



final report

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Prepared by: J Lane, JP van Moort, K Barker, and E Ray

GHD

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Report for External Review of MBfP and MMfS Programs

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List of Acronyms

ABS Australian Bureau of Statistics
AWI Australian Wool Innovation

BCA Benefit Cost Analysis

BCR Benefit Cost Ratio

CRRDCC Council of Rural Research & Development Corporation Chairs

KASA Knowledge, Aspirations, Skills and Attitudes

KPI Key Performance Indicator

M&E Monitoring & Evaluation

MBfP More Beef from Pastures

MER Monitoring, Evaluation and Reporting

MLA Meat & Livestock Australia

MMfS Making More from Sheep

NPV Net Present Value

NRM Natural Resource Management



Executive Summary

GHD Hassall was contracted by Meat & Livestock Australia (MLA) to conduct an independent review of the More Beef from Pastures (MBfP) and Making More from Sheep (MMfS) programs. The purpose of the review was to:

- Evaluate the programs' impacts on the beef, and lamb and sheepmeat industries;
- Assess how successful the programs have been in achieving stated key performance criteria; and
- Provide recommendations as to how the respective programs should (in the event of further investment) be structured, targeted, monitored and evaluated in order to improve and measure industry impact.

MLA and Australian Wool Innovation (AWI) have developed and funded the delivery of the programs to provide best management practice packages of information, tools and learning opportunities for Australian sheep and beef producers to assist them to increase the productivity and profitability of their enterprises.

In order to achieve the objectives of the review, GHD Hassall developed an Evaluation Framework and Program Logic for the programs to identify the information required, including data gaps. Data was obtained via: a desktop review of information provided by MLA and AWI; questionnaire surveys of beef and sheep producer participants; and interviews of key informants involved in the delivery of the programs.

Questionnaire surveys were mailed to 500 participants in each program with a response rate of approximately 20%. This response rate was acceptable for a survey of this type and provided sufficient confidence that the results can be used to inform conclusions about the programs as a whole.

The draft Program Logic identified that the goals and key performance indicators (KPIs) adopted by MLA and AWI related mainly to: awareness of the programs; participation in program education activities such as field days and workshops; and intention to change practices on farm and actual practice change. For these KPIs, evaluation sheets completed by producer participants following program activities indicated that the programs have mostly succeeded in meeting the targets (MBfP) or have exceeded the targets (MMfS).

Independent market research also indicated that practice change KPIs had largely been met. For example, 50% of MBfP course participants and 57% (n=200) of MMfS participants were influenced to change management practices as a result of course attendance (Logan 2009). In another survey, 46% (N=301) of MMfS participants stated they had made a practice change as a result of their participation in the program (GHD Hassall 2009).

The producer surveys for this project confirmed that practice changes had occurred and that these changes were thought to have contributed to enterprise productivity and profitability increases. For example, improved grazing management was nominated by approximately 60% of producers in both programs to have led to management improvements. Forty one percent of MBfP producers estimated production increases ranging from 0-5% to greater than 20%, while 28% estimated profitability increases ranging from 0-5% to 15-20%.

For MMfS producers, 44% estimated production increases ranging from 0-5% to 15-20%, while 39% estimated profitability increases ranging from 0-5% to 15-20%.

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A benefit cost analysis (BCA) was completed for each program using the following assumptions: 20% of program participants experienced an increase in income; increase in income of 5%; discount rate of 7%. The benefit cost ratio (BCR) was calculated as 4.35 for the MBfP program and 3.9 for the MMfS program. A sensitivity analysis indicated the relative insensitivity of the BCRs to changes in key assumptions. For example, the percentage of farmers experiencing an increase in income would need to fall to 5% of participants for both programs to break even (BCR = 1).

The estimated BCRs for both programs are consistent with other cost benefit analyses undertaken by GHD Hassall to assess the impact of agricultural research and development investments. For example an evaluation of MLA's Sustainable Grazing System Harvest Year provided a BCR of 2.9, and an ex-post assessment of the Grains Research & Development Corporation's plant breeding research provided a BCR of 4.9.

Producers in both programs also claimed that activities had produced benefits in natural resource management (NRM) and in a range of social indicators related to knowledge, aspirations, skills and attitudes (KASA). These benefits were not monetarised for inclusion in the BCA.

Although the programs had met their awareness and education targets as envisaged, and MLA's and AWI's investment had achieved positive impacts on the beef, lamb and sheepmeat industries as demonstrated by the BCA, the review found that key informants were supportive of a new approach to program delivery that focussed on adoption of practices at farm level. This can be achieved by:

- Aligning program objectives and structure to maximise impact;
- Targeting producers and practices;
- Focusing program delivery and KPIs on practice change;
- Improving brand management to enhance recognition and attribution; and
- Enhancing monitoring, evaluation and reporting (MER) to improve program performance and reporting.

A profiling framework was provided as a process for selecting appropriate producer targets based on consideration of enterprise goals and characteristics as well as critical drivers of productivity, profitability and sustainability of the potential audience. The learning preferences of the target audience could then be explored to determine roles and responsibilities of service deliverers. The draft program logic developed for this project was used to provide an example of a detailed monitoring, evaluation and reporting (MER) framework in order to measure industry impacts.

It was considered that a similar management and delivery system should be retained for the future (including the reinstatement of a national coordinator for MBfP) although roles and responsibilities will change with this more targeted approach. These roles and responsibilities should be clearly defined by the Program Logic and MER frameworks.



1. Introduction

1.1 Purpose and scope

GHD Hassall was contracted by Meat & Livestock Australia (MLA) to conduct an independent review of the More Beef from Pastures (MBfP) and Making More from Sheep (MMfS) programs. The purpose of the review is to:

- Evaluate the programs' impacts on the beef, and lamb and sheepmeat industries;
- Assess how successful the programs have been in achieving stated key performance criteria; and
- Provide recommendations as to how the respective program deliveries should (in the event of further investment) be structured, targeted, monitored and evaluated in order to improve and measure industry impact.

The review considers the programs at both a strategic and operational level in order to identify and, where possible, quantify the impact of the programs and the relative contribution of their components.

1.2 Background

MLA and Australian Wool Innovation (AWI) have developed and funded the delivery of the MMfS program, and MLA the MBfP program. These programs provide best management practice packages of information, tools and learning opportunities for Australian sheep and beef producers to assist them to increase the productivity and profitability of their enterprises.

The MBfP program was launched in 2004 and has a manual with eight modules that address different aspects of the production system in a pasture-based beef enterprise, such as cattle genetics, pasture growth and meeting market specifications. The manual provides a one-stop information package delivering the essential processes for a successful beef business. The program also has a number of decision support tools that are complementary to the manual.

The MMfS program was launched in January 2008. The program consists of a detailed manual that captures, in one reference, useful information about the 'must dos' of managing a successful sheep and/or wool enterprise, generated from years of research and on-farm experience. The manual includes eleven modules that are linked to enterprise profit drivers. These modules include improved genetics, healthy soils, productive pastures and planning tools.

The programs are designed to be flexible in delivery, including via field days and workshops, and include detailed manuals and CD-ROMs that contain decision support tools that producers can tailor to their individual enterprises. A network of state co-ordinators and producer advocates is available to assist with program delivery and to improve the relevance and acceptance of the programs in different locations.

1.3 Structure of this report

The methodology used to undertake the review of the MBfP and MMfS programs is described in Chapter 2 together with the program logic developed to guide the review. The results of the producer surveys are provided in Chapter 3 and a benefit cost analysis of the two programs is presented in Chapter 4. Chapter 5 presents the results of interviews with key informants and Chapter 6 analyses all results of the review under the key evaluation questions of the project. The future directions of the programs are discussed in Chapter 7 while Chapter 8 provides a summary of the review outcomes. The evaluation framework for each program is presented at Appendix A, which summarises the results of the desktop analysis of MLA



materials. A copy of the survey sent to producers is provided at Appendix B and the key informant interview proforma is provided at Appendix C. Summary tables that support the analysis are presented in Appendix D.



2. Methodology

2.1 Introduction

This chapter details GHD Hassall's approach to completing the review of the MBfP and MMfS programs. The program logic used to guide the review is also presented.

2.2 Methodology

GHD Hassall adopted a five-step methodology to complete the project:

- ▶ Step 1 Initiation meeting and development of draft program logic;
- ▶ Step 2 Desktop review and refinement of program logic;
- ▶ Step 3 Data collection and benefit cost analysis;
- ▶ Step 4 Development of monitoring and evaluation (M&E) framework; and
- Step 5 Reporting and presentation.

A draft program logic and an evaluation framework were developed using information provided by MLA including key performance indicator (KPI) survey reports, extension and communication plans, monitoring and evaluation strategies, and milestone reports. The program logic considers the inputs and outputs of the projects and the required outcomes for achieving longer term project objectives.

The evaluation framework considers the information available at each level of the program logic with relevant KPIs to measure performance. The framework enables information gaps to be identified and describes how these can be addressed. For this project, information gaps were addressed by producer surveys and telephone interviews with key informants. The producer surveys were mailed to a random sample of 500 producers from each program (stratified according to the number of participants in each state). The sample of producers was taken from an MLA database of program participants who had previously submitted feedback forms. A reminder survey was also sent to the sample of producers to maximise the response rate.

Key informant interviews were undertaken with a sample of people who had been directly involved in the programs' delivery and / or management. Key informants included producer advocates, steering committee / advisory panel members, and state / national coordinators. In addition to face to face meetings, telephone calls and email correspondence, a written questionnaire was used to collect detailed information from the MLA program managers.

GHD Hassall has assessed the impact of the programs using a benefit cost analysis framework, in accordance with Council of Rural Research & Development Corporation Chairs (CRRDCC) *Guidelines for Evaluation*. Both the desktop review and data collection stages of the project informed this analysis. The benefit cost analysis included a discussion of data constraints.

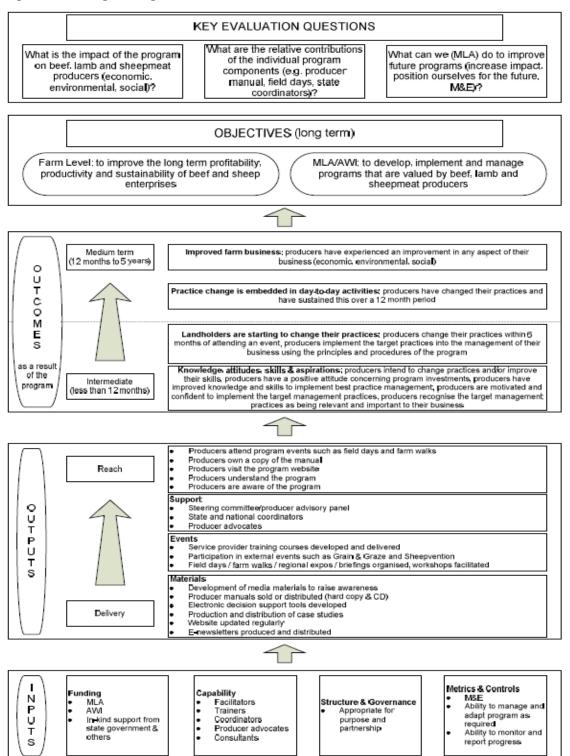
A workshop was held with key program staff from MLA and AWI to present preliminary findings and consider the implications for future monitoring and evaluation activities and these have been incorporated into the report.



2.3 Program logic and evaluation frameworks

The program logic used to guide the analysis is presented in Figure 1. This logic was used to answer the key evaluation questions agreed upon by MLA and AWI. The evaluation frameworks for both programs are presented in Appendix A and provide the results of the desktop analysis.

Figure 1 Program logic





Results

3.1 Introduction

A desktop analysis was undertaken in order to populate an evaluation framework based on the program logic. During this analysis areas of the framework were identified that contained gaps in information. These areas included the long term objectives and outcomes being sought by MLA/AWI and the industry; intermediate level outcomes in relation to producer confidence around key management practices; and program inputs including metrics and controls. The producer surveys and key informant interviews were designed to obtain this information.

This chapter presents the detailed results of the producer surveys.

3.2 More Beef from Pastures

3.2.1 Objectives and goals

When the MBfP program was initially developed in 2004, the objective of the program was that:

By July 2008, 25% of southern beef producers will be actively applying principles or tools from MLA More Beef from Pastures to increase production, profitability and manage risk.

The goals that MLA established in order to achieve this objective included:

- Goal 1: Build and maintain awareness of the manual and its benefits;
- Goal 2: Motivate and support the uptake of the MLA More Beef from Pastures key principles and opportunities (through tools and extension activities) by producers; and
- Goal 3: Partner with service providers to support producer decision making processes described in the manual.

In 2007 a new Communication, Delivery & Extension Plan was developed and the objective of the MBfP program became:

Between July 2007 and July 2009, 20% of southern beef producers¹ will have actively engaged in the More Beef from Pastures program with 70% of those engaged applying at least one target management practice using the principles and procedures from MLA More Beef from Pastures to increase profitability and manage risk.

The goals of the MBfP program include:

- Goal 1: Southern beef producers are aware of what MBfP is about and recognise its potential value to their business;
- Goal 2: Southern beef producers are motivated and better equipped to manage these practices on an on-going basis by engaging in MBfP activities; and
- Goal 3: Southern beef producers implement into their management the target practices using the principles and procedures of the MBfP program.

While the objective and goals of the program were modified, the overall emphasis on producers actively applying the program on-farm remained unchanged. The above goals indicate that the program sought to

Based on 2006 ABS figure of there being 46,339 southern beef producers with annual value of agricultural operations>\$5,000.



achieve awareness and practice change by beef producers. Impact at a farm or industry level was not nominated as a KPI as it was unclear how this could be measured at the time of setting the KPIs.

3.2.2 Inputs and outputs

In order to achieve the above goals, MLA has developed a number of tools and processes to engage southern beef producers. In addition to the MBfP manual (which is also available on CD), workshops and expos have been held, and producer demonstration sites established.

Program events are provided by delivery partners under contract to MLA. The delivery partners are the state Departments of Primary Industries (DPIs) for NSW, Victoria, WA, SA and Tasmania with an additional agribusiness partner (Mackinnon Group) contracted in Victoria.

Since MBfP's inception in 2004, feedback sheets and State Coordinator reports indicate that more than 20,000 producer participants have attended program events. (Note that this number includes repeat attendees and although the exact number of participants is unknown MLA estimates at least 10,000 individual beef cattle businesses have participated). Events were held across five states through approximately 200 workshops and 22 expos and more than 4,000 producer manuals and 18,000 CDs were distributed. A range of media articles and videos have been produced to assist with raising awareness.

A complete list of inputs and outputs is provided in Appendix A with a summary of the desktop analysis for selected KPIs presented in Table 1. Table 1 shows that awareness and practice change among southern beef producers is below target although the estimated engagement of producers is similar to the targeted figure. As described above (section 3.2.1) the goals of the program have changed over time so any measure of performance may not accurately reflect outcomes for the industry. Also, the application of many of the program principles and tools were contingent on normal seasonal conditions and therefore if drought conditions occurred the adoption rates were likely to be limited. The impact of practice change was further investigated in the producer survey for this project (see section 3.2.3).

Table 1 MBfP Key Performance Indicator results

	Awareness among southern beef producers	Producers engaged (percent of southern beef producers)	% of engaged producers who have changed practices
Target	70%	9,268 (20%)	70%
Actual	52%	10,000 (21%)	55%

Source: MBfP Extension and Communication Plan 2007-2009 (for targets), Logan (2009) (for reported awareness and practice change).

The cost of delivering the program to date (2004/05 to 2008/09) is \$2.65 million.

3.2.3 Producer surveys

The producer questionnaire focussed on identifying (and where possible, quantifying) the economic, environmental and social outcomes of producers' participation in the program for the three key evaluation questions. A copy of the producer survey is provided at Appendix B.

A sample of 500 producers was randomly selected from the MLA database (the database was assembled from event feedback sheets) and stratified according to the number of participants in each state. Table 2 provides details of the number of surveys distributed and the responses by state. The



overall response rate was 21% which is considered to be acceptable for a survey of this type and which enables conclusions to be based on survey responses. Due to the low number of returns from the smaller states, the survey results were analysed as a total and not cross-tabulated by state.

It should be noted that the MLA database of program participants was not completely accurate as it contained incorrect mailing addresses (indicated by 'Returns to Sender') and addressees who returned uncompleted questionnaires stating they had not participated in the MBfP program.

Table 2 MBfP producer survey response rate

Surveys	NSW	VIC	SA	WA	TAS	Not stated	Total
No. sent	213	154	43	64	26		500
No. and % returned	44 (21%)	40 (26%)	8 (19%)	11 (17%)	3 (12%)	3	109 (21%)

MBfP is delivered via a number of different components which are listed in Table 3 together with respondents' views regarding the relative usefulness of each component.

MBfP activities (e.g. workshops and field days) and the MBfP manual were considered most useful with 59% and 60% respectively nominated as 'very useful' or 'useful'. All other components were considered as neutral or less useful, which could be explained by the fact that these are not 'front-of-mind' for the producer when considering program delivery. The electronic newsletter was the least useful of all components.

Table 3 Usefulness of program components (n = 109)

	Very useful	Useful	Neutral	A little	Not useful	NA	No Response
MBfP manual	21%	39%	14%	6%	3%	2%	15%
MBfP activities (workshops, field days)	28%	31%	6%	3%	6%	9%	17%
MBfP state co-ordinators	8%	9%	22%	10%	10%	13%	28%
MBfP producer advocates	5%	15%	25%	8%	9%	12%	26%
MBfP agri-business partners	8%	18%	21%	12%	11%	6%	24%
MBfP website	7%	21%	23%	8%	10%	7%	24%
MBfP electronic newsletter	6%	18%	11%	8%	14%	14%	29%

Table 4 presents respondents' level of agreement on aspects of program presentation and shows that 67% 'strongly agreed' or 'agreed' that the format was easy to understand while 65% agreed that the presentation had assisted their learning. About 77% 'agreed' or were 'neutral' that the program was well suited to their needs and that it offered a good balance between economic, environmental and social



outcomes, although the aspect of most disagreement was with it being suited to the respondents' particular needs.

