do you visit the property/ies? How long is your average length of stay? Do you come alone or with family? What do you do when you visit? How much of your time does the running of the property/ies take?

Property characteristics: How many properties and hectares do you own/lease/share farm in and outside the Lachlan? For the Lachlan properties, what percentage is arable? How many hectares are devoted to each enterprise, remnant vegetation and tree belts? What is the average rainfall, and the rainfall in 2009 and 2010? What are the soils types and water sources? Before and since ownership, what is the water and grain storage capacity, infrastructure, number of un/inhabitable houses and number of on-property residents? How much was spent on infrastructure?

Agriculture: What land and water management practices are employed? Have these changed over time (soil tests, fertiliser use, variable costs/ha, water efficiency)? What is your annual fuel and water use/ha? Methods of weed and pest animal control? Productivity/ha (for each enterprise) in 2009–2010 and 2010–2011, target productivity/ha and responses to drought? What are your marketing arrangements? What are your sources of information and advice? Do you do any on-property research? What kind?

Biodiversity: Have you planted trees, or fenced rivers or remnant vegetation, or left land to recover? What has the work cost? Did you receive outside agency support? What fire precautions do you have? Are you or your FM a member of a local fire brigade?

Ownership/tenure: Do you own the land as an individual or what is the ownership structure? How many people are in the ownership structure? What are their backgrounds and responsibilities? When was the structure established? When was the property purchased? What do you know of the history of the property?

Tenure and management: Do you lease, share farm, employ a FM or FMC? What are the details of the arrangements, and the benefits and challenges? Are there differences in how you manage your own land to the land you lease or share farmed? Do you have a farm plan? How are farm plans, day-to-day decisions, monitoring and reporting procedures negotiated? What are the FM’s employment conditions? What are the advantages and disadvantages of working [autonomously/in a team]?
Appendix D continued: AO/FM interview guide

**Other social relations**: How many people do you employ on-property full-time, casual and contract? For casual/contract labour, what would be the total number of labour hours per year? Have you sent workers on any training course? Are any of your neighbours AOs? What relationship do you have with your neighbours and local community? Where do you purchase inputs and why? Have you ever experienced robbery or vandalism? How contactable are you in an emergency?

**Motivations**: What motivates you? Why are you an AO? On what basis was the property/ies selected? Has the property increased in value? What are your short and long-term plans for the property/ies? Do you intend to buy more property? Why? What is your investment horizon? Do you intend to live on property?

**City-based individuals**: Do city friends and family visit your property? What do they think of you purchasing a rural property? What are the benefits and challenges of owning this property?

**Trends/Contributing factors**: What trends do you see in absentee landownership? What factors are contributing to these trends?

**Background**: Year/Place of birth; ancestry; educational qualifications; marital/family status; primary occupation. How would you describe yourself? Where have you lived and worked and in what capacities? What are your personal long-term goals? What would stop you from fulfilling these? What values guide you? What motivates you?

**Attachment to property**: How important for you is owning rural land? Why? What does this property mean to you? What do you think and feel when you are here and when you leave or are away from the property?

**Financial details**: What percentage of the company’s asset base is the rural property in the Lachlan? Did you go into debt when purchasing the Lachlan property? Have you borrowed operating capital since? Are you still paying interest on a loan? Did you make a profit from the property in 2009–2010? Did you make a profit in 2010–2011? What is your taxable net income 2009–2010? What would your total asset base be in $ terms?

Is there anything else we have not covered that you would like to talk about?
Appendix E: Non-AO/FM informant interview guide

**Definitions:** How would you define an AO? Do you think town-based farmers and local multiple property owners are AOs? Why? How would you define sustainable agriculture? How many years do you consider ‘long-term’ in agriculture?

**Firsthand experience:** How long have you lived and worked in the district and in what capacity? What firsthand experience do you have of AOs? What types of AOs? Have AOs or particular types of AOs impacted your business and if so in what ways? (Depending on experience, more details are asked. See below.) Based on your firsthand experience, what are the main issues associated with AL?

**Trends:** What trends in AL have you observed in the Lachlan? What factors are contributing to these trends? What factors are having the most significant impact on agriculture? What motivates different AOs to become AOs?

**Implications:** What are the impacts of AL? What are the impacts of different AO types?

**Background:** Where have you lived and worked and in what capacities? Year of birth? Place of birth? Did you grow up on a farm? Ancestry? Educational qualifications? Marital/family status? Primary occupation? Taxable income?

Is there anything else you would like to talk about?

**Examples of more detailed questions regarding firsthand experience**

**Agribusiness:** What products and services do you provide?

**Contractor:** Are there any differences in working for ROs and AOs? Have AOs asked you to upgrade your machinery?

**Real Estate / Stock and Station Agents:** Who is selling and who is purchasing land in the Lachlan? Why? Does this affect land use and if so, in what way?

**Soil & Water Conservation:** Can you describe the native flora and fauna of this district? What land and water management practices are being conducted on AO properties? What motivates the owner to do this? How do these patterns compare with ROs?
Appendix F: Details of analysis for three 2009 landowner databases

Assessing the extent of absentee landownership at the regional level

For the Lachlan LHPA database, analysis was based on occupiers who could be landowners or farm operators. Holdings were linked to a trading name. An occupier could operate several holdings owned by one or more landowners under one trading name or operate under different trading names. A Lachlan LHPA staff member performed the following steps.

**Step 1:** The LHPA rating data was moved into an Excel spreadsheet and saved as (I) ‘Total hectares’. All holdings less than ten hectares were deleted.

**Step 2:** The occupier column was sorted alphabetically and duplicates deleted, resulting in a saved document (II) ‘Total number of occupiers’. There were 6,274 occupiers. In the deletion process the analyst noted and reported to me that 1,052 occupiers were resident on one property and absentee on others. These 1,052 occupiers were classified Res/AO.

**Step 3:** The analyst deleted all properties in (I) ‘Total hectares’ with the same property and mailing address, creating a spreadsheet (III) ‘AO hectares’.

**Step 4:** To find the total number of AOs the analyst deleted all duplicate occupiers from (III). Included in the list of AOs were 1,177 occupiers with a PO Box mailing address. The analyst personally knew 64 to be resident. These were deleted, leaving 1,113 occupiers with a PO Box mailing address in a list of 4,089 AOs (excluding 1,052 Res/AOs). The analyst was asked to isolate all occupiers/holdings associated with a PO Box mailing address and to identify those with a PO Box mailing address outside the Lachlan LHPA. These were non-local AOs. The remaining occupiers/holdings had unknown residency status.

**Step 5:** The analyst sorted (I) ‘Total hectares’ by postcode and created two documents: (IV) ‘Hectares – local owners’ and (V) ‘Hectares – owners outside Lachlan’. Included in the latter were 292 holdings related to a PO Box mailing address. Not received was the number of occupiers to which these 292 holdings related. However, this could be calculated based on information supplied that there were 1,023 occupiers with a PO Box mailing addresses inside the Lachlan LHPA, including 64 occupiers the analyst knew to be resident. These 1,023
occupiers were subtracted from all occupiers with PO Box mailing address (N=1,177) leaving 154 AOs with PO Box mailing addresses outside the LHPA.

**Step 6:** To calculate the number of occupiers with unknown residency status, I subtracted the 64 PO Box resident occupiers from the total number of occupiers with a PO Box mailing address inside the LHPA, i.e. 1,023 – 64 = 959.

**Step 7:** To exclude those with unknown residency status (i.e. PO Box addresses inside LHPA) from the total number of AOs, I subtracted these 959 from the total number of AOs that included PO Box mailing addresses, i.e. 4,089 – 959 = 3,130 AOs.

**Step 8:** To calculate the total number of resident occupiers, I subtracted the number of occupiers in the categories of AO, Res/AO and ‘unknown’ from the total number of occupiers i.e. 6,274 – 3,130 – 1,052 – 959 = 1,133.

**Step 9:** I then asked the analyst to divide all landowner categories and hectares owned into three ranges based on total area occupied: 10 – 40 hectares, 40+ –1200 hectares and 1200+ hectares. The analyst supplied the following data for each landownership range.

1. Number of AOs including all PO Box mailing addresses. These data included the 64 occupiers known to be resident.
2. Number of hectares linked to mailing addresses outside the LHPA, (i.e. non-local AOs).
3. Number of occupiers associated with PO Box mailing addresses and hectares occupied.
4. (A) The number of occupiers with PO Box mailing addresses inside the LHPA, (i.e. including the 64 occupiers known to be resident), and (B) hectares owned by them.

Not supplied was a breakdown of the number of ROs and Res/AOs and the area they occupied in each hectare range. Based on the data provided, I performed the following calculations.

**Step 10:** To ascertain the number of AOs in each hectare range, the number of AOs with PO box mailing addresses inside the LHPA was subtracted from the number of AOs including all PO Box mailing addresses for each hectare range.

**Step 11:** In each hectare range, I then calculated the proportion of AOs, the proportion of hectares owned by non-local AOs, the proportion of occupiers with
unknown residency status and the proportion of hectares owned by each of these landowner categories.

**Strengths and limitations of methodology**

These calculations provided a useful measure of the extent of AOs and AOL at the regional level in 2009. In addition, they enabled a comparison of absentee occupation at the regional level in 1849 with that of 2009. However, there are some important caveats. Over and above the general limitations in analysing the three databases, the limitations of this analysis were

- The Lachlan LHPA’s database did not cover the whole of the Lachlan River catchment.
- All calculations were based on occupiers, on the assumption that these gave an indication, even if an underestimation, of extent of AL.
- The analysis was conducted over seven months and direct communication with the analyst was not afforded until after the first results were emailed. Having deleted 64 PO Box mailing addresses that the analyst knew to be resident in the total figures, these were not deleted when doing analysis of landownership ranges. This led to a discrepancy of 1% for total number of AOs.
- Data for the area owned by residents and local AOs within the three hectare ranges was not able to be retrieved.
- Analysis of Pty Ltd companies could not be conducted due to the analyst’s other commitments.
- Most importantly, on the basis of the data received, I was unable to determine the area of AOL of Res/AOs who comprised 17% of the LHPA database sample. In addition, 15% of all occupiers of 10.5% of all land had unknown residency status. Consequently, the final statistic for AOL is an underestimation as it excludes AOL of up to 32% of all landowners.
Assessing the extent of absentee landowners in Bland Shire

Unlike the Lachlan LHPA database, the Bland database listed landowners and assessments. An assessment could refer to multiple properties or one property could comprise multiple assessments. It was therefore not possible to work out the total number of properties and the size of properties. An investigation of AOL and ROL was based on area owned.

The Bland Shire Council supplied me with an Excel spreadsheet containing all landowner names, mailing postcodes, hectares associated with each assessment, assessment postcodes, and in some cases, a property name associated with one or more assessments. I conducted the following steps.

**Step 1:** All assessments below 10 ha were deleted from the spreadsheet. The document was sorted alphabetically by landowners’ names and saved as (A) Bland total owners and hectares.

**Step 2:** Using (A), all postcodes that fell within the shire were deleted. The spreadsheet was saved as (B) Bland hectares - AOs outside shire.

**Step 3:** Using (A), all postcodes that fell outside the shire were deleted. The spreadsheet was saved as (C) Bland AO-Res hectares. Only having postcodes, I was unable to distinguish local AOs, ROs, and Res/AOs at this stage.

**Step 4:** On Field Trip 3, I showed five local informants a hard copy of (C), and asked them to identify the residency status of each landowner, and usually, on which assessment/s they resided based on property name. I also asked them to identify any AO that lived in a local town. Some landowners were identified as living outside the shire, despite the name being linked to a postcode inside the shire.

**Step 5:** A column for each category listed in Step 4 was created on the electronic version of (C) and ‘1’ or ‘0’ inserted to denote the landowner’s classification. Using these columns the document could be sorted in various ways, for example, to isolate the forty odd non-local AOs that could then be transferred to (B).

**Step 6:** About 50 local landowners with unknown residency status remained. To reduce the number I used the name and postcode to search an electronic phone directory. Finding the residential address I used the internet facility to map the address. The map showed whether the address was linked to a property or local
town. The landowner’s status was noted in document (C) leaving only 12 of 892 landowners with unknown residency status. Seven related to Pty Ltd companies.

**Step 7:** From spreadsheet (C) three documents were created: (D) *Bland local absentee hectares* including those located in a local town; (E) *Bland resident hectares*, including a subsection of those with unknown residency status, and (F) *Res/AO hectares*.

**Step 8:** To calculate the number of non-local AOs, local AOs and ROs I summed each assessment linked to each landowner in spreadsheets (B) *Bland hectares-AOs outside shire*, (D) *Bland local absentee hectares* and (E) *Bland resident hectares* resulting in each landowner having a total number of hectares. The three new spreadsheets were renamed ‘landowners’ rather than ‘hectares’.

**Step 9:** For (F) *Res/AO hectares* there was one column for resident hectares and another for AOL. If local knowledge was unable to identify which assessment/s was/were resident, the total hectares were divided equally between the AOL and ROL column.

**Step 10:** Using the *landowner* spreadsheets, I calculated the total number of owners, total hectares owned, and mean area owned. For Res/AO hectares, resident hectares were incorporated into the calculations for ROs. AO hectares of Res/AOs were distinguished from other AOL.

**Step 11:** Sorting the *landowner* spreadsheets based on ‘hectares owned’ enabled me to assess the proportion of landowners in each landownership range.

