

Partnership Incentives for Planning and Participating to Achieve Sustainable Land Systems (Two Case Studies)

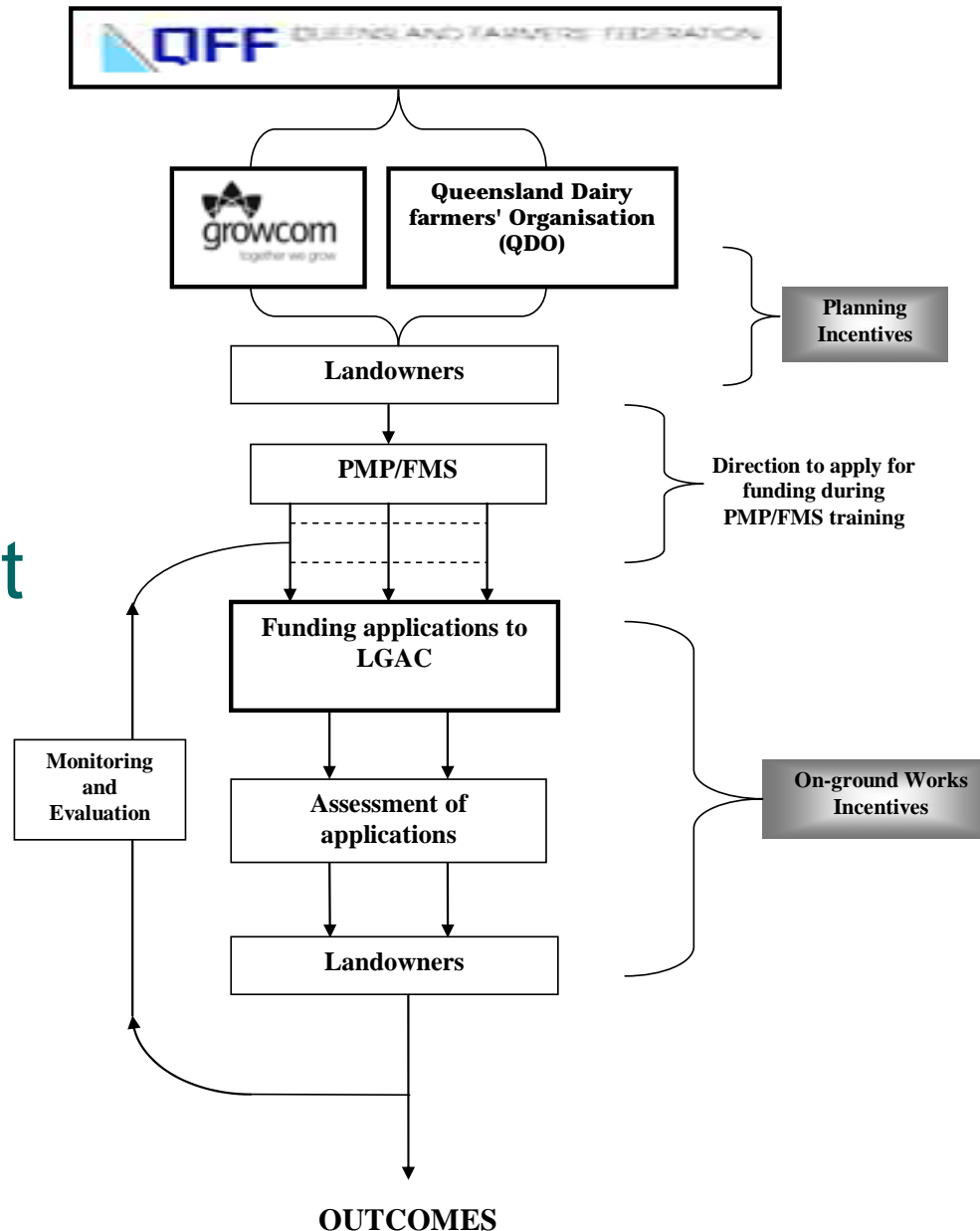
Burnett Mary Regional Group
& Central Qld University

BMRG use of the SE05 Project

What was to be achieved through this investment?

