

Collaborative Improvement Framework – Creating a Legacy Through Agriculture and Natural Resource Management Evaluation

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Abstract

The purpose of this paper is to describe and highlight the key themes and success factors for the design, implementation and legacy of programs in the agriculture and NRM sector. This paper presents the collaborative improvement framework (CIF) as a means of describing the findings from a suite of evaluations recently performed for state and federal government departments, industry agencies and community based organisations in the agriculture and NRM sectors.

The components of the CIF include:

External program

- Understanding the context
- Relationships
- Continuous improvement

Internal program

- Program planning and development
- Program management
- Communication and engagement
- Program activities
- Monitoring, evaluation and reporting (MER).

In our experience, the key difference between 'good' programs and 'excellent' programs is consideration and response to the external components of the CIF.

We too have evolved our evaluation approach in accordance with continuous improvement principles. Similar to the external components of the CIF, we have adopted three key principles to guide our evaluation methods as a result of our experiences. The principles include:

- A focus on people
- Acknowledgement of the bigger picture
- Providing a tailored way forward.

1 Introduction

Evaluation and continuous improvement forms one important component of the broader advice, research and problem solving we provide to our clients.

A suite of evaluations have been recently performed for state and federal government departments, industry agencies and community based organisations in the agriculture and NRM sectors. In undertaking these evaluations a number of common themes and success factors for the design, implementation and legacy of programs in the agriculture and NRM sectors were identified.

This paper describes the critical factors that we consider are essential for delivery of successful programs and projects in the agriculture and NRM sectors. We developed the collaborative improvement framework (CIF) as a means of describing and linking these key themes and success factors.

2 Context: Evaluation in the agriculture and natural resource management sectors

Agriculture and NRM sectors can be characterised by significant scientific unknowns with practices and interventions evolving as we learn more. Only 100 years ago we were land clearing and deliberately establishing populations of what are now known as pest animals such as rabbits and foxes, and only 50 years ago we were planting willows along river banks for stabilisation.

As our knowledge has developed, the implications of these decisions has been realised, and over the past 20-30 years there has been significant investment by government, business, industry and community into repairing damage, protecting significant environmental values, and developing agricultural practices which are sustainable in the long-term.

Evaluation has become a core component of NRM and sustainable agriculture programs in order to:

- Ensure accountability associated with this expenditure of public funds
- Assist in continuous improvement through reflection and learning from previous experiences.

Conducting evaluation in the fields of NRM and sustainable agriculture is itself a maturing industry, which continues to evolve in response to new information and the complex systems (Rogers 2005) upon which it is focused. We have observed, first hand, the change in acceptance of evaluation within this sector over the last 5 years.

Some of the elements, which contribute to the complexity of agriculture and landscape based systems are:

- There is a significant time lag before resource condition change outcomes can be measured (20-25 years)
- Interventions have many components and there is interaction between them such that one modification may have an impact on many other factors
- Programs involve multiple agencies, which are often interdisciplinary and cross-jurisdictional across community, business, industry and government
- A large proportion of land is managed privately by individuals with differing values and motivations

- There is uncertainty associated with production and land management caused by fluctuations in climate, markets and input costs
- A complex decision making environment exists where there is no one simple answer
- The sectors are typified by rapidly changing technology and practices and changing demographics.

Given the time lag in measuring the impact of NRM and sustainable agriculture programs, evaluation in this sector frequently relies on short or medium term outcomes as surrogates to assess the projects trajectory or likely success in achieving long-term outcomes.

Measurement can also be based on qualitative and subjective outcomes, such as change in knowledge, aspirations, skills and attitudes. In NRM and sustainable agriculture programs it is frequently assumed that change in behaviour will lead to better land stewardship and ultimately an improvement in the condition of the resource.

3 Concepts and methods

The suite of evaluation projects undertaken, utilised both quantitative and qualitative methods including: document review and analysis, cost benefit analysis, semi-structured interviews, focus groups, case studies, goal attainment scaling and relationship choice frameworks (De Vaus 2002; Maskey et al. 2010; Keeble et al. 2010).

4 Key themes and success factors for programs

Consistent themes and success factors were identified for the many agriculture and NRM programs and projects that we have evaluated. The CIF was developed as a means of describing these common themes and success factors and demonstrating how they link.

The components of the CIF include those that are external to the program but essential to its successful delivery and those components that are internal and of a more operational nature (Figure 1).

The following section provides a more detailed analysis of the key themes and success factors related to both the external and internal program components.

