



Sustainable Farm Families Program



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Sustainable Farm Families Program

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The Hon. Robert Smith MLC
President
Legislative Council
Parliament House
Melbourne

The Hon. Jenny Lindell MP
Speaker
Legislative Assembly
Parliament House
Melbourne

Dear Presiding Officers

Under the provisions of section 16AB of the *Audit Act* 1994, I transmit my report on the *Sustainable Farm Families Program*.

Yours faithfully



D D R PEARSON
Auditor-General

1 September 2010

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Audit summary

Victorians in rural and remote areas generally have poorer health than those in major cities, with higher rates of mortality, disease and health risk factors. They have less access to primary health-care services and are less likely to adopt preventative health practices. They are also likely to wait longer before seeing a doctor.

Farming families as a group in rural communities have a culture of self-reliance, independence and stoicism in adversity. These attitudes may make them resilient in tough times and possibly less inclined to use health services.

The Department of Primary Industries (the department) has funded the Sustainable Farm Families (SFF) program since 2007 in an attempt to close the gap in the health differential and to support farmers during the protracted drought.

The program is a series of annual workshops over three years, where participants receive information and advice about health issues relevant to farming and rural populations. Attendees also get free annual health assessments and take part in focus groups and action planning. The program is based on the idea that information will lead to behaviour changes that improve health.

The audit examined whether the SFF program has been effective in improving the health and wellbeing of farming families. It reviewed:

- the program's rationale and planning
- its implementation
- evidence of its effectiveness.

Conclusions

Participants report that they have learned from the program and have changed their behaviour as a result. This is borne out by clinical indicators that show their health is improving. Together these indicate the SFF program is effective in improving participants' health. However, it is too early to know whether positive health outcomes will be sustained.

While the SFF program is effective, better targeting and tighter financial control is needed to be assured that the program is efficient.

Findings

The department had a sound basis for funding the SFF program as a drought assistance measure. The SFF program, developed by Western District Health Service, Hamilton (WDHS), had been piloted previously and had early positive results.

Agricultural industry groups partnering with the department and WDHS have successfully recruited farmers and their families into the program. Retention rates are above expectations, but participation rates are starting to fall.

The department did not prioritise locations most in need of the program. The onus was on local health agencies or industry groups to recognise the need and apply to run the program in their area.

A high proportion of participants were referred for additional medical attention after their health assessments. Program results indicate its effectiveness—participants are more knowledgeable about their health after attending and their clinical health indicators improve from the first to second year. At-risk males and females had the highest rates of improvement.

The department has a strong, positive relationship with the program developer WDHS. The department’s project management in non-budget matters is satisfactory but it should strengthen oversight of spending and financial reporting by WDHS.

Recommendations

Number	Recommendation	Page
1.	The Department of Primary Industries should research why participants drop out, to identify any issues with the Sustainable Farm Families program’s content or delivery.	16
2.	The Department of Primary Industries should develop alternative service providers to deliver the Sustainable Farm Families program so the scale of the program is not limited by the program developer’s capacity.	16
3.	The Department of Primary Industries should strengthen oversight of Western District Health Service’s expenditure and financial reporting.	16
4.	The Department of Primary Industries should regularly evaluate the Sustainable Farm Families program to assure that it continues to meet its intended outcomes and assess whether the positive health results are sustainable.	22

Submissions and comments received

In addition to progressive engagement during the course of the audit, in accordance with section 16(3) of the *Audit Act 1994* a copy of this report was provided to the Department of Primary Industries with a request for submissions or comments.

Agency views have been considered in reaching our audit conclusions and are represented to the extent relevant and warranted in this report. Their full Section 16(3) comments and submissions however are included in Appendix C.

1 Background

1.1 Introduction

People in rural and remote areas usually have higher levels of mortality, disease and health risk factors than those living in cities. They have less access to primary health-care services compared with those in major urban centres. They are also less likely to adopt preventive health practices and they will wait longer before seeking medical help.

In addition to these challenges, climate is affecting the prosperity and health of rural residents. Farming communities are under increasing pressure from drought and water scarcity. Labour shortages, an ageing workforce and overseas competition add to the stress. While opportunities from new technologies and farming practices are increasing, these too can add pressure to rural communities.

Together these issues are affecting the physical and mental health and wellbeing of farming families, which are experiencing higher rates of illness, including diabetes, cardiovascular disease and respiratory illness. Reports show that male farmers commit suicide at higher rates than non-farming rural males and the general population. In some areas, the suicide rate among farm workers is more than double that of the rest of the population.

