

# finalreport

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## Rangelands Australia: Promoting the products and consolidating the initiative

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## Abstract

This project set out to raise awareness of, and participation in, a new demand-driven and student-centred educational initiative targeted at land managers and staff of regional NRM groups/state agencies. The centrepiece, a postgraduate coursework program in rangeland management, was specifically designed around their information needs and learning preferences, and aimed to build capacity for change and economic, environmental and social outcomes in Australia's pastoral/ range lands.

Participation in the Rangeland Management program and Rangeland Australia-developed courses has grown strongly, in stark contrast to the widespread decline in enrolments in agriculture. Pastoralists and NRM group/agency staff enrolled are reporting broader and more inclusive outlooks; greater understanding of the systems in which they operate and the external forces driving change; better strategic and operational planning; and better decision-making, management of trade-offs and risk management. Among the current students, the pastoralists/graziers manage around 2% of Australia's grazing lands, and the regional NRM/agency staff influence the management of a further 45% of grazing lands. The courses have been directly applicable to their work, led to improvements in management with valuable economic and environmental outcomes, changed perceptions of the value of a university education, and have encouraged and prepared people to take on industry and community leadership roles.

### Executive summary

In response to a national need, Rangelands Australia (RA) has developed the only educational program in Australia specifically addressing current and emerging issues in the vast rangelands (80% Australia). This has targeted land managers/producers and staff of regional NRM/Landcare groups and state agencies. The initiative has focused on professional development, and especially on building capacity for economic, environmental and social outcomes. This particular project has set out to raise awareness of the program and courses, and to grow participation in both.

Participation in the Rangeland Management (RM) postgraduate coursework program has grown strongly (up 180% over 3 years), and the program now has 3-20 times the number of students of any postgraduate program in the Faculty of Natural Resources, Agriculture and Veterinary Science (NRAVS) at UQ, and more students than 16 of their 20 undergraduate programs. This trend in enrolments is in stark contrast to the decline in enrolments in most postgraduate coursework programs in agriculture and environmental studies. Invitations to display material about the courses, pathways to entry, etc at industry and community events in the bush have increased by 500% over the past 4 years and remain at high levels (~40 invitations p.a.). Contacts with the Rangeland Champions and visits to our website for information continue to grow strongly (up 25-36% p.a. respectively). All of these indicators auger well for the future, as long the initiative can continue to differentiate its products in name and on quality and relevance, and maintain its profile (and credibility) in the bush.

Course development processes have been acknowledged nationally and internationally as 'best practice', and a unique set of twelve range-specific postgraduate-level courses, accessible in several ways, has now been developed.

Course evaluations reveal that the RA-developed courses are widely seen to be high quality, challenging, practical and relevant to current and emerging issues, and industry is deriving significant benefits from the program and courses. Indeed, through the strategic, forward-looking and participative approaches adopted, the offerings have been 'ahead of the game' in addressing what are now current and topical issues in regional and remote Australia (eg attracting and retaining people, diversification, climate change and adaptation).

Among the current students, the owner/managers directly manage over 2% of Australia's grazing lands, and the Regional NRM/Landcare/Rural Lands officers indirectly influence the management on a further 45% of Australia's grazing lands.

The Rangeland Management programs/courses are clearly providing personal growth and professional development for a rapidly growing number of people in regional and remote Australia, an area of long-standing educational disadvantage. External stakeholder feedback confirms that the Programs/courses are nationally recognized as "*vitaly important*" and "*essential ... in building capacity for economic, environmental and social outcomes in regional and remote Australia*". External stakeholders have also acknowledged that it is "*in the national interest that this program continues*". The big challenges are to maintain the profile of the program; the currency, relevance and reputation of the courses; and student support in a climate of contracting resources, over-supply and fierce competition in agricultural education. If continuity can be achieved, the potential to build real capacity for change and for economic, environmental and social outcomes can be realized. This potential has been demonstrated clearly over the past four years. Continuation is strongly supported by industry and community groups, and accordingly, a recommendation for this is made.

And this is a highly innovative and outcome-focused centre, which is now being widely recognized. The RA initiative won a national education award in 2009 (AREA), and the RM program has recently been nominated for a 2010 award for programs that enhance learning (APEL). RA has also been acknowledged by the US-based Range Science Education Council as the inspiration, catalyst and model for a USDA-funded revamp of US range management programs.

Although clearly highly successful, restructuring of the NRAVS Faculty has introduced considerable uncertainty regarding the future of both the RA initiative and the RM program. Some clarity has been sought at several levels of the University hierarchy, but they have been unable, unwilling or too busy to provide any insight as to possible futures. Accordingly, a recommendation is made that a senior MLA representative seeks a meeting with the highest levels of the University for some insight into strategic intent, future areas of focus, and the commitment to teaching (cf. research) and rural/remote Australia at UQ Gatton, and possible futures for the RA initiative in that context.

The Director of RA/Professor of Rangeland Management's and the PA/receptionist positions have been supported by external funding which concludes on 30 June 2010. Through the Head of School (HoS, SIS) the University has indicated that enrolments would need to jump 300-400% and teaching income reach \$2.2m p.a. for the University to consider investing 10% of that income in the salary of 'permanent staff' in the Office of the Chair of Rangeland Management. However, the University has recently confirmed some limited commitment to the short-term future of the RM program, but not RA. The HoS has offered to make a 6-month part-time Administration officer appointment (0.6 FTE) to respond to current and prospective student's enquiries, arrange courses to meet student preferences, and support the learning facilitators. The Director has been offered a 6-month part-time casual lecturer appointment (0.45 FTE) to teach the course AGRC7001 and coordinate the RM Program. But, this may have to be scaled back (to 0.3 FTE) to free up some funds for operating over the next six months. However, this would facilitate continuation of the RA initiative until the opportunities at UQ or another home could be clarified. Subject to a review of all programs in the Faculty in early 2011, the RM program would continue at UQ if enrolments are maintained, but options suggested by UQ for growing enrolments and managing the RM program are contrary to the preferences of almost all other stakeholders, and market research and recent experience indicates that these 'solutions' could see enrolments dwindle rapidly.

It is clear that further government and industry investment will be required to maintain the RA Centre (and the leadership and coordination of the initiative) and initiatives to promote the pathways, program/courses and support mature age students. Accordingly, a recommendation is made to develop a proposal for DEEWR (HEPPP), DAFF (CfoC) and possibly DIISR (Innovation Program) support, and for industry to lobby for this funding. Importantly, MLA and DAFF own the majority of the IP in program structure and course materials. Recommendations are made to identify and conduct 'due diligence' on the best home for this successful initiative and to locate/relocate this national initiative at the most appropriate higher education institution. This would be an institution with a high profile in agriculture and NRM; complementary research initiatives, postgraduate programs and courses; and which is genuinely committed to a teaching and research agenda, and to demand-driven and student-centred professional development in rural and remote Australia.

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# 1 Background

The Rangelands Australia initiative has evolved and grown over three phases.

The first phase ran from 2001 to 2005, with support from The University of Queensland (UQ), Meat and Livestock Australia (MLA), and CSIRO Sustainable Ecosystems (CSE). The current phase has run from 2006 to 2010, with support from the Australian Government's Department of Agriculture, Fisheries and Forestry (DAFF, through the National Landcare Program); Queensland Government (QG, through the Departments of Tourism, Regional Development & Industry; Primary Industries and Fisheries; and Natural Resources & Water); MLA; the Foundation for Rural and Regional Renewal (FRRR) and UQ.

## 1.1 Background – Establishment and first phase (2001-2005)

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### 1.1.1 Background - Catalyst

The Rangelands Australia (RA) initiative was a strategic response to a national need identified in a report on *'Education and training to support sustainable management of Australia's pastoral industries'* (AgTrans Research 1998). This report identified that, despite the importance of the rangelands, there were no offerings specifically in rangeland management in Australia, and that the offerings available at the time were perceived by a wide range of stakeholders to have the following deficiencies:

- not practical,
- did not integrate production/economic and ecological aspects, and were
- 'out of touch' with the education and training needs of rangeland stakeholders.

This report also recommended the establishment of a Rangeland Management Centre and Network *'attuned to the real needs of the stakeholders in the rangelands'* (AgTrans Research, 1998).

The long term goals of the initiative were to:

- Improve participation of young adults and mature-aged people in higher education, and assist the retention of skilled people in remote and regional Australia by improving access to relevant professional development opportunities
- Build capacity for dealing with the complex, multi-disciplinary issues facing rural and remote Australia, and enabling economically, environmentally and socially sustainable development
- Enable enhanced adoption of innovations in production systems and natural resource management, to underpin better performing and more competitive rangeland-based businesses and to sustain our natural resources
- Develop a life-long learning culture, and learning communities with a capacity for change, and
- Ultimately, to change attitudes to higher/university education in a region of historically very low educational attainment.

The challenges set for this educational initiative early in Phase 1 were to:

- Do things 'differently'

- Be student-focussed and demand-driven
- Be forward looking (ie 5-10-15 years out)
- Be relevant to current and emerging issues
- Challenge thinking and practice (especially the 'triple-bottom-line' implications of decisions and actions)
- Be accessible in remote and very remote areas
- Be practical and relevant to enterprises
- Be current (in context and in use of R&D outputs)
- 'Add value' and not duplicate offerings, and
- Be flexible in delivery.

In many ways this initiative has been ahead of its time, with many of these challenges now recognized more widely and accepted as priorities in current education policy in Australia and the USA.

### 1.1.2 Background - Approach

From the outset, a systematic approach was adopted to address the challenges and guide the development of the Rangelands Australia centre and its products. A seven-year plan was developed around participatory, demand-driven and student-centred approaches to improving access to, and participation in, education relevant to a future in the rangelands. This comprehensive approach has focused on both demand and supply issues, and has been guided by market research, Business Plans, a Quality Assurance (QA) Scheme for Course Development and Continuous Improvement, and Marketing and Media Plans.

At the outset of the first Phase, a national workshop was held with around 50 stakeholders from experienced producers to policy makers; including representatives of all rangeland states and territories. Workshop participants reinforced the need for a strong customer/student focus, and the need to '*do things differently*' in terms of course development and delivery to overcome the barriers to learning and to ensure greater relevance and accessibility. Commissioned research on the market for learning in rural and regional Australia (Quay Connection, 2003) clarified the barriers to learning, the preferences of remote learners, and ways to engage and retain the '*passionate learner*,' '*job driven*' and '*gunna*' segments of the market.

A focus group approach was developed to clarify knowledge and skills needs for future success in the rangelands, and to provide a framework for the curriculum (Taylor 2002). Through 24 focus groups across rural and remote Australia, this process engaged a diverse group of over 450 stakeholders, and specifically including women, youth, industry and community leaders and government representatives.

A survey approach was used to clarify and prioritize personal qualities/graduate attributes and knowledge needs for individual, enterprise and community success (Taylor 2003), and to identify the key gaps in knowledge among 'most' members of key segments of our target market (ie cattle/sheep producers and regional NRM/Landcare facilitators/agency staff). The knowledge gaps set the priorities for course development over the next 5 years. This priority setting process engaged over 325 stakeholders. Concurrently, the alignment of supply (ie the content of VET, undergraduate and



postgraduate programs in agriculture and environmental studies) with expressed needs was assessed. This led to the focus on postgraduate coursework as the best way to 'add value', and identified gaps in course offerings and relevant and potential electives offered by UQ and other universities.

The outputs of the first phase included:

- Future scenarios for the rangelands (10-15 year scenarios) regarding operating environment and the nature of future enterprises
- Knowledge and skills needs for individual, enterprise and community success in the rangelands in 10-15 years time
- Knowledge and skills gaps among cattle/sheep producers, NRM/Landcare facilitators and agency staff
- An analysis of the alignment of expressed needs with the content of courses/programs available in Australia in 2003-04, viz:
  - 1350 short courses in agriculture and NRM,
  - 126 VET programs in agriculture and NRM,
  - 156 undergraduate programs in agriculture and environmental science, and
  - 88 postgraduate coursework programs in agriculture and environmental science
- Clarification of the opportunities to 'add value', and identification of the best opportunities across the VET, undergraduate and postgraduate sectors for business growth
- A revised business plan, marketing and media plans
- A Quality Assurance Scheme for course development and continuous improvement
- Course materials for six short courses (1-3 days duration) at Diploma level, including a draft course '*Preparation for Postgraduate Study*'. MLA owns 50% of the IP of these courses.
- Course materials for seven postgraduate-level, distance courses, addressing the highest priority needs for individual, enterprise or a community success in the rangelands in 10-15 years time. MLA owns 50% of the IP of these courses, and
- Evaluations of the quality and relevance of the new courses.

### **1.2 Background – The interim phase (2005-2006)**

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Towards the end of the first phase, it became obvious that, with declining undergraduate and postgraduate enrolments in the NRAVS Faculty, there would be little if any further financial support from UQ. As the RA Director prepared to leave UQ Gatton, industry leaders intervened and made representations to both the Australian and Queensland Governments for funding, and MLA offered funding subject to Government funding. CSIRO (CSE) offered to support the Director's salary and on-costs during this period, and to continue the Director's secondment to UQ if these funding applications were successful. The Director progressed negotiations and development of contracts.

Subsequently, contracts were written between:

- UQ and the Australian Government (DAFF - \$1.13m over 3 years) to support further course development and refinement, support for students in remote localities, and marketing and promotion of the program and courses

- UQ and the Queensland Government (ie DTRD&I, DPI&F, DNR&W - \$600k over 4 years) to support the Chair of Rangeland Management and the office of the Director, and
- CSIRO (CSE) and MLA (\$200k over 4 years) to support the salary of the Director Rangelands Australia/Professor of Rangeland Management in promoting the program/courses.

Unfortunately, the second contract (above) took 8 months to execute through UQ, and this funding was not synchronized with the other grants.

With these contracts in place, an agreement between CSIRO and UQ for the secondment of the Director was progressed over nine months and finally executed.

It is important to note that funding pressures saw UQ/NRAVS 'drop the ball' in this phase, and, if it hadn't been for CSIRO's (CSE) willingness to pick up the Directors salary while funding proposals were developed and contracts negotiated and progressed, the RA initiative would have fallen over and died in 2005-06.

### **1.3 Background – The current phase (2006-2010)**

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In this latest phase, MLA has invested in some of the time the RA Director spends in developing and implementing strategies for promoting and marketing the program/courses, in engaging with potential students/customers, in converting prospects to enrolments, and other activities to grow and consolidate the business.

