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MULTIPLE PATHWAYS TO SUCCESS IN LAND MANAGEMENT

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ABSTRACT

This paper elaborates on my position as rangeland manager for AACo, my experiences and challenges in this role, and highlights issues critical to achievement and success in rangeland management. In rangeland management the key to success is keeping an open-mind, and understanding issues, the people and the history of the issues.

INTRODUCTION TO AACO

Managing the land resource is crucial for one of Australia's s largest pastoral companies, the Australian Agricultural Company (AACo). The company owns 23 stations (totalling 7 million hectares) in the Northern Territory and Queensland, of which 99% are classified as rangelands.

AACo recognise rangeland management as an integral component of their production system, hence my position as a rangeland manager for AACo. I joined the AACo as the first rangeland employee in 1999. I was relatively 'green' to the field of natural resource management, but had plenty of practical knowledge and know-how of station operations; cattle management and most importantly, I understood the people, and their attitudes. If I did not have these qualities I believe that I would not be here today.

I am based at Canobie Station 200 km north of Julia Creek in north Queensland. My role with AACo is to work closely with station managers in developing natural resource management plans, assist managers in monitoring and dealing with local control and management issues. Numerous changes and developments have occurred in rangeland management within AACo in the past few years, which has resulted in the employment of an additional staff member specifically to deal with rangeland management issues.

WORKING FOR A LARGE PASTORAL COMPANY

The opportunity to work for a large, competitive, ever-expanding pastoral company is an experience in itself. My position is extremely dynamic, challenging and occasionally frustrating, but I have the opportunity to work on many issues across a wide assortment of land types and climate variability. The main issues recognised as being the drivers in maintaining AACo's landscape health and profitability are listed below.

- Noxious weed control and management,
- Fire control and management,
- Remnant vegetation and riparian management,
- Pest and feral animal control and management,
- Vegetation thickening and encroachment control and management,
- Feedlot environmental management,
- Pasture management,
- Ground water management,
- Stream water health,

- Infrastructure management,
- Soil health including erosion control and management,
- Conservation management,
- Pollution, chemical and waste management.

Over and above the environmental issues, a sound understanding of station operations, herd dynamics, nutrition, herd behaviour patterns, marketing and livestock logistics are necessary background information to developing land management plans.

From my experience, there is no expectation to know and understand all of the above, but it is more important to know how it fits together. Similarly it is important to form strong working relationships and alliances with land managers, neighbours and agencies to enable you to pull it all together. Using a bit of common sense, combined with listening and willingness to learn, will get you a long way and, most importantly will earn respect.

Rangeland management in AACo includes provision for developing its natural resources to provide adequate financial returns to its shareholders whilst embracing environmental strategies to achieve ecologically sustainable development.

I have a basic understanding of how our activities affect these drivers, but for each situation, the process of controlling the issue or hazard is frequently different because the cause(s) often differ.

MAKING A DIFFERENCE

Land managers are busy people and often not likely to adopt new technologies or management techniques unless prompted or at least supported. Managing change is a very delicate process and can be threatening if all and sundry do not fully understand the processes or outcomes. There have been numerous changes and achievements within AACo's rangeland management in the past four years including:

- Development of pasture monitoring system/s,
- Installation of almost 200 pasture monitoring sites,
- Installation of exclosure sites,
- Installation of 15 weed monitoring sites,
- Fencing off of three mound springs accompanied by conservation agreements,
- Fencing off of 170 km of riparian land,
- Replacing 2 bore drains with articulated watering systems,
- GIS mapping of 19 stations,
- Comprehensive weed management plans on all stations,
- In excess of \$2 million invested in weed control and management activities,
- Environmental Management Plans being developed and piloted,
- Forming 10 sub-catchment community groups for weed control (involving 11 individual AACo stations and 20 neighbours),
- Instigated research and development projects.

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AACo recognises rangeland management as an integral component of their production system and have really given me ample opportunities to identify and justify the need for many land management projects. Without the financial and moral support of AACo, and the forward thinking of its senior management, I would not have been able to achieve what the station managers and I have done to date.

KEY TO SUCCESS

The key to successful land management is to be <u>open-minded</u> – understand the issues, understand the people and most importantly, learn and understand the history of these issues. In land management planning, the aim is to identify the potential risks to our grazing lands and manage them by maintaining land in good condition and/or changing the management regime(s) to suit the management goals.

During the process of change, no matter how small or large a change, from my experience it is important that both you and your colleagues fully understand and comprehend all of the opportunities and threats of what you are doing, otherwise outcomes may not be as expected.