Table 4 MBfP program presentation (n=109)

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	No response
Been well suited to my particular needs	9%	45%	23%	10%	3%	10%
Been easy to understand	18%	49%	17%	2%	4%	10%
Presented in a way that is helpful for me to learn about the practice	20%	45%	17%	4%	4%	10%
Offered a good balance between economic, environmental and social outcomes	8%	39%	34%	4%	4%	11%

The MBfP topics that respondents most commonly cited as contributing to improvements on their property were 'improved grazing management' (59%) and 'increased pasture ground cover' (54%) (Refer to Appendix D, Table D-2). When considering these results it is important to note the likely difficulty that producers have in attributing on-farm impacts to any single program or MBfP topic(s). Producers are exposed to a variety of information and also have varying levels of prior knowledge when participating in a program event. Nevertheless, these results are consistent with Logan (2009) who reported that 'Pasture Growth' and 'Pasture Utilisation' are the two most read modules of the MBfP manual.

Table 5 shows that 41% of respondents considered that their participation in the MBfP program has led to an increase in production for their enterprise. The relatively high proportion of 'unsure' and 'no response' reinforces the difficulty in quantifying the on-farm impact of the program. Respondents have access to many sources of information, making it difficult to identify a production increase directly resulting from the program. There are also external factors that influence production (and therefore make it difficult to distinguish the magnitude of impacts) such as drought. Future approaches to program evaluation that consider this difficulty are discussed in Chapter 7.

Table 5 Production increase from involvement in the MBfP program (n=109)

	Yes, by 0-5%	Yes, by 5-10%	Yes, by 10-15%	Yes, by 15-20%	Yes, by >20%	No	Unsure	No Response
Increase in production	14%	11%	9%	5%	2%	28%	19%	13%

Of the respondents who reported an increase in production as a result of their involvement in MBfP, most stated that the increase was due to 'pasture and grazing management' (Appendix D, Table D-3), which supports the findings presented in Table D-2.

Of the respondents who considered there was no production increase (Appendix D, Table D-4), the majority (58%) reported drought as the limiting factor while a relatively high proportion (18%) felt that the



information was not applicable to their production system. It is possible that some producers have implemented change on-farm however the drought has meant they are yet to obtain any benefits from this. In addition, the program may have assisted other producers to maintain production during the drought.

Table 6 shows 28% of respondents reported that their involvement in the MBfP program has led to an increase in profitability. 'Pasture production' (48%) and 'more beef sold/better quality' (17%) were the major factors leading to an increase in profitability (Appendix D, Table D-5). This is consistent with Table D-2 and Table D-3 where respondents noted pasture and grazing management as reasons for an increase in production. As noted previously, it would be very difficult for respondents to be able to quantify the increase in profit arising directly from the MBfP program.

Table 6 Profitability increase from involvement in the MBfP program (n=109)

	Yes, by 0-5%	Yes, by 5-10%	Yes, by 10-15%	Yes, by 15-20%	Yes, by >20%	No	Unsure	No Response
Increase in profitability	16%	6%	3%	3%	0%	34%	22%	17%

Drought was again identified as the key limiting factor to increased profitability (Appendix D, Table D-6). However, this could potentially mean that by participating in the program other respondents were able to maintain their profitability despite drought conditions.

Table 7 shows that 49% of respondents reported that the MBfP program had helped them to better manage the natural resources on their property. The major NRM benefits included 'increased pasture ground cover' (42%) and 'better assessment of land capability' (31%) (Appendix D, Table D-7).

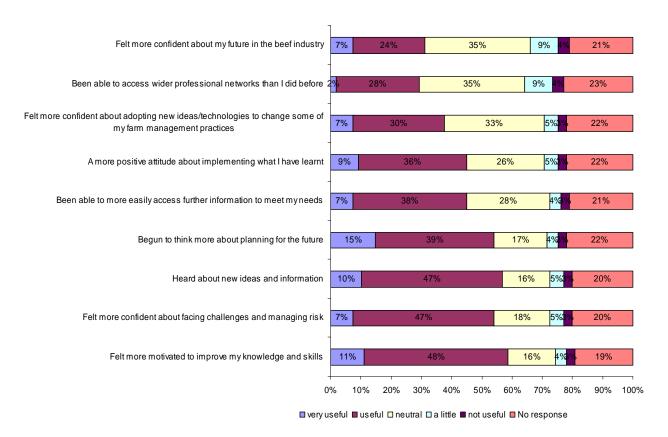
Table 7 Better management of natural resources (soil, water, vegetation) (n=109)

	Yes	No	Unsure	No response
Total	49%	14%	15%	23%

The producer questionnaire sought to identify whether the MBfP program had social benefits which are defined as increases in producer knowledge, aspirations, skills and attitudes (KASA). Figure 2 shows that 59% of respondents felt more motivated to improve their knowledge and skills after participating in the program. There were also high percentages that had: begun to think more about planning for the future; heard about new ideas and information; and had a more positive attitude about implementing what they had learnt.



Figure 2 Social benefits of participation in the MBfP program (n=109)



Survey respondents were asked whether they had any further suggestions or comments about the program. Participants commented that the MBfP program provided a good source of basic information and was a "useful (excellent) resource". The program also seemed to "reinforce ideas" to participants.

However some comments indicated that respondents were not aware of the MBfP brand and were not able to relate their attendance at an event to the MBfP brand. One respondent found "private groups and consultants gave more potent advice to push your business further", while another commented that the program had "fallen down in implementation" and MLA should "find new ways of disseminating information to producers."

Suggestions made by the participants included wanting topics relating to work care aspects, chemicals and partners working together. Other suggestions included information relating to local area benchmark data, mixed farm enterprises, sub tropical regions, genetic DNA tests, feed efficiency and "more field days showcasing profitable producers".



3.3 Making More from Sheep

3.3.1 Objective and goals

The objective of the MMfS program is to:

Provide Australian lamb and wool producers with a best practice package of information and management tools to assist them achieve profitable and sustainable sheep production.

The goals and KPIs of the program include:

- Maximising the awareness of the program with 15,000 producers aware of the program;
- Maximising the number of producers engaged in the program;
- Distributing 5,000 program manuals and CDs; and
- ▶ 50% of the producers who received the manual have applied at least one procedure from at least one module in the manual to their sheep enterprise.

3.3.2 Inputs and outputs

As per the MBfP program, MLA and AWI have developed a number of tools and processes for delivering the MMfS program and the program is directed by a National Coordinator. Program events are coordinated by delivery partners in each state under contract to AWI with six coordinators employed. Ten producer advocates assist to ensure program relevance to their regions while overall guidance is provided by a 12-member Project Advisory Committee.

Table 8 shows the number of events held in each state since the program's inception. South Australia has contributed 30% of the events held followed by NSW with 22%. The number of events held in each state does not necessarily reflect the investment made in each state. Many factors could account for the number of events held including the level of producer interest, seasonal conditions or a current situation creating demand for knowledge such as lice infestations in sheep.

Table 8 Number of MMfS events held by state (Feb 08 - Jun 09)

State	QLD	NSW	VIC	TAS	SA	WA	Total
Total	32	57	32	27	79	31	258

Source: Events by State and Module (Feb 08 - Jun 09) Slide AWI/MLA (S5)

The progress of the MMfS program against its key performance indicators is presented in Table 9. Producer awareness of, and participation in, the program has exceeded the program's targets. The distribution of manuals has been below target and a possible reason for this could be that the entire manual can be downloaded from the MMfS website.



Table 9 MMfS Key Performance Indicators

	Awareness	Participation	Manuals Distributed
KPI	15,000	2,500	5,000
Actual (Jan 08 – June 09)	17,400	4,230	3,450

Source: MMfS Monitoring & Evaluation Strategy January 2008, Preliminary Monitoring & Evaluation Report July 2007 – June 2009

Evaluation sheets were distributed at the conclusion of MMfS events to determine the usefulness of the event to the participants' enterprises, and whether the participants intended to make any on-farm changes based on what they had learnt. Prior to 2009, the evaluation sheets were entered into an electronic database and analysed. This process ceased in early 2009 due to staff time constraints (inputting the data) and the consistent nature of producer responses. The results of the producer evaluation sheets are included in Appendix D (Table D-8 to Table D-11).

The majority of evaluation sheet respondents in each state reported that they found the MMfS events useful. On average, two thirds of respondents indicated that they would make changes to their business based on the information provided at the event, while a similar proportion (71%) felt they had learnt something that had the potential to improve their business. One third of respondents felt that attending the MMfS event had changed their aspirations for what they could achieve in their enterprise.

This project verified the above information from participants via a questionnaire survey that also provided details on data gaps identified in the Evaluation Framework.

3.3.3 Producer surveys

The producer questionnaire was focussed on identifying (and where possible, quantifying) the economic, environmental and social outcomes of producers' participation in the program for the three key evaluation questions. A copy of the producer survey is provided at Appendix B.

MLA provided a database of producers that had been involved in the program and who had previously submitted a feedback form. A sample of 500 producers was randomly selected from the database and stratified according to the number of participants in each state. The overall response rate was 22% which was similar to the responses from the MBfP survey. As with the MBfP survey, the MLA database contained inaccuracies indicated by 'Returns to Sender' and the return of uncompleted questionnaires with respondents stating they had not participated in the MMfS program.

Table 10 provides details of the number of surveys distributed and the responses by state. Due to the small response rate from some states the survey results were analysed as a total and not tabulated by state. (Appendix D, Table D-12).

Table 10 MMfS producer survey response rate

Surveys	NSW	VIC	SA	WA	QLD	TAS	Not stated	Total
Number sent	205	135	108	34	12	6		500
Number and % returned	36 (18%)	23 (17%)	38 (35%)	7 (21%)	2 (17%)	2 (33%)	3	111 (22%)



Table 11 shows that the most useful sources of information utilised by respondents included the MMfS manual (62%), MMfS activities such as workshops and field days (47%) and the MMfS agribusiness partners (35%). As with the MBfP program the manual and the workshop activities would be considered the primary components of the program, with the other components acting as supporting activities to the manual and workshops. The high recognition of agribusiness partners (e.g. stock and station agents) could possibly be attributed to their involvement with workshop activities.

State coordinators and producer advocates mostly operate behind the scenes and producers would be largely unaware of their inputs and therefore would not be in a position to comment on their usefulness to the program.

Table 11 Usefulness of program components (n = 111)

	Very useful	Useful	Neutral	A little	Not useful	NA	No response
MMfS manual	21%	41%	10%	6%	2%	1%	19%
MMfS activities (workshops, field days)	18%	29%	9%	3%	4%	9%	29%
MMfS state coordinators	5%	9%	17%	11%	5%	9%	43%
MMfS producer advocates	5%	15%	14%	8%	6%	7%	44%
MMfS agri-business partners	6%	29%	15%	8%	8%	5%	28%
MMfS website	5%	15%	17%	8%	5%	7%	42%
MMfS website Quick Quiz	1%	5%	18%	10%	7%	11%	48%
MMfS electronic newsletter	5%	21%	15%	9%	5%	6%	38%

Table 12 shows that approximately 70% of respondents considered that the program had been easy to understand and had been presented in a way that is helpful to learn about the practice. As with the MBfP program, producers were less positive about the program being well suited to their particular needs and that the program offered a good balance between economic, environmental and social outcomes.



Table 12 MMfS program presentation (n=111)

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	No response
Been well suited to my particular needs	7%	54%	23%	4%	1%	12%
Been easy to understand	15%	60%	11%	2%	1%	11%
Presented in a way that is helpful for me to learn about the practice	15%	54%	14%	4%	1%	12%
Offered a good balance between economic, environmental and social outcomes	6%	47%	31%	5%	1%	11%

The topics most commonly identified as leading to improvement on properties included 'improved grazing management' (56%), 'development of better business skills and knowledge' (49%) and 'improved lamb survival' (42%) (Refer to Appendix D, Table D-13). This is generally consistent with Logan (2009) which reports 'Wean More Lambs', 'Market Focussed Lamb and Sheepmeat Production' and 'Grow More Pasture' as the most read modules of the MMfS manual. The GHD Hassall (2009) survey also reports that the modules 'Wean More Lambs' and 'Grow More Pastures' were the most frequently completed.

A high percentage of respondents (44%) stated that their involvement in the MMfS program had led to an increase in production (Table 13). It should be noted that these are reported estimates and are not based on actual measured responses. An earlier survey conduced by GHD Hassall (2009) reported that 53% of respondents noted an increase in productivity as a result of implementing changes based on the MMfS program.

Table 13 Production increases from involvement in the MMfS program (n=111)

	Yes, by 0-5%	Yes, by 5-10%	Yes, by 10-15%	Yes, by 15-20%	Yes, by >20%	No	Unsure	No Response
Increase in production	15%	18%	9%	2%	0%	23%	22%	11%

The main factors contributing to this increase in production included health and nutrition improvements (23%) and pasture management (19%) (Appendix D, Table D-14). It is interesting to note the differences to results in Table D-13 where grazing management was more prominent, but the interacting nature of components that led to increases in production would be a contributing factor.

Similar to the MBfP program, 51% of respondents reported that drought was a major factor in limiting production increases (Appendix D Table D-15). It is unknown whether the program may have helped producers to prevent a production loss during drought conditions or that producers were unable to implement aspects of the program as a result of the drought.



Table 14 shows that 39% of respondents reported an increase in profitability as a result of their involvement in the MMfS program. This is consistent with GHD Hassall (2009) where 37% of respondents identified an increase in profitability as a result of making changes based on the MMfS program. In contrast, Logan (2009) reports that 17% of MMfS participants experienced an increase in profitability.

Table 14 Profitability increase from involvement in the MMfS program (n=111)

	Yes, by 0-5%	Yes, by 5-10%	Yes, by 10-15%	Yes, by 15-20%	Yes, by >20%	No	Unsure	No Response
Increase in profitability	16	15%	6%	2%	0%	20%	25%	15%

The main factors identified as leading to an increase in profitability included pasture and grazing management (29%) and lambing improvements (24%) (Appendix D, Table D-16). As previously discussed, it could be difficult for respondents to quantify the level of profitability increase due to the MMfS program. There are many factors that can influence profitability and it is therefore difficult for respondents to relate any increase in profitability specifically to the program.

Respondents reported that the main limiting factor to increased profitability is drought (42%) (Refer to Appendix D, Table D-17). Similar to above, it is unknown whether the program has helped farmers maintain their profitability during drought conditions or if farmers have been unable to implement program procedures due to drought conditions.

Table 15 shows that 55% of respondents reported they were better able to manage natural resources as a result of involvement in the MMfS program. In this survey respondents were provided with a selection of possible natural resource benefits to choose from. This result is substantially higher than that recorded in GHD Hassall (2009) where only 15% of respondents identified natural resource management benefits as a result of the MMfS program however, in this survey, respondents did not receive examples of possible natural resource benefits.

The main NRM benefits gained from involvement in the MMfS program include increased pasture ground cover (43%) and better assessment of land capability (32%) (Refer to Appendix D, Table D-18).

Table 15 Better management of natural resources (soil, water, vegetation) (n=111)

	Yes	No	Unsure	No response
Total	55%	21%	13%	12%

The producer questionnaire sought to identify whether the MMfS program had social benefits which are defined as increases in producer knowledge, aspirations, skills and attitudes (KASA). Figure 3 shows that 69% of respondents reported that the MMfS program reinforced management decisions already in place. Other benefits with high levels of agreement included: a more positive attitude about implementing what they have learnt; had begun to think more about planning for the future; and heard about new ideas and information.



Felt more confident about facing challenges 5% 40% 32% 5% 15% and managing risk Heard about new ideas and information 22% Felt more confident about adopting new 7% 22% 8% 15% ideas/technologies to change some of my farm management practices Been able to more easily access further 8% 27% 14% information to meet my needs Felt more motivated to improve my knowledge 23% 6% 9% 15% and skills Felt more confident about my future in the 11% 23% 7% 14% sheep industry Begun to think more about planning for the 13% 44% 14% Reinforced management decisions already in 17% 52% 13% 13% place 0% 10% 20% 50% 80% 90% 100% ■ very useful ■ useful □ neutral □ a little ■ not useful ■ No response

Figure 3 Social benefits of participating in the MMfS program (n=111)

Survey respondents were asked whether they had any further suggestions or comments about the program. Only a few respondents added comments and as such the suggestions may not be representative of all participants. However, samples of comments are presented below for consideration for the future.

Comments described the manual as being a "good publication" but MLA and AWI "need to keep the information up to speed". There was a suggestion that MMfS could "provide linkages to other reliable sources of information" although it is noted that currently the manual makes extensive use of sign-posting to other information. One participant felt the program was "not distinctively different enough for people to make change", and that the content of the program was "a little bit too heavily weighted toward merino sheep and wool production".

Branding was also identified as an issue as respondents thought "It was difficult to know when MMfS was involved in a field day". Other respondents thought it would be "beneficial to have follow-up workshops" to reinforce what they had learnt and to help with adoption of practices. Several comments referred to the 2010 mulesing deadline and requested workshops on this topic.



Benefit cost analysis

4.1 Introduction

Both the MBfP and MMfS programs had goals that were based mainly on raising awareness and seeking practice change among participants. However, this review seeks also to evaluate the programs' impacts on the beef, and lamb and sheepmeat industries.

As a result of the awareness/participation/practice change approach, limited quantitative data has been collected to date regarding the on-farm impact of producers' participation in the programs. For this reason the producer survey was used to generate some data to assist with an estimation of the on-farm impact of the programs, in terms of production and profitability.

This chapter presents the results of the benefit cost analysis modelling that has been undertaken to estimate the impact of investment in the MBfP and MMfS programs on the beef and sheep industries respectively. The benefits and costs associated with the programs to date are identified. Where feasible impacts have been quantified and a qualitative discussion provided for other impacts that are more difficult to measure within the bounds of the present study.

As discussed in Chapter 3, survey respondents found it relatively difficult to quantify the on-farm impact of their participation in the programs. This likely reflects a variety of factors including the likelihood that producers access information from several sources (which makes it difficult to attribute an on-farm impact to a single program) and the potential for external factors (such as drought) to influence changes in farm output and profitability (which proves challenging when trying to determine the magnitude of any impact). Also, it is considered that many producers do not have sufficiently detailed records to quantify impacts, and the programs do not have sufficient monitoring and evaluation components to enable attribution and direct association of impact.