Concurrent with this project were investments by DAFF, Queensland Government and FRRR to:

- Develop six new rangeland-specific, postgraduate courses, consistent with stakeholder needs
- Review and revise existing distance courses, and develop intensive/block versions of these and a subset of the earlier courses for delivery in the rangelands to better meet student demand
- Establish and nurture a support network for remote and mature-aged students (ie the Rangeland Champion network)
- Prepare interested adults for entering and completing postgraduate coursework
- Market and promote the program and courses, and
- Support the Chair of Rangeland Management and the office of the Chair.

Although course development was not specifically resourced under this MLA grant, this report provides an update on the market perceptions of the quality and delivery of courses (see Appendix 1), their impact on the target market, and the current status and prospects for the initiative. These are important considerations in any decisions about the viability of the initiative, its continuation, further investment, or the future home of the program and the courses.

The UQ/NRAVS/SIS cash investment in this phase has been an annual contribution of around 20-25% of the Director's salary (ie approx \$39,000). This represents around 10-15% of what the Program has earned through student fees, 9% of what the RA Centre has brought in through external grants, and around 5% of total income over the past four years.

## 2 Project objectives

The project objectives were designed to track: i) the progress from awareness through to enrolment in the Rangeland Management program, and of course, ii) growth in participation in the program and RA-developed courses.

The objectives (below) were set for a region where rate of participation in higher education has been historically low (approx 30-50% of the rate in metropolitan Australia, DEST 2001; with this gap widening over time, Alloway 2009), and were set in a climate where enrolments in agricultural education (both VET and higher education) were declining rapidly, and have continued to decline over time.

The objectives of the project were that, by 31 March 2010, to have achieved:

1. 15% annual growth in course inquiries direct to Rangelands Australia and the Rangeland Champions. (Baseline as at Feb 2007: 40 and 0 enquiries *per annum* through RA and the Rangeland Champions, respectively)
2. 10% annual growth in enrolments in the 'Getting into Further Study' short course (Baseline as at Feb 2007: 12)
3. 10% annual growth in enrolments in Rangelands Australia-developed programs and courses (Baseline as at Feb 2007: 39 enrolments in the RM program, and 18 in specific RA-developed courses by students enrolled in other programs at UQ or other tertiary institutions).

## 3 Methodology

### 3.1 Method ology - Strategies

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In the current phase of the RA initiative, the strategies adopted to promote the program, courses, pathways to entry and support available for mature-aged learners were guided by:

- advice/outputs from the national workshop
- outputs of the 24 focus groups held across Australia
- market research commissioned by RA, and
- other information on engaging the target market (eg research on adoption, etc).

The commissioned research on the 'Market for Learning in Rural and Regional Australia' (Quay Connection, 2003) provided valuable insights into the barriers to learning, the preferences of remote learners, and strategies to engage and retain the '*passionate learner*,' '*job driven*' and '*gunna*' segments of the market for learning. This was based on a telephone survey of the attitudes to learning of 1400, 16-64 year olds in rural and remote Australia.

In this phase of the project, it was recognized that, to be successful nationally, we would need to address a number of important challenges for business development. For example, that:

- VET graduates were a larger and growing pool of potential students compared to the numbers of university graduates
- A significant proportion of the potential market would not see a university as an obvious choice for further education, or understand the various pathways and doors into a university that now exist for students in their 30s, 40s or even 60s
- Prospects would need multiple exposure to information relevant to their needs and concerns
- University marketing is typically focused on the information needs of 17-21 year olds (which is their biggest market), and emphasises job and career opportunities, but not the issues of importance to mature-aged students/the postgraduate coursework market
- Many adults lack self-confidence in their ability to undertake higher education
- Negative perceptions of the value and relevance of a university education are common among adults (ie 25 years +) in the bush, and unfortunately, these have been reinforced by deficiencies in many recent university graduates (eg job readiness, social skills, etc).
- Programs/qualifications with the word 'science' in their nomenclature, like '... Science' or even 'Applied Science'(!), were not perceived to be practical or management oriented (!)
- Being Queensland-based, courses could be perceived to be only relevant to the tropics, and Queensland in particular, and/or only accessible to Queenslanders!

These insights led to:

- Use of the RA brand, as a way of differentiating the RM program from other university offerings
- Use of the 'non-standard' program nomenclature (ie GC/GD/M Rangeland Management cf. a more generic name such as GC/GD/M Applied Science (... ...))
- Refinement, renaming and promotion of the enabling course as '*Getting into further study*', and which was designed to build understanding of expectations and self-confidence in people without recent tertiary experience
- Development of promotional materials that address the information needs of the 'passionate learner' and 'job-driven' segments of the market and the requirements of the major sponsors of this phase of the initiative (eg posters for use at displays or trade shows, Program brochure, course outlines, etc)
- Establishment of a national network of Rangeland Champions to meet the need for credible and local advice about further education and 'out of hours' support for mature-age learners. Their role has been two-fold: i) assist potential students with information on the benefits of study, pathways to entry, etc, and ii) assist enrolled students by providing support and encouragement and after-hours advice regarding university expectations
- Participation in industry, community and government events with a focus on learning (eg field days, forums, conferences) to raise awareness of the opportunities for further education, pathways, etc, and
- Development of popular articles/advertorials on new learning opportunities, pathways to entry, etc written by the Director, Rangeland Champions and current students.

Unfortunately we have not had the resources to assess the effectiveness of promotional materials or advertorials, but have made some assessment of the effectiveness of the other strategies.

### **3.2 Methodology – Hard and soft data**

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Some insights into the effectiveness of participation in events, websites and the Champions network, and the relative importance of these in facilitating enrolments has come from pre-application interviews with prospective students.

Evaluations of courses have provided feedback on the quality of the courses and course materials, and what students like most about the courses. Their ratings and comments have been invaluable in building the reputation of the program, in marketing (eg see brochure, course outlines at: [www.rangelands-australia.com.au](http://www.rangelands-australia.com.au)) and in continuous improvement of the courses.

The impact of the program and courses has been measured by surveys of students in 2005 and 2010, and a survey of stakeholders in 2009. The 2010 student survey asked land managers and staff of state agencies/NRM/Landcare groups the question: Have the RM courses helped to improve the way you manage your property and resources? If the answer was 'yes', a series of open-ended questions were then posed, such as:

- What impact have the courses had on your awareness of issues and what you do and how you things?
- What have been the economic, environmental and social outcomes of any changes described above?
- What impact do you anticipate from the courses on you and your enterprise/organisation in 5 years time?
- Have the courses encouraged or assisted you to step up and take an industry or community leadership role, and if so, how?

Enrolments in the RM program and RA-developed courses have been tracked by The University of Queensland's 'mySInet' system, and data on the number of students and EFTSL generated by the University's 'Business Objects' system.

## **4 Results and discussion**

Results are provided under four headings:

- Sources and analysis of course enquiries
- Enrolments in the enabling short course – GiFS
- Enrolments in the program and courses, the number of graduates and the profile of the current student population, reasons for undertaking the program
- Opportunities and expectations of further growth.

### **4.1 Results and discussion – Course enquiries**

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Enquiries are coming into Rangelands Australia (RA) through:

- a. the RA office at UQ Gatton

- b. events that RA staff or Rangeland Champions have participated in
- c. through the RA and UQ websites, and
- d. through the Rangeland Champions network.

However, experience is showing that it can take several contacts and up to 2.5 years (average 6-15mo) to convert enquiries into actual enrolments in the program.

#### 4.1.1 Results and discussion - Enquiries through the RA office at UQ Gatton

These comprise follow-ups to:

- i) material on the RA or UQ websites
- ii) displays and/or material distributed at events
- iii) personal contacts made at events
- iv) advertorials and popular articles in industry and community newsletters, etc (see Appendix 2)
- v) 'word-of-mouth' recommendations, or
- vi) contact with one of the Rangeland Champions.

#### 4.1.2 Results and discussion - Enquiries through events

RA's profile in the bush has lifted dramatically through both the Champion's and the Director's presence at a growing number of industry, community and government events over the past four years. This participation has been funded by DAFF/National Landcare Program (ie travel and accommodation) and MLA (ie Director's time).

The number of invitations to participate in industry, community and government events to promote the RM program, courses and pathways to entry has grown from 8 in 2006, to 19 in 2007, 37 in 2008 to over 40 in 2009 (up 500% over four years). The 72 events actually attended over the period 2006-2010 are listed in Appendix 3. The Director has participated in around 54% of these in the period 2007-10, with the network of Rangeland Champions handling the remainder. However, over the past year our participation rate has dropped as funds for travel started to 'dry up' in June 2009.

At any one event, 6-14% (average 9%) of participants have progressed from just looking at the posters to actually taking a brochure or information pack. Through events attended by RA staff and/or a Rangeland Champion(s), around 2000 people per annum have sought further information (eg brochures or information packs containing learning stories, detailed course descriptions, application forms, etc). But it takes multiple exposures and time (up to 2 years) to convert enquiries to enrolments.

Despite this exposure, at every event there were people who had not even heard of the RA initiative or RM Program ! This highlights a need to continue awareness-raising and to have a presence to grow our profile (and thus credibility) in the rangelands. Indeed, the need to promote the courses more widely has been acknowledged by stakeholders.

*"... these courses need to be promoted more extensively ..."* Shaughn Morgan – Chief Executive, NSW Farmers Association

However, there is no doubt that these activities have raised awareness of RA services and innovations, lifted our profile, and improved stakeholder's appreciation of our recent and potential contributions to individual, industry and community success. This has translated to strong support for continuation of the RA initiative (see Section 7.2.2).

### 4.1.3 Results and discussion - Enquiries through the website

We have seen a pattern of heightened website activity/access at certain times of the year, and strong growth over time in the number of visits to the RA website ([www.rangelands-australia.com.au](http://www.rangelands-australia.com.au)). We are not able to interrogate the UQ website regarding the RM program, but information collected at the time of application for enrolment suggests that at most only 5-10% of enrolments are coming through the UQ website and/or marketing.

Access to information on the RA website typically peaks in the months prior to close of enrolments for Semester 1 (ie November-January) and Semester 2 (ie May-June) (ie 20% and 14% of total visits, respectively).

The number of visits to download files or information has grown significantly in the 'peak periods' (up 160% and 40% for Sem 1 and 2 respectively from 2007 to 2009/10), with an average of 781 people per day downloading files or information in February 2010 and 550 per day in June 2009. Of the visitors, 65-78% are coming to the site directly. In 2008 they were entering through 'our rangelands', 'courses and programs', 'current issues' and 'champions'; and exiting the site through 'our rangelands', 'courses and programs' and 'champions'. In 2009-10 this had changed slightly, with visitors entering through 'current issues', 'about Rangelands Australia', 'courses and programs', 'our rangelands', 'education and training', and exiting through 'current issues', 'courses and programs', 'our rangelands', 'contact' and 'rangeland champions'. The number of visitors coming directly to 'Rangelands Australia' (35-40%) demonstrates the value of the RA brand.

The daily average download has remained steady over time at around 2.5-3.5 pages per visit. The most downloaded materials over the past two years (in declining order of importance) were:

- Courses/programs
- Our rangelands
- Publication – Attracting and retaining young people in the pastoral industry (JAT)
- Current issues
- 2009 Postgraduate coursework brochure
- Rangeland Champions
- Forms (eg Application Postgraduate Coursework, Application for Recognition of Prior Learning – RPL, Cross-Institutional Enrolment)
- Recognition of Prior Learning – Guidelines
- Publication – Key personal attributes for success (JAT)
- Publication – Building capacity in the rangelands (JAT).

Around 50% (range 39-55%) of the visits in 2009-10 were from Australia, with a further 21-25% unresolved. The remainder has been from the US (largely educational) and across a further 17

countries with large tracts of rangeland (eg India, Mexico, Africa, Pakistan, Iran, Morocco, Argentina).

### 4.1.4 Results and discussion - Enquiries through the Champions

Through participation in scheduled events and planned and informal meetings with potential students and influential people, the Champions themselves have raised awareness among over 200-300 people annually (ie an increase of 200-300%), and aroused real interest in 15-25 potential students annually.

Several of the Champions have given presentations on RA, have attended RA displays at key events (see Appendix 3), have opportunistically distributed information (eg at EDGE GLM or Nutrition workshops in Q, NT & WA), and have initiated contact with influential individuals (eg financial planners, accountants) and obvious prospects in their region.

The Champions have been trained in the process and documentation required for Recognition of Prior Learning (RPL) for entry into the program, and the RPL cases submitted over the past 12-18 months have been high quality, and have been approved with minimal revision.

Beyond advising potential students, the Champions have also provided 'out-of-hours' Learning Skills support to Rangeland Management students and other postgraduate students who are studying in the rangelands but enrolled in other institutions (eg Charles Darwin University, Charles Sturt University, James Cook University, Sydney University, University of South Australia).

The number of enquiries through the Champions highlights the importance of telephone and face-to-face contact (cf. mass marketing) for the adult student market, and the huge potential of the Champions network for improving participation and completion of higher education in remote and regional Australia.

There would seem to be a good case for continuing the Champions network, as evidenced by the responses to a 2009 survey about the 'impact and overall impression' of the Rangeland Champions initiative. In addition to words like 'excellent' and 'great idea', comments have included:

- *"Given me the confidence to accept the challenge of further study"*
- *"Without the Champion's support and encouragement, I would not have commenced (further) studies"*
- *"Invaluable – boosted my confidence when I was unsure about my progress"*
- *"Very important part of achieving (success) in distance study"*
- *"Great idea – students in remote locations need the support that an experienced student can provide through advice and mentoring"*
- *"Very important to anyone considering (further) studies"*
- *"Brilliant concept that is proving its value in practice"*
- *"If it wasn't for the Rangeland Champions initiative I would not be involved with this (the RM program) at all".*

These responses highlight the importance of the Rangeland Champions in improving participation and retention in higher education in regional and remote Australia, and demonstrate that the



Champions network is a welcome and valued initiative in the bush. And this is endorsed by key stakeholders. For example,

*“The role of the Rangeland Champions in generally promoting the benefits of further education in the rangelands and supporting students ... is valuable in encouraging students who might usually feel that tertiary education is beyond their grasp”* Geoff Wise – CEO, Barwon-Darling Alliance of Local Government Councils, NSW.

### **4.2 Results and discussion – Enrolments in ‘Getting into Further Study’ (GiFS)**

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The GiFS course was developed to build understanding of university expectations and self-confidence, which are critical to the chances of success for students with little or no recent experience of tertiary study. There are now ‘face-to-face’ (3-days) and ‘virtual/live classroom’ versions, with the latter using the Blackboard on-line/web learning platform. We have encouraged people who have entered the program through RPL to take the ‘face-to-face’ version, because of the learning through interaction with others and the potential to form ‘study buddy’ relations for mutual support during the program. The ‘face-to-face’ version is the option preferred by mature-aged students, however we have been pleasantly surprised with the effectiveness of the virtual/live classroom course.

