

## **CHANGING DYNAMICS – PASTORAL AND REMOTE PROPERTY ASSESSMENT IN AUSTRALIA**

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### **ABSTRACT**

Historically both the pastoral industry in Australia and the valuation of its property resources were fairly predictable. 'Carrying capacities' and 'beast area values' were generally agreed, land and stock management was often fairly rudimentary, and almost all stock were sold and processed onshore.

In recent decades however, the sector has changed dramatically, with much more sophisticated land and stock management and with the industry as a whole more focussed on the live export trade. This has affected the whole nature of production and, with that, changes in productivity and value of land resources. Correspondingly, as with all property sectors, there is an ongoing need for the assessment of asset value for a range of purposes including taxation, rental determinations, finance, sales and acquisition, corporate reporting and others.

During recent decades too, the manner in which these valuations have been carried out both by government and private sector professionals has also evolved considerably. These included changes in the number and location of valuers available to carry out this specialist work and how that group is being supported with new databases providing improved geographic, market, production and scientific information. Whereas theories and methodologies of these types of assessments remain fundamentally sound, their application must now be cognisant of the changed economic and market realities.

This paper summarises the current and emerging challenges and opportunities for the accurate assessment of property values in this sector across Australia. It follows on from reviews of relevant literature, from meetings held in Darwin, Northern Territory in mid-2014 with all Australian and New Zealand Valuers General and key stakeholder interviews from public and private valuation practitioners.

It concludes that there are unique issues that relate to the carrying out of such assessments in the contemporary environment. It also identifies some specific actions that government (through the Valuers General), accredited universities and the wider valuation profession can undertake to ensure that this professional service which is vital to the sector continues to be provided in a competent and professional way in the future.

### **Keywords:**

- Pastoral sector
- Changing market
- Valuation approach
- Valuers General
- Valuer education
- Australia

## **INTRODUCTION**

The ancient and seemingly timeless Australian outback appears to be an unlikely setting for a research paper that considers ‘changing dynamics’. Even white settlement and introduction of pastoral, rural sector uses over the past 200 years have had limited impact on the vast area of land involved. These observations however hide the true history of the pastoral sector that has continued to evolve in its own unique way, over that long period of time.

The last three decades in particular have witnessed a number of unrelated events that have radically changed the nature of the sector, its production, management and prospects and, with all of that, the value of the real property assets upon which it is based. As with all real property based enterprises, the value ascribed to these fixed assets will be fundamental to the long term wealth, financing viability and sustainability of that individual enterprise. Further, this subsector is of very significant scale for example, the total annual value of production of the beef industry is \$A7.55 billion with 67 per cent of total production exported (ABS 2013). A viable pastoral sector therefore is of national and regional economic importance.

As this sector has evolved, so too has the approach to assessment and the knowledge base available. At the same time unrelated changes have also occurred surrounding assessment (such as the legislative change in Queensland’s *Land Valuation Act 2010* after 66 years) and those involved in such professional activities.