The results of the survey, as well as data provided by MLA and AWI, informed the assumptions of the benefit cost analysis. The assumptions are presented in this chapter, as well as the results of a sensitivity analysis of key model parameters. The chapter concludes with a discussion of matters which could be the subject of further consideration.

4.2 More Beef from Pastures: Identification of the costs and benefits

4.2.1 Funding

As at June 2009, MLA has invested \$2.65 million in the MBfP program, as shown in Table 16. A breakdown of expenditure by program component is provided in Table 17. Expenditure to date is \$213,000 less than total funding allocated to the program.

Table 16 Total funding provided for MBfP program

	2004/05	2005/06	2006/07	2007/08	2008/09	Total
Funding (Inc GST)	\$380,351	\$598,985	\$657,170	\$719,184	\$295,148	\$2,650,838

Source: MLA

State coordination accounts for 30% of total expenditure to date, followed by expos (29%) and national coordination (14%).



Table 17 Breakdown of expenditure by program component

	Producer advocates	Communications	Expos	National coordination	New tools development & delivery	Producer demonstration sites	State coordination	Train the trainer activities	Steering committee
Expend. (Inc GST)	\$77,138	\$102,056	\$700,351	\$331,889	\$152,175	\$207,924	\$734,968	\$110,591	\$20,747

Source: MLA

4.2.2 In-kind contributions

In addition to the funds invested by MLA in the program, in-kind contributions have been made by producer advocates, state coordinators, steering committee members and agribusiness when delivering the program. These additional efforts (i.e. beyond payments for conference attendance etc) are recognised as being vital to the delivery of the program to date. This was confirmed during the key informant interviews, with one person commenting "there's currently a huge amount of in-kind contributions". Due to limited information about the extent of these efforts, in-kind contributions are estimated to be equivalent to 50% of total program funding².

In-kind contributions may also include the costs borne by producers to implement any change on-farm, e.g. the time spent attending field days or workshops which would otherwise be spent undertaking day-to-day farm management activities. Due to data constraints, these costs have been excluded from the cost benefit calculations.

4.2.3 Economic

The results of the producer survey show that 41% of respondents report an increase in production as a result of their involvement in the MBfP program (refer to Table 5 above) and 28% an increase in profitability (Table 6). Similarly, the most recent *Awareness & Adoption KPI Evaluation* (Logan, 2009) reported that 32% of MBfP attendees surveyed identified an increase in profitability arising from their participation in the program (n=24).

The increase in profitability reported in both studies could be unreliable due to the reliance on producers' self-reporting (in the absence of any independent benchmarking data) and the likelihood that some survey recipients were deterred from responding to the present survey because they felt unable to quantify the impact that their involvement in the program has had on profitability. The sensitivity analysis undertaken in the present study (see section 4.4.2 below) investigates this further.

4.2.4 Environmental

More than 50% of survey respondents reported that their involvement in the MBfP program had helped them to better manage natural resources on their property (Table 7).

The most common on-farm benefits identified by respondents included:

Increased pasture groundcover (which could include % groundcover, timing and/or duration);

² Estimate provided by MLA program staff



- Better assessment of land capability; and
- Integrated pest and weed management.

Some respondents also noted that they used the program to assist in meeting the requirements of EMS ISO 14001.

A measure of the impact of improved environmental management practices arising from participation in the program is not currently available. For this reason, the environmental benefits associated with these practices have not been included in this quantitative analysis.

4.2.5 Social

The typical social benefits of the program are the improved social capital of the participants and the community. They include the capacity to do further research or practice change, increased confidence and motivation and improved social networks. These impacts are difficult to value and have therefore been excluded from the cost benefit analysis.

The major findings from the consultation process are:

- Increased capacity of participants respondents noted they felt more motivated to improve their knowledge and skills. Respondents also reported they had begun to think more about planning for the future; and
- ▶ Improved networks and information flow respondents reported that they had heard about new ideas and information since participating in the course. A respondent commented that the event was a "very positive experience participating with young farmers".

4.3 Making More from Sheep: Identification of the costs and benefits

4.3.1 Funding

Since the program's inception a total of \$1.8 million has been invested in the program up until June 2009 (Table 18). More than 40% of total expenditure has been spent on the MMfS manual and modules, followed by the activities of the National Coordinator (16%) and activities such as workshops and field days (14%) (Table 19).

Table 18 Total funding provided for MMfS program

	MLA	AWI	LWA	Total
Funding (Inc GST)	\$800,000	\$968,161	\$80,000	\$1,848,161

Source: MLA/AWI



Table 19 Breakdown of expenditure for the program

	Producer advocates	Communications	Activities	National coordination	Manual/modules	State coordination	Agribusiness partners
Expenditure (Inc GST)	\$48,000	\$240,000	\$262,982	\$307,264	\$683,264	\$229,650	\$52,000

Source: MLA/AWI (Strategy, monitoring and evaluation included in manual/modules)

4.3.2 In-kind contributions

In-kind contributions primarily represent the additional efforts of groups involved in delivering the program. Elders and Landmark provided input for the module development and involvement with the program advisory panel. In some cases agribusinesses hosted events and provided catering. DPI is reported to have provided considerable in-kind contributions through staff activities.

While seen to be a vital component of the program, limited information about the extent of these efforts means that in-kind contributions have been estimated to be equivalent to 50% of program expenditure on state coordination and producer advocates³.

In-kind contributions may also include the costs borne by producers to implement any change on-farm, e.g. the time spent attending field days or workshops which would otherwise be spent undertaking day-to-day farm management activities. Due to data constraints, these costs have been excluded from the cost benefit calculations.

4.3.3 Economic

Respondents were asked to estimate the percentage increase in production (Table 13) and profitability (Table 14) experienced as a result of their involvement in the program. Over 50% of respondents reported an increase in production and 48% an increase in profitability. In contrast, the most recent Awareness & Adoption KPI Evaluation (Logan, 2009) reported that 17% of MMfS attendees surveyed identified an increase in profitability arising from their participation in the program (n=27).

The reason for the difference in reported profitability between the two studies is not known although the use of a paper-based questionnaire (this study) compared to telephone interview (Logan) may be a factor. The increase in profitability reported in the present study could be unreliable due to the reliance on producers' self-reporting (in the absence of any independent benchmarking data) and the likelihood that some survey recipients were deterred from responding to the survey because they felt unable to quantify the impact that their involvement in the program has had on profitability. The sensitivity analysis undertaken in the present study (see section 4.4.2 below) investigates this further.

Some factors identified as leading to an increase in production as a result of the program include improved health and nutrition of stock and improved management of ewes, with respondents commenting that they had "increased lambing percentage by learning about required nutrition in ewes" and "monitoring the conditions of ewes during mating, prior to and during lambing".

³ Estimate provided by MLA & AWI program staff



Common themes identified as limiting production and profitability increases included drought and poor market process. Respondents commented that they have "had very dry years; it's so hard to say if the programs have had any impact and profit has been badly affected by drought and commodity prices".

4.3.4 Environmental

The most common on-farm benefits identified by respondents included:

- Increased pasture groundcover (which could include %, timing and/or duration);
- Better assessment of land capability; and
- Improvement in problem soils, i.e. salinity, acidity, erosion.

Respondents also noted that they were still awaiting results of their practice change to determine if there has been an environmental benefit.

A measure of the impact of improved environmental management practices arising from participation in the program is not currently available. For this reason, the environmental benefits associated with these practices have not been included in this quantitative analysis.

4.3.5 Social

Participants were asked at the end of MMfS events if their aspirations have changed as a result of participation in the program. Of the 821 respondents, 33% reported that their aspirations had changed (Table 20). This suggests that these participants now have a more positive attitude regarding what they are capable of achieving.

Table 20 Change in aspirations

	Yes	No	No response
Change in aspirations	33%	12%	55%

Source: MLA

As with the MBfP program, the major findings from the consultation process are:

- Increased capacity of participants, including motivation, new skills and confidence in decision making. The program reinforced the management decisions the respondents already had in place thus providing reassurance and confidence to the participants. Respondents also began to think more about planning for the future which also correlates to the responses from the event exit surveys where participants reported that their aspirations for the future had changed;
- Improved networks and information flow, participants developing networks and learning from others. Respondents noted that "learning from others' experiences and ideas is always a help" and that the "practical field days are great"; and
- All key informants believed the program was relevant to producers.

These impacts are difficult to value and have therefore been excluded from the analysis.



4.4 Analysis and results

4.4.1 Assumptions

The analysis of the programs' impacts is based on the following assumptions (in addition to those noted in Sections 4.2 and 4.3 above):

Table 21 Key assumptions of the analysis

	MBfP	MMfS	
Discount rate	7% per annum	7% per annum	
Assessment period	2004/05 - 2008/09	2005/06 - 2008/09	
In-kind contributions	Equivalent to 50% of total program funding	Equivalent to 50% of total program funding spent on state coordination and producer advocates	
Benefits accrue	2008/09 (i.e. it is assumed that the increased income reported by producers reflects a gradual increase since their participation in the program. Due to data limitations regarding the timing of participation and associated benefits, the model accounts for these benefits in 2008/09)	2008/09 (i.e. year following program launch, to account for information/adoption lag)	
No. of producers exposed to program	10,643 (i.e. 21,285 producers 'engaged' multiplied by 50%, to provide estimate of individual number of producers participating in program ⁴)	4,230 ⁵	
Indicative farm area	1,000 ha	1,000 ha	
Net income per hectare ⁶	\$200	\$200	
% of farms experiencing an increase in income due to the program	20%	20%	
% increase in income	5%	5%	

4.4.2 Results and sensitivity analysis: MBfP

The results⁷ of the benefit cost analysis for the MBfP program are shown in Table 22, as well as an analysis of the sensitivity of the results to the key assumptions. At a discount rate of 7%, the present value of total benefits to date is estimated to be \$16.24 million. This equates to a per enterprise benefit of around \$1,526. The present value of total program costs to date is estimated to be \$3.73 million or \$328

⁴ Based on advice provided by MLA

⁵ Advice provided by MLA/AWI program staff

⁶ Based on NSW Department of Primary Industries Farm Budget Series

⁷ All results reported in 2008/09 dollars



per enterprise. On the basis of these costs and benefits, the net present value (NPV) of the MBfP program to date is estimated to be \$12.51 million with a corresponding Benefit Cost Ratio (BCR) of 4.35.

This BCR is for the base assumptions of three major variables: a 5% increase in income from MBfP practice change, 20% of participating farmers experiencing an increase in income and a discount rate of 7%.

Table 22 MBfP: sensitivity analysis

	Base assumption	Low	Medium	High	Breakeven
Increase in income	5%	2.5%	10%	15%	1.1%
NPV	\$12,508,659	\$4,389,165	\$28,747,646	\$44,986,634	N/A
BCR	4.35	2.18	8.71	13.06	1.0
% of farms experiencing an increase in income	20%	10%	25%	30%	5%
NPV	\$12,508,659	\$4,389,165	\$16,568,406	\$20,628,153	N/A
BCR	4.35	2.18	5.44	6.53	1.0
Discount rate	7%	4%	N/A	10%	89%
NPV	\$12,508,659	\$14,263,205	N/A	\$10,990,435	N/A
BCR	4.35	4.63	N/A	4.1	1.0

The sensitivity analysis indicates the impact of a change in the level of the three main variables and shows that the cost benefit analysis is relatively insensitive to the assumptions made. The breakeven calculations indicate that the increase in producer income arising from participation in the program would need to fall to 1.1% before there would be no net benefits arising from the program (with other variables held constant). Likewise, the proportion of participating farms experiencing an increase in income could fall to 5% before the BCR would be 1. Similarly, the discount rate used in the analysis would have to rise substantially in order to offset the net benefits resulting from the program to date.

4.4.3 Results and sensitivity analysis: MMfS

Table 23 summarises the results of the benefit cost analysis for the MMfS program and also includes an analysis of the sensitivity of the results to the key assumptions. At a discount rate of 7%, the present value of total benefits to date is estimated to be \$6.9 million. This equates to a per enterprise benefit of around \$1,630. The present value of total program costs to date is estimated to be \$1.77 million or \$400 per enterprise. On the basis of these costs and benefits, the NPV of the MMfS program to date is estimated to be \$5.14 million with a corresponding BCR of 3.9.

This BCR is for the base assumptions of three major variables: a 5% increase in income from MMfS practice change, 20% of participating farmers experiencing an increase in income and a discount rate of 7%.



Table 23 MMfS: sensitivity analysis

	Base assumption	Low	Medium	High	Breakeven
Increase in income	5%	2.5%	10%	15%	1%
NPV	\$5,135,676	\$1,682,736	\$12,041,556	\$18,947,436	-
BCR	3.9	1.95	7.8	11.7	1.0
% of farms experiencing an increase in income	20%	10%	25%	30%	5%
NPV	\$5,135,676	\$1,682,736	\$6,862,146	\$8,588,616	-
BCR	3.9	1.95	4.88	5.85	1.0
Discount rate	7%	4%	N/A	10%	129%
NPV	\$5,135,676	\$5,665,244	N/A	\$4,663,783	-
BCR	3.9	4.05	N/A	3.76	1.0

The results of the sensitivity analysis show that the cost benefit analysis is relatively insensitive to the assumptions made. The breakeven calculations indicate that the increase in producer income arising from participation in the program could fall to 1% before there would be no net benefits arising from the program. Similarly, the proportion of participating farms experiencing an increase in income could fall to 5% before the BCR would be 1. The sensitivity results also suggest that the benefit cost analysis is relatively insensitive to the discount rate, as this could rise to 129% before there would be no net benefits resulting from the program to date.

4.5 Summary of findings

The MBfP program is estimated to have a BCR of 4.35, while the MMfS program is estimated to have a BCR of 3.9. The results of the sensitivity analysis show that the cost benefit analysis is relatively insensitive to the assumptions made. Given that the NPVs for both programs are positive and the BCRs are greater than 1, it is concluded that both programs have provided a net benefit to industry.

The reason for the higher BCR for MBfP is due to a greater number of producers having been exposed to the program.

4.6 Factors for further consideration

When deciding upon the magnitude and nature of any future investment in the MBfP and MMfS programs, several factors would require further consideration. These include:

<u>Benefits are likely to accrue for at least 5-10 years:</u> the review period for the present analysis is from program inception until June 2009 (as per the project Terms of Reference). However, it is recognised that the benefits arising from producers' participation in the programs are likely to be subject to a time



lag (due to the time required to implement on-farm changes and observe any benefits) and will therefore likely continue for, say, 5-10 years after program inception.

- Nature of future delivery activities: it is likely that the focus of future delivery activities (awareness raising versus activities designed to encourage practice change) will influence the proportion of farms experiencing increased income as a result of their involvement in the program and the magnitude of this increase.
- M&E activities: the data available concerning the economic, environmental and social impacts of the programs are relatively scarce, and quantitative data are particularly limited. The design of future monitoring and evaluation activities (which is discussed further in Chapter 7) could provide an opportunity to address some of these data gaps. It may then be worthwhile to repeat the present study.
- Difficulty in attributing impacts to a single program: as mentioned previously, producers have varying levels of existing knowledge prior to participating in a program and tend to access a variety of sources in order to inform their on-farm decision making. This can make attributing on-farm impacts to a single program difficult, and should therefore be taken into account when reviewing the results of the present study.
- Potential for regression analysis: Improved assessment of program outcomes could result from higher survey responses and more comprehensive data collection. The latter, in particular may enable more sophisticated statistical analysis of program impacts via regression analysis, such as the identification of change in productivity and profits. Such improvements would cost more time and money than was available for this study.



Key informant interview findings

5.1 Introduction

The above sections have discussed outcomes from a producer perspective and have demonstrated that the KPIs set for the major goals of awareness and practice change have largely been achieved. Although there were no KPIs set in relation to impact on cattle and sheep industries, the BCRs based on assumptions of improvements from producer surveys indicate healthy industry returns.

However, this review was also asked to consider how the respective program deliveries should (in the event of further investment) be structured, targeted, monitored and evaluated in order to improve and measure industry impact. To assist in achieving this task, interviews were conducted with key informants to obtain their views on the current program and what improvements should be considered in the future.

5.2 More Beef from Pastures

5.2.1 Key informant surveys and interviews

Phone interviews were conducted with the following key informants in the MBfP program:

- The MLA program manager;
- Steering Committee members (2);
- State coordinators (6); and
- Producer advocates (2).

A copy of the interview questions is provided at Appendix C and responses are presented below under relevant themes.

Note that this section includes selected quotations from interviewees and as such they do not indicate any consensus for future actions. The quotations are included as raw data which are then subject to further analysis in section 6 where the comments are contextualised based on feedback from MLA.

Program

Design of the program

Key informants tended to be complimentary about the information included in the manual and tools, and presented at program events. However they felt that the design of the program, in terms of its strategic plan and objectives, is less clear. One person reflected "the program is random and ad hoc. I've never been able to get clear objectives from the state coordinator or MLA". Other people commented "MLA needs to go back to the program and look at its design, to achieve practice change" and "MLA need to stop trying to be everything to everyone." These comments largely reflect the fact that the program was originally established to provide a manual and tools to the industry and while this was successful, key informants considered it was time to progress beyond this approach.



Gaps in information

Some people felt that more technical detail, such as benchmarking data, would be a useful addition to the program, with one person commenting "I'm not saying the objective is wrong, but they need benchmarking data to make an argument for beef producers to get involved. They need to put hard data up and a compelling story behind it." Similarly, another person commented "These days you need to have some numbers…you need measurements that mean something, not just information that looks good."

Other information gaps that were identified include:

- Climate change, in particular the link between carbon and pastures; and
- Social impacts, such as the sustainability of families on farms.

Relevance and producer participation

There was broad agreement amongst key informants that the program has successfully raised awareness of targeted management practices and achieved good levels of producer participation at program events.

All of the key informants felt that the program is still relevant to producers, however, the nature of future delivery activities was recognised as a key determinant for ensuring that the information is accessible and useful (see discussion below regarding delivery of the program). Several people recognised that a one-size-fits-all approach can never be completely achieved.