There are 'farming attitudes' that also affect health, such as the culture of self-reliance, independence and stoicism in adversity. These may make farmers resilient in difficult times but may also make them less likely to use health services. In addition, farming was the most dangerous industry in 2009–10, recording nine of the 26 work-related deaths.

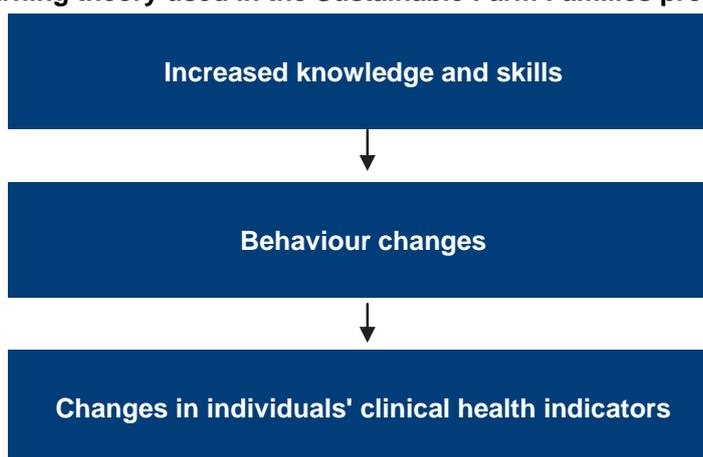
The Sustainable Farm Families (SFF) program aims to improve farming families' health, wellbeing and safety. It aligns with the state government's *Growing Victoria Together* goal of high quality, accessible health and community services.

1.2 The Sustainable Farm Families program

The SFF program, developed by Western District Health Service, Hamilton (WDHS), began as a research project in 2003. The aim was to assess the impact of health information and education on farming families, and the effect this could have on farming businesses.

WDHS provides primary health and aged care services to the western district, and developed the SFF program specifically for farming communities. The program was developed on the premise that effective adult education leads to changes in knowledge, attitudes and skills. When adopted and applied by participants, this leads to positive individual outcomes. Figure 1A shows the learning theory model.

Figure 1A
Learning theory used in the Sustainable Farm Families program



Source: Victorian Auditor-General's Office.

The program has run in seven states and territories and several Commonwealth and state government departments and non-government organisations have funded it. Appendix A summarises the program's history and lists the funding bodies.

The Department of Primary Industries (the department) funds the programs that this audit reviewed. Trained departmental staff facilitate the workshops with two health presenters from a local health agency and a WDHS staff member attending as a program leader. Participants are self-selecting, and are recruited by agricultural industry partners, such as farmers' federations and agricultural groups.

The SFF program runs over three years and comprises physical health assessments, education, focus groups and action planning. At each workshop, registered nurses conduct free annual health assessments covering key health indicators such as:

- cholesterol
- blood sugar
- obesity-related—body mass index, waist hip ratio, waist measurement, percentage of fat in body mass
- blood pressure
- pulse rate
- respiratory capacity.

Participants are referred to a health or medical professional if necessary. The annual workshops inform and advise participants about health issues relevant to farming and rural populations such as:

- cardiovascular disease
- cancer
- stress
- diabetes
- women's health
- men's health
- farm safety
- nutrition
- physical activity
- anxiety and depression
- respiratory health.

In addition, participants make action plans for their health, wellbeing and safety and identify personal goals and strategies to achieve them. Each year, they provide feedback on their progress.

The data collected throughout the program, including the health examinations, is collated for research. The research aims to build a picture of farmer health and to track changes over time.

1.3 Funding

The department is responsible for agriculture, fisheries, earth resources, energy and forestry, and is strongly linked to farming communities. It also has a stake in fostering farmer health and wellbeing, which directly affect farm productivity.

In light of this, in July 2007, the department allocated \$2.9 million for 1 000 farmers in 50 areas to attend the program for two years to 2009 as one of its drought assistance activities. This was in addition to the SFF programs run by the Department of Human Services from 2006, which continued to 2009. See Appendix A for details.

As part of the government's \$205 million *Future Farming Strategy 2008*, the department announced it would fund a further \$2.18 million over four years to:

- run the SFF program for an extra 500 farmers in areas undergoing significant change
- extend the original, drought-funded SFF program for a third year.

