



FINAL REPORT 2014

Applicants must read the *SAGIT Project Funding Guidelines 2014* prior to completing this form. These guidelines can be downloaded from www.sagit.com.au

Final reports must be emailed to admin@sagit.com.au as a Microsoft Word document in the format shown ***within 2 months*** after the completion of the Project Term.

PROJECT CODE :	
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PROJECT TITLE (10 words maximum)
Farmer Groups to Focus on Innovative Practices

PROJECT DURATION

*These dates **must** be the same as those stated in the Funding Agreement*

Project Start date	July 2012
Project End date	30 th June 2014

PROJECT SUPERVISOR CONTACT DETAILS

The project supervisor is the person responsible for the overall project

Title:	First Name:	Surname:	
Miss	Gemma	Walker	
Organisation:			
Mallee Sustainable Farming Inc.			
Mailing address:			
Telephone:	Facsimile:	Mobile:	Email:

Office Use Only

Project Code	
Project Type	

ADMINISTRATION CONTACT DETAILS

The Administration Contact is the person responsible for all administrative matters relating to the project

Title:	First Name:	Surname:	
Mrs	Donna	Robertson	
Organisation:			
Mallee Sustainable Farming Inc			
Mailing address:			
Telephone:	Facsimile:	Mobile:	Email:

PROJECT REPORT

Provide clear description of the following:

Executive Summary (200 words maximum)

A few paragraphs covering what was discovered, written in a manner that is easily understood and relevant to SA growers. A number of key dot points should be included which can be used in SAGIT communication programs

The increasingly complex nature of farming requires farmers to constantly increase their skills and knowledge in regard to practices which could make them more productive, profitable and sustainable. Farmer group activities are an important source of this information and Mallee Sustainable Farming supported extension by utilising a facilitator for group activities this project.

The project engaged with eight local farmer groups to improve participation and land management outcomes throughout the South Australian Mallee.

Commencing in July 2012, the groups in the SA Mallee region chose to address issues pertinent to their areas, making their workshops and field walks locally relevant.

Through the facilitated groups, the farmers had an opportunity to learn more about current Mallee based projects, the latest technologies and practical management programs and strategies to address issues constraining grains production.

Project Objectives

A concise statement of the aims of the project in outcome terms should be provided.

The long-term outcomes include:

- Increased knowledge of farmers of locally relevant methods of maintaining or improving productive capacity

- Established linkages between parties within agribusiness to develop relationships between farmers, researchers and extension agents
- Farmers participated in the direction of MSF research and extension in the SA Mallee
- Farmer involvement in Mallee Sustainable Farming (MSF) projects was maintained by providing extension support to farmer groups in the SA Mallee
- Strengthened networks within local and regional areas of the Mallee to foster farmers learning from farmers

Overall Performance

A concise statement indicating the extent to which the Project objectives were achieved, a list of personnel who participated in the Research Project including co-operators, and any difficulties encountered and the reasons for these difficulties.

The objectives of this project were to:

- Improve both the productivity and profitability of SA Mallee farmers through greater adoption by farm businesses of industry and government funded research outcomes.
- Maintain farmer involvement in Mallee Sustainable Farming (MSF) projects by providing extension support to farmer groups in the SA Mallee
- Maintain farmer participation in the direction of MSF research and extension in the SA Mallee

The objectives were achieved through participation by farmers, researchers, MSF staff and other stakeholders in facilitated activities where local issues were discussed, priorities identified, locally relevant solutions were identified, experiences shared and relevant speakers engaged according to the needs of the individual groups.

Personnel

Gemma Fiona Walker, Executive Manager of Mallee Sustainable Farming Inc, managed the project and the communications through MSF's network

Richard Saunders, Consultant, Dodgshun Medlin, facilitated the groups from November 2013 to June 2014

Leighton Pearce, Consultant, Dodgshun Medlin was involved in the project until November 2013 at which time he finished working at Dodgshun Medlin.

Support was provided by Rachel May, the Regional Landcare Facilitator hosted by Natural Resources SA Murray-Darling Basin.