**Step 12:** The *local AO* spreadsheet was then resorted for local town-based landowners.

**Step 13:** The procedure was repeated for state-owned land.

**Step 14:** Resident, Res/AO, local AO and non-local AO Pty Ltd companies including partnerships of three or more unrelated individuals were identified from each *landowner* spreadsheet to conduct analysis for Pty Ltd companies and partnerships of three or more unrelated individuals.

**Step 15:** The proportion of landowners, proportion of land owned and mean area owned were calculated for each type of landowner in each landownership range.
Strengths and limitations of methodology

Most of Bland Shire falls within the Lachlan LHPA boundary. By investigating the extent of AOs and AOL in two contrasting shires I could explore variations in AL within the region in 2009 and compare extent at the regional level in 1849 with that of Bland Shire in 2009. Access to the database reduced the number of landowners with unknown residency status and afforded more certainty when calculating the number of Res/AOs and the area absentee-owned. It enabled me to investigate the extent of local town-based landowners and those who traded as a Pty Ltd company or partnership.

Assessing extent of absentee landownership in Cowra Shire

The Cowra Shire database provided information on landowners and holdings. A holding was the rating unit for a landowner and therefore the number of holdings equalled the number of landowners. The database was analysed in-house using Excel spreadsheet formulas. The analyst provided me a Cowra Holding Spreadsheet that included the following data.

1. Non-resident: the postal address was different to the property address.
   1A. Non-resident outside Cowra Shire: street postal address outside the shire.
   1B. Non-resident outside Cowra Shire: PO Box mailing address outside the shire.
   1C. Non-resident inside Cowra Shire: postal address and property address different but both within the shire.
2. Presumed RO: postal and property address the same.
3. Unknown residency status: PO Box mailing address within the shire
4. (1) to (3) for Pty Ltd companies.

On my request, another spreadsheet was provided: Cowra Multiple Property Owners. This identified the number of multiple property owners in each category.
Each spreadsheet included a breakdown into four ranges of land owned: less than 10 hectares, 10 – 40 hectares, 40+ – 1200 hectares and 1200+ hectares. For non-local AOs I summed 1A and 1B. I then worked out the proportions of landowners, area owned and mean hectares owned in each landowner category and landownership range, before performing the following steps.

**Step 1:** Forty-six landowners with unknown residency status were found to have multiple properties. These were categorised Res/AO, although they could be AO, leaving 136 with unknown residency status.

**Step 2:** I estimated the number of Res/AOs by adding the number of multiple property owners in the categories ‘resident’ (86) and ‘unknown residency status’ (46), i.e. 132 landowners or 8.5% of all landowners.

**Step 3:** To estimate the AOL of multiple property owners, I added the hectares owned by multiple property owners categorised as ‘resident’ or having ‘unknown residency status’ and divided by two. This assumed that these multiple property owners were resident on half the land.

**Step 4:** ROL was calculated by summing all RO hectares and half of all hectares owned by multiple property owners categorised RO, Res/AO and having unknown residency status.

**Strengths and limitations of methodology**

This analysis afforded a comparison of extent of AL in Cowra Shire and Bland Shire and a comparison of regional extent in 1849 and extent in Cowra Shire in 2009. The main limitation for assessing extent of AL in Cowra Shire was that I relied on an estimate of the number of hectares absentee-owned by Res/AOs and multiple property owners with unknown residency status.
### Appendix G: Extent for Pty Ltd companies in Bland and Cowra Shires

#### Table 11: Pty Ltd & partnerships (of 3+ individuals) in Bland Shire, 2009

<table>
<thead>
<tr>
<th>Land owned</th>
<th>Resident. Pty Ltd owners</th>
<th>Local AO Pty Ltd Co.</th>
<th>Non-local AO Pty Ltd Co.</th>
<th>Unknown residency status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - 40 ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>% owners</td>
<td>0</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0</td>
</tr>
<tr>
<td>Ha owned</td>
<td>0</td>
<td>29</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>% ha</td>
<td>0</td>
<td>0.003%</td>
<td>0.004%</td>
<td>0</td>
</tr>
<tr>
<td>Mean Ha</td>
<td>0</td>
<td>29</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>40+ - 1200 ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>10</td>
<td>10</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>% owners</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Ha owned</td>
<td>5,630</td>
<td>4,361</td>
<td>14,764</td>
<td>1,548</td>
</tr>
<tr>
<td>% ha</td>
<td>0.6%</td>
<td>0.5%</td>
<td>2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Mean Ha</td>
<td>563</td>
<td>436</td>
<td>642</td>
<td>310</td>
</tr>
<tr>
<td>1200 + ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>2</td>
<td>2</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>% owners</td>
<td>0.2%</td>
<td>0.2%</td>
<td>2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Ha owned</td>
<td>5,795</td>
<td>3,305</td>
<td>65,047</td>
<td>3,824</td>
</tr>
<tr>
<td>% ha</td>
<td>0.7%</td>
<td>0.4%</td>
<td>7.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Mean Ha</td>
<td>2,898</td>
<td>1,653</td>
<td>4,336</td>
<td>1,912</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner</td>
<td>12</td>
<td>13</td>
<td>39</td>
<td>7</td>
</tr>
<tr>
<td>%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Ha</td>
<td>11,427</td>
<td>7,695</td>
<td>79,849</td>
<td>5,372</td>
</tr>
<tr>
<td>% ha</td>
<td>1.3%</td>
<td>0.9%</td>
<td>9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Mean</td>
<td>952</td>
<td>592</td>
<td>2,047</td>
<td>767</td>
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</tbody>
</table>
Appendix G continued: Extent for Pty Ltd companies in Cowra Shire

Table 12: Pty Ltd companies in Cowra Shire, 2009

<table>
<thead>
<tr>
<th>Land owned</th>
<th>RO. Pty Ltd Co.</th>
<th>Res/AO Pty Ltd Co.</th>
<th>Local AO Pty Ltd Co.</th>
<th>Non-local AO Pty Ltd Co.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 40 ha</td>
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</tr>
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<td>No. owners</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>% owners</td>
<td>0</td>
<td>0</td>
<td>0.3%</td>
<td>1%</td>
</tr>
<tr>
<td>Total ha</td>
<td>0</td>
<td>0</td>
<td>145</td>
<td>343</td>
</tr>
<tr>
<td>% ha</td>
<td>0</td>
<td>0</td>
<td>0.06%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Mean ha</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>40+ - 1200 ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. owners</td>
<td>19</td>
<td>6</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>% owners</td>
<td>1.2%</td>
<td>0.4%</td>
<td>3.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Total ha</td>
<td>6,794</td>
<td>1,348</td>
<td>13,159</td>
<td>13,495</td>
</tr>
<tr>
<td>% ha</td>
<td>2.3%</td>
<td>0.6%</td>
<td>5.6%</td>
<td>6%</td>
</tr>
<tr>
<td>Mean ha</td>
<td>272</td>
<td>225</td>
<td>274</td>
<td>281</td>
</tr>
<tr>
<td>1200 + ha</td>
<td></td>
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</tr>
<tr>
<td>No. owners</td>
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<td>0</td>
</tr>
<tr>
<td>% owners</td>
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<td>0.06%</td>
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<td></td>
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<tr>
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<td>0</td>
</tr>
<tr>
<td>% ha</td>
<td>1.8%</td>
<td>0.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean ha</td>
<td>1,349</td>
<td>0</td>
<td>1,412</td>
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<tr>
<td>Totals</td>
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<td>Owners</td>
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<td>54</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>1.4%</td>
<td>0.4%</td>
<td>3.5%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Total Ha</td>
<td>10,962</td>
<td>1,348</td>
<td>14,716</td>
<td>13,838</td>
</tr>
<tr>
<td>% ha</td>
<td>4.6%</td>
<td>0.6%</td>
<td>6.2%</td>
<td>6%</td>
</tr>
<tr>
<td>Mean ha</td>
<td>392</td>
<td>225</td>
<td>273</td>
<td>216</td>
</tr>
</tbody>
</table>
Appendix H: Extent of absentee landowners on pastoral stations, 1830–2009

Table 16: Extent of absentee landowners on nine pastoral stations, 1830–2009

<table>
<thead>
<tr>
<th>Property</th>
<th>Billabong</th>
<th>Caragabal</th>
<th>Lake Cowal</th>
<th>Oakhurst</th>
<th>Booerroi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size in acreas</td>
<td>28,400</td>
<td>44,800</td>
<td>16,000 - 164,000</td>
<td>33,000</td>
<td>122,411</td>
</tr>
<tr>
<td>No. owners</td>
<td>19</td>
<td>25</td>
<td>74+</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>No. AOs f/t</td>
<td>12</td>
<td>18</td>
<td>27</td>
<td>11</td>
<td>10 or 11</td>
</tr>
<tr>
<td>+ AO to Res</td>
<td>+1</td>
<td>+1</td>
<td>+2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Res to AO</td>
<td></td>
<td>+1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Res - AO – Res</td>
<td>+1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% AO during ownership</td>
<td>63%</td>
<td>80%</td>
<td>38%</td>
<td>65%</td>
<td>91%</td>
</tr>
<tr>
<td>No. Res. only</td>
<td>7</td>
<td>5</td>
<td>46</td>
<td>7</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Coura/Jerula</th>
<th>Glen Logan</th>
<th>North Logan</th>
<th>Mulyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>1,920 – 19,200</td>
<td>9,840</td>
<td>2,814</td>
<td>3,200</td>
</tr>
<tr>
<td>No. owners</td>
<td>77+</td>
<td>39+</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>No. AOs f/t</td>
<td>51</td>
<td>23</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>+ AO to Res</td>
<td>+2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ Res to AO</td>
<td>+1</td>
<td>+3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+AO – Res - AO</td>
<td>+1</td>
<td>+1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res/AO</td>
<td>+1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% AO f/t</td>
<td>73%</td>
<td>69%</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>No. Residents</td>
<td>21*</td>
<td>12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total no. landowners identified</td>
<td>273</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total AOs throughout ownership</td>
<td>157</td>
<td>58%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total landowners who changed residency status</td>
<td>15</td>
<td>5% of all landowners</td>
<td>9.6% of all AOs</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: AO types on pastoral stations, 1830–2009

Note for Table 17 and Table 18:
**Bolded names**: landowners for 20+ years.

Table 17: AO Types on Bland stations and Booberoi, 1830s–2009

<table>
<thead>
<tr>
<th>AO types</th>
<th>Billabong</th>
<th>Caragabal</th>
<th>Lake Cowal</th>
<th>Oakhurst</th>
<th>Booberoi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual/family in unknown location</td>
<td></td>
<td></td>
<td>English S. Stewart RH Thompson 3 Wilsons</td>
<td>2 owners (names unknown)</td>
<td></td>
</tr>
<tr>
<td>Farmer in local town</td>
<td></td>
<td></td>
<td>Spackman</td>
<td></td>
<td>Peter Allen</td>
</tr>
<tr>
<td>Non-farmer in local town</td>
<td></td>
<td></td>
<td>TE Dean 1/3 Wilsons Young family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregated MPO in local town</td>
<td></td>
<td></td>
<td>Wyalong Rural Investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals based in Sydney</td>
<td>J. Marsden J. Trott</td>
<td>J. Gibson</td>
<td>1/3 Wilson J. Trott Hassett &amp; Backhaus</td>
<td></td>
<td>Isaac Shepherd</td>
</tr>
<tr>
<td>Interstate individuals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Alexander Haley Haley’s 2 sons?</td>
</tr>
<tr>
<td>FC outside region inside state</td>
<td>Leppington Pastoral Company Syd.</td>
<td>TA Field Ltd Hazeldean Pastoral Co.</td>
<td>HPR Coles</td>
<td>F.W. Hughes Sydney</td>
<td></td>
</tr>
<tr>
<td>Indigenous aggregated inside state</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wiradjuri Reg. Land Council NSWALC</td>
</tr>
</tbody>
</table>
Table 17 continued: AO Types on Bland stations and Booberoi, 1830s–2009

<table>
<thead>
<tr>
<th>AO types</th>
<th>Billabong</th>
<th>Caragabal</th>
<th>Lake Cowal</th>
<th>Oakhurst</th>
<th>Booberoi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate MPO Individual/FC</td>
<td>H. Ricketson</td>
<td></td>
<td></td>
<td></td>
<td>Alexander Wilson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>French Bros. McCaughey</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>John Elliot</td>
</tr>
<tr>
<td>Interstate benefactor</td>
<td>Sir William Angliss</td>
<td></td>
<td></td>
<td></td>
<td>G.H. Mitchell &amp; Sons</td>
</tr>
<tr>
<td>Foreign individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign – religious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>British Aggregated Pastoral Company</td>
<td></td>
<td>Scottish Australian Co.</td>
<td>Scottish Australian Farming Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>British Aggregated Financial institution</td>
<td>AMLF BP Australia</td>
<td>Bank of Australasia AMO</td>
<td>AMLF Bank of NSW Rural Bank NSW Commercial Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Aggreg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix I continued: AO types on pastoral stations, 1830s–2009