At the outset of this phase, the GiFS course was a FarmBis approved course in NT, Q, SA & WA, and the milestone for 2007-08 (ie 10% annual growth in participation) was met.

However, with the closure of the FarmBis program and the cessation of subsidies from May 2008, demand fell away at the full cost of \$1000 per person. Consequently, the second annual milestone was not met in 2008-09.

Alternative sources of funding for delivery of GiFS were identified, and funding proposals developed in mid-2008. A proposal to the Foundation for Rural and Regional Renewal (FRRR) was successful in early 2009, and this has subsidized the cost of delivery of this course in remote areas, and allowed it to be offered at the nominal cost of \$150 per person. This could facilitate the streaming of up to 50 students through this short course and into the Rangeland Management program over the period June 2009-Sept 2010. However, a university edict in late 2009 restricted us from advertising Commonwealth-supported places and consequently the GiFS course. The milestone for 2009-10 is now on track to be met, with total numbers over the duration of the project that should satisfy Objective 2.

In response to demand, ‘face-to-face’ GiFS courses have been held in:

- a) Alice Springs NT
- b) Charters Towers Q
- c) Port Augusta SA
- d) Longreach Q
- e) Georgetown Q.

Live classroom versions of GiFS have also been run, attracting students from NT, Q & SA.

More recently, there has been interest in the course from the NT Chamber of Commerce, and in a variant of the short course from the North Australia Beef Research Council (NABRC) and the

Western Catchment Management Authority (CMA), for up-skilling members of Regional Beef Research Committees and Regional Catchment Mentors, respectively.

### 4.3 Results and discussion – Enrolments in the program and courses

Strong growth in enrolments in the RM program and RA-developed courses, and in the number of graduates has been recorded, and the prospects for further growth in domestic students are good. The program has recently become available to international students (ie CRICOS registered), and growth from this quarter can be expected.

It is interesting to note that the majority of enrolments seem to have been attracted through the personal networks of individual Champions and RA’s presence at industry and community events, and a smaller number directly through the web, newsletter articles and advertorials. Of the enrolments in 2008 and 2009, only 5-10% have been attracted by The University of Queensland/NRAVS Faculty’s marketing and communications.

#### 4.3.1 Results and discussion – Enrolments in the program and courses

The table below shows the number of active students in the Rangeland Management (RM) postgraduate coursework program and the number of students enrolled in RA-developed courses. Both of these numbers have continued to rise and now significantly exceed the targets (ie 33-92% cf. 10% annual growth).

	2006	2007	2008	2009
No. students active in RM Programs*	22	24	46	61
Total EFTSLs RM programs*	3.88	5.63	9.13	14.63
No. students enrolled in rangeland-specific courses**	38	44	67	122
Total EFTSLs rangeland-specific courses	4.75	5.50	8.38	15.25

\*All of the students in the RM program have been/are part-time external students, and 95% hold Commonwealth-supported places (CSPs).

\*\*Of the students undertaking RA-developed courses in 2009, 84% were Commonwealth supported, 12% were domestic full fee paying, and 4% were international fee paying students.

The growth in enrolments (180% in the RM program & 220% in the RA-developed courses over the past four years) is in stark contrast to that in almost every other PG coursework program in UQ’s NRAVS Faculty. For example, 6 of these programs have shown a serious decline in enrolments (35-60%) over the past four years (eg Rural Systems Management – from 63 in 2006 down to 29 in 2009; Animal Studies – from 54 down to 29), two are steady (with 20-25 students), and one shows low growth (ie 2-3 students per annum). RM is now the largest PGC program in the Faculty, with 2-15 times the number of active students, or 3-20 times the number of active domestic students, of any other NRAVS PGC program. Only one PGC program exceeds our enrolments in terms of Equivalent Full Time Student Load – EFTSL, and that is Food Studies, but 14.5 of its 15.8 EFTSL are overseas students.

In 2009, the number of students in the RM postgraduate program has also exceeded the number in 16 of the Faculty’s 20 undergraduate programs.

And the rate of attrition has been low. One or two students per semester enrol, and then find the demands of work, family and study all too much. Occasionally a student takes a new job and re-locates. In most cases, these students have deferred and re-enrolled next Semester.

The vast majority of those undertaking RA-developed courses are enrolled in the RM program, with a growing number from other UQ programs (eg Agricultural Studies, Animal Studies, Rural Systems Management, Environmental Management). This could increase significantly if appropriate RA-developed courses were listed as electives in our host School's and other NRAVS postgraduate coursework programs. This issue has been raised in Centre reports and the Director's Performance Evaluation for at least three years with no response. RA is aware that this has been a matter of concern to our external investors. However, it is pleasing to note that the 2010 Courses and Programs Handbook lists a total of six RA-developed courses as electives in four of the Faculty's other postgraduate programs. Nevertheless, it is surprising that more use has not been made of them in UQ's agriculture and NRM-related programs.

We have also attracted cross-institutional enrolments in individual courses (eg from Charles Sturt University, Sydney University, University of New England), and repeat business from these students.

An unexpected and interesting trend has been the increasing number of enquiries and enrolments from people who already hold a Masters or PhD (ie staff of regional NRM groups).

### 4.3.2 Results and discussion – Expectations of further growth in enrolments

New enrolments in Semester 1, 2010 (16) and the list of prospects for Semester 2, 2010 suggests that 2010 enrolments will exceed the 2009 total, continuing the pattern of strong growth.

And, we have high expectations of continuing growth in enrolments from both domestic and international students for a number of reasons:

#### a) Domestic

- Interest continues to grow, largely due to the activities of the national network of Rangeland Champions, and the time spent at industry and community events in the bush (by both the Director and Champions). The pattern of 5-10% of students coming in through University/Faculty marketing has been relatively stable over time.
- Availability of Commonwealth-supported places (CSPs). These directly address the #2 impediment to uptake of higher education – cost – by providing significant savings (up to 65% discount) and the opportunity to defer payments. Early in 2010 the RM programs were approved by the Australian Government, and are the only Postgraduate coursework programs in the NRAVS Faculty able to offer CSPs in 2010 and 2011. Unfortunately, because of a university edict we were unable to promote the availability of these in the lead up to Semester 1, 2010 enrolments.
- Increasing emphasis on improved rangeland management in the 68% of Queensland affected by the State Leasehold Land Strategy. Both lessees and DERM staff have responded by participating in higher education.
- High number of invitations to participate in industry, community and government events to promote the RM programs, courses and pathways to entry

- Satisfied customers and 'word-of-mouth'. The program has attracted a large group of industry and community leaders from all rangeland states and these have had/are having a very positive learning experience. Through their networks, they are now encouraging others to participate.
- Increasing access to information on our website. This has doubled over the past two years and now ranges from 580-845 visits/day (average) in the key periods prior to enrolment deadlines (ie Jan-Feb and May-June).

### b) International

- Forty-seven percent (47%) of the Earth's surface is rangeland, and there has been increasing access to information on our website from countries with large tracts of rangeland (eg Pakistan, Brazil, India, USA, Africa, Canada).
- In response to increasing direct enquiries and international visits to our website, the RM program has recently been registered (CRICOS) and is now available to international students. Unfortunately, this process has taken almost 2.5 years (!), and was concluded too late for it to have any significant impact on 2010 enrolments. As an indication of the potential of this market, other NRAVS postgraduate programs have had 4-22 overseas students enrolled in 2009.
- A request from Texas A&M's Department of Ecosystem Science and Management to run the '*Reading the Rangelands*' course (ie field trip-based intensive course) as a Study Abroad option for 30-50 of their final year and graduate students, and enquiries about including another four of our intensive/block courses in their Study Abroad options. (Note: These opportunities were raised in the Centre's 2008 report, but we are still awaiting for approval to proceed from the Dean, as required by UQ policy.)

### 4.3.3 Results and discussion – Number of graduates

2009 saw the fourth crop of RM graduates (16, up from 8 in 2008 and 4 in 2007). A further 15 students are expected to graduate in July 2010, so the total number for 2010 should significantly exceed the number of 2009 graduates.

Whatever, this will be a huge boost to the qualification profile of the small population of remote and very remote Australia, traditionally a region of extremely low educational attainment. Participation in Higher Education is related more to the lower likelihood of remote students applying for Higher education, compared to metropolitan students (DEEWR 2010), which highlights the need to increase or at least maintain RA's presence in the bush to raise awareness of educational opportunities and pathways to entry.

And the quality of these graduates is high. Feedback from employers, such as regional NRM groups, has been very positive. For example,

*"The quality of graduates is high and the feedback from those graduates about the Rangelands Australia approach is universally positive"*

Tim Ferraro - GM, Central West Catchment Management Authority, NSW

*"I have several staff members who have recently completed or are currently enrolled in Rangelands Australia-developed courses and all express strong satisfaction with the courses and in particular the support services provided to remote study students"*

Daryl Green - GM, Western Catchment Management Authority, NSW

Of the 24 students who have graduated with a Graduate Certificate or Graduate Diploma in Rangeland Management in 2008 and 2009, 60-80% have already articulated or plan to articulate to a higher level of qualification. This attests to the quality and relevance of the courses.

The introduction of the intensive/block mode of course delivery has encouraged part-time students to take up to 2 courses per semester, which has enabled them to complete a program/graduate in two-thirds to half the time it would have otherwise taken. In 2009, around 20% of the RM students enrolled in more than one course in any one semester, and this percentage is expected to grow steadily.

### **4.4 Results and discussion – Student demographics and profile**

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This section reports the profile of the student population, and provides insights into why they have undertaken the RM program. The profile shows that we are attracting our target market, and the reasons for undertaking the program demonstrate that it is meeting a real educational need and is well aligned to industry and community needs.

#### **4.4.1 Results and discussion – Origin and background**

Overall, ninety-two percent of students are from remote and very remote regions of Australia, and the remainder work in the rangelands (eg staff of the Indigenous Land Corporation - ILC, Qld Department of the Environment and Resource Management - DERM, etc).

Ten percent of students are of Aboriginal descent.

People with at least 5 years managerial experience and/or a VET qualification, but without a degree, represent approximately 50% of enrolments. These include both land managers and regional NRM group staff. They have entered through Recognition of Prior Learning (RPL), and a significant proportion of these (43%) report having been enrolled in a degree but not completing it because it 'wasn't relevant'. Most of the new students without a degree have undertaken the preparatory short course, '*Getting into Further Study*' (3 days), prior to or soon after enrolment. Many of these students are the 'first in family' to undertake Higher Education, and the academic performance of these students has been excellent.

RM students live and work in all rangeland states, with the distribution of the current population as follows: Q – 43%, SA – 21%, NSW – 15%, NT – 12% and WA – 9%.

#### **4.4.2 Results and discussion – Vocation and age profile**

At the end of 2009, the profile of the current RM Program population was:

- 41% - owners or managers of grazing enterprises
- 27% - staff of regional NRM /CMAs (eg DCQ, SWNRM, Western CMA)
- 26% - staff of government agencies (eg DERM, SA Pastoral Board, NT Dept Resources)
- 6% - others (eg teachers - TAFE, AACC, rural counsellor, consultants, etc).

The main trend over time in the student profile has been a significant shift in the vocation of students in 2008-09; viz. a decline in owner/managers (from a high of 60%), and an equivalent increase in the number of regional NRM/CMA staff. This is an important development, as Fenton & Rickert (2008) and the Rangelands NRM Alliance (13 regional NRM groups) have all identified 'capacity of NRM organizations and institutions' as the weak link in achieving NRM goals in general, and the Australian Government's ambitious 'Caring for our Country' goals in particular.

Student ages range from 21–66 years, with the proportion in various age classes in 2009 as follows (in descending order of magnitude): 40s (31%), 30s (24%), 50s (22%), 20s (19%) and 60s (4%). Sixty-five percent (65%) of students are women (up from 53% in Mar 2008).

### **4.5 Results and discussion – Reasons for undertaking the RM program**

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Reasons given for undertaking the RM program (ie as given on students' Application Forms in 2008 and 2009) confirms a willingness to learn in the rangelands, the importance of addressing access issues, the need for this program for people to learn about new and emerging issues facing rural industries and communities, and the uniqueness and relevance of the programs to their businesses and their future in the rangelands. For example,

- *"I see the potential for career opportunities. I feel that from doing this course I will better understand the changing influences on the rangelands and have a better understanding of the wider community and different stakeholders"* Pastoral manager, Northeast SA
- *"The units offered in the Rangeland Management program are directly relevant to my career and the area that I live in"* Pastoral Manager, Top End NT
- *"As a manager, the key issues that concern me are operating and maintaining the property in a way that is both profitable and sustainable, land care and erosion management, staff retention and training. The skills and knowledge I will gain from the Graduate Certificate will help me make better management decisions to develop and maintain the rangelands for the future"* Pastoral manager, Q
- *"This will assist me in becoming an environmental officer in the mining industry, and to assist in the research, management and rehabilitation of rangelands where mining is taking place"* Small business operator, SA
- *"I believe this course will expand my knowledge of rangelands and ... allow me to make a greater contribution to the wider community"* Rural Lands Officer, Western Qld
- *"I am undertaking further study in order to consolidate a variety of experiences and involvements into more formal recognition of the skills and knowledge I have attained. I am also attracted ... from the point of view of personal development"* Pastoral manager, SA
- *"The Rangeland Management program offers the most relevant topics in Australia on which I feel I need to expand my knowledge, both to enhance my employability and personal development"* Pastoral manager, WA
- *"The chance to expand my future employment possibilities by the acquisition of further knowledge and ... improvement of my capacity to function in my present role"* Project officer, Regional NRM Group, Qld
- *"To broaden my knowledge and skills to improve natural resource management, and meeting community and government demands on me as an owner/manager. Build my capacity to*

*strengthen and re-vitalize rangeland communities, greater adoption of sustainable practices and understanding of other stakeholders and engaging with them” Pastoralist, Northern SA*

- *“To meet future challenges and achieve continuous improvement of the natural resources. External study is the only way I can take on any large amount of knowledge when I run a full time grazing business in the outback, and the course content (of the RM Program) is very much down the line of my business”* Grazier, Northwest Qld
- *“I want to upgrade my knowledge for better recognition by my peers and pastoralists. This course offers the flexibility that I require ... due to my employment”* Government officer, SA
- *“The content of the Graduate Certificate in Rangeland management is specific to my role and responsibilities as a Rural Leasehold Lands Officer. I seek to further my education and enhance my integrity, and believe that the Graduate Certificate in Rangeland management is the ideal vehicle to do so”* NRM officer, Qld
- *“The Rangelands course seems the most appropriate for me ... to learn about specific issues pertaining to the rangelands rather than more general land management and ecology”* Project Officer, Regional NRM group, SA
- *“I embarked on an agricultural degree which was not relevant. I left after three years. The Range management program enables me to run my business, live and work on the farm and gain valuable academic credentials”* Property manager, WA
- *“Distance education provides the only opportunity that I can consider for postgraduate study. The Rangeland Management program is of particular interest because it offers a range of units that have relevance to both my working life and my personal life as a member of a rangeland community.”* NRM Project Officer, SA

## 5 Success in achieving objectives

We have significantly exceeded expectations regarding two of the three objectives (Objective 1 and 3), and, despite internal and external impediments, have just met the remaining objective (Objective 2). However, the growth of enrolments in the program and in RA-developed courses (Objective 3) is the key outcome by which this project should be judged. In that, we have exceeded our target by a staggering 180-220% at a time when agricultural enrolments have declined 18% nationally, and most postgraduate programs in agriculture at UQ have experienced declines in enrolments of 30-68% over the same period.