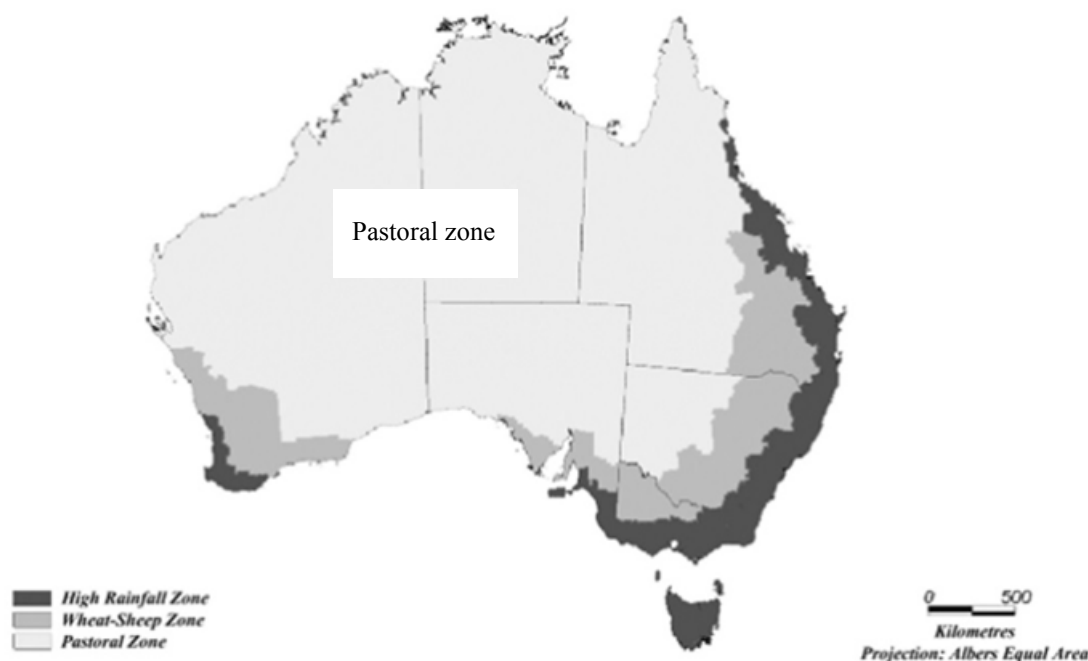
This paper focuses on the assessment of value of pastoral holdings and comments on the issues faces while undertaking those valuations. It particularly notes that these issues can only be fully appreciated with an understanding of the significant changes the pastoral sector experienced over recent decades.

Extensive investigations undertaken in this research established that there is reasonable and high quality information with regard to pastoral rural activities in Australia. However, there is limited, contemporary information available regarding the assessment of pastoral holdings in Australia or the manner in which those services are supplied. To begin with, the professional body involved, the Australian Property Institute (API), does not have details of their members involved in such activities, the nature of the services they provide nor their locations.

Within those parameters, this work draws together information from a range of property valuation and wider economic literature pertaining to the pastoral and rural sectors. Additional new information has been secured as an outcome from a conference of all State and Territory Valuers General held in Darwin, Australia, in July 2014 and from interviews with key informants from the public and private sectors who are involved in pastoral property valuations and related dealings.

## **THE PASTORAL INDUSTRY AND ITS EVOLUTION**

The pastoral component of rural industry is, at a simplistic level, relatively easy to define – it is the breeding, growing and fattening of livestock for meat, fibre (i.e. wool) and hides. In colonial Australia, most rural enterprise was pastoral in nature but with closer settlement and the investment in agriculture in areas of higher productivity, large scale pastoral activities withdrew from the mid-1880s to more remote, lower productivity areas of western Queensland and western New South Wales, the Northern Territory and Western Australia and small areas of Victoria. As such, pastoral activities in Australia took on a unique Australian character which continues to the present time and occupied a remarkable 75 per cent of the Australian continental land mass (Productivity Commission 2002). Figure 1 below illustrates the land in Australia dedicated to pastoral land mainly based on the amount of rainfall received per annum. The darker land masses with high rainfall occupied by most urban areas and the medium rainfall for wheat and sheep production.



**Figure 1 Pastoral zone Australia**

Source: Land and Water Resources Audit (1999)

The country now occupied by the sector, though variable, is typically near flat savannah and grasslands typically semi-arid to arid in the centre and central west. The landforms are ancient and eroded with low nitrogen contents and, because of the generally low terrain, have rainfalls typically well below 500 mm per annum. Rainfall is unpredictable and prolonged droughts are common (Australian Bureau of Meteorology 2013).

Even from the earliest times of white settlement, such a physical environment encouraged large scale properties with capital investment typically limited to water improvements, fencing and cattle handling equipment. Tenure is normally established through long term leases known as ‘pastoral leases’ from the relevant State Government and in Queensland such leases can go up to about 40 years and review thereafter. Maintenance and development conditions normally are attached to those leases which have been the prevailing tenure arrangement across these land uses since the mid-1800 through to today (Productivity Commission 2002).