#### Table 18: AO types on Cowra District properties 1830s–2009

<table>
<thead>
<tr>
<th>Types AOs</th>
<th>Coura/Jemula</th>
<th>Glen Logan/ North Logan</th>
<th>North Logan</th>
<th>Mulyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pty Ltd company unknown location</td>
<td>Riveriview Viticulture</td>
<td>North Logan P/L Nias Pastoral Co.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPO in region</td>
<td>George Campbell Binnington Dunlop Hatch Oliver Riley</td>
<td>Brien Daley (James Sloan) (Ivie Sloan)</td>
<td></td>
<td>John Grant</td>
</tr>
<tr>
<td>Non farmer in Cowra</td>
<td>Squires &amp; Gray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual outside region (rural)</td>
<td></td>
<td>Arthur Ranken John Tindale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual outside region in regional town</td>
<td>H. Fulton Jnr E.M. Emery</td>
<td>Ivie Sloan 2 Sloan daughters 1 Sloan niece</td>
<td></td>
<td>John Fagan</td>
</tr>
<tr>
<td>FC outside region</td>
<td></td>
<td></td>
<td>Edgell &amp; Sons</td>
<td></td>
</tr>
<tr>
<td>British based individual/trust</td>
<td></td>
<td></td>
<td>Dr. W. Redfern Estate of Redfern</td>
<td></td>
</tr>
</tbody>
</table>


Appendix J: Contextual factors contributing to absentee landownership

Table 21: Contextual factors contributing to absentee landownership

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1800s: Large scale British, European and US individual and corporate investment for global export market</td>
<td>1945–46: Korean War</td>
<td>1973: Britain joins EEC; Deregulation of international financial system; Yom Kippur War; OPEC oil embargo; oil price rises</td>
</tr>
<tr>
<td></td>
<td>1853–56: Crimean War</td>
<td>1957: European Economic Community (EEC) established</td>
<td>1980s: In US, rise in foreign investment but since 1970s no significant increase</td>
</tr>
<tr>
<td><strong>International economic cycles and stock market crashes</strong></td>
<td>1841–46: Recession</td>
<td>1873–79: Recession</td>
<td>1960s: Low inflation</td>
</tr>
<tr>
<td></td>
<td>1865–1872: Recession</td>
<td>1882–85; 1887–88</td>
<td>1970s: High inflation e.g. 18% in 1974</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1890–97: Depression</td>
<td>1973–4: Stock market crash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1899–1900; 1902–04; 1907</td>
<td>1973–75: Recession</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1913–1914: Recession</td>
<td>1980–82: Recession</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1918–21: Depression</td>
<td>1987: Stock market crash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1929: Stock market crash</td>
<td>1990–92: Recession</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1927–1933/5: Depression</td>
<td>2002: Stock market crash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1937: Stock market crash</td>
<td>2008: Global Financial Crisis</td>
</tr>
<tr>
<td><strong>Regional logistics e.g. gold rushes;</strong></td>
<td>1830s–1860s: Lack of infrastructure</td>
<td>Gold rushes</td>
<td>2010/11: European debt crisis</td>
</tr>
<tr>
<td></td>
<td>Gold rushes</td>
<td>1873–1881: L. Cargelligo</td>
<td><strong>Gold mines</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>2002</strong>: Barrick Gold; Newcrest</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Trends in input costs                              | Cheap labour of convicts and Wiradjuri until paid labour required. Paid labour expensive. | 1880s: Increase due to weeds, pests, dams, fencing requirements etc.  
1930s: Cost price squeeze as a result of labour and introduction of tractors  
1950s: Low input costs  
1960s: Rising input costs | Costs rising, e.g.  
1970:  
Bagged urea $79.24/t;  
Off-rod diesel 4.39cents/l  
1994:  
Bagged urea $382.9/t;  
Off-rod diesel 38.44 c/l  
2009:  
Bagged urea cost $845.31/t;  
Off-road diesel 84.58 c/l |
| Internationally impacted wool prices received by Australian farmers | Rising from 1855                                                                 | 1877: Peaked  
1880s–1890s: Decline  
1914–18: High demand  
1920s: Decline  
1930s: Below costs  
1939–45: High demand  
1950–53: Peaking  
1968: High, then declining | 1970s: Declined  
1975–76: Below costs, but increasing to peak in 1988;  
1989: Dramatic decline  
1990–93: Below costs  
1995, 97–98: Good  
2002–03: Trebled, remaining high |
| Cattle prices                                       | High due to Licence to Depasture 1836                                             |                                                                                  | early 1970s: Boom then decline  
1975: ‘Bust’  
| Wheat prices                                        | Illegal to grow wheat for commercial purposes in the Lachlan until 1850s         | 1880s: Expansion of wheat industry  
1914–18: Britain took wheat  
1920s: Sudden decline  
1939–45: Britain took wheat  
1972–74: Declined  
1975–80: Good  
1987: Low  
1990s: Volatile: Low 91/93/97; High 92/96  
2005–2008: Dramatic rise,  
From June 2008: Decline  
2010: Rise |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>life insurance co, and govt. instit.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix K: An example of succession: the Gibson family

The Goulburn-based surgeon, Andrew Gibson, veteran of Waterloo, leased properties around Goulburn and on the Monaro plateau but in 1835 he sent agents over the Weddin Mountains in search of pasture. By 1837 Gibson annually leased 104,000 acres in the Lachlan, including 44,800 acres known as Bullan[d] Plains or The Bland. On his death in 1840, his widow, Alice Gibson, took over the leases, parcelling off 26,880 acres, which in 1842 was leased to John Rodd, resident of Bathurst. The neighbouring 44,800 acres remained leased to Alice Gibson and in the 1850s, the portions were re-amalgamated under the name Caragabal Station. In 1857, Alice Gibson’s sons, Frederick and Septimus Gibson, took over the lease, another son, Andrew, leasing adjoining Tregalana/Trigalana, all remaining absentee landowners.

In the 1870s, Frederick Gibson built a homestead on Caragabal and in 1881 a school for station workers and nearby selectors. But by 1885, Caragabal Station had been reduced to 14,000 acres, its leased land costing the Gibsons 102 pounds annually, another 8,785 acres annually licenced for 37 pounds. In 1904, after the Federation drought, Caragabal supported 27,000 sheep, 326 cattle and 49 horses. By this time the Bank of Australasia held the title deeds to Little Caragabal and in the 1920s Frederick Gibson split Caragabal, selling one section, as did Andrew Gibson of Tregalana, both portions purchased by the Maslin family, who renamed the properties Minoru and Warrakimbo. Frederick Gibson also bequeathed a section of Caragabal to Sydney Budge Senior, an emancipated convict, who, having been a station hand on Caragabal for 45 years, had acted as a dummy so the Gibsons could accumulate land through conditional purchase. The remaining portion went to Frederick Gibson’s son, Norman Gibson, who sold the last 18,000 acres and 11,000 sheep in 1935 to Caragabal Pastoral Company, managed by T.A. Field, an absentee grazier and owner of multiple stations.
Appendix L: An account of multiple factors contributing to absentee landownership, 1840s–1986

From 1840 ... the [name] family owned this property. ... [It was] part of a string of places. ... The idea was to walk the steers ... down to Bendigo to feed the miners ... [and grow] wool. ... [In the] 1890s ... depression ... this place, got into the receivers - ... Winchcombe Carson, who are now ... Landmark. ... They actually set up a stud to breed the wool ... [because] if you sold the farmer the ram, you actually got his wool clip. ... My great grandfather was heavily involved with [Winchcombe Carson] in that he would ... sell sheep to someone ... [saying] ‘I know the sheep are worth thirteen cents, but what say you pay me sixteen or twenty cents ... when the sheep get shorn’. ... So he was smart on several counts: one, he normally got paid 25% more than the sheep were worth; two, ... the farmer ... got vendor finance ... and ...three ... my great grandfather was guaranteed a payment. ... [In] 1913 ... Winchcombe Carson ... [sold] this property [to] my great grandfather. ... At that time he was probably about 53. ... He ... had two girls and they were being educated ... in Sydney. ... [He] had started in Grenfell, [before going] to Nyngan [on] ... leasehold country. ... He wanted to get ... freehold land ... [and] was sick of the droughts up in Nyngan. ... They were going to build a dam on Wyangala ... [and] he came here for the water ... and the rail ... [which took the] sheep ... down to Homebush in Sydney. ... He lived in Sydney and he had a series of farm managers – ... extremely good men that respected him. ... His word was his word. ... When he died in 1932 ... his two girls took over the business. ... They married city people. ... The 1920s was a very, very wealthy period for people who had land and sheep, ... [but] that’s when it started to go bad. They had plenty of money, [but] didn’t pay the right men, didn’t take a lot of interest [in it]. ... Then ... in 1935, the government put a proclamation on this farm of 70,000 acres to subdivide it into 160 acre dairy farms. It’s laughable. Government intervention. Anyway, my grandfather, my dad’s father, was a town planner ... in Sydney and he took them on, the Closer Settlement Board, ... on the grounds of the droughts, and the land area being completely unviable. ... But the proclamation meant that we couldn’t sell to anybody else except the government. ... [Because of this] there was not one cent put into [the place]. ... We had ravaging droughts in the 40s. ... It was a really tough economic period, the war was on, all the men went to war, you couldn’t get men, so ... land management went out the window. ... [But then] the wool boom came [in the 1950s] and it was still the same mentality. ... Floods washed away the bridges, the fences. The goats, the rabbits, the whole story. ... In 1957, finally, my grandfather conceded to [sell] 20,000 acres ... to the government, but they were ... viable ... 2,400 acre soldier settlement blocks. ... My [grandparent’s] two boys wanted to be farmers, ... so the two boys took on ... 30,000 acres - ... very run down, ... four paddocks, ... an old ... wool shed ... built ... in 1915. ... My father lived at Wellington ... 300 kilometres away. ...
Appendix L continued: An account of multiple factors contributing to absentee landownership, 1840s–1986

He had ... a farmer who ... came out here and took real ownership. ... He pulled it back big time. He fenced it, put [three] houses on it, fixed the wool shed, ... put in a 2,000 tonne grain storage, ... developed irrigation, ... sowed pastures and killed the rabbits, got rid of all the diseased sheep ... and basically cleaned the place up. ... [My father] said to me, ‘The next step for that farm, to get any more money out of it, is you must live there’. ... We moved here in 1986 (FM-AGG-35).
Appendix M: Models of factors contributing to AO type/s

Colour code for models of factors contributing to absentee landownership

**Black**: Contextual factor over which landowner has no control
**Green**: Contextual factor involving choice
**Red**: Landowner influenced political-economic factor
**Grey**: Linking mechanism (intermediary factor)
**Blue**: Trend in absentee landownership

Figure 48: Factors contributing to farmers living in a local town
Appendix M continued: Models of factors contributing to AO type/s

Figure 49: Factors contributing to ROs selling and different AO types purchasing rural land

Figure 50: Factors contributing to AOs investing in land for commercial agriculture
Appendix M continued: Models of factors contributing to AO type/s

Figure 51: Factors contributing to absentee lifestyle property ownership

Figure 52: Factors contributing to Aboriginal aggregated landownership

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Appendix N: Accounts of defined roles and communication protocols

I  FMC

Our first aim is to know our client. ... Some owners would rather run a fairly risk free operation, whereas others would like to take a more aggressive approach ... in ... intensity ... [or] how quickly you improve it. ... Some owners ... look at the bottom line. ... Other[s are] interested in ... doing Landcare work. ... So we spend a lot of time ... working out what the client is after ... [and] working up farm plans. ... Generally we do a five year contract. ... [Then] once or twice a year ... we will ... sit down with the owner and [work out] ... the working capital requirements, ... the type of enterprise ... [and] drought strategies. ... We do our sums very carefully ... [but] if [the client doesn’t] agree we will modify [the plan]. ... Typically we ... put a man on the property who would be a ... responsible station hand, ... and then we ... have a manager ... [for] a number of ... properties ... so owners get access to high quality management at a fairly low cost. ... We pay the bills, and we make all the decisions ... [although] there are some big decisions which ... have to be ratified by the owner, ... say, the use of derivatives for selling. ... Some owners direct us to buy locally and others say to buy as cheap as you can. The choice is theirs ... [but] because we can buy for multiple properties we can save 20 to 30 % on livestock health products ... and for cropping inputs, we can save between 10 to 15 %, maybe more. ... We pay [bills] promptly ... [by] minimis[ing] the number communications. ... Once a month they have a budget and every 3 to 6 months ... they have full reports. ... We get paid a flat retainer which is based on the carrying capacity in livestock or the area cropped, ... [which] covers our costs, ... and then we take ... 10 to 20 ... percent ... of the profit (FMC-11).

