



09/07 Integration within the Grain & Graze Project

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Introduction

The Grain & Graze program aims to boost farm profitability across the mixed farming zone of southern Australia, while helping to protect the environment. The project is a partnership between four research funding bodies and many other organisations contributing funds and in kind contributions.

It is also explicit or implicit within the project that integration is important. It is important for the project to understand more clearly what is meant by integration, what is the objective of integration and then how can integration be achieved.

This paper aims to bring together some thinking amongst the Grain & Graze team on how integration can be carried out in the project.

What is Integration?

A very useful reference on this subject is a chapter from *Integrated Resource and Environmental Management: Concepts and Practice*¹: titled: "Research and the Integration Imperative" by Dover, S and Price, R.J. 2007².

This paper points out there is pressure on researchers, policy makers and extension workers to 'integrate'.

"International and national policy and law state the 'policy integration principle' – environmental, social and economic consideration must be integrated rather than dealt with piecemeal to advance the social goal of an ecologically sustainable, socially desirable and economically viable future (e.g. 1992 Rio Declaration and Agenda 21, 2002 Johannesburg Declaration). That three-way integration defines an intellectual and methodological challenge to develop integrative methods and capacity. The intellectual challenge is extended by the fact that integrative capacity demands sophisticated understandings of interactions between complex, interdependent and often non-linear human and natural systems. So integration has at least two meanings: *integration in research* combining multiple disciplinary perspectives; and *integration in policy making*, connecting agencies, issues and sectors".²

This imperative however provides a significant challenge to us all. In particular:

¹ K.S. Hanna and D.S. Slocombe (eds) *Integrated resource and environmental management: Concepts and practice*. Pxford University Press, Toronto.

² Dover, S and Price, R.J. 2007. "Research and the integration imperative" in K.S. Hanna and D.S. Slocombe (eds) *Integrated resource and environmental management: Concepts and practice*. Oxford University Press, Toronto.

- what are we meant to integrate? and
- how do we do it?

For the purpose of Grain and Graze it could be assumed integration means:

- “Bringing together financial, environmental and social considerations in our work”

It is the question – how do we do it? which is challenging to research and extension in Grain and Graze regions.

Farmers and Integration

Social research carried out as part of Grain and Graze allowed a number of observations to be made of farmer’s approach to integration as follows:

- Farming families have integrated goals. Their needs and aspirations are seamlessly integrated. They are often not explicit but when questioned a broad set of integrated goals are readily expressed.
- Farmer’s decisions are integrated. Farmers are continually balancing finance, environment and their lifestyle as part of their decision making.

If we acknowledge farmers integrate as part of their decision making then we can draw some useful points in relation to how we do research and extension.

The following seem sensible:

- Acknowledge farmers will integrate and recognise they are good at it.
- when doing research which requires examination of a part of a system, describe how it fits into the whole system and make it clear it doesn’t stand alone.
- when doing research which integrates, acknowledge it is only one combination of many parts and there are many others.
- involve farmers in the process of research and extension and discuss the impact of research on other parts of the system.

Principles for Integration in Grain and Graze

To effectively manage integration or 'take an integrated approach' in Grain and Graze, regions described how they are doing it in their regions at a national workshop. From this discussion, a number of principles have been developed for discussion.

- **Understand the system** – Ensure the team in the region understands the interactions, strengths, weaknesses and important elements of the system. Some regions have presented their system in a series of diagrams to describe their system and the principles which make it work.
- **Producer engagement** – Involve producers throughout all stages of research and extension. This engagement will ensure integration occurs throughout the project. Some regions have allocated resources to run a producer 'think tank' which guides research and extension.
- **Model important interactions** – To understand the interaction between technologies or management changes and financial, environmental and social implications, modelling can be used. The national economics and feedbase projects provide important assistance.
- **Story telling** – Describing how farmers integrate in their systems is an important tool for the community and the Grain and Graze project team to understand how integration is taking place and how technology is adopted in an integrated way. Also, enabling farmers to tell their stories to and with other farmers is a very useful activity.
- **Using System Experts** – A range of experts within the region can be used throughout the research, development and extension process to highlight trade offs or interactions. These may be consultants, farmers, researchers, extension officers.

References

1. K.S. Hanna and D.S. Slocombe (eds) *Integrated resource and environmental management Concepts and practice*. Oxford University Press, Toronto.
2. Dovers, S and Price, R.J. 2007. "Research and the integration imperative". in K.S. Hanna and D.S. Slocombe (eds) *Integrated resource and environmental management Concepts and practice*. Oxford University Press, Toronto.