Re Objective 2, FarmBis subsidies made the GiFS course affordable, and their cessation and the 12 month lag in sourcing replacement funding, resulted in little or no activity in this area for 12-15 months. With hindsight, at that stage this objective should have been deleted or at least re-negotiated. However, on present indications this objective should be met fully by early in Semester2/July-August 2010

Our success has brought national and international recognition for our strategic processes, the quality of outputs/products and their impact. Evidence of the growing national and international reputation of RA includes:

- Invitations to participate in around 40 industry, community, professional and government events annually, across Australia

- Strong support from the leaders of 44 industry and community organizations for new external funding proposals
- Requests to partner with five Australian community and educational groups in new education and professional development initiatives in 2009
- An increasing number of industry and community websites providing links to the RA website
- Acknowledgement by the US-based Range Science Education Council in 2010 that RA was the inspiration, catalyst and model for a US initiative to revamp the range science and management curriculum in 30 US universities
- An invitation to be one of five partners (ie with FAO and three US universities) developing a global Range Management Program, with an Australian range module to be the first international contribution to this new program.

However, although the RM program is the leading performer in postgraduate coursework in UQs NRAVS Faculty, the low level of commitment from UQ signals that continuation of the initiative in a industry and community-responsive way will depend heavily on further industry and government investment. While the University may continue to offer the RM program, unless there are customer-focused staff and resources for maintaining a profile in the bush and for differentiating this from other University programs, enrolments will inevitably decline.

## 6 Impact on meat and livestock industry – now & in five years time

The target market for this initiative has been:

- Land managers and/or cattle and sheep producers
- Staff of state agencies, regional NRM/Landcare groups, shire councils/local government
- Service providers (eg consultants) and
- Educators.

Around 90% of students fall into the first two categories, and these groups were the focus of the 2010 impact survey.

It is worth noting that while the number of students is relatively small when compared to enrolments in other fields (eg engineering, arts, etc), their impact is huge. For example, among the current students, the land managers are responsible for an average of 181,000 ha (range 3,000-780,000 ha) and in total manage over 7m hectares (~2%) of Australia's grazing lands. The regional NRM/Landcare/Rural lands officers interact with and influence 30-200 land managers (average 110 p.a.) through field days and short courses, and each works directly with 30 (on average) in 'on-ground' projects on around 5.4m hectares each year. In that way, these staff are indirectly influencing the management of a further 173 million hectares (45% Australia's grazing lands) each year.

Almost all students in both target groups are industry and community leaders, sitting on 1-7 Committees and/or Boards, and in these roles they also influence wider decisions about sustainable land use and management.



Overall, the land managers and regional NRM/agency staff report that the impact of the courses has included:

- greater awareness of issues influencing their personal development, and the future challenges for their enterprises and/or region
- influencing what they do, and how they do things
- some economic, environmental and social outcomes, although it is 'early days', and
- positioning them and building confidence for career changes and community leadership roles.

Most of these impacts could also be expressed as individual, enterprise and community benefits, as in Taylor (2006).

The impact of the courses/program are summarized below. Further feedback on the courses, collected as part of the 2008 and 2009 course evaluations, is available in Appendix 1, and at: [www.rangelands-australia.com.au](http://www.rangelands-australia.com.au) (go to Courses and Programs).

### **6.1 Impact on meat and livestock industry – now**

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This section covers student feedback on the impact of the courses on:

- Awareness of issues and drivers of change
- What people do and how they do things
- Economic, environmental and social outcomes
- Careers and community leadership.

### 6.1.1 Impact on meat and livestock industry – awareness of issues

The land managers and staff of agencies/regional NRM groups report greater awareness and understanding of their external environment, and especially regional, national and global issues/trends that could impact on their business and resources; a broader outlook; a willingness to consider and be more receptive to other points of view, and, as a result, a wider perspective on issues and possible outcomes. This has assisted in problem solving generally, and in people management and strategic planning.

They have a better understanding of the way their rangelands function and ‘best practice’ management, and the drivers of greater government and community interest in management practices and outcomes.

They have a better understanding of personal strengths and weaknesses, and how to be more effective in their roles in farm businesses and small organisations. They have a better understanding of the needs and drivers of stakeholder groups, and are now more sympathetic to the conflicting challenges and needs of various groups.

### 6.1.2 Impact on meat and livestock industry – what people do and how they do things

RM students have become more strategic, taking a more holistic approach to issues and managing for ‘triple bottom line’ outcomes, and are now paying much closer attention to environmental, people and welfare issues.

They have more confidence in dealing with other stakeholders, and are now more effective in communication and working with others, and have a greater thirst for learning and knowledge.

The RM courses have influenced their decision making, in that they are being more proactive and rigorous, considering the longer term and wider implications of day-to-day and medium term decisions, sourcing more information and other views in making decisions, and, as a result, are making better informed decisions. The courses have also helped identify key areas of focus to improve property management.

They see their properties ‘through different eyes’ now, are more focused and more confident in the way they operate, and are more open to and have greater confidence in trying different approaches to management.

### 6.1.3 Impact on meat and livestock industry – economic, environmental and social outcomes

The land managers and staff of agencies/regional NRM groups are reporting valuable economic and environmental outcomes such as ‘more water retained on the property, cleaner runoff, better animal production and improved species diversity’. Others report that they have changed management practices, saved money, and are running their enterprises more efficiently and managing their resources more sustainably.

Participation in the courses has expanded networks, and will improve opportunities for interstate exchanges and work over time.

Many students now have better relationships with the wider community, and greater involvement in community activities (eg Landcare). Some have undertaken succession planning, and others have made the decision to sell and/or move to another region.

### 6.1.4 Impact on meat and livestock industry – career change/community leadership roles

The RM courses and qualification have given students the confidence and credibility to engage, contribute more and influence local decisions, and for some to take on industry and community leadership roles.

This has led to some engaging in large regional projects, stepping up to higher roles in industry and community groups (eg AgForce branch chair, Western Catchment Mentor, Chair of a Regional Beef Research Cttee), being better positioned for a career change, or taking a new job (eg Grazing Project Office, Community Landcare Coordinator). Others have won national or state awards (eg Nuffield Fellowship, Queensland Landcare Producer of the Year), and are clearly destined for community leadership roles.

Yet others are well down the path of succession, which will see a career change with them handing over the property to a younger generation and/or using their experience, knowledge and qualifications in taking up a position on a Board/Committee, a regional group or local government.

## 6.2 Impact on meat and livestock industry – in five years time

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Looking ahead, and as a consequence of RM students being encouraged and confident to keep learning and further their knowledge, they expect to be more proactive than adaptive or reactive to various future scenarios, to have the capacity for better decision making and hard decisions in particular, and be better placed to tackle new and emerging issues, and to take advantage of opportunities.

This will translate into continuing improvements and tangible benefits in animal production, herd improvement, land condition, water use and biodiversity, diversification of income, and in social interactions and cohesion.

As a result, the managers among the RM students expect to be in a better position economically, to be more advanced environmentally, and considering an industry or community leadership position if not already committed.

The drivers for higher education and the impact of the RM program have been captured in comprehensive Learning stories, and will ultimately be posted on our website. They are based on direct feedback from graduates, such as:

- *“The courses have given me a greater understanding of the diversity of rangeland businesses within Australia by working with other students across the country. The subjects are well structured and readily relate to my own business and lifestyle, improving our management decisions and outcomes in our grazing enterprise. The interaction with lecturers has been encouraging, providing more opportunities to develop knowledge and skills that are generally not available in the bush”* Mrs Penny Wallace, Clarke Creek Central Qld.
- *“The courses have allowed me to complete the studies while fulfilling my home and work commitments. I never imagined that I would have the opportunity to participate, at my age and*

*where live, in further study. The courses are designed by and for people in the rangelands, and the study has allowed me to take a more proactive approach in my work and community” Mr Peter Klem, Longreach Qld.*

- *“The courses are excellent and very relevant to real life situations. Studying with UQ/Rangelands Australia was a great experience as the staff and lecturers understand the students, particularly busy, external students with multiple commitments, and are flexible in their approach. Overall the experience was well worth it!! The contacts and friendships I have made will continue into the future both professionally and personally” Ms Rashida Khan, Adelaide River NT.*

The RM program has changed perceptions of university education, especially among those who entered through RPL, but also among family members, peers and employers. This will have important long-term consequences in terms of attitudes to higher education, and will contribute to reducing the huge discrepancy between metropolitan and rural/remote participation rates.

## 7 Conclusions and recommendations

This section reviews the importance of the rangelands, the current status of the RA initiative, notes external recognition of the importance and value of the initiative, identifies some significant and far-reaching opportunities, and makes a strong case for continuation of the RA initiative.

While these are compelling arguments, continuing uncertainty about the future of RA and/or the RM program, and the lack of any real or substantial commitment from UQ in the short to medium term raise questions about its continuity at UQ and where this initiative should be based in the future.

This section includes a brief review of the UQ Gatton experience and concludes with options for continuing the RA initiative.

### 7.1 Conclusions and recommendations – Importance of the rangelands and the need for a range-specific/remote educational initiative

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The region defined a rangelands cover 80% of Australia (and 47% of the World), and it is now recognized in Australia that adjacent areas should also be managed like rangelands (NRMMC 2010). Rangelands provide substantial benefits to Australia through agricultural production (GVAP \$20b), ecosystem services, mineral extraction, natural resources and their cultural heritage, and the landscapes provide intrinsic social value for all Australians (Bastin 2008). And, rangelands are the only region in the World which will expand with climate change.

The rangelands are home to enterprises and sparsely settled communities supporting around 5-12% of Australia's population. And the people of the rangelands are the most productive and most entrepreneurial people in Australia. For example, the typical rangeland resident contributes ~\$80,000 in goods and services annually (1.5 times the national average), and in the rangelands there is one business to every 14 people compared to a national average of 1 to 32 (Ferguson 2008, Rola-Rubzen & McGregor 2008).

This means that investment in the people behind rangeland enterprises is a good investment in innovation and in national productivity. And, the Australian Government now recognizes the need to improve access, increase participation and lift educational attainment levels as part of national agendas to improve productivity and competitiveness of industries. Indeed, it has acknowledged that higher education provision, responsive to the specific needs of regional Australia, is essential to Australia's social and economic prosperity (DEEWR 2009a).

However, people from low socio-economic status (SES) backgrounds and from rural and remote areas are significantly under-represented in higher education, with those from remote (ie rangeland) regions the most seriously under-represented. For example, rural and remote people comprise 12% of the population, but only 6% of higher education places (Universities Australia 2008). This is largely a result of access and support which is influenced by parental education levels, family and community encouragement of further study and financial factors. So, improving access and participation is all about awareness of pathways, flexible delivery, perceptions of the relevance and attainability of university study and reduction of financial and other barriers (Universities Australia 2008).

Furthermore, the challenges and issues facing enterprises and communities confirm the need for a multi-disciplinary and systems-based postgraduate education initiative to supplement short courses and narrow disciplinary undergraduate education, and especially to build capacity for sustainable enterprises, landscapes and communities. It is concluded that a range-focused educational initiative is still needed, and this need is clearly recognized by industry, communities and governments. The national benefits could be greatly enhanced if emphasis was increased on collating and integrating experiential, scientific and traditional knowledge for management of the rangelands for multiple objectives, and if this information was made available to 'inside' areas which may become more range-like with climate change (NRMMC 2010).

***Recommendation:*** *In light of the national importance of the rangelands, the need for professional development of land managers and those who are supposed to support them, and the investment in the RA initiative (\$4.5m) by industry and governments to date, it is recommended that this initiative continues, is closely linked to relevant research groups, and*

*remains focused on delivering educational products in the rangelands which meet stakeholder needs.*

## **7.2 Conclusions and recommendations – RA’s current status and external recognition**

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This section provides an overview of the current status of the RA initiative (eg courses, staffing and funding), outlines external recognition of RA, and makes a case for further investment.

### **7.2.1 Conclusions and Recommendations – Current status of the RA initiative and RM program**

Rangelands Australia is now widely recognized as a source of innovative, practical, relevant, challenging and high quality courses, and has a reasonably high profile in the bush through the national network of Champions and participation in over 70 industry, community and government events during the past four years. However, the UQ Science Review report made no mention of the RA Centre in the new ‘Super School’ which is replacing the NRAVS Faculty, and indicated that all programs and courses in the Faculty/new School would be reviewed in early 2011. Meetings have been sought with the Chair of the Review Committee/senior University staff for some clarification of possible futures for the Centre and the RM programs, but they are either unwilling or too busy to engage in these discussions at this stage.

***Recommendation:*** *That MLA representatives meet with the most senior staff at UQ, as soon as possible, to ascertain possible futures for the RA initiative and the RM program, and the scale of any possible University commitment to this initiative in both the short (6-12 months) and medium (3-5 years) terms.*

The Rangeland Management program is the only higher education program specifically addressing issues in the rangelands of Australia. Most of the RA-developed courses are available in both distance and intensive/block modes to improve accessibility to higher education in remote areas. The program is now well developed, with a core of twelve range-specific courses developed by RA and sixteen additional elective courses, aligned to expressed needs, and sourced from The University of Queensland, Charles Darwin University, Charles Sturt University, and the University of New England.

By any standard University measure (eg number of students or EFTSL, see Section 4.3.1), and the cash flow generated for the University (see Appendix 4), the RM program would appear to be viable. But, while the numbers suggest that it is more viable than almost every other Postgraduate Coursework Program in the NRAVS Faculty, there are two **major threats** to the survival and continuation of RA and the RM program at UQ: i) funding, and ii) management and promotion of postgraduate coursework programs and the RM program in particular.