The total budget was \$5.08 million, making a cost per participant around \$3 400 if target numbers attended.

Figure 1B shows where the department has run the SFF program.

Figure 1B
Locations of the Department of Primary Industries-funded Sustainable Farm Families programs



Source: The Victorian Auditor-General's Office.

1.4 Roles and responsibilities

Within the SFF program, the department is responsible for:

- project management and reporting to government
- choosing locations in consultation with WDHS
- providing trained departmental SFF facilitators for all workshops
- making payments to WDHS
- managing and funding the program's external evaluation.

WDHS is responsible for:

- managing the sub-contracting of agricultural industry partners to recruit for workshops, and local health agencies to run workshops (refer Figure 1C)
- training health and departmental facilitators in SFF program delivery
- providing health staff, or supporting local health agency staff, to run workshops
- collating all data from workshops, analysing and reporting it
- reporting quarterly to the department and weekly on numbers at workshops
- invoicing the department for the agreed amounts
- reporting six monthly on expenditure and annually with audited accounts.

Figure 1C
Role of agricultural industry partners and local health agencies

Partner	Roles and responsibilities
Agricultural industry partner	<ul style="list-style-type: none"> • recruit participants • collect consents • arrange articles in the industry newsletter
Local health agency	<ul style="list-style-type: none"> • attend collaboration meetings • provide trained SFF facilitators (registered nurses) to run the program, and make health referrals as required • organise the venue and catering • provide program administration • check participant consents, complete health records and file them correctly • contribute to the industry newsletter

Source: Victorian Auditor-General's Office.

Through the collaboration agreement with WDHS, the local health agency and agricultural industry partner receive a combined maximum of \$19 600 per program for their roles in the three annual workshops.

1.5 Audit objectives and scope

The audit examined the effectiveness of the Sustainable Farm Families program funded by the Department of Primary Industries in improving the health and wellbeing of farming families.

To address this objective, the audit reviewed:

- the program's rationale and planning
- the program's implementation
- evidence of its effectiveness.

The audited agency is the Department of Primary Industries, which has funded the program for farmers since 2007. Western District Health Service, Hamilton is a major stakeholder in the audit.

1.5.1 Audit approach

The audit was conducted in accordance with the Australian Auditing and Assurance Standards.

The cost of the audit was \$180 000.

2 Rationale and implementation

At a glance

Background

The Sustainable Farm Families (SFF) program is a series of annual workshops, consisting of health assessments, health education, focus groups and action planning. The program aims to improve the health, wellbeing and safety of farming family participants. It has been funded by the department since July 2007.

Conclusions

The Department of Primary Industries' (the department) decision to fund the SFF program was appropriate; however, it could be better targeted to those most in need in locations undergoing significant change. The department's project management is sound apart from its oversight of program expenditure, which has not met the standards of accountability required for public funds.

Findings

The department had a clear rationale to provide funding for the SFF program in July 2007. It used the previously run SFF program to address the generally poor health apparent in rural farming communities and the impact of the ongoing drought. However, a clear needs model was not used to identify and prioritise the locations that would benefit most from the program.

The department has a strong and positive relationship with the program developer, Western District Health Service, Hamilton (WDHS). However, its dependence on WDHS's involvement in the program is a risk that has not been mitigated.

Collaboration between the department, health agencies and agricultural industry partners is positive, but the number of participants attending first year programs is less than planned. Retention rates for the program are high, but decline from the second to the third year.

The department has not obtained assurance that funds have been fully spent as intended. The evidence is that not all funds provided have been required and there is scope either for savings, or for extending services.

Recommendations

The Department of Primary Industries should:

- research why participants drop out, to identify any issues with the program's content or delivery
- develop alternative service providers to deliver the program so the scale of the program is not limited by the program developer's capacity
- strengthen oversight of WDHS's expenditure and financial reporting.

2.1 Introduction

The design of programs should be evidence-based and accompanied by clear understanding of program objectives and expected outcomes. Effective implementation of the program requires consideration of six key areas:

- planning for implementation
- risk management
- governance and contract management
- stakeholder management and communication
- resources
- monitoring, review and evaluation.

2.2 Conclusions

The Department of Primary Industries (the department) had a well-reasoned rationale for funding the Sustainable Farm Families (SFF) program to address the relatively poor health status of rural areas that had been compounded by drought-related hardship. Choice of this program was appropriate because it provided a model for engaging farming communities that had already been used with promising early results.