II  FMC’s area FMIs

The on-farm manager and [I] do ... a comprehensive farm plan ... down to the amount of chemical we will use in a paddock. I show this to [FMC-11] ... and the final plan goes to the [AO for approval] (FM-FMC-T10). ... [I] source the contractors ... [and inputs. Marketing] would be 90% my decision. ... [The FMC] gives you as much latitude as you require, but ... you’re also highly accountable. ... [The resident manager takes] weekly to monthly directions ... but ... is not micromanaged (FM-FMC-23).
Appendix N continued: Accounts of defined roles and communication protocols

III City investor whose property was managed by the FMC

We discuss every line [of the farm plan.] ... [Small disagreements might be] we tend to ... keep our silos full. ... FMC-11’s view is you turn it into cash and earn interest ... [but] I ... like ... having some backup. ... [Also, the FMC] runs pretty intense operations. ... Early August to early September ... we have something like 4,500 grown sheep plus the lambs ... on 1000 acres. ... We are quietly adding ... pasture. ... [With the present overseer and his wife] ... I did the interviewing. They ... report to FM-FMC-23 ... [but] we [ask] them [for feedback] (AO-CI-T12).
Appendix O: Farm manager profiles

Notes for Appendix O:
FFF: ‘from farming family’
FFF&F ‘from farming family’ and a landowning farmer
Yellow: Interviewed
**Bold:** FM s that had initiated sustainable practices

Table 23: Farm manager profiles

<table>
<thead>
<tr>
<th>Farm operator</th>
<th>#th FO for AO; Years worked for AO, 2012</th>
<th>Recruitment</th>
<th>Qualifications</th>
<th>Local/Non-local; Non/Resident</th>
<th>Cash income (+ other benefits)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mining / Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-AGG-13</td>
<td># 2 7 years</td>
<td>Son of former landowner</td>
<td>FFF&amp;F; Farm Planning, Conservation, Land Man. courses</td>
<td>Local Non-resident (own farm)</td>
<td>$80,000 no package</td>
</tr>
<tr>
<td>FM-AGG-28</td>
<td>#2 15 years</td>
<td>Advertising</td>
<td>FFF; worked as FM since 1965; 3 year Diploma in Ag.</td>
<td>Non-local Resident</td>
<td>$126,000 + 18% bonus</td>
</tr>
<tr>
<td><strong>Commercial agriculture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-AGG-12</td>
<td># 1 16 years</td>
<td>Previously employed by AO</td>
<td>FFF &amp; F; B. Bus; Masters in Business Logistics</td>
<td>Non-local Resident</td>
<td>$80,000</td>
</tr>
<tr>
<td><strong>Aggregated: investment company</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-AGG-35</td>
<td># 1 5 years</td>
<td>Previous landowner Headhunted</td>
<td>FFF &amp; ex-F; Civil Engineer; p/t FM &amp; ag. related courses</td>
<td>Local Resident</td>
<td>Area FM: $100,000++; FM: $80-90,000 Overseer: $45-60,000</td>
</tr>
<tr>
<td>FM-AGG-212</td>
<td># 1 4 years</td>
<td>Previous landowner</td>
<td>FFF &amp; ex-F; TAFE wool classing; chemicals; computers</td>
<td>Local Resident</td>
<td>$70,000</td>
</tr>
<tr>
<td><strong>Non-local, vertically integrated FC</strong></td>
<td></td>
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</tr>
<tr>
<td>FM-FC-26</td>
<td># 1 6 years 1998-2004 (prior FC) 2006-2012</td>
<td>Employed by former owner; interviewed</td>
<td>FFF; Prior FM experience; B. Applied Science Agronomy</td>
<td>Non-local; Resident; Livestock: resident</td>
<td>$70,000</td>
</tr>
<tr>
<td>FM-FC-16</td>
<td>3 in 3 years Assistant FM: 17 years</td>
<td>Previously employed by AO</td>
<td>Worked on farms since school</td>
<td>Non-local; Resident</td>
<td>$61,000</td>
</tr>
<tr>
<td>Farm operator</td>
<td>#th FO for AO; Years worked for AO, 2012</td>
<td>Recruitment</td>
<td>Qualifications</td>
<td>Local/Non-local; Non/Resident</td>
<td>Cash income (+ other benefits)</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>Non-local NFC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-FMC-T10 (area FM)</td>
<td>#1 5 years</td>
<td>FMC</td>
<td>FFF; prior FM experience; FM degree Ag college</td>
<td>Non-local Resident</td>
<td>$80,000 + 2% net profit (av: $20,000)</td>
</tr>
<tr>
<td>FM for AO-NFC-T10</td>
<td>#1 5 years</td>
<td>FMC</td>
<td>FFF;</td>
<td>Resident X 2</td>
<td>$45 - $55,000</td>
</tr>
<tr>
<td>FM-S-37</td>
<td>FM #4 8 years - first as stockman</td>
<td>Advertising</td>
<td>Worked on farms; prior FM exp.</td>
<td>Non-local Resident</td>
<td>FM: $50,000 + bonus of $10-$30,000</td>
</tr>
<tr>
<td>Two overseers for AO-S-37</td>
<td># at least 3 Crop - 5 yrs Stock - 4 yrs</td>
<td>Advertising</td>
<td>Worked on farms</td>
<td>Non-local; Resident X 2</td>
<td>$35,000 + bonus of $4,000+</td>
</tr>
<tr>
<td>FM-FMCA-22</td>
<td>#2 10 years</td>
<td>See indigenous AO</td>
<td></td>
<td></td>
<td>See indigenous</td>
</tr>
<tr>
<td><strong>Local town-based FC with agriculture related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-FC-25</td>
<td>#2 5 years</td>
<td>Word of mouth; interview</td>
<td>FFF &amp; F; School certificate TAFE course in chemicals</td>
<td>Local; Non-resident; (work vehicle supplied)</td>
<td>$35,000 plus 5% net profit for wool &amp; meat; pro rata on crop</td>
</tr>
<tr>
<td><strong>Local town-based NFC with agriculture related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-NFC-24</td>
<td># 1 7 years</td>
<td>Advertising</td>
<td>F; Worked on farms; 2 yr Diploma in FM</td>
<td>Non-local Resident</td>
<td>$60,000 + bonus</td>
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<tr>
<td><strong>Farm-based FC</strong></td>
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<td></td>
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<tr>
<td>2 overseers for AO-FC-29</td>
<td># 1 Multiple generations</td>
<td>Long family association</td>
<td>Unrelated qualifications</td>
<td>Local Resident X 2</td>
<td>$35,000 (2)</td>
</tr>
<tr>
<td><strong>Non-local city-based individual</strong></td>
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<td></td>
<td></td>
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<tr>
<td>FMC-11</td>
<td>Employed two area FMs and on-property FMs for 2 AOs</td>
<td>Word of mouth &amp; advertising</td>
<td>FFF &amp; F; Vet Science, Masters in Animal prod.</td>
<td>Non-local Non-resident (own farm)</td>
<td>$130,000 as FMC director</td>
</tr>
<tr>
<td>FM-FMC-23 (Area manager)</td>
<td># 2 9 years</td>
<td>FMC</td>
<td>FFF &amp; F; B. Applied Science in FM</td>
<td>Non-local Non-resident (own farm)</td>
<td>$130,000</td>
</tr>
<tr>
<td>Overseer for AO-CI-T12</td>
<td># 3 4 years</td>
<td>FMC</td>
<td></td>
<td>Resident</td>
<td>$45 - $55,000 plus bonus</td>
</tr>
<tr>
<td>Lessee AL-15</td>
<td># 2 16 years</td>
<td>Word of mouth</td>
<td>FFF&amp;F; Diploma in farm management</td>
<td>Local Non-resident (own farm)</td>
<td>N/A</td>
</tr>
<tr>
<td>Lessee for AO-CL-39</td>
<td># 1 7 years</td>
<td>Friend</td>
<td>FFF&amp;F</td>
<td>Local Resident</td>
<td>N/A</td>
</tr>
<tr>
<td>Farm operator</td>
<td>#th FO for AO; Years worked for AO, 2012</td>
<td>Recruitment</td>
<td>Qualifications</td>
<td>Local/ Non-local; Non/Resident</td>
<td>Cash income (+ other benefits)</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Aggregated: indigenous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM-FMCA-22</td>
<td># 3 or 4 10 years</td>
<td>FMC; FMC contacted thru accountancy / law firm</td>
<td>FFF Part of Diploma in frontline management</td>
<td>Non-local Non-resident</td>
<td>$60,000 + share in profit = $109,000</td>
</tr>
<tr>
<td>Lessee AO-A-T4</td>
<td>#1 10+ years</td>
<td>Word of mouth</td>
<td>FFF&amp;F</td>
<td>Local Resident</td>
<td>N/A</td>
</tr>
<tr>
<td>Lessee AO-A-22</td>
<td>#2 4 years</td>
<td>Word of mouth</td>
<td>FFF&amp;F</td>
<td>Local Non-resident (own farm)</td>
<td>N/A</td>
</tr>
<tr>
<td>Past FMs associated with properties included in the Lachlan research</td>
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<td></td>
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<td></td>
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<tr>
<td>FM-A-34</td>
<td>#2 15 months</td>
<td>Word of mouth (indigenous)</td>
<td>FFF&amp; work experience</td>
<td>Local resident</td>
<td>1991: $25,000</td>
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<tr>
<td>Other past FMs</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>KI-REFM-14</td>
<td>Three corporates</td>
<td>Diploma in FM</td>
<td>Non-local Resident</td>
<td>1972: $3,000</td>
<td></td>
</tr>
<tr>
<td>AO/FM-115</td>
<td>Bank 3-4 years</td>
<td>FFF&amp;F</td>
<td>Local; Non-resident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KI-SS-23</td>
<td>FC non-local 2 years</td>
<td>FFF &amp; F</td>
<td>Local Non-resident</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix P: Managing biodiversity: practices and outcomes

**Code for Appendix P & Q:**
- Yellow: Cropping only
- Orange: Cropping and livestock
- White: Livestock only
- Green: Other

**Table 24: Managing biodiversity: practices and outcomes**

<table>
<thead>
<tr>
<th>Code</th>
<th>% ha (h) Natural Habitat</th>
<th>% ha (h) native grasses</th>
<th>% ha (h) trees planted</th>
<th>Fencing for conservation</th>
<th>External agent input &amp; AO’s $ contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mining / Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-AGG-13 Ag.: 7,165 h Mine: 4,171 h</td>
<td>6% 432 h Not grazed</td>
<td>8% 598 h</td>
<td>3% 214h Local seed</td>
<td>Cell grazing; Nat. Hab.</td>
<td>Ext: Yes AO: $152,000</td>
</tr>
<tr>
<td>AO-AGG-28 Rural: 2,700 h Leased: 4,100 Mine: 1,200 h</td>
<td>15% 405/2700 Not grazed</td>
<td>0%</td>
<td>3% 81h Aim: 15% Local seed</td>
<td>Natural Habitat</td>
<td>Ext: No AO: $425,000</td>
</tr>
<tr>
<td><strong>Commercial agriculture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-AGG-00 13,324 h owned/leased</td>
<td>Less than 5% 666 h</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>Ext: No AO: $0</td>
</tr>
<tr>
<td>AO-AGG-T9 7,200 h</td>
<td>15% 1,080 h</td>
<td>40% 2880 h</td>
<td>1% Local seed</td>
<td>Natural Habitat</td>
<td>Ext: Yes AO: $75,000</td>
</tr>
<tr>
<td>AO-AGG-12 20,000 h</td>
<td>Less than 5% 1,000 h</td>
<td>0%</td>
<td>Local trees prior owner</td>
<td>0</td>
<td>(Ext: prior owner) AO: $0</td>
</tr>
<tr>
<td><strong>Non-local, vertically integrated FC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-FC-27 32,000 h</td>
<td>10% 3,200 h</td>
<td>10%</td>
<td>Prior AO 2% i.e. 640 h</td>
<td>0</td>
<td>(Ext: Yes for prior owner) AO: $0</td>
</tr>
<tr>
<td>AO-FC-11 10,117 h</td>
<td>15% 1,518 h</td>
<td>35% 3,541 h</td>
<td>0</td>
<td>Fencing creek</td>
<td>Ext: Yes AO: Labour</td>
</tr>
<tr>
<td><strong>Non-local NFC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-NFC-T10 7,449 h</td>
<td>3% 235 h</td>
<td>9%</td>
<td>0</td>
<td>1 k river, troughs</td>
<td>Ext: Yes AO: $10,000</td>
</tr>
<tr>
<td>AO-S-37 5,261 h</td>
<td>.01% 55 h</td>
<td>.01% 50 h</td>
<td>.004% 20 h</td>
<td>nat. hab.; tree belt</td>
<td>Ext: Yes AO: $30,000</td>
</tr>
<tr>
<td>AO-FMC-21 5,208 h</td>
<td>30% 1,562 h</td>
<td>50%</td>
<td>15%, 780 h 30-40% failure</td>
<td>0</td>
<td>Ext: Yes AO: $0</td>
</tr>
<tr>
<td><strong>Local town-based FC with agriculture related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-FC-25 3,238 h</td>
<td>0%</td>
<td>0%</td>
<td>8% 260 h local seed; linked</td>
<td>tree belt</td>
<td>Ext: Yes AO: $40,000</td>
</tr>
<tr>
<td>Code</td>
<td>% ha (h) Natural Habitat</td>
<td>% ha (h) native grasses</td>
<td>% ha (h) trees planted</td>
<td>Fencing for conservation</td>
<td>External agent input &amp; AO’s $ contribution</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
<td>--------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>AO-NFC-211</td>
<td>26%</td>
<td>47%</td>
<td>1000</td>
<td>Creek</td>
<td>Ext: Yes AO: $90,000</td>
</tr>
<tr>
<td>1200 h</td>
<td>312 h Not grazed</td>
<td>564 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm-based FC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-FC-24</td>
<td>0.05%</td>
<td>10%</td>
<td>0.05%</td>
<td>0</td>
<td>Ext: No AO: $0</td>
</tr>
<tr>
<td>289 h (AO</td>
<td>15 h</td>
<td></td>
<td>15 ha prior AO</td>
<td></td>
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</tr>
<tr>
<td>AO-FC-29</td>
<td>35%</td>
<td>50%</td>
<td>1%</td>
<td>Nat. hab.; rivers</td>
<td>Ext: Yes AO: Over yrs</td>
</tr>
<tr>
<td>2,365 h(R/AO)</td>
<td>828 h</td>
<td>1,283 h</td>
<td>24 h own seed</td>
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<tr>
<td>AO-FC-21</td>
<td>0%</td>
<td>100%</td>
<td>One tree line</td>
<td>0</td>
<td>Ext: Yes AO: Labour</td>
</tr>
<tr>
<td>1,417 h(R/AO)</td>
<td>1,417 h past/crop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-local city-based individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-CI-T12</td>
<td>20%</td>
<td>14%</td>
<td>Tree clumps</td>
<td>nat. hab. &amp; trees</td>
<td>Ext: Yes AO: $20,000</td>
</tr>
<tr>
<td>260 h</td>
<td>52 h</td>
<td>36 h</td>
<td>Local seed</td>
<td></td>
<td></td>
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<tr>
<td>AO-INL-15</td>
<td>12%</td>
<td>70%</td>
<td>0</td>
<td>0</td>
<td>Ext: No AO: $0</td>
</tr>
<tr>
<td>1300 h</td>
<td>156 h</td>
<td>910 h</td>
<td></td>
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</tr>
<tr>
<td>AO-CL-39</td>
<td>10%</td>
<td>20%</td>
<td>80 h</td>
<td>0</td>
<td>Ext: No AO: $0</td>
</tr>
<tr>
<td>400 h</td>
<td>40 h</td>
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</tr>
<tr>
<td>Local town-based farmer</td>
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<tr>
<td>AO-TLSHF-26</td>
<td>4%</td>
<td>4%</td>
<td>0%</td>
<td>0</td>
<td>Ext: No AO: $0</td>
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<tr>
<td>486 h</td>
<td>20 h</td>
<td>18 h</td>
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<tr>
<td>AO-TSHF-23</td>
<td>10%</td>
<td>19%</td>
<td>Tree belts, creeks</td>
<td>Ext: Yes AO: $19,000 + lab</td>
<td></td>
</tr>
<tr>
<td>210 h</td>
<td>21 h</td>
<td>40 h</td>
<td>Local seed</td>
<td></td>
<td></td>
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<tr>
<td>AO-T-115</td>
<td>5%</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>Ext: No AO: $0</td>
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<tr>
<td>243 h</td>
<td>12 h</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregated: indigenous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-A-15/14</td>
<td>85%</td>
<td>2%</td>
<td>0%</td>
<td>Ext: Yes AO: $0</td>
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<tr>
<td>9,890 ha</td>
<td>8,407 h</td>
<td>200 ha</td>
<td></td>
<td></td>
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<tr>
<td>AO-A-T4/T15</td>
<td>46%</td>
<td>0%</td>
<td>0%</td>
<td>Ext: No AO: $0</td>
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<tr>
<td>1,070 h</td>
<td>492 h</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>AO-A-22/T4</td>
<td>70%</td>
<td>0%</td>
<td>7% 8 h shrubs - prior AO</td>
<td>0</td>
<td>Ext: No AO: $0</td>
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<tr>
<td>689 h</td>
<td>482 h</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifestyle</td>
<td></td>
<td></td>
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<tr>
<td>AO-LP-T14</td>
<td>30%</td>
<td>70%</td>
<td>20%</td>
<td>Nat Hab., river</td>
<td>Ext: Yes AO: $30,000</td>
</tr>
<tr>
<td>53 h</td>
<td>17 h</td>
<td>37 h</td>
<td>11 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-LP-210</td>
<td>20%</td>
<td>70%</td>
<td>.01%</td>
<td>0</td>
<td>Ext: No AO: $500</td>
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<tr>
<td>55 h</td>
<td>11 h</td>
<td>38 h</td>
<td>0.05 h</td>
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</table>
Appendix Q: Production and social outcomes