Huge financial outlays are often required to achieve the change and the desired outcome, so in such cases you must be meticulous in researching and planning what you are trying to achieve.

Leadership is essential when developing or facilitating land management plans. A leader must have the respect of colleagues to enable them to drive processes in the desired direction. From my experience this requires:

- Good people skills,
- Sound knowledge of what they are doing,
- Ability to listen and communicate with stakeholders,
- A positive attitude,
- Diplomacy,
- A willingness to learn,
- To be independent,
- An open-mind at all times.

If you have these qualities, or at least some of them, you will earn respect from your colleagues, be more effective, and will have a bright future in rangeland management. A lot of these qualities you do not normally learn at university, and they are important to strengthen as part of your personal development.

LAND MANAGEMENT PLANNING

The pathway to success in land management is not straightforward. Land management planning for individual stations is a process that requires:

- 1. Land manager involvement.
- 2. Stakeholder involvement and partnerships.
- 3. Understanding risks involved in implementation.
- 4. Transfer of knowledge.
- 5. Understanding people, the landscape, science, history and legislation.

Land manager involvement

Most land managers have a lifetime of experience in the rangelands and they are acutely aware that for them to produce high-quality cattle, they must first seek the harmonious balance between production and maintaining key soil, water and biodiversity values. Land managers may not talk this lingo but they are very aware of changes that go on around them and are at the forefront of monitoring and understanding changes in their landscapes, and are in the position to do so on a daily basis.

In land management planning, it is a team effort. And the most important contributor to land planning is the land manager. When developing plans, capacity building of the land manager is imperative. The land manager must feel as though it is his/her plan, and feel an important part of the process because after all, he/she will be the driver and implementer of the plan.

My position, I believe, is to act as the 'middle man' to talk through issues with station land-managers, liaise with technical and extension personnel, and work through a plan with the station manager on dealing with the issues. For the plan to be successful, the land manager must feel as though he is the one making the difference – not you as the facilitator.

Stakeholder involvement and partnerships

Most land management issues are best addressed on a regional/catchment basis. An excellent example of this was in 2001, when, in conjunction with DPI, I undertook an economic study to justify significant increases in weed control expenditure on our Gulf stations. Prior to this study, I had facilitated the development of weed control and management plans with each individual station manager. The outcome of the joint study demonstrated that a regional approach to weed control was necessary and that the proposed AACo control programs would play a major role in an effective regional approach to the problem. Fortunately, at this time, new financial outlays became available through the Weeds of National Significance (WONS) program enabling station managers to contact their neighbours to form sub-catchment weed control groups. Ten AACo stations formed their own individual sub-catchment groups and were successful in obtaining approximately \$433,000 over three years. The majority of these funds went to other stakeholders – AACo stations utilising less than 17% of these funds, however the AACo contribution was significant in the achievements of many of these projects.

My role was to inform and empower station managers individually. Station managers then contacted their neighbours and let them know of the opportunity and organised a meeting/s. I only assisted the groups in filling out their funding submissions. Most of these groups were highly self motivated and have worked very well together in the control and management of woody weeds. This example again emphasises the importance of strong people skills in making a difference in the rangelands.

Risks in implementation

The greatest risk in implementation is lack of understanding. This can be overcome to some degree by involving professionals for guidance and recommendations.

There are huge gaps in understanding of rangeland landscape functioning, and when dealing with rangeland issues you often have to take risks using the best available information (even if it is "old"), make assumptions, monitor the outcomes, and adapt your management. In such situations it is essential to work and think 'SIMPLE and PRACTICAL' to ensure greater ownership by the land manager for implementation, monitoring and review purposes.

I have learnt that being too innovative can be a risk in itself. Developing new ideas and ways of doing things can get you into trouble in some circumstances. When I come up with a new idea, I cautiously throw the idea around for comment and 'shaping' (through general discussion) before pushing it further. This approach will build the capacity of those who comment – it generates interest, thought and often leads to greater ownership of the idea, which often enhances implementation of the new idea.

Transfer of Knowledge

AACo encourages relationships and dialogue with research and development organizations, environmental groups and regional bodies to facilitate two-way feedback on issues. Again, this gives us access to a wider pool of knowledge and experience, and this enables us to refine issues by incorporating community concerns and enables these organizations to refine aspects of their projects and plans.

Understanding

The pathway to successful land management is derived from the understanding of:

- People,
- Landscape,
- Science,
- History, and
- Legislation.

Understanding the people

As mentioned earlier, land management planning is a team effort. And a good team requires an understanding of one another, where they come from, why they do the things they do and what they are interested in.