However, given the available funding could cover no more than 3 per cent of farming families, it is not clear that the program has been sufficiently well targeted. More rigour in determining workshop locations should have been applied. A clearer 'needs' model would have provided greater assurance that it was directed to areas in most need.

Apart from targeting of participants, implementation was well planned and drew on strong collaboration between government and non-government sectors. However, the successful implementation of the program is heavily dependent on the program developer, Western District Health Service, Hamilton (WDHS). This represents both a constraint on the scale of the program, and a risk for the department if the service had been unable to meet its obligations.

The department's project management in non-budget matters is sufficient but requires improvement in financial oversight. The high proportion of expenditure on administration relative to service delivery indicates that economies of scale reasonably expected in administration of a program of this size have not been achieved.

2.3 Program rationale

2.3.1 Program need

Identifying program need is a critical step in establishing a new program or, as in the case for the SFF program, for a department to extend a funding commitment.

WDHS and the department recognised that health statistics illustrate the disparity in health status between rural and metropolitan communities. The impacts of drought and other adverse conditions meant that health and wellbeing of farmers was even further affected, with farming populations having above average rates of morbidity and mortality through heart disease, cancer and suicide.

2.3.2 Sustainable Farm Families as a response to need

The department chose to respond to health and wellbeing issues in farming communities by funding a program that had already been developed and piloted. The SFF program had been developed in 2003 by WDHS as a health education program that addressed safety as well as health and wellbeing of participating members of the farming community. The department assumed funding responsibility on the premise that good health, wellbeing and safety practices underpin farming productivity and that improved health and resilience would make farmers better able to manage change.

The department's decision to fund the program was informed by evidence from earlier SFF programs. The program had previously been trialed with over one hundred farm families over three years. The early results were promising and indicated mostly significant improvements for participants in clinical health indicators between the first year and the second year. The rate of improvement was not so clear from the second to the third year, but the trend was still positive.

It was reasonable for the department to expect the SFF program would foster engagement of the target group as the program was based on local delivery, using local health providers and existing agricultural networks.

In the absence of other models for effective public health and safety interventions in rural communities, the SFF program can reasonably be expected to encourage participation from a population that has traditionally been unwilling to access health promotion services.

2.4 Program implementation

2.4.1 Planning for implementation

To enable a program to achieve its stated objectives, funding bodies need to develop clear implementation plans. Factors such as timing, number of participants and locations should be clearly articulated so that the department can assess whether it is doing what it planned to do to address the identified need.

The department's initial plan included only:

- **timing**—all programs to be completed by 30 June 2012
- **number of participants**—1 000 in first funding allocation and 500 in second.

For the second funding allocation, the department established targets for the retention rate for participants—70 per cent from the first to second year, and 70 per cent from the second to third year. That is, 49 per cent retention from the first to the third year.

There is a discrepancy between the department's goal for participant retention rates and the required return rate of 85 per cent detailed in WDHS's agreement with the agricultural industry group. The industry groups must provide a minimum of 85 per cent return rate of participants to receive their full funding amount of \$2 850 over three years. This exceeds the expectation set by the department. WDHS has provided all industry groups the full amount of funding, regardless of return rate.

Locations for the programs were not fixed by the department when funding was announced, but depended on the local health agency or agricultural industry group recognising the local need and applying to WDHS to host the program.

At the time of the first funding allocation in 2007, all of Victoria had been declared by the Commonwealth Government as experiencing 'exceptional circumstances' defined as rare and severe events outside those a farmer could normally be expected to manage using responsible farm management strategies. As such, the department and WDHS assigned equal need ratings to all locations.

The second funding allocation in 2008 was intended for farmers in areas undergoing 'significant change', however, there is no evidence that locations for this second wave of funding were targeted to areas of particular hardship, as areas undergoing significant change were not ranked.

The department took the view that all areas still declared as experiencing exceptional circumstances were considered to be undergoing 'significant change'. However, with limited program delivery capacity and only 3 per cent of the target population able to participate in the SFF program, prioritising according to need was necessary for allocative efficiency. A needs model should therefore have been employed as a basis for final funding decisions.

Performance against implementation plan

Under the combined funding arrangements, the department planned to deliver the program to 1 500 farmers and their families aged 18–75 who are currently farming.

