

# Reef Rescue Research & Development

## RRRD039: Cost-effectiveness of cane BMPs

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- Policy Setting: Public costs and benefits:  
Cost effective – Bang for Buck or \$/ tonne of pollutant reduced
- Private benefits and costs:
  - Opportunity costs
  - Capital costs
  - Improved input efficiency
  - FORM



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Public net benefit	No Action	Positive incentives	Extension
	No action (or extension or negative incentives)	0	No action or flexible negative incentives
		Negative incentives	



Private net benefit

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## RESEARCH OBJECTIVES

For the sugarcane growing industry in the GBR catchment area:

- What practices for WQI? Where? How? (Regions / farm sizes)
- What are the financial costs / benefits?
- What are the environmental benefits?
- Which practices are most cost-effective for WQI?

With Component 4:

- What are farmers' perceptions of these practices?
- What are farmers' perceptions of / experience with change?



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Key Principle/ Indicator	Practice	Code	FEAT Analysis	APSIM Modelling
Application rate management	Rates based on Nitrogen Replacement Technology. Calibrate fertiliser applicator each product and batch	AA	Y	Y
	Variable rates between blocks (based on Six-Easy-Steps). Calibrates once per season for each fertiliser product	AB	Y	Y
	One rate for plant and another for ratoons based on soil type (based on Calcino recommendations). Calibration is less than once per season	AC	Y	Y



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Fallow management	Grain legume crop	FA	N	Y
	Cover legume crop	FB	Y	Y
	Bare fallow	FC	Y	Y
Application management	Split application in plant and ratoons	SA	N	N
	Split application in plant cane only	SB	Y	Y
Application method	Sub-surface application within the stool	MB	Y	Y
	Surface application banded	MC	Y	N
Tillage management	Controlled traffic - Low (reduced) tillage	GB	Y	Y
	Controlled traffic - High (conventional) tillage	GC	Y	Y

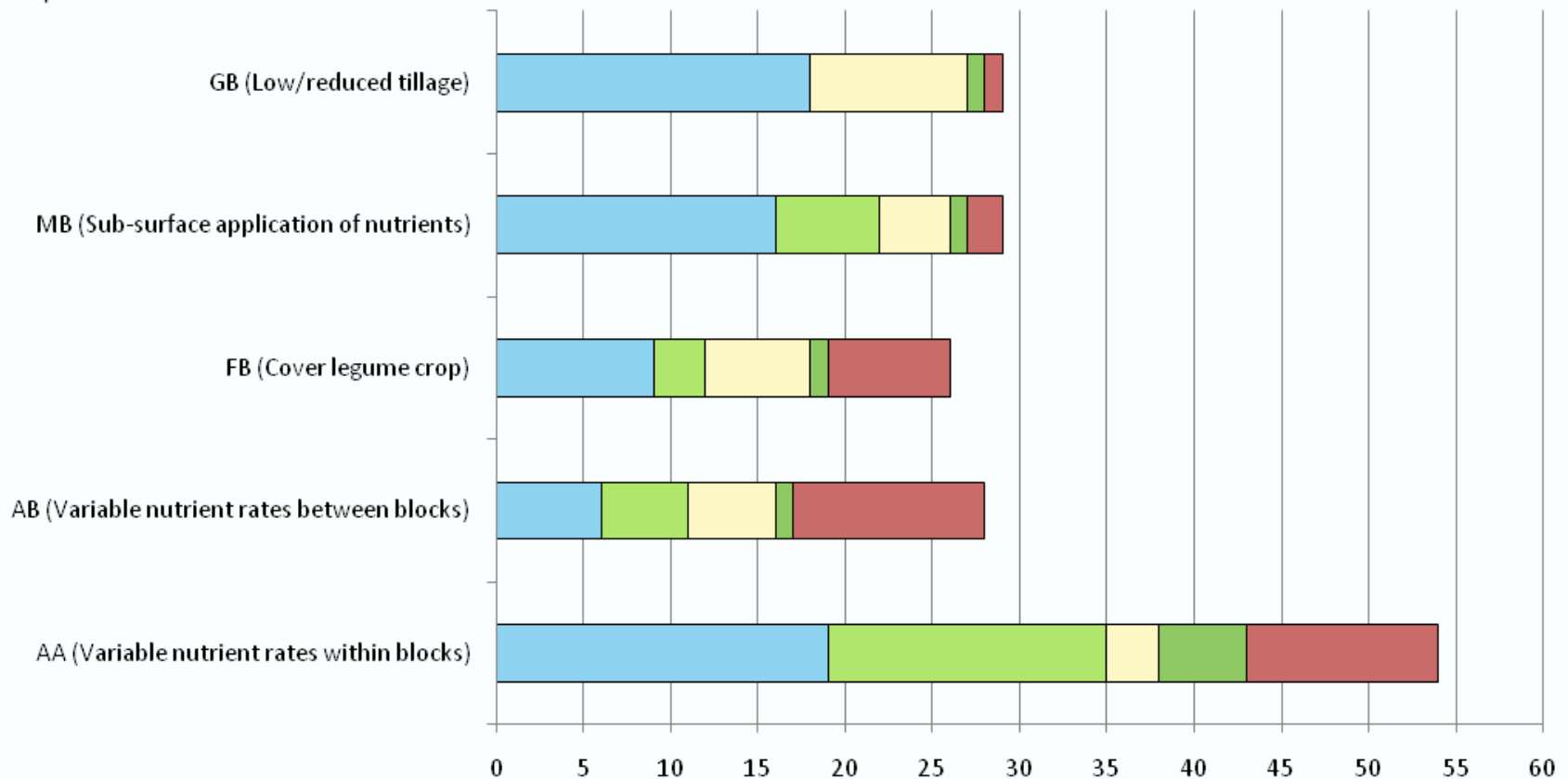


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Please indicate which constraints listed below impacted (or will impacted) on your decision to adopt practices

- High capital investments are needed
- Does not fit with my current farming system
- Requires new skills and information
- Contractors needed to implement changes
- Not easy to trial



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## Key Messages

- Scale
- Capital costs
- Variation on farm
- Heterogeneity



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