Suggestions for further increasing the relevance of the program and participation of producers included:

- Having a dedicated website for the program (rather than a web page within the MLA site) which facilitates information to be updated regularly and enables producers to access the tools easily;
- Adding a module to the manual about the social sustainability of farming families;
- Undertaking local producer surveys to understand their information needs;
- Demonstrating a stronger link to MSA;
- Including links in the manual, to external tools;
- Including more economic / financial information in the modules;
- Recording the livestock weight gain for a sample of producers who are participating in the program, and communicating these results to other producers; and
- Ensuring that the manual is updated regularly.

Note that the above are suggestions of key informants and these have been considered when recommending future program direction in Chapter 7.

Delivery

Flexibility

The flexibility of the program's delivery (in terms of state coordinators and producer advocates being able to use the sections of the manual that are most relevant) is appreciated by state coordinators and producer advocates as it allows them to tailor the program to the specific needs of their state or region.



The collaborative approach to program delivery was also valued, with one person saying "the program has been very cooperative - we want to retain this sense of partnership with MLA and the other states."

However, it was also recognised that the flexibility of the program sometimes results in inconsistencies and reduced clarity around the strategic direction of the program. This included the following comment on the influence of producer advocates: "the producer advocates' role is ad hoc - their stories are interesting but how should people apply this information?"

Resources

Key informants generally value the contribution of the producer advocates and state coordinators in delivering the program. One person commented that "the advocates keep the program grounded and realistic, and the technical expertise of the coordinators can fill any gaps".

Several people felt that the program delivery needed to be more targeted - "MLA really need to target the program at the best and young people" and "a lot of expenditure seems to go on the big ticket items that aren't necessarily the best value."

Training

Some producer advocates have undertaken media training as part of their involvement in the program. Producer advocates also reported receiving informal training and advice from their state coordinators when preparing presentations for program events.

Steering committee members reported that they have not received any training, however, feel that this is unnecessary for their role in the program.

State coordinators said that the majority of the training they have received through the program has been informal. One coordinator commented "I guess this (training) has been a bit of a weakness - training might have made our message more consistent." State coordinator meetings were identified as a good opportunity to discuss any queries, learn from others and improve the coordinators' knowledge base. More formal training has been received in the application of the MBfP tools, such as the Cost of Production calculator.

Outcomes to date

The success of the program to date, in terms of raising producer awareness and encouraging attendance at events, was recognised by all participants. However, most people felt that the delivery of the program has been ineffective for fostering practice change. Some comments included:

"If it was designed to increase awareness, then I think the program has been quite successful. But if they're looking to achieve adoption then I think their delivery model isn't suitable."

"There's been plenty of outputs but not enough outcomes."

"It's a really good awareness program but it hasn't made producers do enough - it lets people off all the time."

"To get adoption you need to focus your efforts on less people."

"MLA's expectations about what they want to achieve are way off the mark. A field day in isolation won't get people to make changes on-farm."

Trade-off between raising awareness and practice change

Many people discussed the trade-off that will continue to exist between future awareness raising and participation activities, versus delivery activities that are designed to boost practice change:



"There's a requirement to ensure practice change but we need to overlay this with a reality check of what's actually feasible going forward."

"(MLA) need to start small, do it right, and then try to take it forward. Field days create awareness and inform people, but this doesn't necessarily cut it if MLA wants practice change."

"The program is moving to an implementation phase but they still need awareness - there needs to be a balance. Going to the arrowhead of only working with a few people could be problematic in terms of reach."

"Small groups would improve practice change but they are more costly - there will always be a trade-off."

Future delivery

The evolution of the program, towards activities that drive on-farm practice change, was highlighted as a key priority for the future with one person stating "*The manual has the basics there - the thinking that needs to be done is how to roll this out.*" Other comments included:

"The right people are there and the right information - it's just about how it's applied. The majority of state coordinators being government employees is good in terms of keeping things low cost, but the trade-off is they may not be completely focussed on achieving the program objectives."

"They need to connect some of the dots. For example, when talking about muscling, they need to link it to pastures and emphasise the dollar impact." One person suggested that procedures or toolkits on how to implement change would be beneficial. Another thought that delivery templates would be useful, including suggested steps on how to use the tools.

"The strength is that you can apply the manual across Australia, but the weakness is that a regional person can't just grab it and run with it."

One person commented that the program is "moving away from awareness, towards action" and felt that this was positive. Another person mentioned that they were "moving towards a supported change phase."

Suggested improvements

When asked what could be done to improve delivery, one person replied "just getting clarity from MLA regarding what it is that they really want us to do. Bums on seats versus an adoption focus - it's tough to do both."

Other suggestions for improving the delivery of the program included:

- ▶ Targeting small groups of producers (educational focus, technical detail) "the field days have probably had their day. We need smaller groups to help each other, like the old 'Beef Check' groups a coordinator delivering very targeted information",
- Delivering snapshots of the manual via short video 'grabs' on a website;
- Presenting benchmarking data so that producers understand their farm's performance compared to the average;
- Increasing the training / educational component of the program "there's no specific skills development, even though the link between skills development and profitability is quite strong";
- Delivering the program to more remote areas and to mixed farmers;
- Holding farm tours;
- Targeting larger and/or younger producers;



- Targeting service providers and consultants to facilitate specific sessions in their areas of expertise;
- Targeting universities and high schools;
- Targeting specific agro-climatic regions; and
- Using rural service providers to form clusters around the state and undertake train-the-trainer activities with in-store staff.

Sustainability

In terms of the sustainability of the program, one state coordinator reported that they are seeking to move towards a user pays system with more targeted delivery, via courses and workshops, whereby producers pay a realistic fee for attendance (rather than a nominal rate). Another coordinator also reported that they try to leverage money from alternative sources (rather than MLA alone), to fund program events.

Monitoring and Evaluation

State-level

All of the state coordinators reported that they have agreed targets outlined in their operational plan. The majority of coordinators recognise that these targets are largely focussed on producers attending events and indicating an intention to change practices, rather than practice change measured on-farm. State coordinators report to MLA against their targets on a monthly basis.

Producer advocates and steering committee members do not have any targets set by MLA.

Program-level

Monitoring and evaluation activities were recognised by many stakeholders as a deficiency of the program:

"The M&E side of things is pretty tricky - to do it properly would take a lot of time and energy, so MLA seem happy to look at the feedback sheets and gauge producers' intent to change their practices."

"There is too much focus on the number of people who have the tool or attended the field day, rather than the number of people who actually understand the tool, can use it, and have made changes onfarm. When collecting M&E data, you want to know that it is informing the future development of the program."



Management

National coordinator

There is broad consensus that the program is managed well given the resources available, however the majority of key informants recognised that a national coordinator would improve planning and consistency. One person reflected "there is an enormously free reign at all stages of the project." Other comments included "you need the flexibility that the state coordinator network provides but the national coordinator would provide cohesion" and "no-one seems to have time to look at the big picture. There's a lack of leadership."

A couple of people felt that the national coordinator role was less necessary, stating "sometimes the program has lacked national coordination but it's really the role of the state coordinators to hit those KPIs" and "the coordinators know each other well, so perhaps the national coordinator isn't as necessary now."

Communication

Communication was also cited as an area for improvement, and it is felt that a national coordinator would facilitate this. Comments included:

"MLA need to improve communication across the board. We have gone through planning phases that have overlapped."

"MLA are a bit directive and reactive. It feels like they sometimes disregard the co-delivery of the program."

"ProGraze worked because it was very prescriptive - people knew what it was. Compare this to MBfP where you have different words, different people delivering the events, and different formats of information."

5.3 Making More from Sheep

5.3.1 Key informant surveys and interviews

As part of the consultation process phone interviews were conducted with key informants in the MMfS program. In total 10 key informant interviews were conducted including:

- National Coordinator;
- State Coordinators (3);
- Producer Advocates (3); and
- Program Advisory Panel members (3).

The interview questions were designed to achieve qualitative responses from the key informants. The questions addressed topics such as training of the key informants, design, management and delivery of the program, quality of information provided, and relevance of the program for producers. The questions are attached in Appendix C.

As for MBfP, this section includes selected quotations from interviewees and as such they do not indicate any consensus for future actions. The quotations are included as raw data which are then subject to further analysis in section 6 where the comments are contextualised based on feedback from MLA.



Program

Design of the program

All key informants agreed the design of the program was good and met the goal of creating awareness. Specific areas that the key informants appreciated included the design and presentation of the manual as it provides a sound base of information.

One respondent felt that the program was "missing an overarching strategy for AWI and MLA and how it fits into other activities with other brands relating to it". Another respondent felt there should be more emphasis on the MMfS brand instead of the delivery service provider.

One comment was that some modules were more complicated than others to follow. Another comment was that MMfS does not have a strategy with how it fits with other extension programs and that this creates branding issues. One respondent felt that to achieve adoption the design needs to change.

Suggested improvements for the design of the program included:

- Potential to add value to the website; and
- The manuals should be updated periodically.

Gaps in information

The majority of the key informants indicated the manual was very good and provided a very sound basis of information that covers a board range of topics. Some key informants indicated that that there would probably always be gaps, however gaps that were specifically mentioned included:

- Organic and biological management practices;
- Adapting to climate change; and
- Mulesing issues.

Relevance and producer participation

All key informants reported that the program was relevant to producers: "I think it's a great program" and has been "well received". One respondent felt that the program was very timely and a great resource for people entering the industry as it provides the core information for any sheep enterprise. Another believed the program has a lot of credibility.

When asked what could be done to increase producer participation the following suggestions were made:

- There are many future opportunities for online interactions, webinars, internet discussion, web Q&As;
- More seminars or on-farm workshops with small groups to help increase adoption;
- The need to focus on adoption in the future and work with private consultants;
- Development of more effective partnerships with other organisations such as agribusinesses and involve them in workshops and promotion of the product;
- More advertising/targeted promotion;
- 'Master classes' for top producers; and
- "There needs to be an attitude change in producers and the community. Producers need to value learning and education. The community attitude needs to drive this and show producers that they are valued."



Delivery

Training

The key informants identified specific training they undertook in order to complete their roles. This training was arranged by AWI. The National Coordinator undertook website training to enable day to day updates, material updates and to inform producers of new events via the MMfS website. The National Coordinator also attended some training for producer advocates.

The producer advocates were provided with some media training, however only one producer advocate mentioned this. Others mentioned that they joined the program as a producer advocate after the training had been delivered.

Neither the State Coordinators nor members of the Program Advisory Panel identified having completed any training for their roles in the program.

Outcomes to date

The majority of respondents reported the delivery of the program was achieving the goal of creating awareness and participation in the program. Several comments were made about changing the focus of the program to adoption of practices rather than simply creating awareness: "System change needs to be more than a one day workshop". Another comment was that the "people delivering the program need to be extremely knowledgeable and passionate about the program".

Future delivery

There was a general consensus that the program should, in the future, focus on achieving a practice change rather than focus on creating awareness. However, there was an acknowledgement that achieving on-farm practice change requires more investment in the program - "extension is cheap but getting adoption is expensive". Another respondent felt that "making the program more sustainable beyond MLA/AWI funding is important for the future".

Suggested Improvements

When asked to identify areas of improvement for the delivery of the program the following points were identified:

- Opportunity to engage more with wool brokers and stock agents to increase networks;
- Ensure deliverers have enough capacity to deliver the program to a high quality;
- Train the trainer to ensure delivery is consistent and high quality;
- States could potentially learn more from each other;
- Emphasis in the future should be on adoption not participation, and this will require a change in delivery; and
- More prominent branding at events required.

Monitoring and Evaluation

National Level

The National Coordinator has the overarching responsibility for all targets including awareness of the program, participation in the program, number of manuals distributed, and adoption on farm. Some of these targets have more direct involvement than others.



State and program level

The State Coordinators identified their targets as being primarily focussed on producer participation in the program. The producer advocates and program advisory panel members did not identify specific targets they were required to meet.

Management

All key informants were satisfied with the management of the program. "The whole management structure is very good. Mike Wagg, Mary Goodacre, Richard Apps and Mike Goldberg are really good"; "It's encouraging to see MLA and AWI working together for the sheep industry."

Respondents reported that the National Coordinator performed the role well, particularly in regard to communication. When asked to identify how the management of the program could be improved, key informants indicated the following areas for improvement:

- Provide the National Coordinator with more autonomy to make decisions and therefore increase efficiency;
- Increased efficiency with administration within AWI, specifically in relation to renewing contracts;
- Need for better clarification of roles and responsibilities; and
- ▶ Need for 2-3 producer advocates per state as a backup.



6. Analysis

6.1 Introduction

The above results have provided information to enable an assessment of the impacts and achievements of the MBfP and MMfS programs and assess the outcomes against their respective KPIs. This chapter discusses these results with the aim of understanding implications for future program delivery. This analysis is based on the premise that future programs will need to provide evidence of industry impact – that is, beyond awareness and participation.

It should be noted that because the goals of the current programs were based on awareness and participation, the program M&E activities were not designed to provide a mechanism to accurately measure impacts of practice change at an individual producer or industry level. This project developed an Evaluation Framework to enable an estimation of industry impact and it is considered that MLA and AWI should utilise a similar framework against which outcomes of future programs can be measured.

This discussion section is based on the key output headings included in the request for tender for the project.

6.2 Industry impact due to uptake of key management practices known to drive enterprise productivity, profitability and/or sustainability

Chapter 3 provided information on producer participation in both the MBfP and MMfS programs as well as the uptake of management practices as a result. The high participation rate of producers in both programs (about 50% for MBfP in six years of operation and 15% for MMfS in one year) demonstrates a relatively high level of reach for the respective industries. This could be expected given the priority for awareness and producer participation by both programs.

From an industry perspective it could be considered that the programs have provided the building blocks which producers can use to improve enterprise outcomes. The programs could be considered as being 'supply driven' although a more efficient approach could be to adopt a 'market driven' approach.

Many key informants considered that the awareness/participation approach needed to change and that it was now time to concentrate on adoption of management practices with defined outcomes.

Despite the above, survey respondents reported a relatively high level of practice change from involvement in the MBfP and MMfS programs that had contributed to improvements in productivity/profitability, natural resource management and social outcomes. For MBfP, up to 60% of producer respondents stated that improved management practices had led to improvements in their enterprises with 41% reporting increases in production and 28% reporting increases in profitability.

Similarly for MMfS, up to 60% of producer respondents stated that improved management practices had led to improvements in their enterprises with 51% reporting increases in production and 48% reporting increases in profitability.

If these levels of increase are extrapolated across the beef and sheep industries, the impact of the programs would be impressive. However, the impacts of the current programs can only be modelled based on reported outcomes and not directly measured. The ability to better measure the impact of future programs is discussed in Chapter 7.

The results also demonstrated reported NRM and social outcomes by producers as a result of their involvement in the programs. For both programs more than 50% of respondents reported better management of natural resources (soil, water and vegetation). From a social perspective, various



indicators of producer KASA were reinforced by involvement in the programs including: 'felt more motivated to improve my knowledge and skills'; and 'a more positive attitude about implementing what I have learnt'.

The KASA results provide guidance on how future programs should be structured. While participants may have felt more motivated to change practices, this did not necessarily result in practice change. This indicates that a future approach that is more targeted to delivery rather than awareness would be appropriate.

6.3 Benefit-cost analysis of each program's investment versus industry outcomes

Chapter 4 provided a BCA for both programs based on the investment by MLA, AWI and their delivery partners using assumptions of profitability increases from the producer survey results. A sensitivity analysis of the main assumptions was completed to provide a more complete understanding of the factors that influence industry outcomes and inform recommendations for further investment.

The MBfP program is estimated to have a BCR of 4.35, while the MMfS program is estimated to have a BCR of 3.9. The reason for the higher BCR for MBfP is due to the assumption that a greater number of producers have been exposed to the program.

The estimated BCRs for both programs are consistent with other cost benefit analyses undertaken by GHD Hassall to assess the impact of Research & Development Corporation investments. For example an evaluation of MLA's Sustainable Grazing System Harvest Year provided a BCR of 2.9, and an ex-post assessment of the Grains Research & Development Corporation's plant breeding research provided a BCR of 4.9.

The positive BCRs for both programs provide evidence that continued investment could have similar impact in the future but that this impact could be enhanced if more emphasis is given to on-farm adoption of practices. Such a change was strongly supported by key informants.

It is therefore recommended that a more targeted approach into defined, segmented markets is pursued with indicators that reflect outcomes at the farm level.

6.4 Assessment of program achievements against KPIs

In the absence of both programs having fully developed plans that clearly identified expected outcomes, this project completed a draft Program Logic and accompanying Evaluation Framework to assess program achievements. The Evaluation Framework provided descriptions of each program's activities and expected outcomes and the KPIs that could be used to measure performance. Evidence of program achievements for each of the activities and outcomes was then assembled using data provided by MLA and AWI (desktop analysis). Producer questionnaires and key informant surveys were designed to obtain data not available from the desktop review.

It is recommended that a Program Logic and Evaluation Framework be developed for each program in the future to provide a better understanding and measurement of the expected outcomes to justify investment.

Data was generally available on aspects related to the inputs (funding, personnel) and outputs (activities, publications) of each program. The major goals of both programs to date have been to: increase awareness among their respective producer audiences; have producers engaged with the programs; and achieve practice change among participating producers. Table 1 and Table 9 provided information on the targets and KPIs for these goals for the MBfP and MMfS programs respectively. For the MBfP program,



KPIs for awareness and practice change have been below target but producer engagement was as per the KPI target. The MMfS program has exceeded its target for both awareness and participation by producers, and almost 70% of MMfS participants stated they would make changes to their business after completing a program activity (Appendix D, Table D-9).

While both programs appear to have performed well against the limited KPIs set for each, the challenge in the future will be to adopt KPIs that more clearly measure achievements that have industry benefits. Key informants recognised the current deficiency with the following comment in relation to the MBfP program reflecting the general sentiment: "There is too much focus on the number of people who have the tool or attended the field day rather than the number of people who actually understand the tool, can use it, and have made changes on-farm".