Table 25: Production and social outcomes

<table>
<thead>
<tr>
<th>Code</th>
<th>Worst ground cover Oct’ 09</th>
<th>Production 2009 Wheat/ha</th>
<th>Lambing %</th>
<th>Production 2010 Wheat/ha</th>
<th>Lambing %</th>
<th>Change in # people residing on property</th>
<th>Non-family f/t labour</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mining / Infrastructure</strong></td>
<td></td>
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</tr>
<tr>
<td>AO- AGG-13 Agric: 7,165</td>
<td>40%</td>
<td>Leased out</td>
<td>-4</td>
<td></td>
<td></td>
<td></td>
<td>2 f/t C: 0.032/ha</td>
</tr>
<tr>
<td>AO-AGG-28 Self: 2,700</td>
<td>50%</td>
<td>2.4</td>
<td>50%</td>
<td>-18</td>
<td></td>
<td></td>
<td>1 f/t C: 0.24/ha</td>
</tr>
<tr>
<td><strong>Commercial agriculture</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>AO-AGG-00 13,324 h</td>
<td>50%</td>
<td>1.5</td>
<td>3.5</td>
<td>+1</td>
<td></td>
<td></td>
<td>2 f/t C: 0.18/ha</td>
</tr>
<tr>
<td><strong>Aggregated: investment company</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-AGG-T9 7,200 ha</td>
<td>40%</td>
<td>1.4</td>
<td>116%</td>
<td>+2</td>
<td></td>
<td></td>
<td>2.5 f/t C: 0.07/ha</td>
</tr>
<tr>
<td>AO-AGG-12 20,000 h</td>
<td>100%</td>
<td>1.5</td>
<td>N/A</td>
<td>-8</td>
<td></td>
<td></td>
<td>8 f/t C: 0.1/ha</td>
</tr>
<tr>
<td><strong>Non-local, vertically integrated FC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-FC-27 32,000 h</td>
<td>15%</td>
<td>Cattle</td>
<td>2</td>
<td>0 (15 residents)</td>
<td></td>
<td></td>
<td>6 f/t C: 0.09/ha</td>
</tr>
<tr>
<td>AO-FC-11 10,117 h</td>
<td>20%</td>
<td>Cattle</td>
<td>? + 3 new houses</td>
<td>5 f/t</td>
<td>C: 0.01/ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-local NFC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-NFC-T10 7,449 h</td>
<td>80%</td>
<td>2</td>
<td>85-135%</td>
<td>+3</td>
<td></td>
<td></td>
<td>3 f/t C: 0.05/ha</td>
</tr>
<tr>
<td>AO-S-37 5,261 h</td>
<td>15%</td>
<td>0.4</td>
<td>120-160%</td>
<td>4.5</td>
<td></td>
<td></td>
<td>5 f/t C: 0.1/ha</td>
</tr>
<tr>
<td>AO-FMC-21 5,208 h</td>
<td>15%</td>
<td>Cattle</td>
<td>Cattle</td>
<td>0</td>
<td></td>
<td></td>
<td>0 C: 0.01/ha</td>
</tr>
<tr>
<td><strong>Local town-based FC with agriculture related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-FC-25 3,238 h</td>
<td>20%</td>
<td>0.24</td>
<td>72%</td>
<td>5</td>
<td>100%</td>
<td>+2</td>
<td>2 f/t C: 0.01/ha</td>
</tr>
<tr>
<td><strong>Local town-based NFC with agriculture related business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-NFC-211 1200 h</td>
<td>40%</td>
<td>Cattle</td>
<td>Cattle</td>
<td>+4</td>
<td></td>
<td></td>
<td>1 f/t C: 0.22/ha</td>
</tr>
<tr>
<td><strong>Farm-based FC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-FC-24 289 h (AO )</td>
<td>60%</td>
<td>1.5</td>
<td>130%</td>
<td>6.5</td>
<td>130%</td>
<td>0</td>
<td>17 f/t on RO’ 0 for AO</td>
</tr>
<tr>
<td>AO-FC-29 2,365 h</td>
<td>80%</td>
<td>Cattle</td>
<td>Cattle</td>
<td>+8</td>
<td></td>
<td></td>
<td>3 f/t C: 0.005/ha</td>
</tr>
<tr>
<td>AO-FC-21 1,417 h</td>
<td>70%</td>
<td>0.4</td>
<td>112%</td>
<td>0.4</td>
<td>124%</td>
<td>-1 or more</td>
<td>0 C: ?</td>
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<tr>
<td><strong>Non-local city-based individual</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AO-Cl-T12 260 ha</td>
<td>50%</td>
<td>2.5</td>
<td>98%</td>
<td>4</td>
<td>98%</td>
<td>-1</td>
<td>2 f/t C: 0.24/ha</td>
</tr>
<tr>
<td>Code</td>
<td>Worst ground cover Oct'09</td>
<td>Production 2009 Wheat/ha</td>
<td>Production 2010 Wheat/ha</td>
<td>Change in # people residing on property</td>
<td>Non-family f/t labour</td>
<td>Contract days/ha/yr</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
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<td>----------------------------------------</td>
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<tr>
<td>AO-INL-15 1300 h</td>
<td>70%</td>
<td>95%</td>
<td>114%</td>
<td>+1</td>
<td>Lessee employs C: .025/ha</td>
<td></td>
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<tr>
<td>AO-CL-39 400 h</td>
<td>30%</td>
<td></td>
<td></td>
<td>+7</td>
<td>1 lessee p/t</td>
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<td></td>
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<tr>
<td><strong>Local town-based farmer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>AO-TLSH-26 486 h</td>
<td>60%</td>
<td>0.5</td>
<td>3</td>
<td>-1</td>
<td>0</td>
<td>C: 0.06/ha</td>
<td></td>
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<tr>
<td>AO-TSHF-23 210 h</td>
<td>80%</td>
<td></td>
<td>130%</td>
<td>150%</td>
<td>0</td>
<td>C: 0.03/ha</td>
<td></td>
</tr>
<tr>
<td>AO-T-115 243 h</td>
<td>70%</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>C: 0.01/ha</td>
<td></td>
</tr>
<tr>
<td><strong>Aggregated: indigenous</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-A-15/14 9,890 h</td>
<td>70%</td>
<td>0.5</td>
<td>Nil sown</td>
<td>+6</td>
<td>2 f/t</td>
<td>C:?</td>
<td></td>
</tr>
<tr>
<td>AO-A-T4/T15 1,070 ha</td>
<td>N/A</td>
<td>Leased out</td>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>2 lessee p/t</td>
<td></td>
</tr>
<tr>
<td>AO-A-22/T4 689 ha</td>
<td>40%</td>
<td>Leased out</td>
<td></td>
<td>0</td>
<td>0</td>
<td>1 lessee p/t</td>
<td></td>
</tr>
<tr>
<td><strong>Hobby farmer</strong></td>
<td>N/A</td>
<td>Nil sown</td>
<td>4</td>
<td>-3</td>
<td>0</td>
<td>C: 0.01/ha</td>
<td></td>
</tr>
<tr>
<td>AO-HF-32 117 ha</td>
<td>100%</td>
<td>0.35</td>
<td>3.8</td>
<td>0</td>
<td>0 C: 0.09/ha + house</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lifestyle</strong></td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>+ 8</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-LP-T14 53 ha</td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>+ 8</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-LP-210 55 ha</td>
<td>85%</td>
<td>0</td>
<td>0</td>
<td>+ 4</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix R: AO sustainability profiles

Code: E: Economic viability  
NRM: Natural Resource Management  
S: Social relations on and off property

Table 26: AO sustainability profiles

<table>
<thead>
<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggregated: public multinational</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-AGG-13</td>
<td>FM: 7,165 ha</td>
<td></td>
</tr>
<tr>
<td>Mine: 4,171 ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total holdings: 11,336 ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased: 2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: No debt</td>
<td>Time: Longevity depends on overseas head office</td>
<td></td>
</tr>
<tr>
<td>E: Scale</td>
<td>E: Properties not selected for agriculture</td>
<td></td>
</tr>
<tr>
<td>NRM: Lease specifies practices (F)</td>
<td>E: Agriculture not a priority</td>
<td></td>
</tr>
<tr>
<td>NRM: Mixed enterprises (F)</td>
<td>E: Little spent on farm infrastructure</td>
<td></td>
</tr>
<tr>
<td>NRM: Cell grazing (F)</td>
<td>S: Less on-property residents</td>
<td></td>
</tr>
<tr>
<td>NRM: Carbon sequestration</td>
<td>E/NRM/S: Company priorities for rural properties change regularly</td>
<td></td>
</tr>
<tr>
<td>NRM: Non-standard fertiliser (F)</td>
<td>E/NRM/S: Long time to make decision about project</td>
<td></td>
</tr>
<tr>
<td>NRM: 6% (432 ha) managed natural habitat (F)</td>
<td>E/NRM/S: Compliance with remedial work after mine closure not assured</td>
<td></td>
</tr>
<tr>
<td>NRM: Tree planting (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRM: Fire fighting equipment compatible with rural fire brigade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S: Puts FM through training courses (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Substantial off farm capital from non-agricultural sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Detailed farm plan (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Employed local landowner FM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Foundation multiple funding sources (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Research with multiple partners with public outcome (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Works with local landowners, and has numerous community projects including education/training (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Break even 2009-2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO-AGG-28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM: 2,700 ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leased out: 4,100 ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mine: 1,200 ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total holdings: 8,000 ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: No debt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: 50% of land leased out - set income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: Biofuel production (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: Latest machinery (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: Top wheat production in 2009 despite drier area/drought (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/S: Detailed farm plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRM: Additional non standard fertiliser (trialling three organics) (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRM: Reduced risks in drought (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRM: 405 ha managed natural habitat (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRM: Ongoing tree planting from local seed (FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRM: Overseas head office has NRM priorities including endangered species</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S: Well paid FM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time: Longevity depends on overseas head office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: Properties not selected for agriculture and agriculture not a priority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: Little spent on farm infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S: Less on-property residents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S: Belongs to no agriculture organisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Overseas head office has mining standards that can interfere with land management procedure/timeliness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/NRM/S: Loss 2009-2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>Positive practices &amp; outcomes</td>
<td>Negative practices &amp; outcomes</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>S: Strict O, H &amp; S</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: Substantial farm capital from non-agricultural sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: FM with high autonomy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: FM well paid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: Support, monitoring and reporting protocol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: Research with public outcome</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: Second highest wheat production/ha 2009-2010 (2.4 t/ha)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM/S: Profit 2010-2011</td>
<td></td>
</tr>
</tbody>
</table>