ABS figures indicate there were slightly more than 25 000 farming families in Victoria in 2006. This means there are at least 50 000 Victorians in the SFF program's target group of farmers and their families aged 18–75 who are currently farming. The department's target of providing the program to 1 500 participants can be estimated at no more than 3 per cent of the target group.

The anticipated and actual number of workshops and participants for each year are shown in Figure 2A.

Figure 2A
Planned and actual number of workshops and participants

Year		Planned	Actual	Per cent achieved
2007–08	Workshops	50	50	100
	Participants	1 000	964	96
2008–09	Workshops	55	54	98
	Participants	1 100	803	73
2009–10	Workshops	75	60	80
	Participants	1 500	883	59

Note: Eight programs originally scheduled to occur in 2009–10 have been held since 1 July 2010.
Source: Victorian Auditor-General's Office.

The department's implementation was aligned with its plan and it is meeting its targets for participant retention rates. However, a number of workshops scheduled to occur in 2009–10 had been postponed to occur in the following year. In addition, three programs from the first funding allocation were cancelled, and three merged with other sessions due to low participant numbers. A summary of program participation for each workshop is detailed in Appendix B.

Managing changes to plans

The department's timing plan was flexible to a degree. For example, one workshop was delayed due to farmers receiving rain resulting in an urgent need to sow crops. Subsequently the workshop was held approximately six months after initially planned.

2.4.2 Risk management

Effective management requires program risks and challenges to be identified and assessed and mitigation plans developed.

The department adequately identified the risks that would impact its ability to deliver the SFF program and achieve its project objectives. The identified risks related to budget, time lines, recruiting participants and maintaining relationships. Each risk had adequate controls in place to reduce its likelihood or to minimise its impacts. Risks were reviewed six-monthly for the department's external reporting. New risks have not been added since the initial plan was developed.

A significant risk in the program is the dependence on WDHS, the developer of the model. The size of the project, in terms of the number of workshops funded, was based on WDHS's capacity to be involved in program delivery rather than need or budget decisions. Given WDHS's responsibility for managing local health agencies and agricultural industry groups, it is unclear whether the program would continue uninterrupted if WDHS was unable to continue its role. There is no evidence that the department planned for how it would manage this risk.

Under the department's funding in 2007–08, an additional 67 Victorian health and departmental professionals were trained to deliver the SFF program in 2007 and 2008. However, the issue of dependence on WDHS remains. The department needs to consider strategies to enable other local health services to assume greater responsibility for running the SFF program, if this risk is to be managed.

2.4.3 Governance and contract management

Good governance requires strong executive support within the funding body, appropriate committee structures to lead, monitor and revise strategies if required, and processes for conflict of interest issues to be identified and dealt with.

The SFF advisory committee, consisting of members from industry groups, government, health agencies and farmer representatives, met regularly to monitor progress against overall project goals and to guide strategic planning. In addition, there was executive support within the department, with progress reports provided regularly. Implementation of the 'Sustainable Staff program', largely based on the SFF program, provides evidence of championing of the program by the department at executive level.

Effective contract management requires active management on three levels—administering the contract terms, assuring that the service is being delivered as agreed and maintaining the relationship between the contracted parties.

For the SFF program, respective roles and responsibilities of all parties were formalised in memorandums of understanding (MOU) and collaborative agreements. There is evidence of positive collaboration between the department, WDHS, local health agency staff and agricultural industry groups.

WDHS has adequately met its obligations for non-financial matters detailed in the MOU, but has not met its roles and responsibilities in terms of providing:

- Six-monthly financial reports on WDHS expenditure
- annual audited financial acquittals.

As a consequence, the department has not received assurance that funds have appropriately been acquitted according to the budget.

In the course of the audit, VAGO requested the required six-monthly financial reports from WDHS. These indicated:

- Only 69 per cent of allocated funds were spent by WDHS under the funding allocation for the first series of programs (2007–08 to 2008–09). WDHS advised that the remaining funds of \$734 820 are to be spent in 2009–10 and 2010–11.
- Expenditure to 31 May 2010 under the second funding allocation (Future Farming Strategy funding) is \$295 520, which is 37 per cent of total funding provided by the department during this time. WDHS currently has \$512 078 in unspent funds.

The level of underspend indicates that the project is overfunded and does not cost \$3 400 per participant over three years, as originally budgeted.

Under the latest agreement, WDHS has an obligation to refund any funds not expended. The department will need to increase its oversight of financial reports to identify reasons for the underspend and to be in a position to recover any unspent funds at the conclusion of the funding period or extend the number of programs to be delivered.