6.5 Benefits, value and constraints of individual program components

Each program has a number of common components that enable delivery, including:

- Producer's manual;
- Awareness and education activities (field days, workshops etc);
- A network of state coordinators and producer advocates;
- A training program for deliverers;
- ▶ An external National Coordinator (only 2004 2007 for MBfP); and
- A Steering Committee or Program Advisory Panel.

The MBfP program also has a number of electronic decision support tools and a quarterly e-newsletter. The MMfS program has a dedicated website and newsletter.

Table 3 (for MBfP) and Table 11 (for MMfS) provide results from producer surveys of the usefulness of these components. Of most use for both programs were the manual and awareness/education activities with about 60% of respondents stating these components were useful or very useful. The website and electronic newsletter were less useful with about 20% reporting these as useful or very useful.

Producers considered agribusiness partners (supply and marketing firms) more useful than state coordinators and producer advocates, as seen in Table 3 (for MBfP) and Table 11 (for MMfS). This may be related to the fact that agribusiness partners were more recognisable at program events and played a more active role in day-to-day farming enterprises. Coordinators and producer advocates would generally work behind the scenes and may not be seen as directly associated with the programs.

The greater recognition by producers of agribusiness partners has the potential to dilute the 'branding' of the MLA and AWI 'more' programs and reduce the recognition by producers on the use of levy funds. It is recommended that the issue of branding be addressed in future programs with the aim of improving outcomes with respect to industry impact.

Producers also considered that the program activities had been easy to understand and were presented in a way that enabled them to learn about the practice. While most agreed or were neutral about the activities being well suited to their needs, 13% of MBfP respondents disagreed with this aspect. Although this is not a high percentage it indicates that some producers are seeking more targeted activities, including on-farm demonstrations. Key informant interviews suggested the continuation of activities such as follow up field days and workshops with small groups, rather than just one-day workshops or general awareness raising activities for larger groups of people.



Key informants also generally considered that the information and delivery components of the program were good but again questioned whether the programs were achieving outcomes at the farm level. A comment that reflects this general thinking was: "The right people are there and the right information - it's just about how it's applied. A lot of work needs to be done in this area". This should be achieved through a collaborative approach with shared responsibility among stakeholders. This will address criticisms outlined in sections 5.2 and 5.3 which indicated that MLA and AWI were making decisions unilaterally.

Key informants considered that program management and management structure were good. The availability of a national coordinator for the MMfS program was seen as contributing to the success of the program and respondents considered this role should be re-instated for the MBfP program. The national coordinator was valued for providing overall coordination and communication among delivery personnel.

6.6 Recommendations for further investment and improvement to format and function

A number of issues have been identified above which are considered to increase the industry impact of each program. A more detailed discussion of the recommendations for the future are contained in the following chapter.



Future directions

7.1 Introduction

The emphasis on participation in the first phase of MBfP and MMfS saw the programs reach an estimated 52% and 71% of beef and sheep producers respectively. The degree of practice change and associated positive impact on producers' productivity, profitability and sustainability was significant as determined by producer responses for this project and modelled BCA results, but ideally such results would benefit from the inclusion of measured information at an enterprise level.

Key informants are supportive of a delivery focus that enables the adoption of practices and improvements to enterprise performance. A number of changes to the current programs will be required if such an approach is taken, including:

- Aligning program objectives and structure to maximise impact;
- Targeting producers and practices;
- Focusing program delivery and KPIs on practice change;
- Improving brand management to enhance recognition and attribution; and
- Enhancing monitoring, evaluation and reporting (MER) to improve program performance and reporting.

7.2 Aligning program objectives and structure to maximise impact

The underlying logic behind the current programs is that promoting and providing learning opportunities for farmers based on all or part of the information captured in the manuals will increase awareness and knowledge and therefore lead to practice change and improved enterprise sustainability, productivity and profitability. While this approach is conceptually sound and cost-effective, a strong focus on outcomes (supported practice change leading to improved enterprise performance) rather than outputs (participation) should be used as the key design principle for future programs.

This will require better targeting of producers to identify those most likely to adopt improved practices and then tailoring program delivery to facilitate adoption for this audience. These concepts are investigated further in sections 7.3 and 7.4 respectively.

7.3 Targeting producers and practices

Analysing producers can improve the effectiveness of the programs by prioritising which producers to target and what practices delivery should focus on. It can also identify groups of farmers with common practice change needs to form the basis of group-based activities with efficient program delivery that will improve enterprise performance.

A profiling framework can be used by the programs to target producers and practices. The framework should be used in the design and on-going management of stage 2 of the programs. The following activities are recommended to implement the framework. They are based on the principle of utilising existing information and knowledge, and engaging key stakeholders.

⁸ Logan (2009)

⁹ Logan (2009)



- Review of National Information review of national surveys (ABS, ABARE) and state DPI information:
- Expert Panels held with agribusiness, researchers and key farmers (producer advocates) to identify state priorities;
- Agribusiness Surveys/Producer Benchmarking analysis of agribusiness data to identify priorities;
- Focus Groups held with producers and service providers to identify regional priorities; and
- Overall Review compilation of results from above activities to identify national, state and regional priorities which form the basis of contracts with service providers for stage 2.

The activities can be repeated periodically to establish new priorities. If and when additional surveys are completed the results can be incorporated into the process.

The following elements are recommended for the profiling framework:

- ▶ Enterprise goals do you intend to leave, contract, maintain or grow your enterprise?
- ▶ Enterprise characteristics location, herd/flock size, financials (revenue, costs, quick ratio), structure etc.
- Critical drivers what are the key challenges and opportunities influencing the productivity, profitability and sustainability of your enterprise?
- Improvement focus which aspects of your enterprise do you want to improve over the next three years?
- ▶ **Learning preferences** who do you trust and seek advice from to improve productivity, profitability and sustainability? Who seeks this advice in your business?

7.4 Focusing program delivery and KPIs on practice change

Future programs will need to establish objectives, KPIs and contractual arrangements with appropriate service providers focused on practice change. This will require the following revisions to the program logics:

- Inclusion of which farmers the programs will target;
- What practice change(s) will be targeted and how they will improve enterprise performance; and
- How practice change will be supported (outputs), including a logic of how they collectively support change.

The revised program logic should then be used to determine new KPIs for the programs and service providers relative to the budget. In designing the activities (outputs) MLA needs to consider the capability of the service provider to undertake them and what level of support is required. This may include guides for each activity, training and mentoring.

7.5 Improving brand management to enhance recognition and attribution

The evaluation found that producers often associated the program with the service providers' brands or the activity participated in rather than the MBfP or MMfS brands. This weakens the recognition of the program brands and makes attribution of impact difficult. The latter can be overcome in future evaluations by surveying on specific activities rather than the brand. However better brand management is recommended given the desire to position the programs as enduring brands for MLA and AWI.



The following brand structure is recommended to clarify the programs' brands and the relationship with service providers' brand and program activities:

Master brand

- Easily recognisable logo.
- Self-explanatory brand name.
- Who is the program is for?
- What tangible and intangible benefits does it offer?
- Why can it be trusted?

Activity brand

- Easily recognisable activity name.
- Who it is for?
- Benefit (consistent with master brand).

Provider brand

- Identifies providers as contact point and source of program services.
- Statement of how they support master and activity brand.

Funder brand

Identifies source of financial support.

The master brand should be the central focus of all program communication, with a secondary focus on the activity brand to highlight the specific benefit being provided. The service provider and funder brands should be avoided where possible to avoid brand confusion. The service provider brand can be used in early phases only when their brand will increase participation but should be phased out over time. The investor brand should only be used for acknowledgement. It is recommended a brand management guide is developed for use by MLA, AWI and service providers. The brand structure should also form the foundation of program communication.

7.6 Enhancing monitoring, evaluation and reporting (MER) to improve program performance and reporting

The current evaluation activities do not effectively support program performance and reporting for adoption and impact at producer and industry levels. Evaluation is based on participant evaluation forms relating to program delivery and intentions to change practices. These forms are not always completed accurately or consistently. Evaluation is supported by surveys of producers but results rely on recall and self-reporting which may not be accurate. Although such evaluations may have suited the goals of the programs to date, they will not be sufficient to measure impacts if the programs move to an adoption approach.

A monitoring, evaluation and reporting (MER) framework approach is recommended for the second phase of the programs. This involves establishing a monitoring system which progressively collects information against the program logic to support periodic evaluations which answer the programs' key evaluation questions. The evaluations should be timed so they feed into planned reporting cycles.

Key evaluation questions need to focus on questions relating to the appropriateness, effectiveness and efficiency of the programs so that performance can be managed and reported. The following key evaluation questions are proposed for the MER framework:

Which producers have the programs engaged (appropriateness and effectiveness)?



- Compare actual participants against target producers.
- 2. What benefit has the program delivered to producers (effectiveness)?
 - Compare actual against planned benefits (outcomes in program logic).
- 3. What benefit does the program provide to industry (appropriateness and effectiveness)?
 - Compare actual benefit against value proposition (brand). Also measure brand recognition.
- 4. How do program activities support change (appropriateness, effectiveness and efficiency)?
 - Analyse appropriateness, effectiveness and efficiency of different activities in various contexts.
- 5. Are we on track to deliver the program as planned (appropriateness, effectiveness and efficiency)?
 - Compare actual against planned inputs/outputs. Analyse to identify performance improvements.

The actual performance indicators which will answer the key evaluation questions need to be based on **program logics**. This involves revising the inputs, outputs and outcomes levels within the program logic. The assumptions underpinning the program logic need to be documented along with a potential suite of performance measures and methods for each level. Key performance indicators (KPIs) are then selected from the potential performance measures taking into account the key evaluation questions, feasibility and budget.

The KPIs form the basis of the **monitoring plan** which systematically and progressively collects KPI data. The monitoring plan for future programs could include:

- Activity feedback sheets collected at the end of each activity;
- Follow-up surveys conducted with participants 3 and 12 months after the activities, including BCA;
- Reference farms/producer demonstration sites where actual practice change and enterprise performance is benchmarked before and after the program. A BCA is also conducted on each reference farm.

The monitoring plan also includes a reporting system where the results are tabulated and reported. The monitoring results need to be reviewed every 6-12 months to ensure they are delivering the required information and can be adapted as necessary.

Periodic **evaluations** are required as an input into program management and performance reporting. This involves analysing the monitoring results and targeted consultation to fill in gaps. Consultation can include focus groups with service providers, producers and key stakeholders. It is recommended that an internal evaluation, conducted annually as part of the business planning cycle, and independent mid-term and final evaluations be commissioned.

Program monitoring and evaluation needs to feed into the programs' **reporting requirements**. At a project level, service providers need to use the monitoring information as evidence in the reporting to MLA and AWI. These reports form the basis of adaptive management of the programs as well evidence for demonstrating program performance. At a program level the project reports need to feed into the programs' reporting cycle for use in adaptive management and demonstrating performance. If the project reports do not fit into the program reporting cycle, a separate process of feeding monitoring reports to program management will be required.

A revised MER program logic for the programs is suggested overleaf.



	Key evaluation questions		1. Which producers have the programs engaged (appropriateness and effectiveness)? 2. What benefit has the program delivered to producers (effectiveness)? 3. What benefit does the program provide to industry (appropriateness and effectiveness)? 4. How do program activities support change (appropriateness, effectiveness and efficiency)? 5. Are we on track to deliver the program as planned (appropriateness, effectiveness and efficiency)?					
1	2 3 4	5	Description	KPI	Method			
		Se	Improved enterprise productivity, profitability and sustainability	Improved performance in target enterprises	 Survey of participants, including BCA Reference farm benchmarking 			
		Outcomes	▶ MMfS and MBfP are recognised and valued by industry	Farmers and key stakeholders: • recognise and value the programs • Can recall the value proposition; • State personal and industry benefit	 Participant and key stakeholder surveys and focus groups Reference farm benchmarking 			
		ate o	Target farmers adopt priority practices	 X% of target farmers adopt Y% priority practices X% of target farmers intend to change Y% of priority practices 	 Survey of participants, including BCA Reference farm benchmarking 			
		Intermediate outcomes	Change in target farmers KASA	X% of farmer improve KASA relevant to priority practices	 Survey of participants, including BCA Reference farm benchmarking 			
		<u> </u>	Farmers benefit from participation	 X% of target farmers identify actions to improve priority practices X% of target farmers have positive response to participation 	 Participant evaluations (happy sheets) completed after each activity Periodic reporting, review and adaptation 			
		puts	 Suite of practice change activities reach X% of target farmers 	X% of target farmers participate in Y practice change activities	Information collected by producers and reported to program management			
		Outputs	Programs implemented effectively and efficiently	 Program management implemented as planned Program adaptively managed 	 Program and provider reporting Periodic review and adaptation 			
			Suite of practice change activities developed	 Providers' capability to facilitate practice change built Written materials for farmers – manuals, factsheets, web etc Key practice change activities designed 	 Expert review of program after initial design Periodic review throughout program, 			
		uts	Program management established	 Adaptive and risk management actions developed Communication and coordination function developed MER system designed Contracts with providers established 	 Expert review of program after initial design Periodic review throughout program, 			
		Inputs	Investment to implement programs	Investment secured and sufficient to achieve goals				
			Target farmers and priority practices determined	 Farmer profiling completed to determine target farmers Priority practice developed 	 Review of target farmers and priority practices, including expert panels, focus groups, surveys and benchmarking/survey analysis 			
			▶ Assumptions	 Program has resources and capability to achieve outcomes Target farmers, priority practices and link to enterprise performance can be defined Investors and providers commit to practice change strategy 	 Expert review of program after initial design Periodic review throughout program, 			

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The monitoring, evaluation and reporting requirements are integrated into an **MER plan** for the program which outlines roles, responsibilities, timing and resource requirements. The proposed structure of the plan is:

- Key evaluation questions (KEQs);
- One page program logic;
- Program KPIs and assumptions, including which key evaluation questions they relate to;
- Service provider KPIs; and
- Action plan.

Program and MER Design					
Action	Responsibility	Timing	Resources		
Producer targeting	MLA, AWI and providers	Start and annual review			
KEQ and program logic	MLA and AWI	Start and annual review			
Provider KPIs	MLA and AWI	Start and annual review			
	Monitoring				
Activity feedback design	MLA, AWI and providers	Start and annual review			
Activity feedback	Providers	After activity			
Activity feedback reports	Providers	6 months			
Participant survey design	MLA, AWI and providers	Start and annual review			
Participant survey	MLA, AWI and providers	3, 6 and 12 months			
Participant survey reports	MLA, AWI and providers	6 months			
Reference farms	MLA, AWI and providers	tbd			
Reference farm reports	MLA, AWI and providers	tbd			
Monitoring reporting system and tracking	MLA and AWI	6 months			
	Evaluation				
Collate monitoring results	MLA, AWI and providers	Annually			
Gap consultation	MLA, AWI and	Annually			



	providers	
Annual evaluation	MLA and AWI	Annually
Mid term evaluation	Independent	Mid-term
Final evaluation	Independent	End of programs
	Reporting	
Project progress report	Providers	tbd
Project final report	Providers	End of program
Program progress report	MLA and AWI	tbd
Program final report	MLA and AWI	End of program



8. Conclusions

This external review considered the implementation of the MBfP and MMfS programs since their inception, with the purpose of the review to:

- Evaluate the programs' impacts on the beef, and lamb and sheepmeat industries;
- Assess how successful the programs have been in achieving stated key performance criteria; and
- Provide recommendations as to how the respective program deliveries should (in the event of further investment) be structured, targeted, monitored and evaluated in order to improve and measure industry impact.

The impacts were considered from a number of perspectives including (for producers) a benefit cost assessment of financial outcomes and a qualitative assessment of NRM and social outcomes. Benefit cost ratios were 4.35 for MBfP and 3.9 for MMfS. These ratios compare favourably with BCRs of similar agricultural research and development investment outcomes.

Participants considered that they had achieved better management of natural resources with about 50% of survey respondents for both programs indicating NRM improvements. Respondents also indicated that the programs had achieved social outcomes with more than 50% agreeing that the programs had been 'very useful' or 'useful' in providing such benefits as: more motivation to improve knowledge and skills; more confident about facing challenges and managing risk; begun to think about planning for the future; and reinforced management decisions already in place.

The usefulness of the manuals and program activities (workshops, field days) were the components of the programs that enabled the above impacts to be achieved. Participants either strongly agreed or agreed that the programs were: easy to understand; presented in a way that was helpful to learn about a practice; and was well suited to their needs.

The above outcomes have been achieved as a result of good management. Key informants indicated that the combination of a national coordinator (currently for MMfS only), state coordinators and producer advocates ensured that program targets were achieved. They did however consider that improvements could be made and these are discussed below.

Because of the overall good management provided, the KPIs that were set for each program have largely been achieved and in some cases exceeded. The KPIs were mainly to measure awareness, participation and intention to change practices as these related to the goals originally set for the programs. The draft Program Logic established for this project (see Figure 1) shows that these KPIs are suited to the lower levels of the program hierarchy (inputs, outputs and intermediate outcomes). In order to measure if the programs have achieved more long term outcomes it will be necessary to establish KPIs that are better suited to the higher levels of the program hierarchy.

Key informants also indicated they considered that the programs needed to move away from an awareness/participation approach to an approach that focuses on adoption and the measurement of the impact of such adoption at a farm and regional/industry level. This can be summarised in one of the comments received: "These days you need to have some numbers...you need measurements that mean something, not just information that looks good."

For the future, it is recommended that the programs are structured on the basis of suitable Program Logics that identify and measure the various outcomes for each component level. This report developed



a draft Program Logic that could be adapted for future use to achieve outcomes with more definable and measurable benefits and impacts.

The current management arrangements appear to work well in achieving goals and should be retained for the future programs, including the re-instatement of a national coordinator for MBfP as recommended by key informants. Consideration should be given to redefining the role of producer advocates within a new structure, perhaps with them as role models for demonstrating impacts of practice change.

Branding' of the programs will also need further consideration in the future. Evidence from producers and key informants indicated that both the MBfP and MMfS programs were not readily identified in the livestock communities because activities to date may have been delivered in combination with broader agricultural programs. A more targeted approach relying on adoption and measurement of outcomes will assist in ensuring greater prominence for program branding and attribution of impacts to each of the programs. The issue of a confusion of course names and brands was also recognised in the recent evaluation of awareness and adoption (Logan 2009).