Given the scale, cost structure and inherent market and climatic variability, many of the holdings are held long term and by major corporations who, typically, have a number of significant holdings scattered in various locations and country types to optimise climatic conditions year to year and to move cattle from breeding to fattening areas.

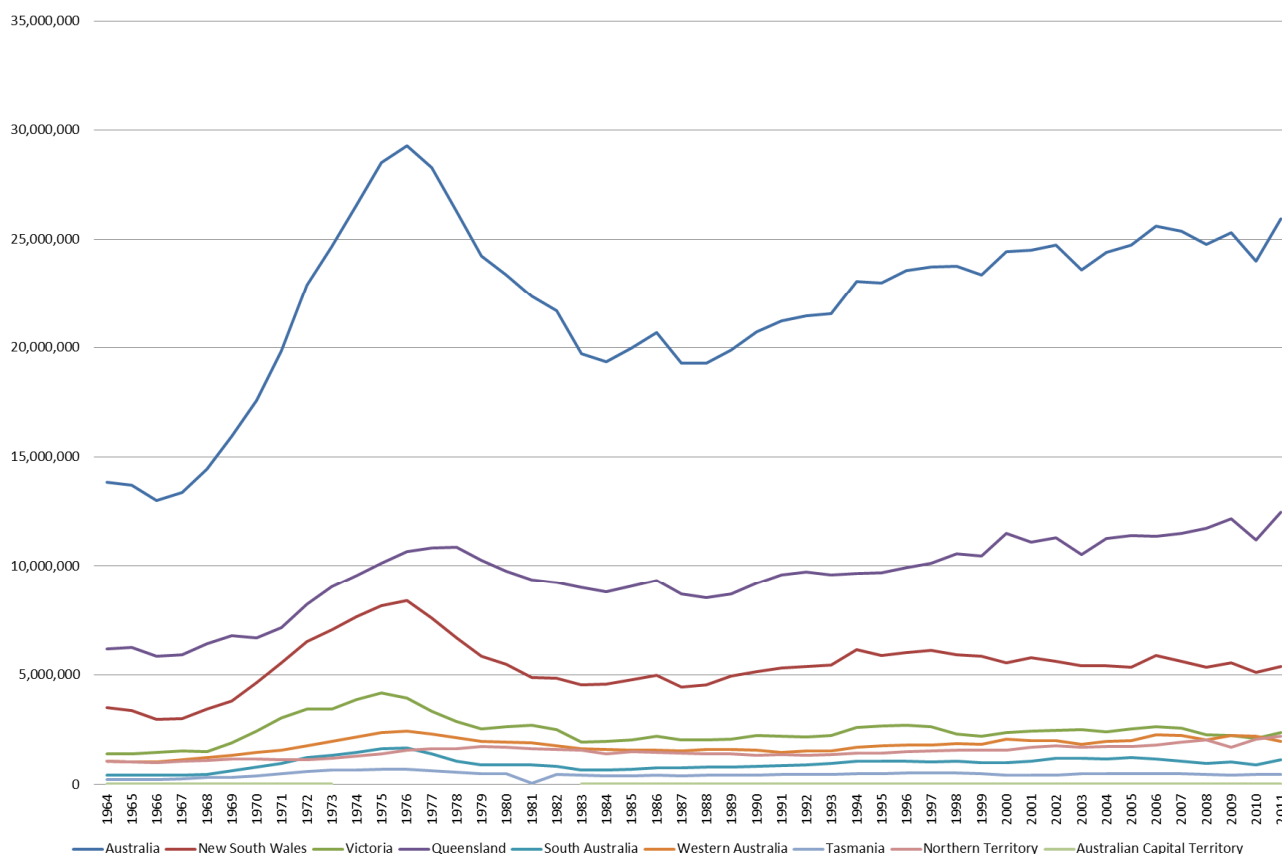
Over time the pastoral sector in Australia shifted almost exclusively to cattle production, the result of droughts, low wool prices and the introduction of feral animals. Meanwhile tick and drought resistant cattle breeds were introduced to enhance beef production. All of that resulted in production and management on such vast scales with single holdings sometimes 10,000 sq km and more running 10-15,000 head of cattle not uncommon. Management practices were often fairly rudimentary with much of the stock effectively left wild and in remote locations year to year.