Figure 2B
Western District Health Service expenditure

	First funding allocation		Second funding allocation	
	\$	%	\$	%
Total funding (WDHS and the department)	2 900 000		2 180 000	
Total funding provided to WDHS by 31 May 2010	n/a	n/a	807 600	37
WDHS expenditure	1 603 123	69	295 520	37
Unspent funds	734 820	31	512 078	63

Note: n/a indicates not applicable.

Source: Victorian Auditor-General's Office, based on information from Western District Health Service.

2.4.4 Stakeholder management and communication

Good stakeholder management is characterised by clear identification of all stakeholders, management of stakeholder interactions and appropriate use of their views. Effective communication depends on a comprehensive communication strategy which is translated into action for day to day operation. Stakeholder management and communication are closely linked aspects of good implementation practice.

There was evidence of good collaboration between the funding agency, the program developer, agricultural industry groups and local health agencies. Communication and reporting between the department and WDHS was frequent and relevant.

The program's advisory committee played a significant role in stakeholder engagement and communication. Its members provided representation from relevant parties—industry groups, government, health agencies and farmer representatives. The advisory committee considered the views of, and communicated back to, the various representative groups.

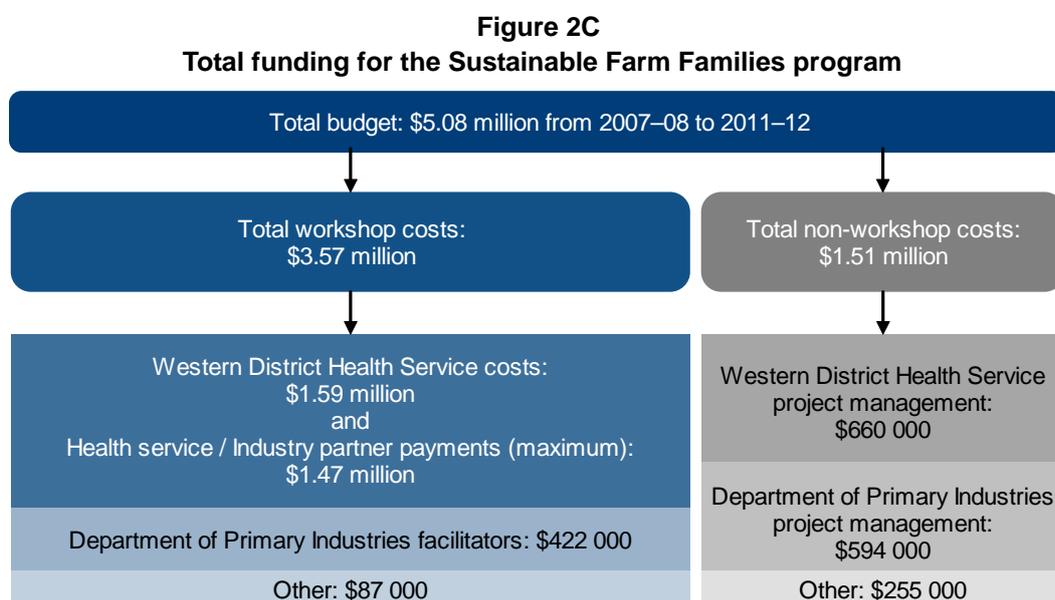
The department's communication strategy generally targeted farming families, focusing on promoting new programs and continuous endorsement of the program through publicising the positive outcomes achieved.

Overall, stakeholder management and communication was sound and is a strength in implementation of the SFF program.

2.4.5 Resources

The level of funding for the program was determined by the capacity of WDHS to assist in delivering the program, rather than identified need across all farming communities or budget constraints. As indicated by the unexpended funds (see section 2.4.3), funding has not been a constraint on program delivery.

A summary of the funding arrangements is detailed in Figure 2C. From a total of \$5.08 million, 70 per cent of funding is used for program delivery and 30 per cent is used in administration and project management.



Source: Victorian Auditor-General's Office.

It is acknowledged that the administration to service delivery ratio will be higher in small budget programs, as economies of scale in administration will be harder to realise. However, given that the SFF program was well established and that existing stakeholder networks were used, it is reasonable to expect that administrative costs would be less than 30 per cent. The department should investigate opportunities for reducing the imbalance.