GHD Hassall has recommended an alternative approach for both programs that is based on adoption of practice change for targeted groups of producers. Chapter 7, titled 'Future Directions', outlined a process of how such targeting could be implemented as well as the process for monitoring and evaluating performance to demonstrate industry impact. It is considered that a similar management and delivery system should be retained for the future although roles and responsibilities will change with this more targeted approach.

It is recommended that appropriate producer targets be selected by completing a profiling framework that considers enterprise goals and characteristics as well as critical drivers of productivity, profitability and sustainability of the potential audience. The learning preferences of the target audience can then be explored and this will determine roles and responsibilities of service deliverers.

As discussed above, overall guidance for program delivery should be based on program logics which define the various inputs, outputs and outcomes expected and how these are measured. A detailed monitoring, evaluation and reporting (MER) framework example was provided for consideration.

This review has confirmed that both the MBfP and MMfS programs have largely achieved their aims as determined by their respective goals when the programs were established. The quality of program delivery and management has been instrumental in the programs achieving the KPI targets that related mainly to awareness, engagement and practice change.

However, the review has found that stakeholders consider it is time to move to an adoption phase with more targeted audiences and measurable outcomes. On the assumption that this adoption approach is taken, recommendations were made on how programs could be structured using program logics and how the programs can then be monitored and evaluated so that industry impact can be reported.

It is recognised that if there was a more targeted approach to program delivery, fewer producers would be engaged by the program and the cost of program participation (on a per producer basis) could rise. Although these producers may potentially be more likely to achieve long-term practice change and a greater increase in profitability, this may not offset the impact of reducing the number of producers included in the existing cost-benefit model. However, more targeted program delivery would enable more effective monitoring of the impact of producers' participation in the program (rather than a reliance on self-reporting) and this would give more confidence to the BCR outcome. In addition, the robustness of this approach would be more likely to encourage other producers to adopt improved practices due to the tangible benefits demonstrated on participants' properties. This indirect impact of the programs on practice change would increase the BCR outcome for the livestock industries.



9. References

Item ¹⁰	Reference
B1	Logan, J. (2005a) Edge & MBfP Mini Survey, MLA: Sydney.
B2	Logan, J. (2005b) Program Adoption & Awareness Survey 2005, MLA: Sydney.
В3	Logan, J. (2006) Awareness & Adoption KPI 2006 Survey, MLA: Sydney.
B4	Logan, J. (2007) Awareness & Adoption KPI Evaluation 2007, MLA: Sydney.
B5	Logan, J. (2008) Awareness & Adoption KPI Evaluation 2008, MLA: Sydney.
	Logan, J. (2009) Awareness & Adoption KPI Evaluation 2009, MLA: Sydney.
C1	Sefton & Associates. (2003a) More Beef from Pastures: Extension and Marketing Communications Plan.
C2	Sefton & Associates. (2003b) Development of a Strategic Marketing, Communication and Delivery Plan for the Southern Beef Program.
C3	MLA. (n.d) Extension and Communication Plan 2007 – 2009.
C4	Black, J., and Scott, L. (2002) More Beef from Pastures: Current Knowledge, Adoption and Research Opportunities, MLA: Sydney.
C5	Sefton & Associates. (n.d) <i>More Beef from Pastures: Communication, Delivery & Extension Plan</i> 2006 – 08.
O1	Council of Rural Research & Development Corporation Chairs (2007), Guidelines for Evaluation
R1	Banks, R. (n.d) MBfP Steering Committee – background, purpose & expectations.
R2	MLA. (2008) More Beef from Pastures Steering Committee meeting agenda.
R3	Weatherley, J. (2009) MBfP Cost Breakdown 2004 – 09.
R4	Steering Committee Terms of Reference
R5	More Beef from Pastures Contacts
R6	MBfP Advisory Committee Membership
R7	MBfP and MMfS Summary
R8	Hassall and Associates. (2005) <i>Triple Bottom Line Evaluations. Volume 1: Review of Southern Beef and Lamb and Sheepmeat Programs</i> , Hassall and Associates: Sydney.

Due the use of references within the evaluation framework tables, each reference has been allocated an item number for ease of reference within tables where: 'B' refers to survey reports, 'C' refers to communication & extension plans, 'O' refers to external references, 'R' refers to other MBfP reference materials and 'S' refers to other MMfS reference materials.



R9	GHD Hassall (2009) Making More From Sheep Report on Extent of Practice Change, GHD Hassall Sydney
S1	MLA and AWI. (n.d) <i>Making More from Sheep Preliminary Monitoring and Evaluation Report July 2007 – June 2009</i> , MLA/AWI: Sydney.
S2	MLA and AWI. (2008) Making More from Sheep - Monitoring and Evaluation Strategy (Version 2, initial operating Version) January 2008, MLA/AWI: Sydney.
S3	MLA and AWI. (n.d) <i>Making More from Sheep: Communication, Delivery & Extension Plan 2006-2009</i> , MLA/AWI: Sydney.
S4	MLA and AWI. (n.d) TOR (2009 – 2012) Making More From Sheep Project Advisory Panel, MLA/AWI: Sydney.
S5	MLA and AWI. (n.d) Events by State and Module (Feb 08 – Jun 09), MLA/AWI: Sydney.
S6	Author? (2009) Making More from Sheep – National Coordinator Milestone Report TMS06, June 2009
S7	AWI. (2009) Making More From Sheep Contact List, AWI: Sydney.
S8	Weatherley, J. (2009) MMfS Budget Update 20, MLA: Sydney.



Appendix A

Evaluation Frameworks

More Beef from Pastures & Making More from Sheep

Evaluation Framework: More Beef from Pastures Program

	Description	Performance Measures	Evidence (and reference index number)
Level 5: Long term objectives			
Industry level	To improve the long term viability and sustainability of the beef and sheep meat industries with respect to productivity, profitability, NRM and social outcomes	» Positive benefit cost ratio.	
MLA/AWI	To develop, implement, manage & evaluate RD&E programs that support the short and long term viability of beef, lamb and sheepmeat producers in partnership with relevant industry organisations.	» Positive benefit cost ratio.	
Level 4: Medium term outcomes (12 months to 3 years)			
Improved farm business viability	Producers have achieved an improvement in relevant business performance (economic, environmental and social).as a result of MLA RD&E outputs	» Results of annual surveys of producers, monitoring producer performance reported (\$/DSE, \$/ha - perhaps with per mm rainfall) improvement in farm gross margin and cost efficiency attributed to practice change, reported improvement in farm natural resources attributed to practice change, reported social benefits attributed to practice change.	Positive outcomes reported as a result of the program included: 40% of course participants who saw positive outcomes reported an increase in pasture utilisation; 29% reported an increase in management/business skills; 20% reported an increase in productivity; 11% reported an improvement in stock health; 9% reported improved feed management; 9% reported an increase in profitability. [B5, p33]
Practice change is supported through innovative RD&E outputs and processes	Targeted producers are provided with the support to build skills that enable relevant, sustained practice change	» Results of annual surveys of producers, reported practice change attributed to programs, skills and confidence auditing results from relevant D&E activities.	As at 2008, 50% of More Beef from Pastures event attendees have changed management practices as a result of participating in the MBfP program. This compares to 50% in 2007, 44% in 2006 and 37% in 2005. [B5, p4] In the 12 months prior to the 2008 survey, 51% of producers participating in the More Beef from Pastures program have implemented change, similar to 53% in 2007 and up from 35% in the 2006 survey. [B5, p4] MBfP has stabilised its influence with 50% of participants indicating management change as a result of the program. This is consistent with 50% in 2007 and up from 44% in 2006. [B5, p27] 51% of southern beef course participants in 2008 have changed management practices as a result of course participation (compared to 50% in 2007 and 33% in 2006). [B5, p29]
Level 3: Intermediate outcomes (less than 12 months)			
Producers commence building	Targeted producers commence building knowledge, skills and confidence in key	» Results of market research phone survey and annual surveys of	As a result of participating in the 2008 MBfP courses and reading the manual, readers were asked which procedures they had implemented. 20% of manual readers indicated

	Description	Performance Measures	Evidence (and reference index number)
skills and confidence around key management practices	management practices within 6 months by attending an MLA (and partner) program D&E activity event, producers implement the target practices into the management of their business using the principles and procedures of the program.	producers, reported practice change attributed to programs, D&E activity feedback sheets and skills and confidence audits, producers report improved knowledge/skills/motivation/confidence.	they 'determine the risk and vaccinate to prevent specific diseases' (Herd Health & Welfare). 18% indicated they 'wean as early as possible' (Weaner Throughput). 15% of readers indicated they 'determine stocking rate, plan paddock sequences' (Pasture Utilisation). 15% indicated they 'map farm grazing land and pasture zones' (Pasture Growth). 15% indicated they 'select the most profitable breed' (Genetics). [B5, p41] Also as a result of participating in the MBfP courses and reading the manual, readers were asked which tools and practices they had used. 20% of manual readers indicated they had used 'pasture rulers, sticks and meters'. 13% used 'calving ease EBV's'. 10% indicated they had used 'vaccination strategies'. 8% has used tools as 'graphs indicating liveweight and fat score'. [B5, p41] In 2008, 36% of the 61% of surveyed course attendees who made practice changes did so by rotational grazing; 30% undertook land/pasture management evaluation; 12% routinely weighed livestock to monitor growth/weight gain; 9% changed breeding practices/calving, lambing or weaning times; 9% set pasture utilisation targets; 6% used nutritional supplements/supplementary feeding; 6% calculated the cost of production; 6% managed feed to ensure ewes were at condition score 3 for joining; 6% undertook marketing/improved their knowledge of markets. [B5, p30]
Knowledge, attitudes, skills & aspirations (KASA)	Producers intent to change practices and/or improve their skills, producers have a positive attitude concerning program investments, producers are motivated to improved knowledge and skills to improve the key management practices, producers recognise the target management practices as being relevant and important to their business.	» Results of annual awareness and KPI surveys and evaluation forms at events, producers report an intent to change practices/improve skills, producers report improved knowledge/skills/motivation/confidence.	19% of MBfP participants who had not implemented a procedure or tool indicated they intended to do so. [B5, p41] When specifically asked which element of the MBfP extension program had the most influence on attendees, 70% indicated the workshops were most influential. This is a significant shift from 2007 where 36% indicated the manual was most influential. 27% of course attendees indicated they felt the Manual (CR Rom) was the most influential element of the MBfP program. 21 % nominated the pasture ruler; 17% nominated the MBfP Expo; 17% nominated the Feed Demand Calculator; 17% nominated the Manual & Workshop; 15% nominated the Producer Advocate Presentation; 15% nominated the Stocking Rate Calculator; 14% nominated the Rainfall to pasture growth outlook tool; 12% nominated the COP Workshops. 11% made no changes at all as a result of participating in the MBfP program. [B5, p41] MBfP participants were asked to rank on farm issues that they were most interested in changing as a result of participation and implementation in MBfP. MBfP participants ranked Profit and Productivity as 1st and 2nd most important issue to be improved, with 29% indicating these were the most important issues to change. Grazing and Pasture management, Meeting market specifications and Lower Cost of Production were also ranked (3rd and 4th) as issues producers are interested in improving. [B5, p43] The MBfP program is influencing 18% of all targeted producers, slightly less than 20% in 2007, up on 13% in 2006 (In 2008 this result equated to 50% of all MBfP course attendees, the same as in 2007). The impact of MBfP is increasing amongst southern beef producers and declining in other segments. MBfP accounts for 36% of cumulative course attendees overall, up from 22% in 2007. [B5, p26] 5% of northern beef producers were influenced by the program in 2008 (compared to 7% in both 2006 and 2007), 30% of southern beef producers (compared to 29% in 2007 and 21% in 2006) and 8% of sheep/lamb producers (10% in 2007 and 5% in 2006). [B5, p26]
Level 2: Outputs			
Reach	Producers are aware of the program/s (beef and/or sheep), producers understand the program, producers own a copy of the	» Results of annual surveys of producers, number of producers that own a copy of the manual, number of website views of	Of those 85% of More Beef from Pastures course participants who received a manual, 61% read 1 or more modules, down from 83% in 2007. 20% did not read any modules, up from 17%. 36% read >5 modules, 7% read 4 modules, 11% 3 modules, 5% 2 modules

	Description	Performance Measures	Evidence (and reference index number)
	manual, producers visit the program website, producers attend program events such as field days and farm walks.	program modules, number of unique website visitors, number of people attending program events, databases of manual/CD distribution.	and 2% read only 1 module. 20% could not recall how many modules they had read, up from 12% in 2007. [B5, p39] Of the 61% of manual readers, 78% read Pasture Growth, Market Specifications and Pasture utilisation were the 2nd most read modules in the manual with 62% of readers nominating each module, 60% of readers nominated Herd Health & Welfare. 58% also read the Genetics and Weaner throughput modules, 56% read Tactical Stock Control and 38% read Setting Directions, however 11% could not remember what modules they had read. 9% indicated they had read it all (the whole manual). Of the 20% who did not read a module, 36% did not have time and 36% said they intended to read it, 9% felt they did not understand them or they were too complicated. [B5, p39] Of the 213 producers surveyed in 2008 (percentage of all targeted livestock producers, not just those segments for which each program is targeted), 4% had an unaided awareness of the MBfP program (compared to 14% in 2007 and 6% in 2006), 33% had an aided awareness (compared to 35% in 2007 and 46% in 2006). [B5, p17] 2% of northern beef producers were aware of the program in 2008 (compared to 39% in 2007 and 44% in 2006), 63% of southern beef producers were aware of the program in 2008 (compared to 65% in 2007, 60% in 2006 and 61% in 2005). [B5, p18 and 20] Of those More Beef from Pastures participants interviewed in 2008 (n=66), 85% indicated they received a More Beef from Pastures manual, up from 79% in 2007. [B5, p39] 39% of MLA members were aware of MbfP, which is similar to 2007. [B5, p22] 64% of MBfP participants indicated the course they participated in consisted of a number of components (e.g. mixture of workshops, seminars, manual, etc); 11% reported seminars; 9% reported field days; 8% reported workshops; 5% reported the manual; 3% reported the training course. [B5, p35]
Delivery	E-newsletters produced, website updated regularly, electronic decision support tools developed and used, manuals sold or distributed (hard copy & CD), MLA/partner designed field days organised, relevant training courses developed and delivered, workshops facilitated, coaching groups initiated, participation in external collaborative events such as Beef Profit Partnership groups, joint MBfP/MMfS days, Grain & Graze and Sheepvention, briefings, producer advocates, state coordinators, national coordinator, steering committee/producer advisory panel, development of media materials to raise awareness, production and distribution of case studies.	» Number of e-newsletters produced and distributed and read, new material put on website clicked on/downloaded, number of manuals sold or distributed (hard copy & CD), number distribution and producer participation in field days/courses/workshops/coaching groups/collaborative events, number and distribution of briefings, press releases produced, extent of media coverage, number of articles in BTB, Prograzier and Feedback, number and distribution of case studies produced.	To date the program has involved mass distribution of over 3,318 producer manuals via the 1800 publications line or by the state coordinator network. In addition 4,000 CDs have also been distributed. [C3, p6] In 2006-07, over 12 regional "Re-building for Profit" expos were successfully held across the southern beef region to provide support for producers in drought. [C3, p11] In 2006 Biomedia created four videos of producer advocates and their businesses which were used as a key extension tool at the MBfP Expos. [C3, p13] Since MBfP's inception in 2004, the program has captured more than 15,000 participants across five states and has seen the concurrent delivery of 22 expos, 3,800 Producer Manuals, 14,000 MBfP CDs, 200 related workshops and more than 20 related publications. [R4, p1] 14,500 producers engaged, 4058 manuals sold, 17797 CDs [R7, p1]
Level 1: Inputs			
Metrics & controls	M&E, ability to manage and adapt program as required, ability to monitor and report progress.	» Program M&E activities reported against M&E framework on an annual basis.	