Agency staff, consultants and land managers, all can be set in their ways - it's human nature. But understanding their background and experiences will enable you to understand where they are coming from and you will ultimately be in a better position to facilitate an approach to land management planning.

In land management planning, the importance of understanding the land manager is vital to the success of a land management plan. They are very busy people, and very practical; mostly outdoors type people so the type of plan you develop must be simple, practical and coherent to their way of thinking and operating.

Understanding the landscape

Land management commences with mapping (GIS) of station infrastructure and land types; utilising satellite imagery, global positioning system (GPS) technologies and obtaining information from government agencies. In addition, issues (e.g.: location of woody weeds, erosion etc), monitoring sites and conservation areas etc are included on infrastructure maps. <u>GIS is the most valuable tool in land management</u>; as it visually links and puts the landscape and current management practices into perspective for developing future best practice.

Probably the most important facet of mapping is the ability to assess safe carrying capacities for different land types. To compliment this technology, AACo stations have established almost 200 pasture monitoring sites in order to determine trends in land type condition and assist in arriving at feed availability to determine safe stocking rates.

However, in much of the rangelands in Australia, we know very little of our landscapes and how they function. Hence we often need to make assumptions and carefully monitor and document outcomes to

improve our understanding of the landscapes.

Understanding the science

There is very little scientific knowledge of much of Australia's rangelands. Land planning must continue irrespective of what information is available. This is where land manager, agency and community partnerships, together with historical records, are invaluable in land management planning.

Understanding the history

The pathway to successful land management is best determined by understanding historical events prior to the present. The reason for things being the way they are in the present day is determined by the past – whether it is climatic/seasonal history, cultural or indigenous history, past land use or previous developments. Understanding these events will inevitably put you in a sound position for successful future land management planning.

Understanding legislation

The understanding of specific environmental legislation, guidelines and codes of practice is important in determining our responsibilities in land management.

OPPORTUNITIES IN RANGELAND MANAGEMENT

Living and working in remote rangelands of Australia is a brilliant and very satisfying lifestyle. The landscapes are incredibly unique and spectacular with plants and animals that reflect much of the character of these special regions. And the people are remarkable.

Unfortunately in many areas of northern Australia, there are too few positions available in agencies or consultancy organisations in rangeland management. And when these positions do become available, they are often difficult to fill because people do not want to live and work in remote areas, or the positions are limited in timeframe due to short-term funding.

If you have empathy for rangelands, its people and its history and a basic understanding of operations and industry, you will be in a great position for a successful career in rangeland management. In addition, good communication skills and experience of industry and the rangelands will be extremely valuable. A good sound ecological understanding of rangeland landscapes would also be an advantage, but can be learnt if you are prepared to be observant, to listen to others, and to experience the annual and longer term cycles of good times and bad times.

University, or any study for that matter, is important backgrounding and will build your capacity for learning and develop essential skills/ knowledge for the management of rangelands. But study alone will not make you a successful rangeland manager. The rangelands are a complex place, and to be effective in managing them you will need to understand the industry, the people and the operations of which you are a part. It is relatively easy to overcome these complications if you take on the challenges by making strong working relationships and alliances with people with an open mind.

CONCLUSION

The pathway of land management embarked on today will ultimately determine land condition and performance into the future. So it is imperative that we get it 'right' now by ensuring we accumulate

all of the facts, assumptions, experiences, the history and the science together to make certain we can get it as 'right' as possible.

The pathway undertaken in land management planning should be determined by the people – their experience, attitude and objectives; the science; and understanding the history of issues. In land management planning, we are all aware that our rangelands are a complex ecosystem but need to ensure that our plans are SIMPLE and PRACTICAL and tailored to the needs of each operation.

In addition, to be successful in managing rangelands you and/or your colleagues will need to understand or have the ability to acquire an understanding of the operation of which you are working, their objectives, and become familiar with drivers which are important in maintaining landscape health and profitability. Furthermore you must be able to comprehend opportunities and threats to the operations of which you are a part. The challenge of understanding can be overcome through doing a bit of research, but it is most important to be open-minded and willing to learn from others and their experiences, especially in circumstances where there is a lack of science and knowledge available.

As rangeland manager for AACo the most important factor that enables me to take risks and ultimately make a difference is having the support of senior management and the cooperation of land managers themselves. Having the support of my colleagues and living amongst our natural resources, I have the advantage of seeing, understanding and networking readily with issues and the people. This is a very motivating and rewarding experience that is good backgrounding for future professions, whether it is as a land manager or in an agency or consultancy position.