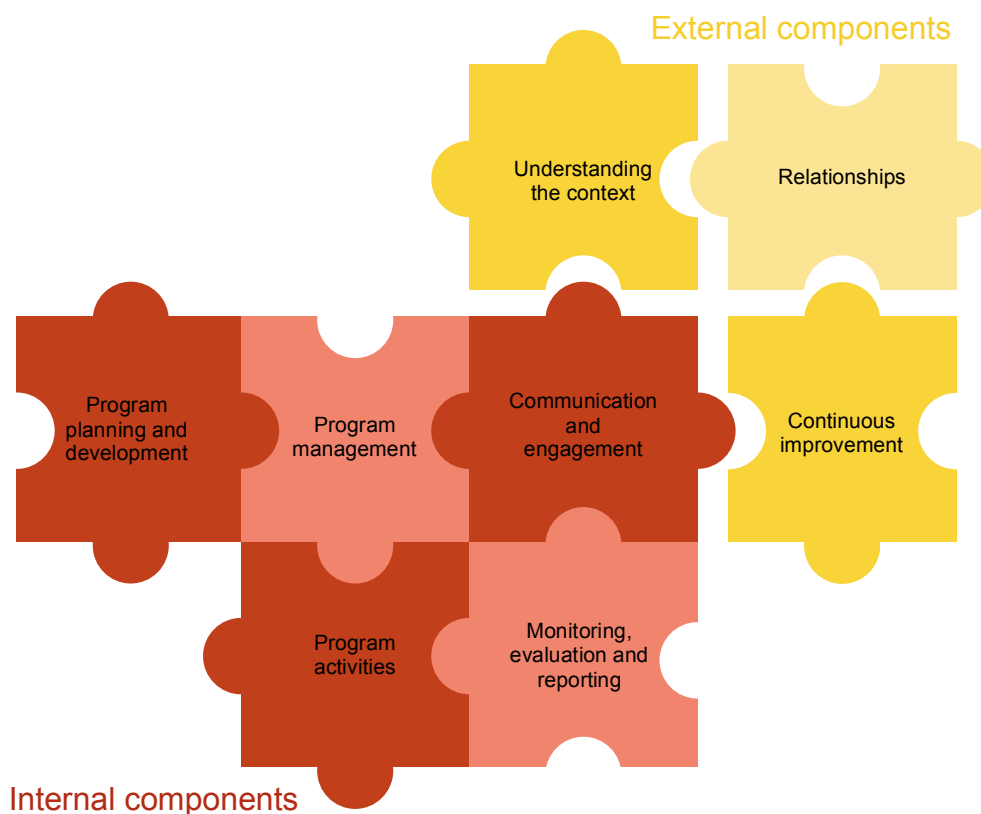


Figure 1: Collaborative Improvement Framework

4.1 External components

We identified three key components that are external to the program and are critical to the program success. Each of these components is described in more detail below.

1. Understanding the broader context within which the program operates

Program managers need to understand the environment within which they are operating. This includes being clear about how the program fits into the bigger picture (i.e. policy context). The identification of the target audience and stakeholders that will need to be involved is critical. Understanding of the community and their needs and the broader political and social environment will assist in delivery of the program.

2. Relationships both within and external to the program

Relationships are the foundation for all activities. This includes key partnerships and networks and ensuring that these relationships are nurtured and based on trust.

3. Continuous improvement focus with the application of adaptive management

A culture of continuous improvement will ensure that a program adapts to changing circumstances as required. The existence of a continuous improvement approach generally means that past investment is built upon and that evaluation is viewed as an opportunity to do things better.

Both the negative and positive implications for these components in delivery of programs is described in Table 1.