	Description	Performance Measures	Evidence (and reference index number)
		 Contracts signed with relevant partners/service providers. Program budgets prepared and reported against on an annual basis. 	
Structure & governance	Appropriate for purpose and partnership.	 Key roles and responsibilities of MLA, AWI and others agreed and documented. Agreed policies and procedures for decision making documented and adhered to. 	MBfP Management Committee (governance, internal), MBfP Steering Committee (strategic, external), MBfP Producer & State Co-ordinator Networks (operational, external) – provides final veto to MLA for all decisions; independent advisory body of consultants, agencies and producers; increase integration of MBfP with other extension programs and providers; fresh direction and guidance; effective on-ground representation and operational capacity. [R1, p3-4] The MBfP Steering Committee has 3 core responsibilities: § overseeing and directing the technical development of the MBfP program (including reviewing outcomes of the latest research in light of potential incorporation into the MBfP curriculum; inception and development of new – and updating of existing – decision support and risk management tools, including identification of accompanying R&D needs and priorities; development and delivery of technical training program(s) – for training providers, intermediaries, etc) § Overseeing and directing the development of the MBfP extension and delivery strategy (including providing direction on the core focus for the program; development and utilisation of a MBfP communication network; supporting and enhancing the Producer Advocate and State Co-ordinator networks – training, professional development, recruitment, etc; content, themes and funding apportionment for MBfP PDS activities; establishment and maintenance of MBfP delivery network – training providers) § Overseeing reporting and evaluation requirements for the MBfP program (including guiding KPls for program delivery and how to measure practice change; tracking and reporting on progress) [R4, p1]
Capability	Facilitators, trainers, coordinators, producer advocates, consultants.	» Number of facilitators/trainers/coordinators/produce r advocates/consultants employed for the program.	1 National Co-ordinator [C3, p8] 19 producer advocates, 7 state coordinators [R5, p1] 15 Advisory Committee members [R6, p1] 13 Steering Committee members [R4, p3]
Funding	MLA, AWI, in-kind support from state government and others.	 Actual expenditure of MLA/AWI budget. Estimated expenditure on the program by partners (state government and others). 	MLA MBfP expenditure 2004 – 09: Producer advocates \$77,138; Communications (publications) \$102,056; MBfP Expos \$700,351; National Coordination \$331,889; New tools development and delivery \$152,175; MBfP Producer Demonstration Sites \$207,924; State Coordination \$734,968; Train the trainer activities \$110,591; MBfP Steering Committee \$20,747; Grand Total \$2,437,839 [R3, p1-2] Delivery partners: DPIs (NSW, Vic, WA, SA, Tas), Agribusiness (Mackinnon Group - Vic) [R7, p1] Operating budget: \$490,000 p.a. [R7, p1]

Evaluation Framework: Making More from Sheep Program

	Description	Performance Measures	Evidence (and reference index number)
Level 5: Long term objectives			
Industry level	To improve the long term viability and sustainability of the beef and sheep meat industries with respect to productivity, profitability, NRM and social outcomes	» Positive benefit cost ratio.	
MLA/AW1	To develop, implement, manage & evaluate RD&E programs that support the short and long term viability of beef, lamb and sheepmeat producers in partnership with relevant industry organisations.	» Positive benefit cost ratio.	The stated objective of Making More from Sheep is to: Provide Australian lamb and wool producers with a best practice package of information and management tools to assist them achieve profitable and sustainable sheep production. [S1, pg 2] Underpinning the achievement of this objective is a Communication, Delivery and Extension Plan that aims to accomplish the following: Raise awareness among sheep producers about the new, 'one-stop-shop' best practice sheep management information 'package' developed by AWI/MLA; and how they can access it. 'Awareness' is defined as the total number of sheep producers aware of the manual. Motivate sheep producers to engage with the program by either: obtaining a copy of the manual and/or associated products from MLA/AWI (or delivery partners), and/or participating in a related learning activity Encourage adoption by sheep producers of the key management principles and practices outlined in the manual with a view to increasing profitability and sustainability. [S1, pg 2] The combined portfolio level evaluations will assess uptake of the Making More from Sheep Manual and implementation of Making More from Sheep procedures on-farm, to be measured against the target of: • 50% of sheep producers who have received the manual have applied at least one procedure, from at least one module, in the Manual to their sheep enterprise
Level 4: Medium term outcomes (12 months to 3 years)			
Improved farm business viability	Producers have achieved an improvement in relevant business performance (economic, environmental and social).as a result of MLA RD&E outputs	» Results of annual surveys of producers, monitoring producer performance reported (\$/DSE, \$/ha – perhaps with per mm rainfall) improvement in farm gross margin and cost efficiency attributed to practice change, reported improvement in farm natural resources attributed to practice change, reported social benefits attributed to practice	Improvement in farm business as a result of MMfS involvement: Of those that had undertaken a practice change 72% felt that it had been successful, 27% were unsure and 1% felt that the change was unsuccessful. The major benefits of practice change nominated by survey participants was improved productivity (53%), improved profit (37%), improved ease of management (18%). [S1, pg 9]

	Description	Pe	erformance Measures	Evidence (and reference index number)
			change.	
Practice change is supported through innovative RD&E outputs and processes	Targeted producers are provided with the support to build skills that enable relevant, sustained practice change	*	Results of annual surveys of producers, reported practice change attributed to programs, skills and confidence auditing results from relevant D&E activities.	Axiom survey indicates that 42% of attendees at events have changed practices. Hassall's survey showed that 45% of workshop attendees changed practice (survey $n=109$), 44% of those using just the manual changed practice (survey $n=102$) and 67% of those attending a workshop and using the manual changed practice (survey $n=9$). This indicates that around 2,100 people have changed a practice that they attribute to MMFS activities some 18 months after the manual launch. This compares to a target of 2,500 farmers having changed practices 2 years after launch. For those not (yet) having changed practice reasons given included: already doing it (32%), drought(13%), incorrect time of year (10%) and just getting around to it (8%), indicating that the rate of adoption could increase. [S1, pg 8]
Level 3: Intermediate outcomes (less than 12 months)				
Producers commence building skills and confidence around key management practices	Targeted producers commence building knowledge, skills and confidence in key management practices within 6 months by attending an MLA (and partner) program D&E activity event, producers implement the target practices into the management of their business using the principles and procedures of the program.	*	Results of market research phone survey and annual surveys of producers, reported practice change attributed to programs, D&E activity feedback sheets and skills and confidence audits, producers report improved knowledge/skills/motivation/confidence.	
Knowledge, attitudes, skills & aspirations (KASA)	Producers intent to change practices and/or improve their skills, producers have a positive attitude concerning program investments, producers are motivated to improved knowledge and skills to improve the key management practices, producers recognise the target management practices as being relevant and important to their business.	*	Results of annual awareness and KPI surveys and evaluation forms at events, producers report an intent to change practices/improve skills, producers report improved knowledge/skills/motivation/confidence.	Producers intend to change practices as a result of an event Yes: 78%, No 12%, No response 10%. [S1 pg 7] Producers attending events: Learned something to improve business: 82% Not learned anything to improve business: 5% No response: 13% Around 32% of people not adopting say it is because they are already doing it – this indicates reinforcement for many participants [S1 pg 8] Has it changes your perception of what is possible in your business? Changed aspirations for business YES: 48% Changed aspirations for business NO: 20% No response: 32% [S1, pg 8]
Level 2: Outputs				
Reach	Producers are aware of the program/s (beef and/or sheep), producers understand the program, producers own a copy of the manual, producers visit the program website, producers attend program events	*	Results of annual surveys of producers, number of producers that own a copy of the manual, number of website views of program modules, number of	Ag Scan Solutions survey showed 47% of sheep producers aware. Axiom Survey showed 63% of sheep producers aware. Assuming 37,000 sheep producers, 47% = 17,400; 63% = 23,000 against a target of 15,000 to June 30, 2009. (does not state how many sheep producers were surveyed, how they were selected etc don't know which Axiom survey they are referring to) Of those that are "aware", 39% did not know what "Making More from Sheep" is about (AgScan).

	Description	Performance Measures	Evidence (and reference index number)
	such as field days and farm walks.	unique website visitors, number of people attending program events, databases of manual/CD distribution.	These surveys were conducted about 12 months ago. Since then there has been a focus on "using the manual" in media stories and case studies to try to clarify the message around what MMFS is about. [S1, pg 4] Around 4,700 people as at June 30, 2009 attended a Making More from Sheep event. The vast majority of these have been farmers who class themselves in the following way: Wool and Prime Lambs: 55% Wool only: 20% Prime Lambs only: 25% Many of the larger Forum style events have had agribusiness staff attend, but numbers have not been kept. [S1, pg 6] This high level of participation has occurred during a time of difficult seasonal conditions for many producers. There have also been many other events that have directly targeted the same audience such as Stockplan, mulesing days, Grain & Graze events, Evergraze events, LWA Healthy Soils events along with many grower network activities. [S1, pg 6]
Delivery	E-newsletters produced, website updated regularly, electronic decision support tools developed and used, manuals sold or distributed (hard copy & CD), MLA/partner designed field days organised, relevant training courses developed and delivered, workshops facilitated, coaching groups initiated, participation in external collaborative events such as Beef Profit Partnership groups, joint MBfP/MMfS days, Grain & Graze and Sheepvention, briefings, producer advocates, state coordinators, national coordinator, steering committee/producer advisory panel, development of media materials to raise awareness, production and distribution of case studies.	» Number of e-newsletters produced and distributed and read, new material put on website clicked on/downloaded, number of manuals sold or distributed (hard copy & CD), number distribution and producer participation in field days/courses/workshops/coachin g groups/collaborative events, number and distribution of briefings, press releases produced, extent of media coverage, number of articles in BTB, Prograzier and Feedback, number and distribution of case studies produced.	Between January 08 and June 09, there have been around 50 media releases prepared by Seftons along with 23 case studies on Producer Advocated and Industry experts. This along with coverage of events resulted in 275 media stories related to the launch, case studies and events. Coverage has been distributed between AWI/MLA publications, rural weekly publications, regional papers, internet (including the Elders webcast), radio and TV (segment on landline). 258 workshops or seminars conducted by June 30, 2009 [S1, pg 4] Website updated with events at least every week. News items and other additions made as needed, newsletter quarterly. Hot Topics section added April 09. Hotlinks checked Sept. 08 and June 09 ~1,400 hardcopy manuals sold/distributed at end June 09 ~1,050 website downloads of the complete manual. [S1, pg 5] 66,700 website visits from 151 different countries as at June 30, 2009. In the last year there have been 16,320 visits from Australian users with an average of 2.7 page views per visit. The most popular module is "Plan for Success" and the most popular tool is "Understanding different communication styles". The main search phrase is "Communication Styles" and the second most common is "Making More From Sheep" followed by "Sheep Diseases". The home page is by far the most common entry (and exit) page. Google accounts for over 90% of search engine referrals. [S1, pg 6] Manual modules 1- 11 reviewed last September as well as all recently reviewed and web links updated. Some minor additional content corrections/additions made to web pages with log of changes kept. [S6, pg 2] Ten module based articles and 6 advocate profiles have been produced, but not all yet published. In addition to case study articles activities mentioned above, there has been continuing coverage of events in the media averaging about 8 articles a month, mostly in rural weeklies or on radio. Elders webcast still being visited at about 80 hits/month. Templates re-done with various logo changes incorporated. Awareness raising eve

	Description	Performance Measures	Evidence (and reference ind	lex numb	oer)					
			Day, Trangie, Straun, Ruthergon Farms conference, Evergra Events page updated weekly. Email updates sent out to ~19 are mostly subscribing for the opening rate around 35% News items and webinar recoloring temporary and webinar reco	glen, Ham aze Proof 00 subsc update o ordings po Diaries, tround 30 nyperlinks	nilton Info site day, ribers on in event e osted on Evergraz 00 visits.	8/8/08, 6 evaluation home page, Grain dand sev	5] 6/11/08, 2 n sheets. ge. & Graze,	22/2/09, 2 Unsubso LWW.	22/5/09 S cribe rate	Subscribers
Level 1: Inputs										
Metrics & controls	M&E, ability to manage and adapt program as required, ability to monitor and report progress.	 Program M&E activities reported against M&E framework on an annual basis. Contracts signed with relevant partners/service providers. Program budgets prepared and reported against on an annual basis. 	Monitoring budget as updates Compared data from MLA sur coordinators before being properties of terms of refer (Hassalls). Collation of material for filling Progress against each of the lyears using quantitative and generativities) will be tracked and a Coordinator.	vey to MI gressively ence for out attach KPIs will l ualitative uals distri	MFS targy added to evaluation ned evaluation med evaluation medians.	ets. Ever o databa n survey lation ten ured and s of data d produc	nt evaluatese for whe and man inplate. [Stracked foollection er participates of the stracked foollection in the st	ion forms ole of pr agement 6, pg 6] or the ne and ana pation in	s are revi ogram ar t of contri ext three alysis. learning	ewed by state nalysis.

	Description	Performance Measures	Evidence (and reference index number)
			A standard exit survey will be developed and used at all Making More from Sheep delivery events for the first 6 months, and a consultant contracted to consolidate these and report on the results. This exit survey will be consistent with both MLA and AWI's current approaches. Adoption and practice change, and if possible the relative influence of the Making More from Sheep package, will be measured at 12 month intervals after launch through MLA's and AWI's respective producer data collection processes – MLA through its annual producer KPI survey and AWI through its planned database of target producer segments. These processes will remain independent, however the AWI processes for monitoring practice change will be designed to minimise "survey overload" for sheep producers paying levies to both organisations. Qualitative cases studies will be conducted using the "Most significant change" method as described by Dart (2005), which will give specific examples and "stories" on how the program has facilitated change on specific farms across Australia. The combined AWI and MLA evaluation processes will: • include results from random and self-selected survey processes • provide a rigorous analysis of KPI achievement • take a multiple method approach to evaluation (randomized quantitative, selfselecting) • capture the change process in individual sheep producers • include aided and unaided awareness measures • have regular review and reporting to ensure meeting KPIs and if not, to devise new strategies for meeting the KPIs. [S3, pg 18]
Structure & governance	Appropriate for purpose and partnership.	 » Key roles and responsibilities of MLA, AWI and others agreed and documented. » Agreed policies and procedures for decision making documented and adhered to. 	Elders involvement in local NSW events esp. sponsorship for catering at events. MMFS stand in Landmark tent at Gunnedah. Meeting with FFI CRC Adoption Manager. Good involvement with Evergraze month in Victoria. Slow progress on development of MYPD and its integration with MMFS. Involvement with network groups in Tas (8x5), Vic (BWBL), NSW (Bestprac), SA (Young Guns). Joint event with Westech Ag (Vic). Series of events run under MMFS and MBFP branding in SA. Elders involved with webinar on wool marketing. There has been some attendance at events (as participants) by industry service providers. Joint events with Sheep CRC on Wean More Lambs (esp preg. Scanning). Contact with Graham Truscott has strengthened links with the Sheep CRC and Graham will now attend PAP. Articles written for and published in AMIC and ALPA newsletters. Agribusiness training initiatives set up with both Elders and Landmark. [S6, pg 3, 4] Delivery Partners: DPI – QLD, NSW, VIC, SA, Tas, Agribusiness –JR Hall (WA), Elders, Landmark Strategic Direction – Program Advisory Panel Management National – National Coordinator (External) Management State – State Coordinator Advocacy State – Producer Advocate Network [R7]

	Description	Performance Measures	Evidence (and reference index number)
			Project Advisory Panel Membership The Project Advisory Panel (PAP) is to consist of the following representation and suggested membership: Australian Wool Innovation – 2 positions Meat & Livestock Australia – 2 positions Mool Industry producer representatives – 2 positions Agribusiness representatives – 2 positions Agribusiness representatives – 1 from each of Elders and Landmark State agency representative – rotating position National Coordinator Making More from Sheep – Mike Wagg Observer – Sheep CRC Deputy CEO and commercialisation manager PAP members are appointed for a minimum of two years with the exception of AWI and MLA. Membership may be extended for a further year. PAP Roles and Responsibilities The roles and responsibilities of the PAP are to: Provide strategic guidance on the implementation of MMFS delivery activities including where appropriate state specific delivery activities. Review the outcomes, outputs and deliverables of MMFS to ensure that sheep and wool industry requirements are met. Support to the National Coordinator for Making More from Sheep. Review the progress towards timelines and deliverables for Making More from Sheep Participate in the ongoing review of the Communication, Delivery and Extension (CD&E) Plan for Making More from Sheep. Participate in the review of the Monitoring and Evaluation Plan for MMFS. Note regular monthly communication from the National Coordinator Represent Making More from Sheep at industry/agency forums if required. Act as a conduit for sheep industry feedback on Making More from Sheep. Champion the delivery of Making More from Sheep. Attend scheduled Advisory Panel meetings both physical and via phone-link PAP Meetings Two meetings of the PAP are foreshadowed, at least one will be a face to face one day. Meetings are tentatively scheduled for Feb/Mar (Face To Face) and Oct of each year Administration of the PAP MLA will provide secretarial support to the PAP and coordinate all meeting and activities relating to the PAP.
Capability	Facilitators, trainers, coordinators, producer advocates, consultants.	» Number of facilitators/trainers/coordinators/pr oducer advocates/consultants	National Coordinator – 1 State Coordinators – 6 Producer Advocates – 10

	Description	Performance Measures	Evidence (and r	eference ind	ex number)				
		employed for the program.	Project Advisory [S7]	– 12					
Funding	MLA, AWI, in-kind support from state government and others.	 Actual expenditure of MLA/AWI budget. Estimated expenditure on the program by partners (state government and others). 	Total expenditure for MMfS including the development of resources (website and manual) ar implementation will be ~\$1,836,000 against a budget of \$1,848,161. [S1, pg 3] Contribution in kind – the initial proposal put to each state was of providing operation funds to State Departments who contributed days in-kind (with the exception of a private contractor in who was paid for coordination and delivery). Days specified to June 30, 2009 per state were QLD - 70; NSW - 104; Vic – 100; Tas – 70; SA – 80; WA – 96. DAFWA also contributed \$20,000 to delivery in WA. While additional leverage in terms of time would be difficult to estimate, there has been significant over-achievement by the states above what was expected for the numbers of ever and participants.[S1, pg 3] Financial Summary [S8, (summarised)]				funds to actor in WA e were:		
			Income						
				2005/06	2006/07	2007/08	2008/09	TOTAL	
			AWI	\$268,161	\$200,000	\$260,000	\$240,000	\$968,161	
			LWA 06/07		\$80,000			\$80,000	
			MLA 05/06	\$207,434	\$192,566	\$170,000	\$230,000	\$800,000	
			TOTAL	\$475,595	\$472,566	\$430,000	\$470,000	\$1,848,161	
			Expenditure						
			Total	\$348,419	\$268,357	\$723,757	\$391,548	\$1,836,137	



Appendix B Producer Survey

Survey sent to program participants

mla MEAT & LIVESTOCK ALISTRALIA

More Beef from Pastures

GHD Hassall, an Agricultural Consulting company, has been appointed by Meat & Livestock Australia to conduct a review of the More Beef from Pastures Program (MBfP).

Please take a few minutes to help us **identify MBfP advantages/benefits to your business and provide suggestions** on changes or improvements you would like to see.

All information is **CONFIDENTIAL** and responses are not attributed to individuals.

Please return your completed survey ASAP, or no later than 7th August 2009, to GHD Hassall, PO Box 1052, Dubbo NSW 2830 or fax 02 6841 4601.

If you have any questions, please contact Bridget Boreham on 02 6841 4611.

1.	What is the total number of cattle in your herd?
2.	What is the postcode for your property's location?
3.	What is the average rainfall for your property?

4. Of the sources of information from MBfP that you've used, how helpful have they been in supporting decisions about your enterprise?