- Institutional arrangements that foster a relationship of partnership, cooperation and trust.
- Incentives designed in collaboration with landholders.
- Incentives that support landholders to address NRM issues at the landscape level and in an integrated approach.
- Improved uptake of best management practice and property management planning.
- NRM Plan targets.

Partnership and engagement process





TOO BIG/AMBITIOUS??



3 Stages in project

- An overview process:
 - to identify different MBIs and incentive mechanisms
 - to map potential mechanisms to NRM issues in the region
- An engagement process to work with regional industry bodies and local government to encourage uptake of preferred incentive mechanisms,
- A planning and trial process to develop two incentive trials in the regional area with different industry bodies:
 - Queensland Dairy Organisation
 - Growcom
- Key trial occurring with dairy farmers in East Gympie region

Goals

- To facilitate the adoption and trial of incentive mechanisms by industry and local government in the region rather than to directly run the trial mechanisms.
- The process was to run an awareness and engagement process within the region
 - Action learning engagement with key stakeholders to select mechanisms
- Run two separate trials to demonstrate the potential application of the mechanisms
 - Use industry bodies to administer the trials

Stage 1 - Overview

- The research partner (CQU) developed an overview document
 - outlined the different mechanisms that were available,
 - relative advantages,
 - steps involved in application,
 - the types of issues that they were suited to.
- Workshops were held across the region
 - to present the overview information about available mechanisms,
 - to identify the types of issues that mechanisms could be applied to,
 - to engage regional stakeholders in adoption process(es).

Stage 2 - Identification

- Results of the workshops were identified and circulated to regional stakeholders to generate wider awareness of the mechanisms and issues.
- Two industry organisations, QDO and Growcom, were identified as potential partners to roll out incentive trials.
- A series of meetings were held with representatives of these bodies to develop more focused applications.

Stage 3 – QDO Implementation

- Relevant NRM issues were identified as:
 - Effluent management impacting on nutrient movement into waterways
 - Riparian management
- A competitive tender mechanism was selected for the trial
- A restricted area (the East Gympie region) was selected for the trial to minimise design issues and engagement costs, and to maximise uptake of the mechanism
- The design process and initial engagement processes with dairy farmers in the East Gympie trial area were completed
- **Implementation of the trial is underway in September and October 2006.**

Key innovation 1 – action learning with stakeholders to select MBIs

- Trying to increase level of awareness and have ownership develop over the process
- Broad engagement process was difficult to perform well,
- There are high search and transaction costs involved in each of the stakeholder types going through the different mechanisms of interest,
- The ‘competition for attention’ makes it hard for stakeholders to focus on the incentive tools unless there are immediate actions available.

Key Innovation 2 – Contracting implementation to industry groups

- Potential advantages
 - Capitalising on the existing skills and networks that industry groups have,
 - Generating awareness and upskilling industry groups about incentive mechanisms,
 - Being able to potentially draw on regulatory tools or fee mechanisms that potential partners such as local government may be able to employ,
 - Avoiding the creation of an excessive bureaucracy within the NRM group,
 - Avoiding the potential duplication or confusion of mechanisms that different stakeholders might use to address similar problems.

Industry rollout

- Potential disadvantages
 - Additional time and costs involved in negotiating arrangements,
 - Potential confusion over responsibility for different roles and arrangements,
 - Closer relationship to productivity or governance issues as distinct from an NRM focus,
 - Key learnings and skill development do not necessarily occur or reside in NRM group, making it difficult to get continuity across projects.