Those practices changed considerably as a result of two, significant events. First, to continue to sell beef internationally, it became necessary for the cattle industry (with wide government and CSIRO support) to eradicate bovine brucellosis and tuberculosis from the Australian cattle herd. These diseases not only affected cattle breeding and herd productivity but also prohibited the export of live cattle or chilled beef from affected countries to many major international markets. The eradication process was a large but manageable task in closer settled areas but, for pastoral holdings, the project was remarkably difficult. It demanded a much more sophisticated herd and breeding practice and eradication of wild cattle and buffalo from these regions. Major investment was also necessary in yards and holding infrastructure for effective management.

The project commenced in the early 1970s and the Australian herd was declared free of these diseases by 1992 and, with that, a new sector of the industry commenced in the form of live exports from a number of ports, mainly in northern parts of the continent.

The second event was a result of the first where the live cattle trade has increased dramatically since that time (see Figure 2 below) and fundamentally changed the pastoral industry in a couple of ways: (1) all weather access to ports

(including on-boat and destination fattening) and to feed lots became a critical advantage, and (2) the previous need to move cattle across Australia to various types of country and through to on-shore meat processing works became less common.



**Figure 2 Meat Cattle in Australia**

Source: Australia Bureau of Statistics 2012

Transportation, particularly during the wet season, has always been problematic in northern Australia and moving stock to meatworks at the most favourable (wet season) times of the year was often difficult and delayed production for many months. Pastoral holdings however, with rapid all-weather access to live export ports, were now at an enormous advantage, reinforced by the much improved herd management and property operation techniques resulting from the earlier disease eradication programs noted above.

While access had always been critical to operations of pastoral holdings, this new overlay further differentiated operations, production and therefore value of one holding over another. Additional to all of that, dealing appropriately with native title (post-1993) and with a range of environmental protection and food security issues have resulted in much more intense management of such properties with a much wider knowledge and skill base required than cattle husbandry.

## VALUATION APPROACH

The assessment of value of pastoral property holdings needs, in accordance with wider valuation practice, to base such assessment on the analysis of comparable sales. This could be either through direct comparison or using some derivative of return on investment or income derived from such sales evidence (International Valuations Standards 2007).

Rural (including grazing and pastoral) lands assessments subscribe to that traditional approach, in this case with the subject and sale properties being normally reduced (or potentially added to) so that all have a common basis for comparison – for example, ‘fenced and watered’. Once that base was established and comparative values assessed, the value of any additional improvements that the subject property possesses were added to the base figure to arrive at a final value (Baxter & Cohen 2009; Hefferan 2013). There is a certain simplicity and logic to such an approach and might be seen as particularly suitable to the pastoral holdings given the comparatively low levels on improvements and

similarity between the improvements on comparable properties (e.g. fencing, yards, stock watering equipment etc.) across the sector.

This mainstream and long-standing methodology is faced with significant challenges, particularly in the contemporary environment are:

- The number of major, open market sales in pastoral Australia is often remarkably small and can be very difficult to closely analyse. Furthermore, those sales can be very diverse in terms of country type, size, productivity, location and accessibility and thus bear little relevance in the assessment of value to a particular subject property.
- It may be argued that the process of ‘adding and subtracting’ property attributes to arrive at a final valuation represents, in part, a summation approach where ‘depreciated cost’ and ‘value’ can be easily confused and distort market assessments (Reed 2007).
- Most important in considering any pastoral sale is the size, type, quality and condition of the stock involved in the sale or, indeed, if the property was ‘sold bare’. The impact on price of livestock that is involved in a sale depends greatly on prevailing seasonal conditions, the buyer’s stock requirements across their aggregation and the availability and market price of store cattle at that point in time. Given the volatility of these stock prices, comparison of sales, even when in reasonably close date order, can cause added complexity in analysis.
- Eves (2004) notes that the operations of rural (and pastoral) holdings are much more complex than in times past. As with any other assessment of commercial and/or income producing property, the valuation of these properties in the contemporary environment require a more sophisticated approach than the traditional whole property comparison. He notes, in particular that regard must be had to the overall productivity and income producing capacity of the property. Flowing on from that, he considers that the skill (or otherwise) in the management in the development and operations of each property must be recognised in ways that a simple comparison of sales data could never accommodate.

In support of a productivity based approach it is interesting to note that, in many states in Australia, the rent payable on pastoral holding leases is determined on the basis of carrying capacity of the property with allowances for improvements (particularly water improvements) and compared with other properties of similar use type e.g. breeding, growing, fattening etc. – a system known in some jurisdictions as ‘nett and gross rates’. The current system could be extended further as the pastoral as carrying capacity and earnings. The current system could be extended further similar to the model adopted in New Zealand where their rental assessment approach in pastoral areas links rents with earning capacity (Clough 2002).

While these approaches will almost invariably result in debate about carrying capacity, particularly averaged over a long period of time through drought periods, most properties hold accurate, long term stocking and stock turn-off figures which can be analysed if made available.

Another significant issue that must be considered in the use of a productivity based approach for assessment is that, over time, good management will improve productivity and carrying capacity thereby increasing rent – almost a penalty for good practice.

## **VALUATION PRACTICE IN PASTORAL REGIONS IN AUSTRALIA**

The final component of this paper contains observations as to how pastoral valuations are currently undertaken in Australia, changes in those arrangements and prospects for the future. There are ongoing deliberations by the API’s National Education Board, the Valuers General from all Australian States and Territories and the public and private sectors currently involved in these assessments.

Professional valuation services for property assets in the pastoral properties parallel those required in other sectors: finance (purchase, sale, mortgagee and possession etc.), statutory valuation, (asset revaluations and company transfers, changes in partnership arrangements, plant and equipment assessments) and a range of others.

The work required in pastoral assessment is specialised and requires not only valuation expertise but also a sound understanding of the nature of and changes in the industry, knowledge of land types, pastoral and grazing practices and knowledge of local and market conditions. As with any valuation, sound networks and current information sources particular to the region and the subject properties are also essential and require extensive research over a considerable period of time and the updating of that research on a regular basis.

Because of the physical scale, the work is logistically difficult and time consuming. Many pastoral holdings remain in single (normally large corporate) ownership over many decades. These firms tend to have very long associations with and trust in their professional advisers, including those involved in consultancies such as valuation.

Despite the fact that accurate figures do not exist, professional property services have significant upcoming issues which need to be addressed by the profession in terms of property education, training and research, particularly given a rapidly aging workforce (Hefferan 2010). This seems to be of particular impact in regional areas and in smaller, specialist services such as those provided to the pastoral sector. Reasons advanced by the recent Australian Valuers General conference in Darwin 2014 identify key issues outlined below:

- The retirement/impending retirement of a cohort of senior rural valuers – will impact significantly because of the relatively small numbers of the entire group.
- The lack of rural/regional training provided by both government and private practitioners alike, compared with the situation in decades past where cadetships/scholarships and near-compulsory rural service were considered the norm.
- The perception of more lucrative careers in other parts of the property sector (particularly in finance and commercial property and development).
- Related to the above, the perception by young professionals that their involvement in this type of rural work may limit other career options too early.
- Changes in socio-economic decision-making by young professionals which includes spouse/partner's careers and, therefore, may not be well served by service in remote areas.
- (Arguably) the lessening of interest by many governments in wider land management/Crown and State administration activities, thus lessening the wider demand for rural based property professionals.

