**INFLUENCES SHAPING EVALUATION: THE FARM BUSINESS RESILIENCE PROGRAM**

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**Abstract**

Evaluation of Government programs can be shaped by many influences. The purpose of this paper is to describe how some of these influences shaped the evaluation of the Farm Business Resilience – Farm Planning pilot program, particularly in relation to the planning and design of a postgraduate evaluation-based research project. The iterative and participatory nature of the pilot program, the number and variety of stakeholders, and the complexities and uncertainties surrounding drought and a changing climate presented a challenging evaluation situation. Due to the complexities of the program, the evaluations undertaken by the pilot program were flexible and iterative. A framework was utilised by the Masters research project, providing a structure that highlighted a clear direction to navigate a multitude of evaluative data. It may assist others in the construction and management of potential research streams within complicated or complex projects.

**Introduction**

The Farm Business Resilience – Farm Planning (FBR-FP) program, one of the new drought policy measures piloted in Western Australia during 2010/11, provided training to farm businesses to help guide them toward future success given a drying climate and the potential for increased occurrence of drought. The iterative and participatory nature of the program, the number and variety of stakeholders, and the complexities and uncertainties surrounding drought and a changing climate presented a challenging evaluation situation.

This paper focuses on the influences that have shaped the evaluation of the FBR-FP program, and how these influences have affected the design of a Masters research project. The paper describes a framework to help identify the outcomes, data sources, context and potential influences. The framework was invaluable to the research project, providing a structure that highlighted a clear direction to navigate a multitude of evaluative data and expectations.

**The Farm Business Resilience program**

The FBR-FP program is one of seven drought policy measures being piloted with farm businesses in Western Australia. The pilot began in July 2010 and is due for completion, after being extended for one year, in June 2012. With climate predictions pointing toward a drying climate (see Hennessy et al. 2008), it is possible that drought will become a more common feature of the Australian landscape, and a risk for which the agriculture sector will need to prepare. As such, the new policy measures move away from the traditional ‘short-term, crisis-framed’ government response to drought (Drought Policy Review Expert Social Panel 2008, p. 7) toward a focus on the long-term outcomes. This is being achieved by encouraging landholder adoption of appropriate climate change management strategies, and the creation of an environment of landholder self-reliance and drought preparedness (Department of Agriculture Fisheries and Forestry 2010).

In light of the challenges facing agricultural Australia, farm business skills need to extend beyond the ‘practical experience’ that the sector traditionally values (Kilpatrick 1997) and into the realms of business management and leadership (Industries Development Committee Workforce, Training and Skills Working Group 2009). An important aspect of this is the development of the sectors’ risk management and strategic planning skills to address environmental, financial, production and social aspects of the business, and to understand how these realms operate and interact.

The FBR-FP program consisted of five modular workshops delivered to 400 (thus far) farm businesses across Western Australia. The workshops were delivered in a group setting, with up to 20 farm businesses in attendance (on average there were 12 farm businesses). An optional ‘kitchen table’ session (one-on-one) was available to businesses on completion of the five modules.

Participants were taken through a facilitated adaptive process (see Berkes 2009, Pahl Wostl 2009) that identified their key challenges in managing the various environmental, social, financial and production attributes of their businesses. The process enabled participants to ‘self-discover’ potential ‘solutions’ to their challenges. These solutions formed the basis of a documented strategic plan for the farm business, focusing on three key areas—managing the natural environment and production; balancing work-life commitments; and managing financial resources. Priority activities to help the business be more self-reliant and prepared to face a changing climate were identified, and a grants program (another of the seven drought policy measures being piloted) was available for farm businesses to access to help implement these priority activities.

**Influences shaping the FBR evaluation**

***Complexity and complicatedness***

Farm businesses operate in a complex setting, having to constantly respond and adapt to emergent issues such as seasonal variability, market signals and pest and disease outbreaks. Furthermore, for many farm families farming is not just a job—the farm is their home (in some cases, for generations) and farming is their identity (Productivity Commission 2009). Separating the ‘farm business’ from the ‘farm family’ is unwise, as issues that affect the farm business affect the farm family, and vice versa (Productivity Commission 2009). For example, agricultural drought can have enormous impacts on individual farm productivity and profitability, which can have severe emotional impacts on the farm family. In turn, the social vibrancy of rural communities can be affected (Productivity Commission 2009). Drought can result in loss of jobs, closures of small rural businesses, reduced employment opportunities, and movement of people away from rural areas to the larger cities (Horridge et al. 2005; Productivity Commission 2009, Edwards et al 2009).

Aspects of the FBR-FP program contributing to its ‘complicatedness’ (see Rogers 2008) were its delivery across multiple sites, the multiple, simultaneous actions taken by the program to deliver outcomes (i.e. multiple causal strands) and the large number of stakeholders. For example, the FBR-FP program is delivered to multiple farm businesses across Western Australia by multiple Facilitation Teams comprised of people from multiple private businesses. The Facilitators are coordinated by a Facilitator Leadership Group, who are managed by Curtin University via the FBR program team, which oversees and administers the program as a whole, including the Evaluation Strategy Team. Curtin University was contracted to deliver the program by the Department of Agriculture and Food WA (DAFWA) and the Rural Business Development Corporation. DAFWA is representing the Western Australian Government, who is partnering the Australian Government via the Department of Agriculture, Fisheries and Forestry (DAFF) in this pilot initiative.