Difficulties

The change over of staff at Dodgshun Medlin meant that the key contact with the group changed. Fortunately, this occurred after the Spring activities had been conducted and before the Autumn events were arranged.

Key Performance Indicators (KPI)

*Please indicate whether KPI's were achieved. The KPI's **must** be the same as those stated in the Application for Funding and a brief explanation provided as to how they were achieved or why they were not achieved.*

KPI	Achieved (Y/N)	If not achieved, please state reason.
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Post harvest meetings to discuss harvest issues and plan potential trials.	Y	
8 Crop walks in the SA Mallee	Y	
Support of 1 large and 1 small field day in SA Mallee	Y	
8 Crop walks in the SA Mallee	Y	

Technical Information (Not to exceed **three** pages)

Provide sufficient data and short clear statements of outcomes.

Throughout the duration of the project, the farmers were the drivers of the topics discussed in their local events.

These included:

Geranium & (Upper SE) young farmers

- Variety performance and selection
- Pre – Emergent herbicides
- Plant back periods
- Frost
- Rhizoctonia

Karoonda Young farmers

- Evercrop project findings
- Variable rate applications
- N & P fertiliser strategy results
- Frost trials in SA Mallee

Ping – Bowhill

- Herbicides and their use
- Crop nutrition
- Crop rotations and varieties

Loxton

- Variety performance and selection
- Pre – Emergent herbicides
- Plant back periods
- Variable rate applications
- Rhizoctonia

Lowbank

- Herbicides – looking ahead
- Nutrition strategies
- Rhizoctonia

Lameroo

- Variety performance and selection
 - Pre – Emergent herbicides
 - Plant back periods
 - Rhizoctonia
- Swan Reach / Nildottie
- Variety performance and selection
 - Pre – Emergent herbicides
 - Plant back periods
 - Variable rate applications
 - Rhizoctonia
- Wanbi / Copeville
- Seeder setup
 - seeding rate
 - Seed depth

A number of projects were set up to assist farmers to address specific research, development and extension priorities identified during the workshops. Examples include: Mallee Challenge (12 farmers are conducting paddock scale demonstrations and trialing new and existing technology), a technology workshop in Parilla, two broadscale variety trials and the seeder set up project.

Conclusions Reached &/or Discoveries Made (Not to exceed one page)

Please provide concise statement of any conclusions reached &/or discoveries made.

That the outcomes from projects such as the GRDC funded crop sequencing project, GRDC funded/Syngenta partnered rhizoctonia project (A McKay), SAGIT funded Brome Grass project were extended through the facilitated groups. There wouldn't have been such a high level of exposure of the results otherwise to the farmers in the Mallee. The groups provided a conduit for the farmers' issues and challenges to be feed through the funding bodies.

Speakers linked with projects were brought in on the request of the farmers or as recommended by project consultants. The result was that the farmers were challenged about appropriate rotations in the Mallee, informed about herbicide resistance in brome grass, informed about legume options and appropriate legume establishment, updated on the rhizoctonia work at Wynarka. Most importantly, they were brought up to speed on what is happening with the carbon farming initiative.

Discussion was conducted about the National Variety Trials outcomes in the Mallee. As a result the farmers were better informed about the variety performance and new varieties. The farmers identified a need to have broad scale variety trials on legumes to implement what they had learned from the crop sequencing project and the speakers on legume crops. This funded by the Department of Agriculture Community Grants program.

Intellectual Property

Please provide concise statement of any intellectual property generated and potential for commercialisation.

No IP was generated

Application / Communication of Results

A concise statement describing activities undertaken to communicate the results of the project to the grains industry. This should include:

- Main findings of the project in a dot point form suitable for use in communications to farmers;
- A statement of potential industry impact
- Publications and extension articles delivered as part of the project; and,
- Suggested path to market for the results including barriers to adoption.

Note that SAGIT may directly extend information from Final reports to growers. If applicable, attach a list of published material.