There are two parts to the **funding** issue:

- i. Core funding, and
- ii. Operational funding.

Core funding has supported the Chair of Range Management (ie salary and on-costs of the Chair/Director and a p/t Receptionist/ Administrative Officer) to:

- handle enquiries
- manage entry by RPL
- coordinate the RM program
- coordinate delivery of the 'Getting into Further Study' short course and the suite of 12 postgraduate courses in the rangelands
- coordinate the national network of Rangeland Champions and participation in industry, community and government events, and
- manage external grants.

This has been largely (ie 80%) externally funded, with the University making valuable contributions by way of space, power, postage, and library, finance and personnel services. It would seem appropriate that this might continue to be funded by a University and a benefactor or industry in the future. An outline of projected annual costs of the Chair/Director RA is provided in Appendix 5.

There would seem to be scope for some UQ support for the Chair, as in 2009 alone RA earned the NRAVS Faculty and our host (ie SIS) approximately \$151,000 from student fees, and earned the University \$237,000 from Government payments for Commonwealth-supported Places (Total = \$388,000). Yet, after University/Faculty overheads (~60-65% of both fees and Government payments !) and all course delivery costs, the remainder has been retained as 'School available funds'. The scale of University/Faculty overheads and the retention of net funds as 'School available funds' means that apart from a \$39,000 per annum contribution to the Director's salary, none of the return on external investments over the past four years (estimated at \$1+m) has been re-invested in the RA initiative, and the HoS and Dean have indicated that they have no intention of increasing the UQ contribution. The HoS recently explained that "*the model of externally-funded courses or programs ... is not normal practice*", and it seems that there is no funding or flexibility in the UQ system to make professional appointments to carry on successful initiatives built with external investments. However, it was suggested that if RA was projected (on the basis of enrolments) to make a 'profit' of ~\$110,000 from teaching in Semester 2, 2010 (ie all teaching income less University/Faculty overheads and all course delivery costs) the University might consider appointing the Director and PA for 6 months. This translates to a 6-month teaching income target of around \$1.1m (or \$2.2m for a full year) for the University to then consider re-investing around 10% of that in RA/UQ staff. This is a ridiculous ask, which would require us to increase enrolments by 300-400% !

The lack of University support is also a serious impediment to proposals for further external investment in the RA initiative at UQ Gatton, and the inflexibility in the University's attitude to teaching income suggests that there is little future for the RA initiative at UQ without serious government and industry support.

Operational funding has supported the higher cost of course delivery in remote areas, the support network (ie Rangeland Champions), promotion and marketing of the program and courses, and continuous improvement of courses and/or development of new courses to meet stakeholder needs. This has been fully externally funded, and it would seem appropriate that this might continue to be funded by industry and/or governments in the future to meet productivity and equity goals. An outline of major activities and projected annual costs are provided in Appendix 5.

It has been clear for some time that the operational aspects of the RA initiative would continue to depend almost entirely on industry and government support. So, RA staff have been active in trying to source further medium-term (ie 3-5 year) external funding, although the opportunities are limited. For example,

- A 'Caring for our Country' proposal on '*Supporting rangeland community skills and development*' (\$3.2m over 3 years). This was submitted to DAFF in mid- 2009. There were 1300 applications and only 57 were successful. Unfortunately, while we passed through a sequence of four panels, the RA bid was relegated to the 'reserve list' because of some perceptions of University courses (ie relevance and capacity to lead to on-ground outcomes) and the fact that there was no guarantee of enrolments. However, RA has been given detailed feedback on the bid, and has applied for the Second round. The funds available under this round are limited to \$1.5m over 3 years, and we now do not expect to hear the outcome of this bid until July 2010.
- A proposal on 'Equity in Higher Education in Remote Australia' (\$6.5m over 5 years) was submitted to the Australian Government (DEEWR) in mid-2009. Feedback from DEEWR and the Minister's office was that this proposal '*ticked all the right boxes*' regarding strengthening regional higher education provision and supporting low socio-economic status (SES) participation, but it has languished in the absence of a specific program/funding for anything other than infrastructure. This situation has recently changed with an announcement from Education Minister Gillard in June 2010 of a \$56m (rising to \$168m in 2012 and beyond) program to boost the participation of low SES in higher education (Higher Education Participation and Partnership Program - HEPPP). However, we may not be around to make a submission, and there is no guarantee that the RA initiative would be seen as a priority by the NRAVS Faculty or UQ.

Under the UQ funding model, with only 25-40 new domestic students per annum, the RM program is unlikely to ever generate sufficient income from student fees and CSPs to support a small core of staff, let alone funds to raise awareness and participation, support remote students, update and improve courses, and deliver courses in the rangelands.

The other major threats to the survival of the RM program are the ways it could be promoted externally and managed internally. Access is influenced by the type of university and programs/courses on offer (DEEWR 2010), so the public presentation, management and promotion of the RM Program are important issues influencing its growth and survival.

It has been suggested by our host School (SIS) that one option for growing enrolments and managing the RM program might be sweeping it into the Master of Sustainable Systems (MSS) program, as a field in that program. But, this option completely disregards clear stakeholder preferences and market research on program nomenclature (Taylor 2008) which indicates that it won't attract RA's target market and will actually turn many away. The Master of Rural Systems Management (MRSM) has been cited as an example of a program recently rolled into the MSS, but with Semester 1, 2010 enrolments in rural systems management in the MRSM vs MSS running at 26:1, this example gives little confidence in the future of the RM program under this model !!

University marketing is almost completely oriented to the undergraduate market, and to metropolitan students at that. It is not aligned to the information needs of adult learners, and especially the information needs of rural-based people seeking professional development, as opposed to research training in a particular discipline. This is demonstrated in the poor uptake of UQ marketing materials



over five events in 2008, when 106 RA brochures/information packs were picked up for every one UQ/Faculty brochure/booklet. Furthermore, the UQ website has only attracted 5-10% of students over the past four years. Clearly, the program will not grow if it is reliant on the standard UQ/Faculty marketing, and it will probably go backwards.

These suggestions demonstrate a poor understanding of external stakeholder preferences and key elements of business development in the bush by Faculty leadership. While these so-called 'solutions' would see the program conform more to the 'standard' UQ program model, they pose a high risk that the RM program could die.

***Recommendation:*** *If the Caring for our Country funding application is successful, a decision will be required about whether to accept or reject the offer of funds, and this should be made in the context of the external investors' aspirations for the program and the overall initiative. Currently, RA staffing is inadequate to service and manage a caring for our Country grant (see 7.3.1 below). However, the grant might be an incentive for a higher education partner (ie current or new partner – see 7.3.2 below) to contribute to the office of the Chair of Rangeland Management in the next phase of the RA initiative. It is recommended that MLA consider its response and a possible short and medium-term commitment to the RA initiative should a Caring for our Country grant be offered.*

### 7.2.2 Conclusions and recommendations – External recognition

Unfortunately, there has been little internal recognition of RA's achievements, or even acknowledgement of RA's Annual Reports detailing achievements, and little or no response to opportunities identified. However, the RA initiative was recently nominated for a UQ award for programs that enhance learning (APEL), with a full case required by mid-July 2010.

Perhaps more importantly, as a result of RA's presence in the rangelands and promotion and marketing activities over the past 3-4 years, external understanding and appreciation of the value of the RA initiative has grown dramatically, and especially in the target region - regional and remote Australia. And, this is now reflected in strong statements of support from over 30 industry and community leaders (see Appendix 6), and a national education award (see Section 7.2.2.2).

In addition, our reputation has spread internationally, as evidenced by invitations to partner leading US range institutions in several major range education initiatives, and to provide 'Study Abroad' opportunities for final year and postgraduate students from Texas A&M University. Further details and examples of external recognition follow:

#### 7.2.2.1 Industry and community recognition and support

There is now widespread recognition of the role RA is playing in making relevant further education more accessible in the bush. There is strong support for its continuation from a wide range of industry and community leaders and professional groups.

It's rare to hear of an educational program being 'respected' or 'essential' to a region or industry's future, but in four years Rangelands Australia has built that reputation among industry and community leaders across Australia. For example,

*"Rangelands Australia is a partner in our future ..."* Rohan Sullivan – President, Northern Territory Cattlemen's Association

*“The work of Rangelands Australia is soundly based, well established and highly respected. They have a wonderful track record of success ... and are a unique initiative in higher education”* Carol Vincent – Chief Executive, SAFF

*“Rangelands Australia offers an important program which allows those located in rural and remote regions of WA opportunities to access to higher education. This support is paramount to the long term viability of our industry in remote and regional Australia”* Robert Gillam – President, Pastoralists and Graziers Association of WA

*“Rangelands Australia will provide a template for the delivery of higher education in many fields to remote Australia”* Sue Holder – President, Northern Territory Isolated Children’s Parents’ Association (NTICPA)

*“The unique learning opportunity and courses offered by Rangelands Australia addresses the future sustainability of communities and businesses in remote Australia, in a most fundamental way”* Bill McIntosh AM – Chair, Outback Areas Community Development Trust

*“Our current, and next generation of land managers rely on Rangelands Australia to provide that important bridge between practical but isolated farm management, and knowledge to move our regional businesses forward”* Simone Tully – CEO, OBE Beef Pty Ltd

The need for continuity of this initiative is also widely recognized by stakeholders. For example,

*“Access to higher education, as offered by Rangelands Australia, is vital to equip industry with the skills and confidence required to sustainably and economically manage 75% of the Australian land mass”* Don Heatley - Chair, Meat and Livestock Australia

*“The demand for the concept will increase as owners and managers of rangelands observe the attitudinal and practical changes brought about by those who experience further education through this program”* Peter Kenny – Chair, Expert Panel for Social Impact of Drought, and Immediate Past President, Agforce Queensland

*“Our current and next generation of land managers rely on Rangelands Australia to provide that important bridge between practical but isolated farm management, and knowledge to move our regional businesses forward”* Simone Tully – CEO, OBE Beef Pty Ltd

*“Never before have the issues facing rangeland managers been so daunting and complex. ... The programs developed by Rangelands Australia are aimed directly at providing an underpinning set of tools for rangeland managers to combat current and emerging hurdles and to face an uncertain future with a degree of confidence”* Alister Trier – Director Pastoral Production, NT Dept Regional Development, Primary Industries, Fisheries & Resources

Rangelands Australia is proud of the achievements over the past four years, but, as key stakeholders have observed, the need has not been satisfied and more should be done to build capacity to achieve industry, government and community aspirations for the rangelands. For example:

*“Prolonged drought, changing attitudes to agriculture, desire for long term sustainable management and the implications of climate change have created a current environment that demands an increased capacity for innovation and ability to manage change”* Sharon Oldfield, Cowarie Station, SA

*“While Rangelands Australia has delivered on its objectives, its work is far from done. Significant natural resource management issues remain in the rangelands and we do not*

*have the skills base needed to effectively address these issues”* Tim Ferraro - GM, Central West Catchment Management Authority

*“The continuity of this approach is essential to build on the current good work and assist land managers to prepare for the future”* John Gavin – GM, South Australian Arid Lands NRM Board.

The relevance of the RM program to work/business and one's future in the rangelands (see Appendix 1) is a unique point for differentiating this program from all other PGC programs in the NRAVS Faculty and more widely across Australia. Evidence of this has been included in on-line descriptions of RA courses on the UQ website, but a recent UQ edict has stopped this and replaced it with a section about amendments to a course in response to student feedback. While this can demonstrate 'market responsiveness', which may be important for UQ programs to demonstrate, it doesn't help a high quality program like the RM program which was actually based on market needs.

### 7.2.2.2 Recognition by the education profession

Rangelands Australia was awarded the 2009 Australian Rural Education Award (AREA) by the Society for Provision of Education in Rural Australia (SPERA). The AREA award recognizes excellence in rural education, and in particular, initiatives that expand opportunities, bring about efficient and effective education, and provide educational benefits in rural Australia. The citation noted that:

*“the development of UQ’s Rangeland Management postgraduate coursework program has been one of the most highly strategic knowledge and skill development initiatives in Australia, with needs and gap analyses, market research, stakeholders engaged and actively guiding curriculum and course development, and innovations in support for mature-aged students”.*

This is the first time the award has been conferred on a University-based education initiative in fifteen years.

### 7.2.2.3 International recognition

International recognition has grown dramatically over the past two years. Examples include invitations to collaborate in developing proposals for: a) revamping rangeland management programs in the US, and b) a global repository of range information. Both of these proposals have been successful, and will be funded by the USDA.

- a) During most of 2009 the RA Director was the only international member of the USA-based Range Science Education Council RSEC Working Party that developed a proposal for a USDA higher education grant entitled: *“Repositioning rangeland education for a changing world”*. RA's contributions to this initiative were acknowledged by the Immediate Past-President of the Range Science Education Council (Prof Karen Launchbaugh, Idaho) in a letter sent 04 Nov 2009. It reads ...

*“thank you for your insight on ways that we might revise the university rangeland curriculum here in the United States. I am very inspired by the work that you and Rangelands Australia are accomplishing. It is the most exciting initiative in range management education I have seen in decades. The strategic approach taken in your curriculum, involvement of stakeholders in curriculum development, and involvement of experience and expertise in course development are models of best practice. ... You brought us ... inspiration about a new approach ... which ... could certainly revitalize range education over here .... Thanks for taking these brave steps toward a new approach in rangeland education and thanks for sharing your insight.”*

Further, in introducing the RA Director's keynote presentation in Feb 2010, the current Chair of RSEC acknowledged that Rangelands Australia was the "*inspiration, catalyst and model*" for the USDA funding proposal.

- b) Rangelands Australia is one of five partners (along with FAO, and the Universities of Arizona, California - Davis, and Idaho) in a collaborative project also funded by USDA on '*Building Global Access to Sustainable Rangeland Resources for Research, Teaching and Extension*'. This recently approved grant will see an Australian module developed by RA as the first international contribution to a new Global Rangeland Management Program, and establishment of a Global repository of rangeland-relevant information (with initial contributions from Africa, North America, Australia and South America). This has the potential to be an invaluable resource for teaching and research in Australia.

**Recommendation:** *The RA initiative is meeting a national need, and has proven its value to industry and community groups, but has yet to reach its full potential. It is recommended that options for: a) funding the Office of the Chair of Range Management, student support (eg Rangeland Champions network), delivery of courses in remote Australia, and continuous improvement of the educational products, and b) housing the initiative be explored in parallel. Once the preferred option in each of these areas is clear, it is recommended that a funding partnership/consortium (involving MLA, higher education and industry and community groups) be established to pursue funding opportunities through Australian Government programs.*

In summary, the RA initiative represents 'good value' to Governments and other potential investors because it leverages off the significant investment to date (\$4.5m) in needs analysis and market research, unparalleled in-kind contributions to curriculum and course development, and the profile and reputation already developed among industry, remote communities and governments. Importantly, it addresses a Government commitment to transform higher education and improve access in the most educationally disadvantaged region – remote Australia (Universities Australia 2008).