**Commercial agriculture**

**Aggregated: public multinational**

<table>
<thead>
<tr>
<th>AO-AGG-00</th>
<th>FM: 13,424 ha</th>
<th>Purchased: 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>E: No debt</td>
<td>E: Scale</td>
<td>Time: Longevity depends on overseas head office</td>
</tr>
<tr>
<td>E: Tested soils before purchase</td>
<td>E: Geographic spread outside Lachlan</td>
<td>E: Administrative costs</td>
</tr>
<tr>
<td>E: Detailed farm plan</td>
<td>E: Latest machinery (FM)</td>
<td>E: Five to ten year time frame</td>
</tr>
<tr>
<td>E: Own shipping</td>
<td>E: Own international marketing</td>
<td>E/NRM: Needs to purchase &amp; cart water</td>
</tr>
<tr>
<td>E/S: Lessors employed as contractors</td>
<td>E/NRM: Extensive due diligence before purchase</td>
<td>NRM: High number of chemical sprays</td>
</tr>
<tr>
<td>E/NRM: Knowledgeable FM</td>
<td>E/NRM: Biological fertilisers</td>
<td>NRM: Less than 5% (666 ha) unmanaged natural habitat</td>
</tr>
<tr>
<td>E/NRM: Biological control of weeds</td>
<td>E/S: Belongs to several ag./conserv orgs.</td>
<td>NRM: FM prevented from conservation and tree planting work because of drought, lack of time and AO’s other priorities</td>
</tr>
<tr>
<td>NRM: Reduced risks in drought (FM)</td>
<td>S: Increase in on-property residents</td>
<td>S: Lacks links with local community</td>
</tr>
<tr>
<td>S: f/t waged labour other than FM</td>
<td>E/NRM/S: Retained landowners as contractors</td>
<td>E/NRM/S: Overseas head office intrusive in decisions</td>
</tr>
<tr>
<td>E/NRM/S: Substantial off farm capital from non-agricultural sources</td>
<td>E/NRM/S: Large loss 2009-2010</td>
<td>E/NRM/S: FM lacks autonomy</td>
</tr>
</tbody>
</table>

**Aggregated: investment company**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time: Ability to replace investors</td>
<td>Time frame in excess of 20 years</td>
<td>E: Cost of compliance (investors)</td>
</tr>
<tr>
<td>E: No debt</td>
<td>E: Scale</td>
<td>E: Administrative costs</td>
</tr>
<tr>
<td>E: Geographic spread outside Lachlan</td>
<td>E: Considered climate change predictions / seasonal risk</td>
<td>E:</td>
</tr>
<tr>
<td>AO</td>
<td>Positive practices &amp; outcomes</td>
<td>Negative practices &amp; outcomes</td>
</tr>
<tr>
<td>----</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>AO-AGG-12</td>
<td>Time: Ability to replace investors</td>
<td>Time: Ten year time frame</td>
</tr>
<tr>
<td>FMs: 20,000 ha</td>
<td>E: No debt</td>
<td>E: Property 90% of asset base</td>
</tr>
<tr>
<td>Purchased: 2008/2009</td>
<td>E: Scale</td>
<td>E: All property within Lachlan catchment</td>
</tr>
<tr>
<td></td>
<td>E: Tested soils before purchase</td>
<td>E: Cost of compliance (investors)</td>
</tr>
<tr>
<td></td>
<td>E: Detailed farm plan</td>
<td>E: Administrative costs</td>
</tr>
<tr>
<td></td>
<td>E/S: Monitoring and reporting protocol</td>
<td>NRM: High number of chemical sprays</td>
</tr>
<tr>
<td></td>
<td>E: Bio fuel production</td>
<td>NRM: Less than 5% (1000 ha) unmanaged natural habitat</td>
</tr>
<tr>
<td></td>
<td>E: Latest machinery</td>
<td>NRM: Natural habitat not managed</td>
</tr>
<tr>
<td></td>
<td>E: Own transport</td>
<td>NRM: No tree planting</td>
</tr>
<tr>
<td></td>
<td>E: Closed loop marketing – premium price</td>
<td>S: Less on-property residents</td>
</tr>
<tr>
<td></td>
<td>E: Top quality FM and assistant FM with local knowledge</td>
<td>E/NRM/S: Large loss 2009-2011</td>
</tr>
<tr>
<td></td>
<td>E/S: Puts FM/workers thru training</td>
<td>E/NRM/S: Large loss 2009-2011</td>
</tr>
<tr>
<td></td>
<td>E/S: Belongs to several ag./conserv orgs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E/NRM: Extensive due diligence before purchase</td>
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</tr>
<tr>
<td></td>
<td>E/NRM: Additional non-standard</td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>Positive practices &amp; outcomes</td>
<td>Negative practices &amp; outcomes</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AO</td>
<td>fertilisers</td>
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<td></td>
<td><strong>NRM:</strong> Reduced risks in drought</td>
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<td></td>
<td><strong>NRM:</strong> Fire fighting equipment compatible with rural fire brigade</td>
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<td></td>
<td><strong>S:</strong> F/T waged labour other than FM</td>
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<td></td>
<td><strong>S:</strong> Strict O H &amp; S</td>
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<tr>
<td></td>
<td><strong>E/NRM/S:</strong> Substantial off farm capital from non-agricultural sources</td>
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<td></td>
<td><strong>E/NRM/S:</strong> Head office in catchment</td>
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<td></td>
<td><strong>E/NRM/S:</strong> Support, monitoring and reporting protocol</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM/S:</strong> Former landowner FM</td>
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<td></td>
<td><strong>E/NRM/S:</strong> Research with public outcome</td>
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<tr>
<td><strong>Non-local, vertically integrated FC</strong></td>
<td></td>
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</tr>
<tr>
<td>AO-FC-27</td>
<td>E: Scale</td>
<td>E: Large debt</td>
</tr>
<tr>
<td>FMs: 32,000 ha</td>
<td>E: Geographic spread outside Lachlan</td>
<td>E: No agronomist</td>
</tr>
<tr>
<td>Purchased: 2005</td>
<td>E: In drought did not have to bring in feed</td>
<td>E: No yearly budget or farm plan</td>
</tr>
<tr>
<td></td>
<td>E: Own processing – vertical integration of meat and wool</td>
<td>E: No reporting protocol</td>
</tr>
<tr>
<td></td>
<td>E: Own transport</td>
<td><strong>NRM:</strong> 10% (3,200 ha) unmanaged natural habitat i.e. second largest area of 28 AOs.</td>
</tr>
<tr>
<td></td>
<td>E: Own international marketing of wheat, meat &amp; wool into 100+ countries</td>
<td><strong>NRM:</strong> 10% minimum ground cover in drought</td>
</tr>
<tr>
<td></td>
<td><strong>E/S:</strong> Belongs to several agricultural orgs.</td>
<td><strong>NRM:</strong> AO not interested in fencing rivers</td>
</tr>
<tr>
<td></td>
<td><strong>E/S:</strong> AO has good people skills</td>
<td><strong>E/NRM/S:</strong> Conflict of interest between crop and livestock managers</td>
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<tr>
<td></td>
<td><strong>E/NRM:</strong> Mixed enterprises</td>
<td><strong>E/NRM/S:</strong> Loss 2009-2011</td>
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<tr>
<td></td>
<td><strong>E/NRM:</strong> Regeneration through Lucerne/spelling land</td>
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<tr>
<td></td>
<td><strong>E/NRM:</strong> Lamb feedlot (AO inspired)</td>
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<tr>
<td></td>
<td><strong>NRM:</strong> Reduced crop risks in drought (FM)</td>
<td></td>
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<tr>
<td></td>
<td><strong>S:</strong> Maintained on-property residents</td>
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<td></td>
<td><strong>S:</strong> F/T waged labour other than FM</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM/S:</strong> Substantial off farm capital from related businesses</td>
<td></td>
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<tr>
<td>AO-FC-11</td>
<td><strong>Time frame in excess of 20 years</strong></td>
<td>E: Reduced stock in drought</td>
</tr>
<tr>
<td>FMs: 10,117 ha</td>
<td>E: No debt</td>
<td><strong>NRM:</strong> 15% (1,518 ha) unmanaged natural habitat.</td>
</tr>
<tr>
<td>Purchased: 1980</td>
<td>E: Geographic spread outside Lachlan</td>
<td><strong>NRM:</strong> 10% minimum ground cover in drought</td>
</tr>
<tr>
<td></td>
<td>E: Own transport, including back loading of fertiliser etc for Lachlan property</td>
<td><strong>E/S:</strong> FM lacks autonomy</td>
</tr>
<tr>
<td></td>
<td>E: Property supplies another industry</td>
<td><strong>E/S:</strong> FM and other labour issues</td>
</tr>
<tr>
<td></td>
<td><strong>E/NRM:</strong> Mixed enterprises</td>
<td><strong>E/S:</strong> No reporting protocol</td>
</tr>
<tr>
<td></td>
<td><strong>NRM:</strong> Additional non-standard fertiliser (chicken manure) produced by FC</td>
<td><strong>NRM:</strong> No tree planting</td>
</tr>
<tr>
<td></td>
<td><strong>S:</strong> F/T waged labour other than FM</td>
<td><strong>E/NRM/S:</strong> Lowest wheat production/ha in 2009-2010 (0.06 t/ha)</td>
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<td></td>
<td><strong>E/S:</strong> Belongs to several ag./conserv orgs.</td>
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<tr>
<td></td>
<td><strong>E/NRM/S:</strong> Substantial off farm capital from ag and non ag sources</td>
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<tr>
<td></td>
<td><strong>E/NRM/S:</strong> Overall profit 2009-2011 but loss for Lachlan property</td>
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483
<table>
<thead>
<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-local NFC</strong></td>
<td></td>
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</tbody>
</table>
| AO-NFC-T10 | **Time** frame in excess of 20 years  
**E:** No debt  
**E:** Scale  
**E:** Geographic spread outside Lachlan  
**E:** Set income from 1/4 properties leased  
**E:** In drought did not have to bring in feed  
**E:** Latest machinery (FMC)  
**E/S:** Detailed farm plan (FMC)  
**E/S:** Monitoring & reporting protocol (FMC)  
**E/S:** Puts FM/workers thru training (FMC)  
**E/NRM:** Mixed enterprises (FMC)  
**E/NRM:** Direct drill native pastures (FMC)  
**E/NRM:** Fertilise native/ improved native pasture (FMC)  
**NRM:** Sowed to Lucerne in response to chemical resistance (FMC)  
**NRM:** managed natural habitat (FMC)  
**NRM:** Fenced river erosion/habitat (FMC)  
**NRM:** 80% minimum ground cover in drought  
**S:** Increase in on-property residents  
**S:** F/T waged labour other than FM  
**S:** Strict O H & S  
**E/NRM/S:** Substantial off farm capital from ag and non ag sources  
**E/NRM/S:** Top quality FMs  
**E/NRM/S:** Well paid FM spread over multiple AOs (FMC)  
**E/NRM/S:** Support, monitoring and reporting protocol  
**E/NRM/S:** On-farm labour consulted  
**E/NRM/S:** Well networked (FMC)  
**E/NRM/S:** Research with public outcome (FMC)  
**E/NRM/S:** Third highest wheat production/ha 2009-2010 (2 t/ha)  
**E/NRM/S:** Profit 2010-2011 | **E:** FMC costs  
**E:** Superannuation board administrative costs  
**NRM:** 4% (235 ha) natural habitat  
**S:** AO lacks links with local community  
**E/NRM/S:** Loss 2009-2010 |
| AO-S-37 | **E:** Scale  
**E:** Farm plan  
**E:** Own good machinery  
**E:** Good livestock overseer – high lambing rates (FM)  
**E:** Advanced marketing methods  
**E/S:** Puts FM/workers through training  
**E/S:** Belongs to several ag./conserv orgs.  
**E/NRM:** Off farm capital  
**E/NRM:** Mixed enterprises  
**E/NRM:** Lamb feedlot (AO inspired) | **NRM:** 15% minimum ground cover in drought  
**NRM:** Only 0.1% (55 ha) natural habitat  
**E/S:** Conflict of interest crop/livestock but mechanisms to resolve issues  
**S:** Communication between FM and AO replicated three times  
**E/NRM/S:** Loss 2009-2010 |

AO-NFC-T10  
FMC: 5,668 ha  
Leased out: 1,781 ha  
Total holdings: 7,449 ha  
Purchased: 2007/2010