Table 1: External components and implications for delivery of programs

External component	Implications	
	Positive	Negative
1. Understanding the context	<ul style="list-style-type: none"> ▪ Successful programs were those where all participants understood the policy context and how their efforts contributed to the bigger picture (i.e. catchment management, food security, land health). ▪ There was a good knowledge of the community and/or industry needs with realistic expectations of what could be changed. ▪ Broader political and social aspects were acknowledged and factored into the delivery. 	<ul style="list-style-type: none"> ▪ Programs often lacked focus where staff did not understand the bigger picture and why their contribution was significant. ▪ A lack of knowledge and empathy with the community sometimes resulted in poorly designed programs. ▪ Poor understanding and lack of rapport with a specific industry led to inappropriate activities that didn't align with the needs and circumstances of the end user.
2. Relationships	<ul style="list-style-type: none"> ▪ The most effective programs often had at their core strong and trusted relationships both within the program and with external partners. ▪ Often these relationships had been established prior to the program. ▪ The programs that had undertaken a needs analysis were frequently more effective. ▪ The ability of key staff to work with others was critical in program delivery. 	<ul style="list-style-type: none"> ▪ The formation of robust relationships often took longer than the existence of the program. ▪ Lack of understanding and trusted partnerships hampered program delivery. ▪ Skills in relationship management were generally not recognised as important.
3. Continuous improvement	<ul style="list-style-type: none"> ▪ A culture of continuous improvement and a readiness to change was fundamental for many successful programs. ▪ This often related to a thirst to do things better and improve on previous programs. ▪ This also translated to an enthusiasm to build on the evaluation findings. 	<ul style="list-style-type: none"> ▪ A number of programs were strongly driven by the process rather than reflecting on the success of activities and being prepared to change as required. ▪ Frequently, there was no desire to understand how activities impacted on the community or how they could be improved. ▪ There may have been a culture of suspicion associated with evaluation and a reluctance to do anything differently.

In summary the most successful programs evaluated had:

- Good knowledge of the community and/or industry needs with realistic expectations of what could be changed
- Trusted relationships both within the program and with external partners

- A culture of continuous improvement and a readiness to change was at the core of many successful programs.

4.2 Internal components

We identified five components internal to the program, which are critical to program success. Each of these components is described in more detail below.

1. Program planning and development

Effective planning and development is critical in the early stages of the program. This was usually reliant on the development of a program logic (Bennett 1975; Owen 2006), and the subsequent identification of appropriate indicators, targets and testing of assumptions.

2. Program management

Program management is important in the establishment and successful operation of the program. This considers aspects such as approach, governance, roles and responsibilities and integration.

3. Communication and engagement

Communication and engagement needs to contribute to the objectives and desired outcomes of the program while considering the broader and on-going partnerships and networks external to the program.

4. Program activities

Program activities are the basis for program delivery. All program activities required to achieve the desired goal must be included and tailored to suit the broader context within which the program operates.

5. Monitoring, evaluation and reporting (MER)

Internal MER throughout the program is important for informing formative and summative independent evaluations.

Both the negative and positive implications for these components in delivery of programs are described in Table 2.

Table 2: Internal components and implications for delivery of programs

Internal component	Implications	
	Positive	Negative
Program planning and development	<ul style="list-style-type: none"> ▪ Successful programs were often those that demonstrated clear links between inputs, outputs and a hierarchy of desired outcomes from the onset of the program. ▪ Program logic was most useful when consensus and ownership was built between key partners and stakeholders. ▪ Program logic that was simple, practical and accessible was most 	<ul style="list-style-type: none"> ▪ Less successful projects were those where a program logic had not been developed properly, or at all. This led to a number of issues: <ul style="list-style-type: none"> ○ No consensus and ownership over desired outcomes of the program ○ The program logic was not seen as a useful or practical tool in planning and development ○ A program logic had to be

	<p>often used actively during the program operation.</p> <ul style="list-style-type: none"> ▪ Successful programs were designed to suit the biophysical and social aspects of the program. 	<p>developed retrospectively, to provide an evaluation framework.</p>
Program management	<ul style="list-style-type: none"> ▪ Successful programs had a program manager who had knowledge of the technical aspects as well as strategy and policy. ▪ Skilled program managers were able to exercise discretion and adaptive management at the operational level. ▪ Successful programs with strong accountability had clear governance and well defined roles and responsibilities for other program staff, partners and stakeholders. 	<ul style="list-style-type: none"> ▪ Less successful programs experienced governance and accountability issues generally due to poorly defined roles and responsibilities (both internal and external to the program) and/or lack of leadership from the program manager.
Communication and engagement	<ul style="list-style-type: none"> ▪ More successful programs often prepared communication and engagement plans. This outlined the stakeholder analysis, mode and reason for engagement and the appropriate type of engagement e.g. IAP2 spectrum. ▪ A documented plan often resulted in clear, targeted and meaningful communication and engagement, which contributed to the objectives of the program, managing expectations and fostering external partnerships and networks beyond the life of the program. 	<ul style="list-style-type: none"> ▪ Poorly planned communication and engagement often resulted in 'engagement fatigue', which has a negative impact on the program and on relationships beyond the life of the program.
Program activities	<ul style="list-style-type: none"> ▪ Successful programs had actions that were tailored to each farm, location or landholder allowing flexibility without compromising on the program objectives 	<ul style="list-style-type: none"> ▪ Less successful programs implemented a 'one-size fits all' approach, regardless of the target audience, interventions and drivers and barriers to participation.
Monitoring, evaluation and reporting	<ul style="list-style-type: none"> ▪ Successful programs often had an MER framework, or equivalent, associated with the program logic which was embedded from inception. ▪ Clearly articulating the following aspects early in the program is beneficial: <ul style="list-style-type: none"> ○ Indicators and targets to drive the collection of appropriate monitoring data ○ Key evaluation questions, focussing on the appropriateness, efficiency, effectiveness, impact and legacy ○ Reporting requirements, including format, timing and responsibility. 	<ul style="list-style-type: none"> ▪ Less successful programs took an unstructured or 'ad hoc' approach to monitoring, resulting in inconsistencies in data collection over time and data that did not directly address key evaluation questions. ▪ Reporting and feedback was often the 'missing link' in MER. Operational staff or partners often did not understand how the monitoring data they collected was being used.