### **7.3 Conclusions and recommendations – Future options for the RA initiative**

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A unique initiative in higher education, and professional development in particular, has been created at UQ Gatton, largely with external funding.

If we look to the USA for signals of where higher education in agriculture in general is heading, the growth area is in postgraduates who are entering from the workforce for professional development. These professional degrees are shorter, are designed to prepare graduates for work outside academia or research (ie the areas of workforce growth), and are typically based on (some) analysis of demand from potential employers. They are also usually trans-disciplinary, combine technical and workforce skills, and are focused on current and emerging issues, not disciplines or tools (Taylor 2010) ... just like the RM program!!

And UQ would seem to now recognize some of these trends, with relevant priorities under the 2010-2014 Strategic Plan including increasing participation in postgraduate coursework and under-represented groups, improving flexibility and access, and a renewed focus on quality in teaching. Furthermore, the Vice Chancellor announced on 15 June 2010 that UQ was gearing up for stronger partnerships with the food and agriculture sector and was revamping agricultural teaching and

research. The VC said *“UQs new strategy will improve our links with industry and encourage teamwork amongst academics from different disciplines, with the goal of making learning and research more innovative and more relevant to industry.”* While the RA initiative is strongly aligned to many of UQ’s strategic objectives, the rhetoric is yet to be demonstrated in any decision or actions within the NRAVS Faculty.

Despite RA’s success to date and the RM program being well positioned for the future, the continuing uncertainty while the recommendations of the UQ Science Review are implemented, means that the future for this initiative at UQ Gatton is unclear and it would seem to be at risk. Indeed, for some time now external stakeholders have questioned why this initiative is still based at UQ Gatton. The alternatives seem simple, viz to:

- i. Stay at UQ Gatton, or
- ii. Find an alternative home where there is greater commitment to demand-driven and student-centred education, to teaching, and especially to distance education and professional development-type programs.

### 7.3.1 Conclusions and recommendations – Option 1: Stay at UQ Gatton

This initiative was established at UQ Gatton because of the significant investment (\$1.0 m) that UQ was prepared to make in 2000, the existence of a strong group of staff with rangeland experience, complementary centres (eg Rural Extension Centre - REC), the relevance and the alignment of the philosophy of the then School of Natural and Rural Systems Management (now SIS) and RA, and the importance of rangelands to Queensland (87% of the state, with 68% of the state being leasehold land and subject to close scrutiny of management practices and outcomes).

The RA initiative has benefited from the support of over 30 UQ staff through their involvement in scoping and reviewing of courses through to identifying possible resource materials in both phases 1 and 3. However, several staff with significant rangeland experience have unfortunately left, or are about to leave, and other staff with rangeland experience are over-committed, so the involvement of UQ staff in teaching the RM program has been much less than originally anticipated. A restructure of the Faculty in 2008 in response to declining enrolments in agriculture at UQ resulted in the loss of further ‘good’ teachers with range experience.

The recent UQ Science Review has taken environmental management away from agriculture, which is a backward step as it is widely recognized that both are intimately linked (Foley 2009). There are no CRCs based at UQ Gatton, but there are research centres of relevance to current and emerging rangeland issues (ie Animal Welfare & Ethics; Advanced Animal Science). The Queensland Alliance for Agriculture and Food Innovation (QAAFI) is being established, but this seems to be along traditional disciplinary lines (ie crops, animals), and its role beyond facilitating collaborative research is unclear.

Unfortunately, there has been a sad history of Centres at the UQ Gatton campus, with five disappearing over the past seven years. The latest to disappear, the Centre for Rural and Regional Innovation (CRRIQ, formerly the REC) suffered from the withdrawal of CSIRO (CSE) and QDPI&F, and lost its IP and driver to the University of Tasmania (UTas). The Institute for Regional Development at UTas is now thriving.

Over time, cultural issues have made this initiative more difficult and slower to progress than it should have been, and while many of these are relatively minor issues, combined they raise questions about capacity for the leadership, flexibility and responsiveness necessary to remain competitive in the demand-driven higher education funding environment that will take effect in 2012. Examples of cultural impediments include:

- Lack of strategic planning
- Slow pace of change (eg reviews of postgraduate programs that distract and have no outcome)
- Lack of a response or even a reaction to strategic opportunities and threats
- Long delays in completing simple contracts (ie 6-9 months) and processing invoices (ie 4-8 weeks) which damage external credibility
- Significant delays in processing postgraduate applications, and
- Lack of any response to reports and issues.

In the current phase of the RA initiative (Phase 3), SIS/UQ have provided space, power, postage, and library, finance and personnel services, and made an annual contribution to the Director's salary of around \$39,000. Issues regarding the future of RA and the RM program were raised in September 2009, and again in April 2010. The latter discussions were optimistic and confirmed a commitment to the RM program, but since then the offer of internal support has been scaled back. It currently stands at salary support only - 6 months support for a part-time (0.6 FTE) administration assistant (funded from the RM program's Semester 1 income), and a 6-month part-time (0.45 FTE) casual lecturer contract for the Director to teach a core range course and provide coordination of the RM Program, if enrolments (and income from teaching) permit. There is no operating for those positions. Some operating will clearly be needed to pay for phones, a presence at key industry and community events, and minimal marketing, and the Director has offered to reduce his time commitment to 0.3 FTE to free up funds for operating.

Through these discussions it has become obvious that teaching large undergraduate courses and research income are what is *'taken into account in determining whether a staff member is cost-effective to the university'* or not. Clearly, external grants for program and course development (\$2.0m) and postgraduate teaching don't appear to count much at UQ in assessing 'cost-effectiveness' or 'worthiness' of an individual.

This all suggests that there is little future for both RA as a teaching-focused Centre, or the current Director, at UQ Gatton. Furthermore, if the RM program is rebadged and reliant on University and Faculty marketing, our market research and enrolment data suggest that enrolments will collapse, and it follows that the program will probably wither and die in 1-2 years if it continues at UQ without significant external investment.

The consequences of the demise of the RM Program will be that people in the rangelands seeking practical and relevant professional development in aspects of rangeland management will have no choice except for the sort of course offerings that existed in 2000 and led to the establishment of RA. Furthermore, they will not have the support that is so important in attracting and retaining mature age students.

But, perhaps the initiative could be housed and continue at another tertiary institution - one with a better understanding of partnerships, relationship building, the value and implications of engagement and business development, and a greater commitment to demand-driven and student-centred education in rural Australia. Indeed, for nationally and internationally-recognized qualifications the RA initiative must have a close association with a higher education institution.

***Recommendation:*** *The uncertainty at UQ, the lack of any short- or medium-term commitment to support the RA initiative, and the lack of alignment with UQs real priorities (discovery/research) suggests that the RA initiative will probably decline over time at UQ Gatton without significant government and industry investment. However, if MLA accepts the industry and community need and the support expressed for the RA initiative, it is recommended that MLA and DAFF (the other major holder of the IP in the program structure and courses) negotiate the release of course materials and other IP from UQ for use at one or more other higher education institutions in Australia.*

### 7.3.2 Conclusions and Recommendations – Option 2: Find another base/home

Ideally, any alternative home for the RA initiative would be a higher education institution with:

- a high profile and reputation in agriculture and NRM, and some strength and experience in aspects of range management among staff
- a strong track record in distance education and innovation in educational programs
- complementary research initiatives, postgraduate programs and courses, and a
- willingness to capitalize on and use the RA brand in the short to medium term.

These criteria narrow the field, and suggest careful scrutiny of the institutional capacity and commitment at a small number of potential new homes. Key criteria would be capacity for and a strong commitment to:

- strategic leadership
- demand-driven and student-centred education
- relationship building, collaboration and business development
- nurturing and maintaining industry and political networks
- professional, customer-focused business management practices
- being a 'learning organization'
- co-investing in, and advocacy of learning/teaching as well as research/discovery
- negotiating a share of the 'profit' from delivery of courses.

Also, key criteria for any higher education partner would be a willingness to:

- a) develop and advocate a case for the Australian Government (ie DEEWR, DAFF & DIISR) to establish the '**Australian National Rangelands Centre**', and
- b) commit to succession planning for the position of Director/Prof of Rangeland Management.

A preliminary scan has identified two institutions for closer scrutiny as possible new homes for the RA initiative, viz:

- i) University of New England
- ii) Charles Sturt University &/or the Australian Government's New Regional University

However, there may be other options, and the MLA project on '*Supply and demand for agriculturally trained graduates for the Australian grazing industries*' might identify these.

### 7.3.2.1 University of New England (UNE)

UNE is home to high profile and relevant Cooperative Research Centres (ie Beef Genetics, Australian Sheep Industry), and is a significant partner in the second phase of the Desert Knowledge CRC (ie CRC for Remote Economic Participation). It has enduring and relevant Centres like the Institute for Rural Futures, and has successfully established a Primary Industry Innovation Centre. The School of Environmental and Rural Science emphasizes the important links between agriculture and the environment (one of the drivers for the establishment of RA), and there are relevant programs (eg Natural resources; Environmental systems and markets, Rural science and agriculture) which could provide complementary elective courses. Indeed, the RM program already lists three UNE courses as electives. UNE has a long and strong record in distance education, with 80% of its students studying in this mode. Recent promotional material (including VC statements), strategic initiatives (eg Project 2012), new postgraduate programs (with fresh and unique names like 'Agricultural consulting') all demonstrate a strategic emphasis and market awareness and responsiveness.

### 7.3.2.2 Charles Sturt University (CSU)

CSU is home to the CRC for Future Farm Industries, houses relevant Centres such as Agricultural Innovation, Research in Complex Systems, and the Institute of Land, Water and Society; and is the largest provider of agricultural education in Australia. It has relevant programs (Agribusiness, Sustainable agriculture, Resilient communities) and is responsive to the market, as demonstrated in the recent review and revision of some of its undergraduate degrees (eg B. Agricultural Business Management) to better meet the needs of 21<sup>st</sup> Century industries. Indeed, the RM program already lists three CSU courses as electives. CSU is strong in distance education, and has a commitment to flexible access and pathways from VET to Higher education. CSU was a core partner in a recent study of the feasibility of a new national university to focus on high quality education for and in regional Australia. This does not seem to have progressed far beyond a needs analysis, perhaps because it doesn't have to be a regional university to provide relevant education in the regions.

**Recommendation:** *That MLA researches or commissions research to identify higher education institutions in Australia with the capacity and commitment to add value, co-invest and otherwise support the RA initiative.*

**Recommendation:** *That MLA engages with the most appropriate institution, conducts 'due diligence', and negotiates a basis for the continuation of the RA initiative at that institution.*

Growing demand and the early impacts clearly warrant further investment. As a professional development program, the RM program is unique in Australia in its development, in the response from students and its impact. The initiative has already proven its worth, but is yet to reach its full potential in the most educationally disadvantaged regions of Australia. Continuity of the RA initiative is strongly supported by industry and community leaders, and will address educational disadvantage in regional and remote Australia, which is a national priority. The legacy of this initiative will be the information on the rangelands that has been collated and distilled, the new knowledge and passion



for learning generated, and a new generation of qualified land managers, regional NRM/Landcare/agency staff with real capacity to deliver economic, environmental and social outcomes in the rangelands. And educational attainment is a key factor contributing to individual success and Australia's economic prosperity (ABS 2010). The enduring benefits of this initiative will include social capital, increased productivity, more competitive and sustainable industries, better natural resource management, more capable industry and community leadership, and more resilient rural and remote communities.

***Recommendation:*** *To achieve the potential of the Rangelands Australia initiative it is recommended that MLA, a higher education partner, industry and community leaders participate in the development, and support and advocate a proposal for Australian Government funding under the Higher Education Participation Partnerships Program (HEPPP).*

## 8 Bibliography

ABS (2010). Education and training experience 2009. pp 7. ABS, Canberra.

AgTrans Research (1998). Education and training to support sustainable management of Australia's pastoral industries. Report on Project TR.004 to the Meat Research Corporation, February 1998.

Alloway, N (2009). Work together for better participation. The Australian Higher Education Supplement. August 26, 2009.

Bastin, G (2008). Rangelands 2008- Taking the pulse. NLWRA, Canberra. pp 223.

DEEWR (2009a). Strengthening regional higher education provision. pp 2. Available at: [http://www.deewr.gov.au/HigherEducation/Documents/PDF/Pages%20from%20A09-303%20Budget%20Fact%20Sheets-11\\_webaw.pdf](http://www.deewr.gov.au/HigherEducation/Documents/PDF/Pages%20from%20A09-303%20Budget%20Fact%20Sheets-11_webaw.pdf) (Accessed 20 May 2010)

DEEWR (2009b). Undergraduate applications, offers and acceptances: 2009. Available at: <http://www.deewr.gov.au/HigherEducation/Publications/HEReports/Documents/FINALAppsandOffers2009.pdf> (Accessed 23 May 2010)

DEEWR (2009c). Funding to support low SES participation targets. pp 2. Available at: [http://www.deewr.gov.au/HigherEducation/Documents/PDF/Pages%20from%20A09-303%20Budget%20Fact%20Sheets-2\\_webaw.pdf](http://www.deewr.gov.au/HigherEducation/Documents/PDF/Pages%20from%20A09-303%20Budget%20Fact%20Sheets-2_webaw.pdf) (Accessed 20 May 2010)

DEEWR (2010). Regional Participation: The role of socioeconomic status and access (pp 81). Available at: [http://www.deewr.gov.au/HigherEducation/Programs/Equity/Documents/RegionalParticipation\\_report.pdf](http://www.deewr.gov.au/HigherEducation/Programs/Equity/Documents/RegionalParticipation_report.pdf) (Accessed 20 May 2010)

DEST (2001). Regional participation in HEd  
<http://www.dest.gov.au/archive/highered/occpaper/99B/1.htm>

Fenton & Rickert (2008). A national baseline of the social and institutional foundations of NRM programs. NLWRA, Canberra. pp 170. Available at: <http://nlwra.gov.au/files/products/national-land-and-water-resources-audit/pn20593/pn20593.pdf> (Accessed 20 May 2010)

Ferguson, J (2008). Dynamic deserts building resilient communities. Desert Knowledge Symposium 2008, Alice Springs NT.