AO-S-37  
FMs: 7,284 ha  
Purchased: 1994  
Wish to sell
<table>
<thead>
<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO-FMC-21</td>
<td><strong>NRM</strong>: Drought feedlot (separate)</td>
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<tr>
<td></td>
<td><strong>NRM</strong>: Planted tree belt</td>
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<tr>
<td></td>
<td><strong>NRM</strong>: Fenced river for erosion</td>
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<tr>
<td></td>
<td><strong>NRM</strong>: Fenced natural habitat</td>
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<td></td>
<td><strong>S</strong>: Same number of resident families</td>
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<td></td>
<td><strong>S</strong>: F/T waged labour other than FM</td>
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<tr>
<td></td>
<td><strong>S</strong>: Well connected to neighbours</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Substantial off farm capital from ag and non ag sources</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Quarterly consultations with AO and FM, other labour consulted</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: On-farm labour consulted</td>
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<td></td>
<td><strong>E/NRM/S</strong>: Third highest wheat production/ha 2010-2011 (4.5 t/ha)</td>
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<td><strong>E/NRM/S</strong>: Tied highest lambing rate 2009-2010 (130%)</td>
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<td></td>
<td><strong>E/NRM/S</strong>: Tied second highest lambing rate 2010-2011 (130%)</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Profit 2010-2011</td>
<td></td>
</tr>
<tr>
<td>AO-FMC-21</td>
<td><strong>E</strong>: Scale</td>
<td><strong>E/S</strong>: Distance from property impacted maintenance of infrastructure, stock loss and other outcomes</td>
</tr>
<tr>
<td></td>
<td><strong>E</strong>: Farm plan</td>
<td><strong>E/NRM</strong>: 30% (1,562 ha) unmanaged natural habitat.</td>
</tr>
<tr>
<td></td>
<td><strong>E</strong>: Geographic spread outside Lachlan</td>
<td><strong>E/NRM</strong>: 15% (780 ha) planted to mallee in drought, low survival rate, but area locked up for 113 years.</td>
</tr>
<tr>
<td></td>
<td><strong>E/NRM</strong>: Off farm capital</td>
<td><strong>NRM</strong>: Low survival rate of mallee plantation</td>
</tr>
<tr>
<td></td>
<td><strong>E/NRM</strong>: Mixed enterprises</td>
<td><strong>S</strong>: No resident on property</td>
</tr>
<tr>
<td></td>
<td><strong>NRM</strong>: Organic fertiliser</td>
<td><strong>S</strong>: Lacks links with local community</td>
</tr>
<tr>
<td></td>
<td><strong>NRM</strong>: Carbon sequestration</td>
<td><strong>S</strong>: Significant vandalism, theft, stock loss</td>
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<tr>
<td></td>
<td><strong>S</strong>: Belongs to several ag./conserv orgs.</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Well paid FM spread over multiple AOs</td>
<td><strong>E/NRM/S</strong>: Loss 2009-2011</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Substantial off farm capital from ag and non ag sources</td>
<td></td>
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<tr>
<td>AO-FC-25</td>
<td><strong>E</strong>: Bartering to reduce some costs</td>
<td></td>
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<tr>
<td></td>
<td><strong>E</strong>: Own good machinery, well maintained</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM</strong>: Mixed enterprises</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>E/NRM</strong>: Drought feedlot (FM)</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM</strong>: Agisted sheep in drought &amp; managed crop risks (FM)</td>
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<tr>
<td></td>
<td><strong>E/NRM</strong>: Constructed contour banks etc</td>
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<td></td>
<td><strong>E/S</strong>: Undergoes training days</td>
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<tr>
<td></td>
<td><strong>NRM</strong>: Local native ree belt linked to external natural habitat areas</td>
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<tr>
<td></td>
<td><strong>S</strong>: Increase in on-property residents</td>
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<td></td>
<td><strong>S</strong>: F/T waged labour other than FM</td>
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<tr>
<td></td>
<td><strong>S</strong>: Well connected to area</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Off farm capital</td>
<td></td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Quick decisions, FM support</td>
<td></td>
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<td></td>
<td><strong>E/NRM/S</strong>: Belongs to ag./conserv orgs.</td>
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<td></td>
<td><strong>E/NRM/S</strong>: Second highest wheat production/ha 2010-2011 (5 t/ha)</td>
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<td></td>
<td><strong>E/NRM/S</strong>: Profit 2010-2011</td>
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<tr>
<td>AO</td>
<td>Positive practices &amp; outcomes</td>
<td>Negative practices &amp; outcomes</td>
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<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>AO-NFC-211</td>
<td>E: Cattle and sheep</td>
<td>E: High infrastructure expenditure</td>
</tr>
<tr>
<td>FM: 1,200 ha</td>
<td>E: Use of NFC’s agricultural products</td>
<td>E/NRM/S: Loss 2009-2010</td>
</tr>
<tr>
<td>Purchased:</td>
<td>E/NRM: Non standard fertiliser/weed control reducing reliance/cost</td>
<td></td>
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<tr>
<td>2004</td>
<td>E/NRM: Lamb feedlot (AO inspired)</td>
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<tr>
<td></td>
<td>E/NRM: Solar pump for dam/throughs</td>
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<tr>
<td></td>
<td>E/S: AO undergoes training courses</td>
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<tr>
<td></td>
<td>E/S: Belongs to several ag. organisations</td>
<td></td>
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<tr>
<td></td>
<td>E/NRM: Addressed erosion issues and increased water retention</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NRM: Fenced river for erosion control</td>
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<tr>
<td></td>
<td>NRM: Tree planting</td>
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<tr>
<td></td>
<td>NRM: 26% (312 ha) ungrazed natural habitat</td>
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<td></td>
<td>S: Increase in on-property residents</td>
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<td></td>
<td>S: Strict O H &amp; S</td>
<td></td>
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<tr>
<td></td>
<td>E/NRM/S: Off farm capital from ag related business</td>
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<td></td>
<td>E/NRM/S: Detailed farm plan</td>
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<tr>
<td></td>
<td>E/NRM/S: Monitoring and reporting protocol</td>
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<td></td>
<td>E/NRM/S: Future plans for research with public outcome</td>
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<td></td>
<td>E/NRM/S: Profit 2010-2011</td>
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<tr>
<th>Farm-based FC</th>
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<tbody>
<tr>
<td>AO-FC-24</td>
<td>E: Experienced team</td>
<td>NRM: 0.05% (15 ha) natural habitat</td>
</tr>
<tr>
<td>Self op. + non-fam labour; AO: 289 ha</td>
<td>E: Own good machinery</td>
<td>E/NRM: Pivot, pump, fence problems as no caretaker/FM on AO property</td>
</tr>
<tr>
<td>RO land: about 1,000 ha</td>
<td>E: New profitable enterprise in response to drought</td>
<td>S: No resident on AO property which runs livestock</td>
</tr>
<tr>
<td>Purchased AOL: 2004</td>
<td>E/S: Detailed farm plan</td>
<td></td>
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<tr>
<td>Wish to sell AO land</td>
<td>E/NRM: Additional trace elements &amp; other non-standard inputs</td>
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<tr>
<td></td>
<td>E/NRM: Mixed enterprises - base farm expansion</td>
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<tr>
<td></td>
<td>E/NRM: Sowed to Canola in response to chemical resistance</td>
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<td></td>
<td>NRM: Pasture cropping</td>
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<td></td>
<td>S: Well connected to area</td>
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<tr>
<td></td>
<td>E/NRM/S: Wide ag./conserv networks</td>
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<tr>
<td></td>
<td>E/NRM/S: Up-to-date knowledge</td>
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<td>E/NRM/S: Capital from non-ag. sources</td>
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<td>E/NRM/S: Highest wheat production/ha 2010-2011 (6 t/ha)</td>
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<td>E/NRM/S: Tied highest lambing rate 2009-2010 (130%)</td>
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<td></td>
<td>E/NRM/S: Tied second highest lambing rate 2010-2011 (130%)</td>
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<td></td>
<td>E/NRM/S: Profit 2009-2011</td>
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</table>

<p>| AO-FC-29      | Time frame in excess of 20 years                                                           | S: Low pay of overseers, can’t afford more                                       |
| P/t self op. + FMs: AO: 1,701 ha | E: Scale through ownership, lease and agistment                                           |                                                                                   |
| RO: 664 ha    | E: Detailed monitoring/measurements of cattle so know which to breed, sell etc.             |                                                                                   |
| Total holdings: 2,365 ha |                                                                                       |                                                                                   |</p>
<table>
<thead>
<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
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<tbody>
<tr>
<td>Leases other land</td>
<td>E: Involved in a company research program to enhance productivity</td>
<td></td>
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<tr>
<td>Inherited two properties purchased in 1928 and 1943 and purchased ROL in 1973.</td>
<td>E: Markets cattle by description – premium price</td>
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<tr>
<td></td>
<td>E/S: Detailed farm plan</td>
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<tr>
<td></td>
<td>E/NRM: Native and improved pastures</td>
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<tr>
<td></td>
<td>E/NRM: Fertilise native and improved pastures</td>
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<tr>
<td></td>
<td>E/NRM: 80% minimum ground cover in drought</td>
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<td></td>
<td>NRM: Cut out standard fertilisers</td>
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<td></td>
<td>NRM: High percentage managed natural habitat</td>
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<tr>
<td></td>
<td>NRM: On-going planting of trees from property seed</td>
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<tr>
<td></td>
<td>NRM: 35% (828 ha) managed natural habitat</td>
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<td></td>
<td>S: Well connected to area</td>
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<td></td>
<td>S: Maintained on-property residents</td>
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<td></td>
<td>S: Employs more than one overseer/FM</td>
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<td>E/NRM/S: Overseers employed 2-4 generations ie locals with security of employment</td>
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<tr>
<td></td>
<td>E/NRM/S: Updates knowledge/training</td>
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<td></td>
<td>E/NRM/S: Belongs/works for to ag./conserv/research organisations.</td>
<td></td>
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<tr>
<td></td>
<td>E/NRM/S: Profit 2009-2011</td>
<td></td>
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<tr>
<td>AO-FC-21</td>
<td>Time frame in excess of 20 years</td>
<td></td>
</tr>
<tr>
<td>P/T self op.;</td>
<td>E: Cut out sheep mulesing and drenching</td>
<td></td>
</tr>
<tr>
<td>RO: 688 ha</td>
<td>E: Bartering to reduce some costs</td>
<td></td>
</tr>
<tr>
<td>AO: 729 ha</td>
<td>E/S: Experienced team with defined roles</td>
<td></td>
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<tr>
<td>Total holdings: 1,417 ha</td>
<td>E/NRM: Mixed enterprises</td>
<td></td>
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<tr>
<td>Purchased AOL: 1996</td>
<td>E/NRM: Undergoes regular training days</td>
<td></td>
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<tr>
<td>Share farm other land</td>
<td>E/NRM: Cell grazing</td>
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<tr>
<td></td>
<td>E/NRM: Direct drill into native pastures For pasture cropping</td>
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<tr>
<td></td>
<td>E/NRM: Fertilise native pasture / wheat</td>
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<td></td>
<td>NRM: 70% minimum ground cover in drought</td>
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<td></td>
<td>E/NRM: Planted salt bush for sheep</td>
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<td></td>
<td>E/NRM: AO property allows for stock movement and spread of seasonal risk</td>
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<td></td>
<td>NRM: Spot spraying / fire gun to reduce chemical use</td>
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<td></td>
<td>S: Good neighbour relations</td>
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<td></td>
<td>E/NRM/S: Belongs to ag./conserv orgs.</td>
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<td></td>
<td>E/NRM/S: Off farm contracting business</td>
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<td></td>
<td>E/NRM/S: Profit 2009-2011</td>
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<tr>
<td></td>
<td>E: Water/stock issues as no caretaker/FM on AO property</td>
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<tr>
<td></td>
<td>NRM: No natural habitat</td>
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<td></td>
<td>S: No resident on-property, which runs livestock</td>
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<td></td>
<td>E/NRM/S: Loss 2009-2011</td>
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<tr>
<td>Non-local city-based individual</td>
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<td>AO-CI-T12</td>
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<tr>
<td>AO: 260 ha</td>
<td>E: Latest machinery (FMC)</td>
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<tr>
<td>Lease in: 240 ha</td>
<td>E/S: Detailed farm plan (FMC)</td>
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<tr>
<td>Purchased AOL: 2000</td>
<td>E/S: Monitoring and reporting protocol</td>
<td></td>
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<tr>
<td></td>
<td>E/S: Puts FO through training (FMC)</td>
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<td></td>
<td>E/NRM: Mixed enterprises (FMC)</td>
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<tr>
<td></td>
<td>E: Overspent on house</td>
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<tr>
<td></td>
<td>E: Input costs/ha high</td>
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<tr>
<td></td>
<td>E: High full time employment per hectare</td>
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<td></td>
<td>S: Purchase domestic supplies in</td>
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</tbody>
</table>