How useful have these sources of information been? (Please circle)

			(1.100000011)	.0,	
Which of these have you used? (Please tick box)	Not at all useful	Of little use	Neutral	Useful	Very useful
MBfP Manual	1	2	3	4	5
MBfP activities, e.g. field days, farm walks, workshops	1	2	3	4	5
MBfP state co-ordinators	1	2	3	4	5
MBfP producer advocates	1	2	3	4	5
MBfP agri-business partners e.g. Landmark, Elders, private consultants	1	2	3	4	5
MBfP website	1	2	3	4	5
MBfP electronic newsletter	1	2	3	4	5

5. For each of the topics below, please rate your level of agreement with the following statements. (Please circle)

The principles/tools and procedures offered by the MBfP program have:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Been well suited to my particular needs	1	2	3	4	5
Been easy to understand	1	2	3	4	5
Presented in a way that is helpful for me to learn about the practice	1	2	3	4	5
Offered a good balance between economic, environmental and social outcomes	1	2	3	4	5





More Beef from Pastures

Have any of the following MBfP topics led to improvements on your property? (Please tick more than one if applicable)	
Reducing cost of production	
Development of better business skills & knowledge	
Increased pasture ground cover	
Improvement in problem soils	
Better assessment of land capability	
Improvement in soil health & fertility	
Improved grazing management	
Improved pasture species	
Improved fertiliser application	
Improved cattle genetics	
Improved herd fertility	
Improved calf survival	
Improved animal health	
Management of risks associated with climate variability	
Integrated pest and weed management	
Other (Please list)	
Has your involvement in the MBfP program led to an increase in production for your beef enterprise? (Please box only)	tick or
box only)	tick or
box only) Yes, by 0 to 5 percent	tick or
box only)	tick or
Yes, by 0 to 5 percent Yes, by 5 to 10 percent Yes, by 10 to 15 percent	tick or
Yes, by 0 to 5 percent Yes, by 5 to 10 percent Yes, by 10 to 15 percent Yes, by 15 to 20 percent	tick or
Yes, by 0 to 5 percent Yes, by 5 to 10 percent Yes, by 10 to 15 percent	tick or





More Beef from Pastures

8.	Has your involvement in	n MBfP program led to increased profit for you	ur enterprise? (Please tick one only)					
		Yes, by 0 to 5 percent						
		Yes, by 5 to 10 percent						
		Yes, by 10 to 15 percent						
		Yes, by 15 to 20 percent						
		Yes, by more than 20 percent						
		No						
		Unsure						
	If Yes, what was it about the MBfP progam that assisted you in increasing your production?							
	If No or unsure, please	comment.						
	· ·							
9.	Do you believe that your involvement in the MBfP program has helped you to better manage the natural resources (soil, water, vegetation) on your property? (Please circle and describe below)							
	Yes	No	Unsure					
10.	If Yes, which of the followard MBfP program? (Please		have been gained from being involved in the					
		Increased pasture ground cover						
		Improvement in problem soils i.e. salinity, ac	idity, erosion					
		Better assessment of land capability						
		Improved riparian zone management						
		Ability to manage native vegetation						
		Integrated pest and weed management						
		Other (Please list)						
		•						
	-							





More Beef from Pastures

11. Please rate your level of agreement with the following statements, as a result of participating in MBfP (Please circle):

Since participating in the MBfP program, I have	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Felt more motivated to improve my knowledge and skills	1	2	3	4	5
A more positive attitude about implementing what I have learnt	1	2	3	4	5
Begun to think more about planning for the future	1	2	3	4	5
Felt more confident about facing challenges and managing risk	1	2	3	4	5
Been able to more easily access further information to meet my needs	1	2	3	4	5
Heard about new ideas and information	1	2	3	4	5
Been able to access wider professional networks than I did before	1	2	3	4	5
Felt more confident about adopting new ideas/technologies to change some of my farm management practices	1	2	3	4	5
Felt more confident about my future in the beef industry	1	2	3	4	5

12.	Do you have any other comments on the MBfP program or suggestions for future improvements?

THANK YOU FOR YOUR INPUT



mla

Making More from Sheep

GHD Hassall, an Agricultural Consulting company, has been appointed by Meat & Livestock Australia to conduct a review of the Making More from Sheep Program (MMfS).

Please take a few minutes to help us **identify MMfS advantages/benefits to your business and provide suggestions** on changes or improvements you would like to see.

All information is CONFIDENTIAL and responses are not attributed to individuals.

Please return your completed survey **ASAP**, or no later than <u>7th August 2009</u>, to **GHD Hassall**, **PO Box 1052**, **Dubbo NSW 2830 or fax 02 6841 4601**.

If you have any questions, please contact Bridget Boreham on 02 6841 4611.

1. V	Vhich of the following	enterprise types	best describes	your flock?	(Please circle)
------	------------------------	------------------	----------------	-------------	----------------	---

	Wool	Prime Lambs	Wool and lambs
2.	What is the total number of sheep in your flock? _		
3.	What is the postcode for your property's location?		
4.	What is the average rainfall for your property?		

5. Of the sources of information from MMfS that you've used, how helpful have they been in supporting decisions about your enterprise?

How useful have these sources of information been? (Please circle)

Which of these have you used? (Please tick box)	Not at all useful	Of little use	Neutral	Useful	Very useful
MMfS Manual	1	2	3	4	5
MMfS activities, e.g. field days, farm walks, workshops	1	2	3	4	5
MMfS state co-ordinators	1	2	3	4	5
MMfS producer advocates	1	2	3	4	5
MMfS agri-business partners, e.g. Landmark, Elders, private consultants	1	2	3	4	5
MMfS Website	1	2	3	4	5
MMfS website Quick Quiz	1	2	3	4	5
MMfS electronic newsletter	1	2	3	4	5





6. For each of the topics below, please rate your level of agreement with the following statements. (Please circle)

The principles/tools and procedures offered by the MMfS program have:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Been well suited to my particular needs	1	2	3	4	5
Been easy to understand	1	2	3	4	5
Presented in a way that is helpful for me to learn about the practice	1	2	3	4	5
Offered a good balance between economic, environmental and social outcomes	1	2	3	4	5

Have any of the following MMfS topics led to improvements on your property? (Please tick more than one if applicable)

Reducing cost of production	
Development of better business skills & knowledge	
Increased pasture ground cover	
Improvement in problem soils	
Better assessment of land capability	
Improvement in soil health & fertility	
Improved grazing management	
Improved pasture species	
Improved fertiliser application	
Improved sheep genetics	
Increased ewe pregnancy rate	
Improved lamb survival	
Improved animal health	
Integrated pest and weed management	
Clearer market focus in production system	
Other (Please list)	

8. Has your involvement in the MMfS program led to an increase production for your sheep enterprise/s? (Please tick one box only)

Yes, by 0 to 5 percent	
Yes, by 5 to 10 percent	
Yes, by 10 to 15 percent	
Yes, by 15 to 20 percent	
Yes, by more than 20 percent	
No	
Unsure	





1	If Yes, what was it about the	Trivino progam that assisted you in more	
I	If No or unsure, please com	ment.	
	Has your involvement in MM only)	IfS program led to an increase in profit fo	or your sheep enterprise/s? (Please tick one
		Yes, by 0 to 5 percent	
		Yes, by 5 to 10 percent	
		Yes, by 10 to 15 percent	
		Yes, by 15 to 20 percent	
		Yes, by more than 20 percent	
		No	
		Unsure MMfS progam that assisted you in incre ment.	easing your production?
1	If No or unsure, please com	e MMfS progam that assisted you in incre	
). I	If No or unsure, please com Do you believe that your inv	e MMfS progam that assisted you in incre	ed you to better manage the natural resource
). I	If No or unsure, please com Do you believe that your inv	e MMfS progam that assisted you in increase ment. ment. olvement in the MMfS program has help	ed you to better manage the natural resource
). I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y	ment. olvement in the MMfS program has help your property? (Please circle and describ No	eed you to better manage the natural resources
). I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y Yes If Yes, which of the following MMfS program? (Please tick	ment. olvement in the MMfS program has help your property? (Please circle and describ No	ed you to better manage the natural resources be below) Unsure
). I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y Yes If Yes, which of the following MMfS program? (Please tick	ment. olvement in the MMfS program has help your property? (Please circle and describ No g natural resource management benefits k)	ped you to better manage the natural resources be below) Unsure have been gained from being involved in the
). I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y Yes If Yes, which of the following MMfS program? (Please tick	ment. olvement in the MMfS program has help your property? (Please circle and describ No q natural resource management benefits K)	ped you to better manage the natural resources be below) Unsure have been gained from being involved in the
). I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y Yes If Yes, which of the following MMfS program? (Please tick Incre Imp	ment. olvement in the MMfS program has help your property? (Please circle and describ No g natural resource management benefits k) eased pasture ground cover rovement in problem soils i.e. salinity, ac	ped you to better manage the natural resources be below) Unsure have been gained from being involved in the
). I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y Yes If Yes, which of the following MMfS program? (Please tick Incre Imple Bett Imple	ment. olvement in the MMfS program has help your property? (Please circle and describe No gnatural resource management benefits (c)) eased pasture ground cover rovement in problem soils i.e. salinity, accer assessment of land capability	ped you to better manage the natural resources be below) Unsure have been gained from being involved in the
) D. I (If No or unsure, please com Do you believe that your inv (soil, water, vegetation) on y Yes If Yes, which of the following MMfS program? (Please tick Incre Impl Bett Impl Abili	ment. colvement in the MMfS program has help your property? (Please circle and describ No quatural resource management benefits () ceased pasture ground cover rovement in problem soils i.e. salinity, accer assessment of land capability roved riparian zone management	ped you to better manage the natural resources be below) Unsure have been gained from being involved in the





12. Please rate your level of agreement with the following statements, as a result of participating in MMfS (Please circle):

Since participating in the MMfS program, I have	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Felt more motivated to improve my knowledge and skills	1	2	3	4	5
A more positive attitude about implementing what I have learnt	1	2	3	4	5
Begun to think more about planning for the future	1	2	3	4	5
Felt more confident about facing challenges and managing risk	1	2	3	4	5
Been able to more easily access further information to meet my needs	1	2	3	4	5
Heard about new ideas and information	1	2	3	4	5
Been able to access wider professional networks than I did before	1	2	3	4	5
Felt more confident about adopting new ideas/technologies to change some of my farm management practices	1	2	3	4	5
Reinforced management decisions already in place	1	2	3	4	5
Felt more confident about my future in the sheep industry	1	2	3	4	5

13.	Do you have any other comments on the MMfS program or suggestions for future improvements?

THANK YOU FOR YOUR INPUT





Appendix C

Key Informant Interviews

Questionnaire used during interviews with key informants





Review of MBfP / MMfS program - Key Informant Information

Background:
1. What is your involvement in the MBfP / MMfS program?
2. How long have you been involved in the program?
3. Do you have specific targets that you are required to meet?
4. What training have you received as part of your involvement in the program?
Program design and management:
5. What are your thoughts about the design of the program?
3. What are your thoughts about the design of the program:
6. Are there any gaps in the information provided by the program?
o. Are there any gaps in the information provided by the program:
7. Do you think the program is managed well?
7. Do you think the program is managed well:





8. Do you have any suggestions about how program design and management aspects could be improved?
improved:
Program delivery:
9. What are your thoughts about how the program is being delivered?
10. Do you have any suggestions for improving the program delivery?
Outcomes of the management
Outcomes of the program:
11. Do you think the program is relevant to producers?
12. If not, how would you suggest to improve it?
13. What else, in your opinion, could be done to increase producer participation in the program?
14. Are there any other comments that you would like to make about the MBfP / MMfS?
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Appendix D Supporting Tables

Summary tables of selected results



More Beef from Pastures

Table D-1 MBfP respondents by state and herd size

Herd Size	NSW	VIC	TAS	SA	WA	Total
0-199	11 (39%)	6(27%)	1 (50%)	1 (50%)	2 (100%)	21 (28%)
200-399	4 (14%)	10 (45%)				14 (25%)
>400	13 (46%)	6 (27%)	1 (50%)	1 (50%)		21 (38%)
Total	28	22	2	2	2	56

Table D-2 MBfP topics leading to property improvements (n=56)

	Yes	No Response
Reducing cost of production	20%	80%
Development of better business skills & knowledge	32%	68%
Increased pasture ground cover	54%	46%
Improvement in problem soils	14%	86%
Better assessment of land capability	32%	68%
Improvement in soil health & fertility	34%	66%
Improved grazing management	59%	41%
Improved pasture species	25%	75%
Improved fertiliser application	21%	79%
Improved cattle genetics	29%	71%
Increased herd fertility	20%	80%
Improved calf survival	18%	82%
Improved animal health	29%	71%
Management of risks associated with climate variability	21%	79%
Integrated pest and weed management	23%	77%

Table D-3 Components resulting in production increase (n=58)

Component	Respondents
Pasture & grazing management	43 (74%)
Business decisions	5 (9%)
Soil management	4 (7%)



Component	Respondents
Cost of Production	2 (3%)
Other	4 (7%)

Table D-4 Reasons for no increase in production (n=33)

Reason	Respondents
Drought	19 (58%)
Information not covered/Doesn't apply to me	6 (18%)
Too early to tell	3 (9%)
Can't afford to make changes	2 (6%)
Other	3 (9%)

Table D-5 Components resulting in profitability increase (n=29)

Component	Respondents
Pasture management	14 (48%)
More beef sold/better quality	5 (17%)
The whole MBfP program	3 (10%)
Business skills	2 (7%)
Other	5 (17%)

Table D-6 Reasons for no increase in profitability (n=42)

Reason	Respondents
Drought	13 (31%)
Poor market prices	10 (24%)
Doesn't apply to me/ Doing it anyway	6 (14%)
Too early to tell	4 (10%)
Other	9 (21%)

Table D-7 NRM benefit from MBfP involvement (n=111)

NRM benefit	Yes	No response
Increased pasture ground cover	42%	58%
Improvement in problem soils i.e. salinity, acidity, erosion	16%	84%



NRM benefit	Yes	No response
Better assessment of land capability	31%	69%
Improved riparian zone management	9%	91%
Ability to manage native vegetation	11%	89%
Integrated pest and weed management	21%	79%



Table D-8 Has the event been useful to your enterprise?

	Very useful	Of some use	Not useful at all	No response
QLD (n=19)	53%	42%	0%	5%
NSW (n=330)	60%	12%	0%	27%
Vic (n=180)	56%	39%	1%	5%
Tas (n=42)	60%	31%	0%	10%
SA (n=269)	72%	20%	0%	7%
WA (n=269)	56%	40%	1%	3%
Total	61%	26%	0%	12%

Table D-9 Will you make any changes to business – based on the information provided today?

	Yes	No	Unsure	No response
QLD (n=19)	95%	0%		5%
NSW (n=330)	61%	6%	1%	32%
Vic (n=180)	63%	18%	8%	11%
Tas (n=42)	74%	12%	2%	12%
SA (n=269)	75%	6%	9%	11%
WA (n=269)	72%	18%		9%
Total	68%	11%	4%	17%

Table D-10 Have you learnt anything that will potentially improve your sheep enterprise?

Yes	No	Unsure	No response	
95%	0%		5%	
58%	7%		35%	
74%	9%	2%	16%	
79%	10%		12%	
84%	2%	0%	14%	
68%	20%		12%	
	95% 58% 74% 79% 84%	95% 0% 58% 7% 74% 9% 79% 10% 84% 2%	95% 0% 58% 7% 74% 9% 2% 79% 10% 84% 2% 0%	95% 0% 5% 58% 7% 35% 74% 9% 2% 16% 79% 10% 12% 84% 2% 0% 14%



	Yes	No	Unsure	No response
Total	71%	9%	0%	20%

Table D-11 Has today's event changed your aspirations for what you think you can achieve in your sheep enterprise?

	Yes	No	No response
NSW (n=330)	37%	13%	50%
Vic (n=180)	41%	21%	39%
Tas (n=42)	19%	10%	69%
SA (n=269)	25%	6%	69%
Total	33%	12%	55%

Table D-12 Respondents by State and Flock Size

Flock Size	NSW	VIC	TAS	SA	WA	Total
0-1999	6 (32%)	3 (27%)		11 (50%)		20(35%)
2000-3999	10 (53%)	2 (18%)		9 (41%)		21 (37%)
>4000	3 (16%)	6 (55%)	2 (100%)	2 (9%)	3 (100%)	16 (28%)
Total	19	11	2	22	3	57

Table D-13 MMfS topics leading to property improvements (n=57)

	Yes	No Response
Reducing cost of production	26%	74%
Development of better business skills & knowledge	49%	51%
Increased pasture ground cover	37%	63%
Improvement in problem soils	25%	75%
Better assessment of land capability	18%	82%
Improvement in soil health & fertility	18%	82%
Improved grazing management	56%	44%
Improved pasture species	19%	81%
Improved fertiliser application	11%	89%
Improved sheep genetics	28%	72%
Increased ewe pregnancy rate	28%	72%



	Yes	No Response
Improved lamb survival	42%	58%
Improved animal health	35%	65%
Integrated pest and weed management	9%	91%
Clearer market focus in production system	16%	84%

Table D-14 Components resulting in production increase (n=79)

Component	Respondents
Health & nutrition improvements	18 (23%)
Pasture management	15 (19%)
Ewe management	13 (16%)
Fat Scoring	8 (10%)
Other	25 (32%)

Table D-15 Reasons for no increase in production (n=57)

Reason	Respondents
Drought	29 (51%)
Can't attribute improvements solely to the program	5 (9%)
Too early to tell	5 (9%)
Not relevant to me/ Already doing it	7 (12%)
Other	11 (19%)

Table D-16 Component resulting in profitability increase (n=49)

Component	Respondents
Pasture & grazing management	14 (29%)
Lambing improvements	12 (24%)
Business decisions	6 (12%)
Lamb & ewe management	6 (12%)
Other	11 (22%)



Table D-17 Reasons for no increase in profitability (n=50)

Reason	Respondents
Drought	21 (42%)
Too early to tell	5 (10%)
Poor market prices	9 (18%)
Didn't find the program helpful	3 (6%)
Other	12 (24%)

Table D-18 NRM benefit from MMfS involvement (n=57)

NRM benefit	Yes	No response
Increased pasture ground cover	43%	57%
Improvement in problem soils i.e. salinity, acidity, erosion	17%	83%
Better assessment of land capability	32%	68%
Improved riparian zone management	4%	96%
Ability to manage native vegetation	11%	89%
Integrated pest and weed management	16%	84%