It may be argued that the specialist skills involved here require some intrinsic knowledge or a lifetime's experience in the area. Again there is no empirical evidence here. However advice from the Valuers General and from other key informants suggests that, while some background and interest in the sector obviously exists, skills can be acquired both through theory and through working with experienced senior professionals – in exactly the same way as it would in any other sub-set of valuation practice.

Although not all Australian universities with property accredited courses include rural valuation to any depth, several do provide that specialisation along with other initiatives such as the one between the State Valuation Service Queensland and the University of Queensland, Gatton Campus which provides a regular, ongoing professional development course. There are also a number of regular API rural valuation conferences and discussion groups in various parts of Australia, but it is obviously not the intent of such gatherings to provide comprehensive pastoral valuation training.

It has also been noted in interviews with key informants that the level of complexity that now exists in the pastoral sector that to provide accurate assessments now requires the input of a number of other professionals as well as the valuers themselves. These include economists specialising in the rural and beef cattle markets, agricultural scientists and the like. While the property consultancy and valuation firms may not have such experts on staff, access to those skills and to contemporary local and sector-wide information now seems increasingly important.

It is relevant that other rural sub-sectors (agricultural, grazing, small crops and the like) do not appear to have the professional staff shortages that appear to be looming as in the pastoral sector. Several events in 2013/14 have brought these pastoral valuation issues into sharp focus. In the first instance, the Federal Government decided that their Australian Valuation Office (AVO) would cease operations by June 2014. A significant proportion of the AVO's work was across rural and pastoral sectors and, while the work will now be carried out by the private sector, many of the older AVO rural valuers are taking the opportunity presented by redundancy and early retirement. Similarly other state jurisdictions such as that in the Northern Territory (given their own resourcing issues) are now also looking to outsource their pastoral valuation needs.

On the face of it, this might imply significant business opportunities for private property valuation practitioners. As long as assessment work is carried out by competent, registered professionals who are cognisant of local markets and conditions and by organisations with effective quality control systems in place, there should be little difference between assessments that are made by professionals from the public sector or the private sector. However, as these matters continue to evolve, several problems emerge:

- The decreasing number of skilled professional staff remains as issue regardless and there will continue to be challenges in attracting suitable employees and their spouses/partners away from major cities into rural and regional centres such as Darwin and Townsville where the pastoral industry may best be served.

- Many of the holdings in the pastoral sector are held very long term by major corporations who expect that all of their consultants (including those who represent them on valuation matters) will have no actual or perceived conflicts of interest and where the landowner/ corporation's business is kept in strict confidence. If at least some of the work that those corporations require pertains to dealings with government (on rental assessments, land administration, taxation and other dealings), they would see their relationship with their consultants potentially compromised if those professionals also accept large scale contracts from the government in the same general work area. Valuations firms interviewed as part of this research indicated that loyalty to these long term corporate owners would, on the face of it, preclude them from involvement in upcoming government contracts.

## **SUMMARY**

This work has, in the first instance, attempted to identify a contemporary pastoral industry in Australia and, particularly, noted important changes to it that have occurred in the recent past. These have included the introduction of much more sophisticated land and herd management practices together with the rising importance of live cattle exports in a market that was already heavily focussed on international markets. These have had significant impacts on comparative property values where good farming practices together with quick access to export ports are now significant determinants of value. It is against that backdrop that the manner in which company assets are assessed, the availability of professionals to carry out those duties has been considered.

On this aspect, as with other areas of valuation, the availability of data and the higher sophistication of land uses and of management means that the task of assessment is increasingly sophisticated – emphasising productivity, management and a deeper understanding of agrostology and related areas.

The paper recognises that there is an important lack of viable data on the workforce carrying out these important assessment tasks. While verification is often not available, it is clear that the workforce carrying out these tasks is ageing and steadily reducing in number. Additionally, the training of staff to these types of professional practice was provided through government cadetships and postings to appropriate rural offices. Little such training now seems to exist with many of the public valuation practices in the pastoral regions being closed. Much of the work is now carried out by contractors where there is often less funding for trainee positions.