487
<table>
<thead>
<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
</tr>
</thead>
</table>
| AO-INL-15   | **E/NRM**: Direct drill native pastures (FMC)  
**E/NRM**: Fertilise native and improved native pasture (FMC)  
**NRM**: Drought precautions – sacrifice areas (FMC)  
**NRM**: Local native tree planting (FMC)  
**NRM**: Fenced river for erosion/ habitat (FMC)  
**NRM**: 20% of 260 ha managed natural habitat (FMC)  
**S**: Good community relationships  
**S**: F/t waged labour other than FM  
**S**: Strict O H & S  
**S**: Increase in on-property residents  
**E/NRM/S**: Off farm capital from non-ag,  
**E/NRM/S**: On farm labour consulted  
**E/NRM/S**: Support, monitoring and reporting protocol (FMC)  
**E/NRM/S**: Top quality FM  
**E/NRM/S**: Well paid FM spread over a number of AOs (FMC)  
**E/NRM/S**: Good ag. networks (FMC)  
**E/NRM/S**: Highest wheat production/ha for 2009-2010 (2.5 t/ha)  
**E/NRM/S**: Profit 2010-2011  | **E/NRM**: Lessee lacks capital to improve pastures or fertilise native pastures (FO)  
**E/NRM/S**: Loss 2009-2010 |
| AO-CL-39    | **Time** frame in excess of 20 years  
**E**: No debt  
**E**: Cattle and sheep (FO)  
**E**: Various marketing methods (FO)  
**E**: Regular training days (FO)  
**E/S**: Long term lessee  
**NRM**: 70% minimum ground cover in drought  
**S**: Good neighbour relations (FO)  
**S**: Increase in on-property residents  
**E/NRM/S**: Off farm capital  
**E/NRM/S**: Long term beneficial & flexible AO-FO relationship  
**E/NRM/S**: Profit 2009-2011 for (FO)  
**E/NRM/S**: Profit 2009-2011 (lease)  | **E**: Lease for work rather than cash  
**E**: Lessee reduced stock in drought  
**NRM**: 30% minimum ground cover in drought  
**E/NRM**: No capital to spend on infrastructure and fertilisers  
**S**: Self, family and friends rarely visit  
**S**: Purchase domestic supplies in Sydney  
**E/NRM/S**: Property 100% of asset base  
**E/NRM/S**: Loss 2009-2011 |
| AO-TLSHF-26 | **Time** frame in excess of 20 years  
**E**: Subdivided for profit  
**E**: Lessee very knowledgable re breeding livestock, and works on and off property (FO)  
**E/S**: Long term relationship with lessee  
**E/S**: Agricultural networks (FO) and AO  
**S**: Increase in on-property residents  | **E**: Lease for work rather than cash  
**E**: Lessee reduced stock in drought  
**NRM**: 30% minimum ground cover in drought  
**E/NRM**: No capital to spend on infrastructure and fertilisers  
**S**: Self, family and friends rarely visit  
**S**: Purchase domestic supplies in Sydney  
**E/NRM/S**: Property 100% of asset base  
**E/NRM/S**: Loss 2009-2011 |

**Local town-based farmer**

| AO-TLSHF-26 | **Time** frame in excess of 20 years  
**E**: Lease/share crop providing scale  
**E**: Detailed farm plan  | **NRM**: Lacks capital for earthworks, shed, fences  
**NRM**: 4% (20 ha) natural habitat  |
<table>
<thead>
<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO-TSHF-23</td>
<td>Time frame in excess of 20 years</td>
<td>E: No farm plan</td>
</tr>
<tr>
<td>Self op.: 210 ha</td>
<td>E: Beneficial share farm arrangement</td>
<td>E/NRM/S: No ag./conserv. Organisation</td>
</tr>
<tr>
<td>Purchased: 1990</td>
<td>E: Cut out mulesing and drenching sheep</td>
<td>S: No on-property resident</td>
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<tr>
<td>from father</td>
<td>E/NRM: Experienced autonomous FO</td>
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<tr>
<td></td>
<td>E/NRM: Undergoes training days</td>
<td>E/NRM/S: Loss 2009-2010</td>
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<tr>
<td></td>
<td>E/NRM: Direct drill into native pastures</td>
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<td></td>
<td>E/NRM: Only organic fertilisers</td>
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<td>E/NRM: Fertilise native and improved native pasture</td>
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<td></td>
<td>E/NRM: Sow native pastures</td>
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<td>E/NRM: Planted salt bush</td>
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<td>salinity/sheep</td>
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<td>E/NRM: Cell grazing</td>
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<td></td>
<td>E/NRM: Created water channels, leaky dams for erosion control/water retention</td>
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<td></td>
<td>NRM: Eradicated use of chemicals</td>
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<td></td>
<td>NRM: Erosion control re water channels</td>
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<td></td>
<td>NRM: 80% minimum ground cover in drought</td>
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<td></td>
<td>NRM: On going planting of fenced local native trees</td>
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<td></td>
<td>NRM: 10% (21 ha) well managed natural habitat</td>
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<td>NRM: Fenced creek for erosion &amp; habitat</td>
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<td>S: Well connected to area</td>
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<td>S: Partner helps on property</td>
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<td></td>
<td>E/NRM/S: Research with public outcome</td>
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<td></td>
<td>E/NRM/S: Tied highest lambing rate 2009-2010 (130%)</td>
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<tr>
<td></td>
<td>E/NRM/S: Highest lambing rate 2010-2011 (150%)</td>
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<tr>
<td></td>
<td>E/NRM/S: Profit 2009-2011</td>
<td></td>
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<tr>
<td>AO-T-115</td>
<td>Time frame in excess of 20 years</td>
<td>E: F/T work off farm i.e. time poor</td>
</tr>
<tr>
<td>P/T self op.: 243</td>
<td>NRM: 70% minimum ground cover in drought</td>
<td>NRM: Less than 5% natural habitat</td>
</tr>
<tr>
<td>ha Inherited</td>
<td>E/NRM: Experienced autonomous</td>
<td>E/NRM/S: No ag./conserv. Organisation</td>
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<tr>
<td></td>
<td>E/NRM/S: Undergoes training days</td>
<td>S: No on-property resident</td>
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<td></td>
<td>S: Well connected to area</td>
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<td></td>
<td>E/NRM/S: Profit 2009-2011</td>
<td></td>
</tr>
<tr>
<td>AO-A-15/34</td>
<td>E: No debt</td>
<td>E: Machinery issues</td>
</tr>
<tr>
<td>FMC: 9,890 ha</td>
<td>E: Scale</td>
<td>E: Marketing issues</td>
</tr>
<tr>
<td>Purchased: 1987</td>
<td>E: Has geographic spread outside Lachlan</td>
<td>NRM: 85% (8,407 ha) unmanaged natural habitat. Highest area of 28</td>
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<td>Tranferred to current</td>
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**Aggregated: indigenous**
<table>
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<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
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</thead>
</table>
| owner: 1992 | **E**: Infrastructure upgrade  
**NRM**: 70% minimum ground cover in drought  
**E/NRM**: Mixed enterprises  
**E/NRM**: Carbon sequestration (FMC)  
**E/NRM**: Non-standard fertilisers (FMC)  
**S**: Increase in on-property residents  
**S**: Employs F/T waged labour  
**E/NRM/S**: Top quality FM supported by FMC (FM/FMC)  
**E/NRM/S**: Well paid FM spread over a number of AOs (FMC)  
**E/NRM/S**: FM knows latest technology  
**E/NRM/S**: Farm plan (FMC)  
**E/NRM/S**: Profit 2010-2011 | **AOs**.  
**E/NRM/S**: Competing interests regarding capital allocation  
**E/NRM/S**: Contested ownership  
**E/NRM/S**: Disunity within current ownership structure  
**E/NRM/S**: Past labour issues  
**E/NRM/S**: No ag./conserv. Organisation  
**E/NRM/S**: Loss 2009-2010 |
| AO-A-T4/15  | **E**: No debt  
**E**: Has geographic spread outside Lachlan  
**E/NRM/S**: Profit 2009-2011 (lease) | **NRM**: 46% (492 ha) unmanaged natural habitat  
**E/NRM/S**: Property not economically viable  
**E/NRM/S**: Contested ownership  
**E/NRM/S**: Policy of not funding operational costs of non showcase properties  
**E/NRM/S**: No vision for property  
**E/NRM/S**: No ag./conserv. organisation |
| AO-A-22/T4  | **P**: No debt  
**S**: Indigenous community makes use of property  
**S**: Good neighbour relations  
**E/NRM/S**: Training of indigenous worker a priority  
**E/NRM/S**: Indigenous resident  
**E/NRM/S**: Profit 2009-2011 (lease) | **NRM**: 70% (482 ha) unmanaged natural habitat  
**E/NRM/S**: Property 100% of asset base and income  
**E/NRM/S**: Property not economically viable  
**E/NRM/S**: FO determines most outcomes and has not been diligent in fulfilling lease obligations  
**E/NRM/S**: Difficulties in funding fixed and variable costs  
**E/NRM/S**: Lack of knowledge/networks  
**E/NRM/S**: Lack of social status impacting negotiations with lessee |
| AO-THF-38   | **Time** frame in excess of 20 years  
**E/S**: Share farm arrangement - off farm work  
**E/NRM/S**: Farm plan  
**E/NRM**: Mixed enterprises  
**S**: Both partners work on property  
**S**: Good community relationships  
**E/NRM/S**: Agricultural/conservation networks  
**E/NRM/S**: Future residence  
**E/NRM/S**: Profit 2009-2011 | **NRM**: 5% (20 ha) natural habitat  
**E/NRM/S**: Debt  
**E/NRM/S**: Property 100% of asset base |
| AO-HF-32    | **E/NRM**: Mixed enterprises  
**S**: Both partners interested in property  
**S**: Good community relationships  
**E/NRM/S**: Off farm capital | **E**: Overspent on house  
**E/NRM**: Small property size for enterprises  
**E/NRM**: Lack of agricultural knowledge/relationships |
<table>
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<tr>
<th>AO</th>
<th>Positive practices &amp; outcomes</th>
<th>Negative practices &amp; outcomes</th>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Farm plan (FO and agonomist)</td>
<td>knowledge impacting practices</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Satisfied with knowledgable FO who owns machinery</td>
<td>NRM: 0% natural habitat</td>
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<tr>
<td></td>
<td><strong>E/NRM/S</strong>: Future residence</td>
<td>NRM: Reduced unmanaged shrub belt</td>
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<td></td>
<td></td>
<td>S: Purchase domestic supplies in Sydney</td>
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<td></td>
<td></td>
<td>S: Family visit infrequently</td>
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<td></td>
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<td>E/NRM/S: Belongs to no ag./conserv. Organisation</td>
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<td>E/NRM/S: Third lowest wheat production/ha 2009-2010 (0.35 t/ha)</td>
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<td>E/NRM/S: Loss 2009-2011</td>
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<td></td>
<td><strong>Lifestyle property owner</strong></td>
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<tr>
<td>AO-LP-T14</td>
<td><strong>Time frame in excess of 20 years</strong></td>
<td>E: Property not selected for agriculture</td>
</tr>
<tr>
<td>P/T self op.: 53 ha</td>
<td><strong>E</strong>: Earns income from agistment and from 2010 power generation</td>
<td>NRM: Slashing / pump only fire precautions</td>
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<tr>
<td>Purchased: 1996</td>
<td><strong>E/NRM</strong>: No debt</td>
<td>S: Purchase domestic supplies in Sydney</td>
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<tr>
<td></td>
<td><strong>E/NRM</strong>: Off farm capital</td>
<td>S: No on-property resident</td>
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<tr>
<td></td>
<td><strong>E/NRM</strong>: Farm plan</td>
<td>S: Family and city friends visit infrequently</td>
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<tr>
<td></td>
<td><strong>NRM</strong>: Solar power</td>
<td>E: Loss 2009-2011, but this could change</td>
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<td></td>
<td><strong>NRM</strong>: Destocked all but 22 hectares</td>
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<td><strong>NRM</strong>: Used chemical for weeds 2 times in 16 years</td>
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<td><strong>NRM</strong>: 30% managed natural habitat and 70% native pasture.</td>
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<td><strong>NRM</strong>: 20% of property planted to local native trees &amp; shrubs</td>
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<td><strong>NRM</strong>: 100% minimum ground cover in drought</td>
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<td><strong>NRM</strong>: Fenced river for erosion &amp; habitat</td>
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<td></td>
<td><strong>NRM/S</strong>: Joined Landcare</td>
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<td></td>
<td><strong>S</strong>: Increased number of residents on original area</td>
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<td></td>
<td><strong>S</strong>: Good neighbour relations</td>
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<td><strong>S</strong>: High casual employment/hectare</td>
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<tr>
<td>AO-LP-210</td>
<td><strong>NRM</strong>: Off farm capital</td>
<td></td>
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<tr>
<td>P/T self op.: 55 ha</td>
<td><strong>NRM</strong>: 85% minimum ground cover in drought</td>
<td>E: Property not selected for agriculture</td>
</tr>
<tr>
<td>Purchased: 2008</td>
<td><strong>NRM</strong>: Spot spraying / mechanical labour</td>
<td>E: No on-property enterprise</td>
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<tr>
<td></td>
<td><strong>NRM</strong>: Work to combat erosion</td>
<td>S: No on-property resident</td>
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<tr>
<td></td>
<td><strong>NRM/S</strong>: Joined local fire brigade</td>
<td>S: Purchase domestic supplies in Sydney</td>
</tr>
<tr>
<td></td>
<td><strong>NRM/S</strong>: Joined Landcare</td>
<td>S: Family and city friends visit infrequently</td>
</tr>
<tr>
<td></td>
<td><strong>NRM/S</strong>: Future residence</td>
<td>S: Rural culture issues, especially for female</td>
</tr>
<tr>
<td></td>
<td><strong>S</strong>: Increased residents on original area</td>
<td>E/NRM: Net liability</td>
</tr>
<tr>
<td></td>
<td><strong>S</strong>: Good neighbour relations</td>
<td></td>
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<tr>
<td></td>
<td><strong>S</strong>: Both partners interested in property</td>
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