- Aim: To encourage greater participation in Mallee Sustainable Farming's research and adoption of innovative practices by farmers in the SA Mallee through extension support to eight established Mallee Sustainable Farming farmer groups. Collaborative effort between partners and participants.
- Funding: South Australian grains Industry Trust and Department of Environment Water and Natural Resources SA
- Partners: CSIRO, SARDI, SA Natural Resource Management Board, Dodgshun Medlin, University of Adelaide, Rural Solutions SA, Partners in Grain
- Participants: Lowbank, Wanbi/Copeville, Parilla/Lameroo/Pinnaroo, Karoonda, Young Farmers Group (Upper South East), Loxton/Paringa, Swan Reach/Nildottie, PinG & Women in Ag Business

- Structured approach to Continuous Extension support
- Creating linkages to Researchers & other Projects
- Challenges
 - Bringing groups together
 - Appropriate communication strategy
 - Creating the right balance of activities during busy seasonal periods – workshops/field walks, capacity building
- Achieving outcomes
 - Re-invigorating existing or defunct groups
 - On-ground change through connections with researchers and demonstration site

Key areas to note:

Crop sequencing

Farmers have recognised the need for better rotations for disease control, weed control, nutrition etc. Research from the GRDC funded Crop Sequencing project was communicated through the facilitated groups with opportunities for farmers to share their learnings alongside the technical researchers to provide a unique forum for increased understanding of the issues and management options.

Technology

A technology event was conducted at Parilla with support from DEWNR with the aim of providing exposure to new and existing precision farming tools such as UAVs and

software, blue tooth, Weedit sprayers. The outcome is that farmers are aware of the options and where to access further information. Plus contacts for further access.

Young farmers

These groups provide the opportunity to learn who is doing what in the Mallee – introductions and access to people that they wouldn't otherwise meet. Opportunities to link with more experienced farmers as well researchers.

Copies of speakers' presentations available on requests.

POSSIBLE FUTURE WORK

Provide possible future directions for the research arising from the project including potential for further work and partnerships.

Five groups have been funded through NRSAMD community grants program. The new project will work with five of the eight groups funded by SAGIT under this project.

Grower have identified the following topics for investigation or consideration by MSF Inc:

Crop sequencing and rotations

- The importance of two year breaks for grass control compared to one year break
- The role of legumes in rotation for lifting subsequent cereal yields, even to two years
- The long term effect of continuous cereal and the factors of yield suppression
- Agronomic drivers influencing cereal crop yield

New Varieties

- Alternative Clearfield® tolerant Barley in near future?
- Should CCN still be a consideration for growers in the SA Mallee? Cf Emu Rock v Corack
- Need for better variety agronomic information to enable more informed variety choice
- Rapid turnover of varieties - varieties being grown and retained for only 3-4 years in future.
- Canola, Grain legume NVT trials in the Northern Mallee?

Rhizoctonia

- Future of Allan McKay's/Paul Bogaki's research with banding fungicide for rhizoctonia control?
- Practicality of liquid delivery of fungicides on Mallee seeders

- Role of Knife openers compared to Discs for rhizoctonia control

Legumes for the Mallee

- Possible grain legumes for the Mallee and their inoculation requirements
- Benefits and role of inoculation for legumes – species – rhizobia specificity
- Rapid identification of soil type – legume type – rhizobia requirements
- Effect of residual herbicides on nodulation

Grass herbicide resistance

- The rapid rise of herbicide resistance in grass in the SA Mallee – can it be stopped or managed?
- The range of herbicides showing resistance
- The importance of testing for resistance
- How widespread is this resistance
- Long term effect
- Long term management strategies
- What are our options if we have resistance?
- Are there any new and better herbicides coming on the market soon?
- If we don't use chemicals for weed control what can we do?

Carbon Farming

- How does this affect SA Mallee growers?
- Which are the most significant Green House Gases?
- What can I do on my farm to reduce GHG emissions?
- Can I do anything in the low rainfall Mallee?
- What carbon project could I get involved with on my Mallee farm?
- What are the implications if I undertake a Carbon project?

AUTHORISATION
Name: Gemma Walker
Position: Executive Manager
Signature:
Date: 24 th September 2014

Submit report via email to admin@sagit.com.au as a Microsoft Word document in the format shown ***within 2 months*** after the completion of the Project Term.