The issues are now exacerbated by the closure in 2014 of the Commonwealth Australian Valuation Office and the likely retirement of their small cohort of pastoral valuers. It would appear unlikely that they, nor Valuers General staff in areas such as the Northern Territory, will easily be replaced by private contractors given that these professionals are often at near maximum work capacity and may be unwilling to undertake such work. In any case, given that conflicts of interest are likely to arise with their long-term, major corporate clients who are private pastoral lessees and landowners.

## **LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

The inherent limitations of this work are the data not publicly available on productivity based approaches to land valuation. Furthermore the scope of this paper has not been able to cover the data available by industry groups such as Meat and Livestock Australia, Cattle Council of Australia and the like to thoroughly understand the beef industry.

There are in each state and varying across states a range of pastoral tenure types (pastoral leases, to development leases, occupation licenses and range of others) that have been in place often for a century or more, and one might question whether those tenures still assist in the development and good land management of these huge assets. Aside from those lease tenures, future research should also consider how native title issues are handled in such valuations.

However this work here serves as a foundation for further research into demand for pastoral valuation services. It clearly establishes the lack of reliable data into these areas. It is a professional service that appears to be most important to land holders and the wider rural sector. This paper identified the needs to ensure that the quality and the effectiveness of assessments currently produced continue, the observations regarding how it is likely to further change into the future and what is needed to support the professional undertaking such work.

So on those conclusions, it would be recommended, in the first instance, to valuing authorities and the Australian Property Institute to undertake a project that ascertains the age, location and level of activity of existing pastoral valuers and the current likely future demand for their services. There would appear to be considerable urgency in this task given the likely loss of older professionals in this area of practice over the next few years.

With that in place additional steps could include the enhancement of valuation information and methodologies and information sharing so that existing pastoral valuation methodologies can be enhanced. Related to that, government could better support both tertiary and professional short courses in this professional area to ensure the sustainability and enhancement of this essential professional service into the future.

## **REFERENCES**

- Australian Bureau of Meteorology (2013). Average Annual Seasonal and Monthly Rainfalls. Australian Government. Canberra.
- Australian Bureau of Statistics (2012). 2011 Agricultural census ABS 7121.0 June 2012 Table 7 Meat Cattle, 71240DO001\_201011 Historical Selected Agricultural Commodities, by State (1861 to Present), 2011 Released at 11:30 am (Canberra time) Wed 06 Mar 2013
- Australian Productivity Commission (2002). Pastoral Leases and Non-Pastoral Land Uses. (Commission Research Paper) Australian Government. Canberra.
- Australian Property Institute (2007). Valuation – Principles and Practice. (Second Edition). API Canberra
- Clough P. (2002) Methods for Calculating the Dollar for Stock Unit Rate in Proposed New Formula for Setting Rents for Crown Pastoral Leases. NZIER Wellington New Zealand)
- Eves, C (2004) The use of income valuation methods to value rural property. International Real Estate Research Symposium IRES 13-15 April 2004
- Hefferan M.J. (2010) Forces for change in property education and research in Australia. PRRES Conference 2010
- Hefferan M.J. (2013) Real Property in Australia Foundations and Application. Australian Property Institute. Canberra.
- International Valuations Standards Committee IVSC (2007), International Valuations Standards 8<sup>th</sup> Edition. International Valuations Standards Committee London
- Land and Water Resources Audit (1999) in Ewing, MA & Flugge, F 2004, 'The benefits and challenges of crop-livestock integration in Australian agriculture', paper presented to 4th International Crop Science Congress, Brisbane, Australia, 26 September – 1 October 2004, viewed 16 October 2014, available <[http://www.regional.org.au/au/asa/2004/symposia/6/3/2005\\_ewingma.htm](http://www.regional.org.au/au/asa/2004/symposia/6/3/2005_ewingma.htm)>
- Reed R.G. (2007) The Valuation of Real Estate. Australian Property Institute. Canberra

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