In summary the most successful programs evaluated had:

- Clear objectives and strong understanding of how actions will contribute to the desired outcomes through a program logic
- A skilled and capable program manager with appropriate authority
- An ability to exercise discretion and adaptive management at the operational level
- Early and coordinated communication and engagement with program partners, stakeholders and the community
- Actions that were tailored to each location or landholder allowing flexibility without compromising on the objectives
- Support for demonstrating progress, particularly for making a case for further investment.

5 Conclusions

5.1 Lessons learnt from designing and implementing programs

The suite of evaluations undertaken has consistently identified the key difference between ‘good’ programs and ‘excellent’ programs being consideration and response to the external components of the CIF.

Program managers within the NRM and sustainable agriculture sector are consistently demonstrating knowledge, skills and experience in executing the internal components of the CIF. Over the last 5 years we have seen:

- Increased use of program logic in project development
- Increased use of prioritisation tools to ensure the best value for money
- High quality on-ground works
- Skilful project management
- Thoughtful and effective communication and engagement approaches
- Increasing support for the need to be able to demonstrate progress.

From our experience, those programs who have effectively managed and responded to the external components of the CIF, have strengthened the success of their program by:

- Generating higher levels of participation – attracting landholders who have not traditionally been involved by addressing their specific needs
- Demonstrating better value for money – maximising the delivery of ecosystem services and minimising cost
- Creating a legacy for future work - through the establishment of partnerships and networks that will be enduring over time
- Developing a case for further investment – through the demonstration of success, evidence of adaptive management and realistic plan for the future.

5.2 Lessons learnt for our evaluation approach

The common themes and success factors for the design, implementation and legacy of programs in the agriculture and NRM sectors that were identified through the development of the CIF not only provide insight for program design, but also for the way we undertake evaluation.

We too have evolved our evaluation approach in accordance with continuous improvement principles. Similar to the external components of the CIF, we have adopted three key principles to guide our evaluation methods as a result of our experiences. The principles include:

A focus on people

Building capacity through listening, connecting and development. This is achieved through:

- Assisting project proponents in relation to the development and use of program logic. Evaluation often require revisions of the program logic to adequately represent the project and provide a usable framework for evaluation. We often work with the program staff to ensure there is common understanding of the program logic
- Assisting project proponents to overcome the fear of being evaluated and view evaluation in the light of continuous improvement – being open to and supportive of constructive criticism to improve program outcomes. Our experience would suggest that people are often seeking ways of doing things better and often eager to provide suggestions

Acknowledgement of the bigger picture

Understanding the context and framing the debate in a relevant and accessible way. Our evaluation approach focuses on:

- Taking time to understand the complexity of each program in order to conduct content rich evaluation (location, demographic, environment, interventions, stakeholders, governance). Our project teams are usually assembled to include specific technical expertise
- Taking into consideration the circumstances of the project proponents (e.g. lack of resourcing, staff with limited evaluation experience). Our approach often will include capacity development of staff in evaluation components

Providing a tailored way forward

Providing insight and building ownership to complex problems and opportunities. Experience has highlighted the benefit of:

- Involving clients throughout the evaluation process where appropriate (no surprises approach). This also ensures that challenging issues can be discussed throughout the evaluation
- Helping the project proponents learn from the findings and take ownership over the recommendations – creating the right environment for change.

6 References

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