Key Innovation 3 – Development of a metric focused on nutrients

- Different types of activities in QDO case study
 - effluent management from dairies,
 - management of riparian areas (getting cows out of creeks)
- different types of environmental outcomes
 - Reductions in nutrient loads,
 - Reductions in sediment movements
 - Improvements in biodiversity protection

Assessment calculation

- Relative Bid Value = \$ / Total Assessment Score
- TAS = (Proportion Nitrogen + Proportion Phosphorus) x Loading Sediment x Loading Riparian
 - assessment focused on nutrient reductions (N and P), and then scores adjusted by scalars to take account of any additional benefits
 - Nitrogen and phosphorus reductions were weighted according to the total annual loads of N and P in the Mary River system
 - Scalars for Sediment and Biodiversity could range from 1 (base level) to 1.5 (maximum)

Key actions for dairy farmers

<i>Number</i>	<i>Action</i>	<i>Ways farmers can improve their bid</i>
<i>1</i>	<i>Keeping stock out of riparian areas</i>	<i>Increasing the exclusion time</i>
<i>2</i>	<i>Improving the condition of riparian areas</i>	<i>Having a wider buffer strip</i>
<i>3</i>		<i>Improving ground cover and reducing erosion</i>
<i>4</i>	<i>Reducing risk of effluent moving from field to stream</i>	<i>Improving effluent management and disposal systems</i>

Issues in auction design

<i>Issue</i>	<i>Considerations</i>	<i>Decision</i>
<i>The number of bidding rounds</i>	<i>Multiple rounds more suitable if coordination between landholders is required, but adds to complexity of process</i>	<i>Single bidding round preferred</i>
<i>Sealed or open bid</i>	<i>Landholders more likely to participate if their bid details are confidential</i>	<i>Sealed bid preferred</i>
<i>Discriminatory or uniform pricing</i>	<i>With discriminatory pricing, winning bidders get paid their asking level. With uniform pricing, winning bidders get paid the value of the highest bid. With uniform pricing, there needs to be more control over what actions are offered</i>	<i>Discriminatory bid preferred</i>
<i>Reserve price</i>	<i>Reserve price may be necessary to reject over-priced bids, particularly if there is limited competition.</i>	<i>Reserve price preferred.</i>
<i>Equity and participation</i>	<i>Maximum bid levels can be set to ensure maximum involvement by landholders. Having no caps on bid levels means a small number of efficient bids may get most of the funding. Landholders may increase their chances of success by entering multiple bids.</i>	<i>Multiple bids preferred No cap on bid levels</i>

Issues in contract design

<i>Issue</i>	<i>Considerations</i>	<i>Decision</i>
<i>Time period for contract</i>	<i>Longer time periods preferred, but there are government constraints on funding period available.</i>	<i>Funding period available for 2 years – July 06 to June 08</i>
<i>Payment periods</i>	<i>There are benefits in tying funding to performance, but also in minimising the number of payments</i>	<i>3 payment points: July 06 on contract establishment, June 07 at first milestone, and June 08 at last milestone</i>
<i>Form of security</i>	<i>Some conservation tenders have involved high levels of security, such as covenants over land titles. Simpler agreements are more likely to be accepted by landholders.</i>	<i>Simple contracts to be used.</i>
<i>Form of contracts</i>	<i>Preferable to have simple form of contract that is easy to understand.</i>	<i>Standard simple contract to be used, with bid forms to be attached as a schedule when signing agreements.</i>

Items to measure

- Estimated reductions in N (kgs entering waterways)
- Estimated reductions in P (kgs entering waterways)
- Changes in sediment movement
 - Width of buffer zone
 - Level of livestock exclusion (90%, 80%, 70%)
- Improvements in biodiversity
 - Importance score (BAMM assessment)
 - Condition score (estimated change)

Spreadsheet detail for cows in creeks

Property number	Bid amount	# cows with creek access	Days of access each year	Urine and Faeces / cow / day	Total N / kg / day	Total P / kg / day	Urine and Faeces	Total N	Total P / kg	
Enter other bid and property details as required	\$			kg	kg	kg	kg	kg	kg	
	Enter value	Enter value	Enter value							
		0			54.000	0.240	0.025	0.000	0.000	0.000
		0			54.000	0.240	0.025	0.000	0.000	0.000
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