Complex and complicated aspects of the FBR-FP program have implications for evaluation. Logistical challenges abound where interventions are implemented across multiple sites and/or have multiple stakeholders, and evaluation must identify the multiple causal strands (Rogers 2008). In terms of complexity, Eoyang and Berkas (1999) identified five characteristics of complex adaptive systems relevant for evaluation:

* Dynamic – the system is constantly changing, and does not necessarily follow a predictable pattern. As such, change can operate outside the set program timeframes or boundaries, and any predicted program outcomes are essentially artificial constructs.
* Massively entangled – it is difficult to identify a priori the factors that will be of interest for evaluation because of the complex interrelationships.
* Scale independent – the program works at different scales, so evaluation should cover the ‘system-wide’ as well as each part of the system – macro- and micro-evaluation.
* Transformative – the system transforms over time, and also causes transformation. These need to be captured through the evaluations.
* Emergent – the behaviours of the system emerge over time and are sensitive to the initial conditions. This impacts on the ability to predict movement toward outcomes (particularly longer-term outcomes).

***Client needs***

Addressing the clients’ evaluation needs is a crucial part of evaluation. In terms of the FBR-FP evaluation, there were three key clients—the FBR program team (Curtin University), DAFWA and DAFF. These three organisations represented the hierarchy of ‘management’ for the program. However, there were other contributors to the program with a vested interest in the evaluation. For example, the facilitators, particularly the Facilitator Development Team, were heavily involved in developing and refining the content and processes used in each workshop module. As such, this group were keen to ensure evaluation questions that enabled continuous improvement.

Evaluation and reporting requirements were outlined by the Commonwealth Government (via DAFF), and these requirements were delivered by the FBR Program. However, given the framework the program was using in development and delivery of the program (complex adaptive systems theory – see Eeoyang and Berkas 1999, Vogelsang nd), the FBR team felt it necessary to extend evaluation beyond the ‘must-dos’ as set by Government. While Government recognised the complexities of the situation, their requirements for tracking program progress were based on output and process indicators (e.g. how many farm businesses participated in the training; how many workshops were delivered etc.) and linear change pathways.

***Implementation context***

As a pilot program, evaluation is of immense importance—the evaluation results will play an important role in determining when, how and if the program can/should be scaled up and out as the Governments’ national response to drought. Close attention is being paid to the program by the Australian State and Commonwealth Governments, as well as influential farmer organisations and farmers themselves.

In this context, rigorous and focused planning, implementation and evaluation are essential. However, tight timeframes made this difficult and were compounded by loosely defined program and evaluation guidelines and multiple stakeholders.

**Effects of the influences**

The three key influence areas discussed above have shaped the current evaluation of the FBR-FP program, but the implementation context and client needs have been of major importance. ‘Wanting results yesterday’ has placed immense pressure on the evaluation. This may have affected the number and selection of the evaluation methods used within the program. To date, evaluation of the program has taken place via:

* Online questionnaire for workshop participants before attendance at the workshops, and after completion of all the workshop modules.
* Written questionnaire for workshop participants to complete at the start of the first workshop and at the end of the last workshop.
* ‘Happy sheets’ for workshop participants to complete at the end of each workshop module.
* Group end-of-day debrief for workshop participants/facilitators, which may have included questions about ‘what worked well or what could be improved’. Inclusion of this in the workshop depended on the facilitator and the group of participants.
* Structured interviews (open-ended questions) with selected participants and facilitators.
* Standard open-ended questions for facilitation teams to complete at the end of each workshop.
* Written questionnaire for workshop facilitators to complete.
* Facilitation Leadership Team assessments of facilitator performance.
* Coaching, mentoring, peer-learning, pre-briefing and debriefing systems built in to the program for continual improvement.

Furthermore, with the imperative to get the evaluation instruments finalised and data collected, there was a potential blurring of the line between the ‘need to know’ core evaluation questions and the ‘nice to know’ research questions. Although the FBR program team were involved in developing the specific survey questions and reflective processes used within the workshops, the short timeframe for implementation prevented the development of an evaluation plan for the program. Nevertheless, the evaluation has evolved over time as potential lines of inquiry have emerged.

**Shaping a research project**

The influences have also shaped the design of an evaluation-based Masters research project, which was developed alongside the FBR-FP program. The aim of the research project is to assess the effectiveness of the program at achieving behaviour change and landholder management of the natural resources. The objectives are to determine:

* the extent to which the FBR-FP program influenced the program participants;
* the factors influencing the effectiveness of the program; and
* how the program could be improved to better achieve its outcomes.