Foley, J (2009). The other inconvenient truth: the crisis in global land use. Available at: <http://e360.yale.edu/content/feature.msp?id=2196> (Accessed 23 May 2010)

Harding, S (2010). Proximity not sole participation factor. The Australian Higher Education Supplement. June 9, 2010.

Lesslie, R, M Hill, G Woldendorp, S Dawson & J Smith (2006). Towards sustainability for Australia's rangelands: Analysing the options. Bureau of Rural Sciences, Canberra ACT.

NRMMC (2010). Principles for natural resource management in the rangelands. pp 17. Available at: <http://www.environment.gov.au/land/rangelands/pubs/rangelands-principles.pdf> Accessed 25 May 2010.

Quay Connections (2003). Market analysis and strategic directions. Unpublished report to Rangelands Australia, April 2003.

Rola-Rubzen, MF & M McGregor (2008). Impact of the desert economy. Desert Knowledge Symposium 2008, Alice Springs NT.

Taylor, JA (2002). Key personal attributes and areas of knowledge for future success in the rangelands. Proceedings 12<sup>th</sup> Biennial Conference of the Australian Rangeland Society, September 2002, Kalgoorlie WA, pp 74-78.

Taylor, JA (2003). Building capacity in Australia's rangelands. Proceedings VIIth International Rangeland Congress, July-August 2003, Durban South Africa. pp 1801-1808.

Taylor, JA (2006). Building capacity in the rangelands. Final report on Projects NAP3.326 and NBP217 to Meat and Livestock Australia, March 2006. pp 132.

Taylor, JA (2008). Stakeholder perceptions of postgraduate program nomenclature. Report of a survey. May 2008, pp 16.

Taylor, JA (2010). Rangeland and Related education initiatives. Report on a USA trip, February 2010. pp 26.

Universities Australia (2008). Advancing equity and participation in Australian Higher education. [http://www.universitiesaustralia.edu.au/documents/publications/policy/equity/0408\\_Equity\\_Particip\\_Action\\_Plan.pdf](http://www.universitiesaustralia.edu.au/documents/publications/policy/equity/0408_Equity_Particip_Action_Plan.pdf)

## 9 Appendices

- 9.1 Course offerings and evaluations
- 9.2 Popular articles on the Rangelands Australia initiative
- 9.3 Industry, community and government events attended
- 9.4 Funding contributions and income generated from teaching
- 9.5 Funding required to continue the Rangelands Australia initiative
- 9.6 External acknowledgement of RA's role and contributions

### 9.1 Appendix 1: Course offerings and evaluations

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Over the period 2003-2009, a suite of 12 rangeland-specific courses have been developed as the core of Australia's only program in rangeland management. All of the courses are offered by distance, with 6 of these also offered in intensive/block mode. The latter have been delivered at the following locations: Carnarvon (WA), Charleville (Q), Charters Towers (Q) x 3, Longreach (Q) x 3, and Port Augusta (SA) x 4, and more are scheduled for Semester 2, 2010 in Leonora (WA) and Charleville (Q). Student demand and evaluations show a growing preference for the place-based intensive/block courses. Feedback from the students on the intensive courses continues to be very positive, particularly regarding collaborative learning, sharing of experiential knowledge, exploration of different worldviews and experiential learning through the application of knowledge.

The inclusion of high impact educational practices (ie learning communities, collaborative projects, exploring experiences, experiential learning and integrated blended learning) in all courses are resulting in highly engaged students, which is reflected in the course evaluations (see below) and in high retention rates (see above).

University and RA-initiated evaluations of all of the RA-developed courses offered in Semester 1 and 2 of 2008 and 2009 show that these courses are fresh, high quality, challenging, practical and relevant, and are leading to very positive learning experiences. For example, **average student evaluation scores** (out of a max of 5) across all of the RA-developed courses delivered in 2008 and 2009 were:

Learning facilitator provided useful guidance and support	4.5
Learning Guide and Reader were useful resources	4.2 - 4.4
Satisfaction with the challenge of the learning activities	4.5
Satisfaction with the content of the course	4.3 - 4.5
Satisfaction with the structure & integration of the course	4.2 - 4.3
New skills and knowledge gained	4.6 - 4.7
<b>Relevance to work and business</b>	<b>4.5 - 4.6</b>
<b>Relevance to a future in the rangelands</b>	<b>4.5 - 4.6</b>
Overall satisfaction	4.3 - 4.6

**Other student feedback** provided as part of the course evaluations conducted in 2008 and 2009 has included:

- *"The course is rewarding, challenging and quite useful for my operation"* AGRC7001\*
- *"The course was challenging, interesting and very relevant to my work in the rangelands"* AGRC7001
- *"Excellent. I have enjoyed the learning and the learning experience"* AGRC7001
- *"Excellent experience with valuable learning outcomes, directly applicable to my work"* AGRC7001
- *"Very worthwhile and intellectually challenging course"* AGRC7001
- *"Broadened my outlook wrt the issues facing people, business and landscapes"* AGRC7001
- *"The course has definitely made me step outside my comfort zone, and has helped me think about things differently"* AGRC7001
- *"This course is a must – it is thought provoking, well referenced and brings together an eclectic group of participants"* AGRC7023
- *"The course was very relevant to me and the property I manage. This information is now being used in practical applications"* AGRC7023
- *"Good course, challenging, rewarding"* AGRC7023
- *"Highly relevant and practical ... should be compulsory for dept personnel working in natural resource management"* AGRC7028
- *"A very, very informative course which is very relevant"* AGRC7029
- *"Well integrated, applicable to any region, big picture with lots of detail"* AGRC7035
- *"This course was of enormous benefit to me personally as well as my job ..."* AGRC7035
- *"No one should be working in rangelands without an understanding of the ... concepts and models presented in this course"* AGRC7035
- *"Excellent... This will improve the management of our property and also my career in animal nutrition"* ANIM7017
- *"I thoroughly enjoyed the course and it was very applicable to my future in the rangelands"* ANIM7017
- *"Gave more scientific understanding of a subject that I believed I had some knowledge of. Didn't know as much as I thought"* ANIM7017
- *"Very good ... a real necessity in these days of transparency and interaction and joint decisions"* MGTS7976
- *"Very relevant and given me a deeper understanding of vital participatory processes"* MGTS7976
- *"This subject has had a profound effect on my worldview"* MKTG7965
- *"An excellent course which will change the way I think about information and ... consider issues..."* MKTG7965
- *"The best course I have done as part of my MRurSystemsMgmt, and the most relevant to my work"* MKTG7965
- *"An excellent course which will change the way I think about information, and hopefully help me to consider issues from different angles. Made me more confident about my family taking on a future in the rangelands"* MKTG7965

\*Where:

AGRC7001 – Sustainable production systems and regions  
AGRC7023 – Grazing land management  
AGRC7028 – Rangeland monitoring and adaptive management  
AGRC7029 – Diversification and new industries  
AGRC7035 – Advanced rangeland ecology  
ANIM7017 – Animal nutrition and behaviour  
MGTS7976 – Building effective stakeholder engagements  
MKTG7965 – Global and national trends, local scenarios

Student evaluations also reveal that the RA-developed courses are relevant well beyond the rangelands.

According to the students, the strengths of the courses are:

*“Relevance to rangeland systems throughout Australia”*

*“Balance of theory and field work”*

*“Field work exercises”*

*“Theory well grounded with practical field work”*

*“Learning guide as a resource to look back through”*

*“Excellent course materials”*

*“The amount of contact with the Learning facilitator”*

*“Very informed and practical Learning facilitator”*

*“The Learning facilitator is in private industry himself”*

*“Interaction with Learning facilitator and other students”*

*“The challenge of the learning activities”*

*“The opportunity to learn from other experienced managers”.*

## 9.2 Appendix 2: Popular articles on the Rangelands Australia initiative

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A wide range of newspaper, newsletter or magazine articles have been published on the Rangeland Management program, Rangeland Champions and/or Rangeland Management students. These articles have been written by the RA Director, Rangeland Champions, students and Communication officers in state agencies and regional NRM groups in the period January 2007- April 2010:

- *Further education – it isn't what it used to be!* Western Division Newsletter (NSW), Jan-Feb 2007, p 5-6
- *Further education – it isn't what it used to be!* Pastoral Lines (Pastoral Lands Board newsletter, WA), Feb 2007, p 49
- *Learning for success in the rangelands: New opportunities for further study from home.* Pastoral Lines (WA), Feb 2007, p 50-51
- *Fostering further education in Western NSW*, Country Web (Rural Women's Assn newsletter, NSW) (Feb 2007), p 10-11
- *Education and training in rangeland management.* Range Management Newsletter (Aust Rangeland Society, National) March 2007, p 7-8
- *Creating Champions for Bush Future.* Australian Landcare (National), September 2007, p14
- *Investing in a Future in the Rangelands.* Aust Farm Journal, July 2007, p 14-15, and 18
- *Learning for Success in the Central West.* Central West Newsletter (QDPI&F, State), August 2007, p 4
- *Dad, Mum, we won't wait forever.* Australian Farm Journal (National), August 2007, p 7
- *A Rangeland Champion.* Australian Farm Journal, August 2007, p 7
- *Creating Champions for Bush Future.* Australian Landcare (National), September 2007, p14
- *Boost your knowledge and skills in rangeland management.* Western Division Newsletter (NSW), Nov 2007, p 18.
- *Learning in the Western Division.* Western Division Newsletter, Nov 2007, p 19 + advert.
- *Rangeland Champions – Understanding and support for mature-aged learners.* Range Management Newsletter (National), November 2007, p 4-7
- *Taking study seriously.* The Northern Miner (Q), 29 February 2008
- *Looking for recognition of your skills to improve your career prospects?* Barkly Beef (NT), March 2008, p 5.
- *Backing operational knowledge with science.* Range Management Newsletter, Mar 2008, p 4.
- *Rangelands Australia Courses.* Katherine Rural Review (NT), March/April 2008, p 6.
- *Three-day course for those wanting to study further.* Across the Outback (SA), May 2008, p 3

- *Graziers advance through rangeland studies.* Australian Farm Journal (National), July 2008, p 31-32, and an advert on p 25
- *Learning for a future in the bush at Port Augusta.* Coober Pedy News (SA), 17 Jul 2008, p 3
- *Looking for Postgraduate Coursework that's relevant to over 80% of Australia?* Land & Water News, 2nd July, 3 & 17 Dec 2008, EnviroNews, 9th July, 4 & 18 Dec 2008, and LG News 18 Dec 2008 (all National)
- *Dunluce: 100 years of progress.* Qld Country Life (Q & NT), 7 Aug 2008, p 110
- *New Rangelands course recognises industry experience.* QDPI&F (Q) News release, 10 Sept 2008
- *Penny learns about management.* NQ Register (Q & NT), 18 Sept 2008, p 12
- *Exciting study opportunities in the Rangelands.* Northern Muster (QDPI&F newsletter, Q) Sept 2008, p 12
- *Championing rangeland students in NSW.* Western Division Newsletter (DPI, NSW) Nov 2008, p 8 + advert
- *Industry in focus: Rangelands future.* Frontier (MLA, National), Summer 2008-09, p 23.
- *Uni comes to Longreach.* Available at: <http://dcq.boab.info/uni-comes-longreach> (Accessed 8 Mar 2010).
- *DCQ hosts university course on Rangelands.* Longreach Leader (Q), April 2009.
- *New rangeland-specific courses and new modes of delivery.* Range Management Newsletter July 2009, p 8.
- *Gaining a deeper understanding and a brighter future with Rangelands Australia.* Southern Rangelands Pastoral Memo (WA), August 2009, p 5-6.
- *Learning for a Future in the Bush.* Australian Farm Journal, July 2009, p 24.
- *Education: Rangelands Study.* Frontier, Spring 2009, p 14.
- *Education: Bolstered by Knowledge.* Frontier, Spring 2009, p 15.
- *Learning for a Future in the Bush.* National Farmers Federation Ann Review 2008-09, p 91.
- *Rangelands Australia – Australian Rural Education Award 2009.* Range Management Newsletter, November 2009, p 11.
- *Education & Training: Learning for a Future in the Bush.* Agribusiness Chain Vol 10 #1 2010, p 40-41.
- *Want to study again?* Pedals (Isolated Children Parents Association) Summer 2009-10, p 32.



**9.3 Appendix 3: Participation in industry, community and government events in 2007, 2008, 2009 and early 2010 to promote the program, pathways, etc**

<b>2007</b>	<b>Location</b>	<b>Event</b>	<b>RA role</b>	<b>Who'll be there?</b>
20 February	Greenvale Q	MLA Beef-up Forum	Exhibitor	Bob Shepherd (Local Champion)
8-9 March	Broken Hill NSW	Western Division Young Farmers Forum	Sponsor, speaker & exhibitor	John Taylor & Chrissy Brown (Local Champion)
20-22 March	Townsville Q	Northern Beef Research Update Conference	Exhibitor	John Taylor & Bob Shepherd (Local Champion)
29-30 March	Katherine NT	Nthn Territory Cattlemens Association AGM, then Katherine Beef Up Forum	Exhibitor	John Taylor & Richard & Dionne Walsh (Local Champions)
20 April	Cloncurry Q	MLA Beef Up Forum	Exhibitor	John Taylor
24 April	Broome WA	Kimberley Beef Up Forum	Exhibitor	John Taylor & Michael Jeffery (Local Champion)
26-27 April	Beltana SA	Outback Alive	Exhibitor	Sharon Bell & Jim Cawthorne (Local Champions)
27 April	Dampier WA	Pilbara Beef Up Forum	Exhibitor	John Taylor
14-15 May	Mitchell Q	Mitchell Show	Exhibitor	Ian Beale (Local Champion)
8 June	Charleville Q	Western Qld Beef Up Forum	Exhibitor	John Taylor
21-22 June	Mt Ive SA	Field Day	Exhibitor	Jim Cawthorne (Local Champion)
22 June	Barcaldine Q	Western Qld Beef Up Forum	Exhibitor	John Taylor
17-19 July	Goondiwindi Q	AgForce State Conference	Sponsor & exhibitor	John Taylor
20-22 July	Katherine NT	Katherine Show	Exhibitor	Dionne & Richard Walsh (Local Champions)
29-31 July	Charters Towers Q	Charters Towers Show	Exhibitor	Bob Shepherd (Local Champion)
3 August	Injune Q	Central Qld Beef Up Forum	Exhibitor	John Taylor
17 August	Glendambo SA	Field day	Exhibitor	Jim Cawthorne (Local Champion)
30 August	Emerald Q	Central Qld Beef Up	Exhibitor	John Taylor

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		Forum		
18-19 September	Canberra ACT	National Forum NRM Facilitators	Exhibitor	John Taylor
5 October	Ivanhoe NSW	Kilfera Field Day	Exhibitor	Dee Wilkes-Bowes (Local Champion)
18 October	Tilmouth Well NT	Remote Management Field Day	Sponsor & exhibitor	John Taylor
26 October	Oxley NSW	Riverina Multi-purpose Merino Field day	Exhibitor	Dee Wilkes-Bowes (Local Champion)
1 November	Goondiwindi	Sthn Qld Beef Up Forum	Exhibitor	John Taylor
3-4 November	Hay NSW	NSW Annual Women of the Land Gathering	Exhibitor	Dee Wilkes-Bowes (Local Champion)
15-16 November	Roma Q	Young Beef Producers Forum	Sponsor, exhibitor & speaker	John Taylor

<b>2008</b>	<b>Location</b>	<b>Event</b>	<b>RA role</b>	<b>Who'll be there?</b>
26 March	St George, Q	MLA Forum	Exhibitor	Richard Golden Local Champion
27 March	Warwick, Q	MLA Forum	Exhibitor	Richard Golden Local Champion
22 April	Karumba, Q	MLA Forum	Exhibitor	John Taylor
23 April	Boulia, Q	MLA Forum	Exhibitor	John Taylor
20 May	Hughendon, Q	MLA Forum	Exhibitor	John Taylor
22 May	Atherton Tableland, Q	MLA Forum	Exhibitor	Joe Rolfe
28 May	Darwin, NT	NTCA Conference	Sponsor & Exhibitor	John Taylor
29 July	Brisbane Q	QDNR&W Distinguished Scientist Seminar Series	Speaker	John Taylor
2-3 August	Nyngan NSW	Ag Expo	Exhibitor & speaker	John Taylor
6 August	Kidman Springs, NT	DPIF&M Field day & MLA Forum	Exhibitor	Dionne Walsh Local Champion
8 August	Adelaide River NT	MLA Forum	Exhibitor	Dionne Walsh Local Champion
23-24 August	Hughendon Q	Arid Lands Festival & expo	Exhibitor, sponsor & speaker	John Taylor
27 August	Rockhampton Q	AgForce Meeting – Central Region	Exhibitor & speaker	Richard Golden Local Champion
29 August	Longreach Q	Desert Channels Qld seminar	Speaker	Mike Chuk Local Champion

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5 September	Clermont Q	MLA Forum	Exhibitor	Roger Landsberg RM student
9-10 September	Barcaldine	Westec Field Day	Exhibitor	Mike Chuk Local Champion
12-14 September	Mackerel Islands, WA	Pastoralists & Graziers Assn Conference	Sponsor & Exhibitor	John Taylor
16-18 September	Proserpine, Q	AgForce Annual Conference	Sponsor & Exhibitor	John Taylor
21-24 September	Monto, Q	Qld Landcare Conference	Sponsor & Exhibitor	John Taylor
28 September – 4 October	Charters Towers, Q	Australia Rangeland Society Conference	Sponsor & Exhibitor	John Taylor, RA staff & Rangeland Champions
9-10 October	Charters Towers Q	Blueprint for the Bush Forum	Exhibitor	Bob Shepherd Local Champion
17-18 October	Coonamble NSW	NSW Rural Women's Network	Sponsor, exhibitor & speaker	Dee Wilkes-Bowes & Michelle Maunder Local Champions
20-23 October	Toowoomba Q	Vegetation Futures 0AgForce Meeting – SW Region8	Exhibitor	John Taylor
28 October	Cunnamulla Q		Exhibitor & speaker	Richard Golden Local Champion
4-7 November	Alice Springs, NT	Desert Knowledge Symposium	Sponsor & Exhibitor	John Taylor
12 November	Orange NSW	MLA Meat Profit Day	Sponsor & Exhibitor	Michelle Maunder Local Champion
12-13 November	Broken Hill NSW	Bestprac Forum	Sponsor	John Taylor
13-14 November	Roma Q	Young Beef Producers Forum	Sponsor & Exhibitor	Richard Golden Local Champion

2009	Location	Event	RA role	Who'll be there?
27 March	Alice Springs, NT	NTCA Conference	Sponsor, Exhibitor	John Taylor Dionne & Richard Walsh Local Champions
? April	?, NSW	NSW Farmers Assn Region 12 /Western Divn Convention	Sponsor, Exhibitor & Speaker	Christine Ferguson Local Champion
14 April	Kimberley, WA	MLA Forum	Exhibitor	Michael Jeffery Local Champion
8-9 July	Adelaide, SA	SPERA Conference	Award recipient, Speaker	John Taylor

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13-14 August	Longreach, Q	ICPA National Conference	Exhibitor	John Taylor
23 August	Gatton, Q	UQ Gatton Open Day	Exhibitor	John Taylor
15 September	Cunnamulla, Q	MLA Forum	Exhibitor	Richard Golden Local Champion
2 October	Roma, Q	Meat Profit Day	Exhibitor	John Taylor
24 October	Culgoa NSW	Western Division Landcare Forum	Speaker & exhibitor	Christine Ferguson Local Champion
9 November	Charters Towers, Q	MLA Forum	Exhibitor	Bob Shepherd Local Champion
11 November	Georgetown, Q	MLA Forum	Exhibitor	Joe Rolfe Local Champion
12 November	Cobar NSW	Western Lands Advisory Council	Speaker	Dee Wilkes-Bowes Local Champion
19 November	Roma, Q	Young Producers Forum	Exhibitor	John Taylor

<b>2010</b>	<b>Location</b>	<b>Event</b>	<b>RA role Who'll</b>	<b>be there?</b>
26 February	Alice Springs NT	MLA Forum	Exhibitor	Dionne Walsh Local Champion
23-24 March	Adelaide SA	National Landcare Forum	Exhibitor	John Taylor
25-26 March	Darwin NT	NTCA Conference	Sponsor of Ladies Lunch	John Taylor
12 April	Longreach Q	MLA Forum	Exhibitor	John Taylor
24 April	Rolleston Q	MLA Forum	Exhibitor & speaker	Richard Golden Local Champion
25 April	Taroom Q	MLA Forum	Exhibitor & speaker	Richard Golden Local Champion

## 9.4 Appendix 4: Funding contributions and income generated

Over the past five years, 95-98% of the funding for RA staff and operating costs has been external funding (Table 9.5.1). Looking at teaching income and expenditure, the RM program broke even in 2006, and income from student fees and commonwealth payments have been steadily increasing to the current level (Table 9.3.2). Over the past four years the total income generated for UQ from teaching is estimated at \$1.0+m\*. This has been retained by the University, with ~\$39,000 p.a. re-invested in the RM program.

Table 9.4.1: Funding for the Rangelands Australia initiative 2005-2010

<b>Funding Source</b>	<b>2005-06 \$</b>	<b>2006-07 \$</b>	<b>2007-08 \$</b>	<b>2008-09 \$</b>	<b>2009-10 \$</b>
CSIRO (CSE)	180,000				
DAFF/NLP		570,750	275,750	286,500	
Qld Govt			150,000	150,000	150,000
MLA		50,000	50,000	50,000	50,000
FRRR					50,000
UQ*		38,000	38,000	38,000	38,000
<b>Total \$</b>		<b>670, 750</b>	<b>513,750</b>	<b>524,500</b>	<b>288,000</b>

\*The University also provides space, power and two desk telephones.

Table 9.4.2: Income generated\* for the University from Student fees and Commonwealth payments

<b>Source of income</b>	<b>2009 \$*</b>
Student fees	151,000
Commonwealth payments	237,000
<b>Total \$</b>	<b>388,000</b>

\*This is a 'best estimate', and a conservative estimate at that. It is a very complex calculation, based on the number of courses a student has undertaken in a calendar year (ie University financial year), the type/band of course, and whether they are commonwealth-supported or full fee paying students.

**9.5 Appendix 5: Funding required to continue the Rangelands Australia initiative**

Funding for this national initiative is required for two areas: i) Office of the Chair of Range Management, and ii) Centre operating. (Note: i) might be funded by a University-MLA partnership, and ii) through the DEEWR's HEPPP program if the Caring for our Country (CfoC) proposal is not successful.) The \$'s provided below represent annual costs, with operating costs as from RA's 'Caring for our Country' proposal\*, currently under consideration by DAFF & DEWHA.

**I) Office of the Chair of Rangeland Management**

Full-time Professor (salary + on-costs)	\$175,000
Part-time PA/receptionist (25 hrs per week)	\$ 36,000
Office consumables, remote travel & accommodation costs	\$ 29,000
Participation in industry & community events, promotion of pathways and marketing*	\$ 70,000

**Total** **\$310,000**

\*Could also be seen as an operating cost. Currently included in the CfoC proposal.

**II) Operating (course improvement, promotion and marketing)**

Update** the 2003 national skills & knowledge needs analysis	\$ 20,000
Re-activate the national network of Rangeland Champions to support mature-aged learners and their application of learning in management initiatives	\$ 90,000
P/T Research officer/knowledge broker to source new and emerging info for course updates	\$ 55,000
Annual update of the 12 courses by small panels to incorporate new information, address new contexts	\$100,000
Extra costs of face-to-face delivery of up to 10 courses in remote areas (ie facilitator travel and accommodation, venue hire, etc)	\$50,000
Surveys of participant satisfaction and property/regional visits to document/record practice change and other benefits of higher education learning outcomes	\$100,000

**Total: 2011 only** **\$415,000**

**Annual recurring** **\$395,000**

\*The CfoC proposal is for \$1,325,000 over 3 years, 07/2010–06/2013, and is targeted at land managers and up-skilling regional NRM staff and Boards across Australia. The outcome of the bid should be known by mid-July 2010.

\*\*2011 only

### 9.6 Appendix 6: External acknowledgement

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As a result of our presence in the rangelands and promotion and marketing activities over the past 3-4 years, understanding and appreciation of the value of Rangelands Australia's educational programs and allied initiatives has grown dramatically in regional and remote Australia. A sample of statements, made in 2009 by industry/community leaders and representatives of key organizations in support of a funding proposal, follow:

- *"It is in the National interest that this program continues to be supported. The knowledge building program and innovative forms of delivery developed by Rangelands Australia are highly relevant to land managers in our rangelands"* (Dr Peter Johnston - President, Australian Rangeland Society)
- *"The courses that Rangelands Australia offers provide unique educational and training opportunities for Indigenous and non-Indigenous people to gain better understanding and knowledge of the complex eco-systems that make up the rangelands across Australia."* (David Galvin – GM, Indigenous Land Corporation)
- *"Rangelands Australia provides a unique range of high quality courses which assist with meeting the growing demands of the job and skills market. The Rangeland Management program also delivers pertinent information about how best to prepare and deal with the environmental challenges of the 21<sup>st</sup> Century, using delivery methods appropriate to students in these remote locations. "* (Roxanne Morrissey – Federal President, ICPA Aust)
- *"Access to higher education, as offered by Rangelands Australia, is vital to equip industry with the skills and confidence required to sustainably and economically manage 75% of the Australian land mass"* (Don Heatley – Chairman, Meat and Livestock Australia)
- *"Unfortunately regional and remote Australian's often face a range of challenges in regard to access to education and training services. Rangelands Australia is seeking to specifically overcome these challenges"* (Ben Fargher - CEO, National Farmers Federation)
- *"The extensive on-ground consultation with producers by Rangelands Australia ensures that the courses delivered are targeted to suit people living and working in the grazing and related industries in remote Australia"* (Shaughn Morgan – Chief Executive, NSW Farmers Association)
- *"The role of Rangelands Australia is central to the present and future success of our sector, land and people as we are challenged by a changing physical, economic and policy world"* (Rohan Sullivan - President, NT Cattlemen's Association)
- *"Rangelands Australia offers an important program which allows those located in rural and remote regions of WA opportunities to access to higher education"* (Robert Gillam - President, Pastoralists & Graziers Association of WA)
- *"Rangelands Australia has delivered land managers with excellent skills in natural resource management and it is vital that this work continues"* (Tim Ferraro - GM, Central West Catchment Management Authority, NSW)
- *"For land managers across the half a million square kilometres of the Desert Channels Region the Rangelands Australia courses are the obvious choice, giving the managers of the*

*future real skills in rangelands management” (Leanne Kohler - CEO, Desert Channels Queensland)*

- *“The Rangelands Australia courses provide a mechanism to build capacity which is tailored to the needs of land managers. The initiative is relevant and unique” (Kate Andrews - Chair, Natural Resources Management Board, NT).*
- *“The courses offered by Rangelands Australia and the method in which they are offered have proven to be very effective and relevant to our region” (John Gavin - GM, South Australian Arid Lands NRM Board)*
- *“The Rangelands Australia courses provide direct access to the latest R&D information on the relevant aspects of rangeland management” (Daryl Green - GM, Western Catchment Management Authority, NSW)*
- *“The Rangeland Australia approach has been very successful in the way it encourages the first often difficult steps back into education and offers highly relevant and stimulating subject choice” (Bill McIntosh - Chair, Outback Areas Community Development Trust, SA)*
- *“Rangelands Australia has had remarkable success in its short history in changing attitudes and increasing access to higher education in Australia's rangelands” (Paul Erkelenz - Consultant, Rural Solutions, SA)*
- *“I firmly believe that the continuation of this unique initiative is essential for the ongoing education of people and producers living in remote and regional Australia” (Peter Kenny, Chair, Expert Panel for Social Impact of Drought, Q)*
- *“The Rangelands Australia initiative not only recognises the raw talent that lies in regional locations but encourages its development both personally and professionally. Without the continuity of the Rangelands Australia initiative the talent within our remote communities could lie untapped and underutilized” (Alexander McDonald - MD, MDH Holdings Ltd, Q)*
- *“Education opportunities in remote Australia are severely limited and the programs developed by Rangelands Australia address this through courses specifically designed to address the current & emerging issues facing our rangelands as well as the needs of the people who live there” (Sharon Oldfield, Cowarie Station, Birdsville Track, SA)*
- *“Our current, and next generation of land managers rely on Rangelands Australia to provide that important bridge between practical but isolated farm management, and knowledge to move our regional businesses forward” (Simone Tully - CEO, OBE Beef; Q, NSW & SA)*
- *“The Rangelands Australia initiative is a highly credible and essential player in building capacity for economic, environmental and social outcomes in regional and remote Australia” (Dr Brian Keating - Director, CSIRO Agricultural Sustainability Initiative)*
- *“The programs developed by Rangelands Australia are aimed directly at providing an underpinning set of tools for rangeland managers to combat current and emerging hurdles and to face an uncertain future with a degree of confidence” (Alister Trier – Director, Pastoral Production, Department of Regional Development, Primary Industries, Fisheries & Resources, NT)*