The focus of the Masters research project is on the medium-term program impacts. As such, it has not been subjected to the same timeframes and levels of pressure as the pilot program. In contrast to the FBR-FP program evaluation, the key area of influence shaping the research project stemmed from the complexities of the pilot program.

According to Eoyang and Berkas (1999, p. 3), ‘the whole concept of projected and predictable outcomes is an artificial construct when evaluating performance in a complex adaptive system.’ The success of the FBR-FP program ultimately relies on the participant’s decisions and actions, and these are subject to a myriad of external factors that are not under the programs control. A such, the research project will endeavour to discover the ‘real’ outcomes of the FBR-FP program and explain how/why these outcomes have emerged. This has similarities to Realistic Evaluation (see Pawson and Tilley 1997 cited in Porter and O’Halloran 2011)—the project will aim to ‘discover if, how and why [the FBR-FP program] has the potential to cause beneficial change’ (Porter and O’Halloran 2011, p. 2).

In order to develop a better understanding of the FBR-FP program, three key questions were asked at the various levels of the program (at the program level, workshop level etc.):

1. What is it about?
2. What is the context?
3. What are the complicated/complex aspects? (See Rogers 2008 for definition of complex versus complicated programs)

This framework was used to uncover a variety of influences that will shape the research project. For example, the FBR-FP was a process-oriented program—that is, it was highly participatory with broadly defined goals. Furthermore, the program utilised complex adaptive systems theory (see Eoyang and Berkas 1999, Vogelsang nd), in recognition of the complex problem that drought policy is addressing and the complex environment within which it is being implemented. A focus on facilitation allowed participants to undertake a ‘facilitated learning journey’ to help them identify their challenges and the potential solutions to these. A facilitation team (lead facilitator, 3-4 supporting facilitators, plus topical specialists) provided support, monitored progress, identified opportunities and responded to any emerging issues, and there were opportunities for participants to share stories and insights and learn from each other. An exploratory approach would be recommended for evaluating this type of program (Dart et al. 1998), as ‘success of the program relies on chains of human reasoning and action’ (Porter and O’Halloran 2011).

In order to gain a greater understanding of the FBR-FP program’s causal intent, the Theory of Change (Harris 2005) for the program was documented and depicted in a Logic Model (Fig 1). This may seem to conflict with the ‘realistic’ approach, as a logic model would assume an understanding of the interactions and dynamic nature of the complex adaptive system—or regard these as inconsequential. The model, however, was developed for the research project to depict the general intent of the FBR-FP program in terms of its impact on natural resource management. In doing so, it enable the research to focus on its aim.

As suggested by Blamey and Mackenzie (2007), Theories of Change can provide the high-level intent of the program and learnings about its implementation, while Realistic Evaluation can focus more on the micro level. In this sense, the framework was also applied to the components of the program logic to help in the identification of causal triggers, feedback loops and unexpected outcomes. For example, for the outcome ‘farmers implement their strategic plans’, the research project will endeavour to discover what ‘implementation’ is, the context and the complicated/complex aspects—if, how and why the FBR-FP program has the potential to cause beneficial change.

VISION: A resilient and sustainable agricultural sector

LONGER TERM OUTCOME: Better natural resource management

INTERMEDIATE OUTCOME: Greater preparedness for the impacts of a changing climate

INTERMEDIATE OUTCOME: Enhanced quality of life for farming families

INTERMEDIATE OUTCOME: Improved practices in farming businesses

INTERMEDIATE OUTCOME: Strategic plans for resilient farm businesses

INTERMEDIATE OUTCOME: Better decisions

INTERMEDIATE OUTCOME: Increased understanding of the farm business

OUTPUT ACTIVITIES: Facilitated learning journey for farmers

INTERMEDIATE OUTCOME: Positive farmer attitudes to risk mitigation

INTERMEDIATE OUTCOME: Peer support and encouragement

*OUTPUTS: Farmers know of and participate in the Farm Planning workshops*

*IMMEDIATE OUTCOME: Farmers have enhanced skills in business planning, with particular focus on managing and preparing for drought and a changing climate (i.e. resilience, knowledge, attitudes and aspirations)*

*INTERMEDIATE IMPACT: Farmers implement their strategic plans*

*INTERMEDIATE IMPACT: Increased farmer management of the natural resources*

*ULTIMATE OUTCOME: Improved/maintained natural resource condition*

Masters logic 🡩

FBR-FP logic 🡩

**Figure 1. Logic model for the Masters research project, (shaded grey) showing linkage to the logic model developed by the Farm Business Resilience team for the FBR-FP pilot program.**

*Note: Only part of the FBR-FP logic model is depicted above (the part that is relevant to natural resource outcomes).*

**Conclusion**

This paper highlights how a variety of influences can shape evaluation. As a Masters research project with limited time and resources, it was of particular importance to have well-defined aims and objectives to enable some control over potential influences. However, it was the complexity that had a major bearing on the design of the research. In this sense, context is of great importance in the quest to understand how (or if) the FBR-FP program will have beneficial change.

Disclaimer: the views presented in this paper are those of the authors and may not reflect the views of the Department of Agriculture and Food, Western Australia.

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