2.4.6 Monitoring, review and evaluation

Monitoring and review

Programs should be carefully monitored to make sure they are on track to achieve outputs and objectives, and to allow senior decision makers to take corrective action if required.

The department adequately monitored how well progress was being achieved against target workshop and participant numbers through weekly updates from WDHS. In addition, the department's internal monthly reporting provided evidence of taking corrective action as issues were identified. An example of this is proactively recruiting additional departmental staff to be trained as facilitators.

Figure 2D Monitoring retention rates

The retention rate for the first series of programs funded by the department (2007–08 to 2009–10) was 73 per cent from the first to the second year and 57 per cent from the first to the third year, meeting the target set by the department. However, reasons for non attendance were not formally collected, so the department was unable to determine if there were underlying issues with the program.

The retention rate for the second series of programs was slightly higher, with a retention rate at 30 June 2010 of 79 per cent from the first to second year. However, the average number of participants attending the first year is decreasing, from 21 in 2008–09 to 18 in 2009–10, see Appendix B.

Lower participation but higher retention indicates that the program is getting better at attracting those who will stay with the program.

Source: Victorian Auditor-General's Office.

Referrals to health services were collected and monitored to determine the initial health status of participants. However, WDHS does not have comprehensive data on how many of these participants took up the referrals. WDHS and local health agencies could have strengthened their data set by collecting information on how many participants took up the referrals. WDHS commenced collecting this information in the second series of programs through participant self reporting. It is important that referral data continue to be collected as it provides valuable evidence on the program's effectiveness.

Evaluation

The department had access to quantitative data collected, collated and analysed by WDHS. It supplemented this with qualitative data from an independent evaluation commissioned to assess the first series of SFF programs. The independent evaluation collected data from:

- telephone interviews with 111 farmers (including 25 interviewees who had not attended the second year workshop), 18 health professionals and seven department facilitators
- four focus groups with farmers
- five farm case studies in different industries.

The evaluation approach of using health data collected on site and using an independent evaluator to collect and assess qualitative data was sound. To avoid any potential conflicts of interest, independent evaluation is required separate from the program developer's role. However, there were some serious shortcomings, particularly due to the timing of the independent evaluation of the first series of SFF programs:

- Clinical health data was not available for the second year of workshops. Therefore, a comparison was not undertaken between farmer reports of change and actual change shown by data collected by health professionals. The department budgeted \$10 000 in 2009–10 to extend the independent evaluation for the first series of SFF programs to examine this.
- The evaluations did not compare outcomes and views between those farmers who attended both workshops and those who attended the first year only.
- The short follow up period restricts the conclusions that can be made about how long the effects of the SFF program persist. This is particularly important given the difficulty in sustaining outcomes from health promotion interventions.

The department is taking positive steps to improve its independent evaluation. Additional external funding has been provided by Rural Industries Research Development Corporation to the program developer, WDHS, to conduct a review of the original SFF program five years after the program started. This will provide valuable information regarding the sustainability of the impacts of the program.

Recommendations

1. The Department of Primary Industries should research why participants drop out, to identify any issues with the Sustainable Farm Families program's content or delivery.
 2. The Department of Primary Industries should develop alternative service providers to deliver the Sustainable Farm Families program so the scale of the program is not limited by the program developer's capacity.
 3. The Department of Primary Industries should strengthen oversight of Western District Health Service's expenditure and financial reporting.
-

3 Effectiveness

At a glance

Background

The Sustainable Farm Families (SFF) program aims to improve the health, wellbeing and safety of farming family participants. Outcomes of the program have been evaluated to determine its effectiveness in achieving these outcomes. Although there are some evaluation design issues, there is enough evidence to draw conclusions on its effectiveness.

Conclusion

The SFF program is delivered to a population with overall relatively poor health and has been effective in improving health status, most significantly for those most at risk. Available evidence validates the short-term effectiveness of the behavioural change model on which the program was based. Longer-term impacts are less clear.

Findings

Programs funded by the department indicate participants have increased health knowledge after attending the program, and show improvements in their clinical health indicators after 12 months. At-risk males and females had a greater number of significant improvements than the total groups.

Rates of referral for additional health attention are high, indicating the SFF program is effective in targeting those in need of health education and acting as a pathway to health services.

Participants have generally committed to making ongoing improvements to their health, wellbeing and safety.

Pilot programs have shown that clinical health improvements stabilise or reduce after the initial 12 months and further research is required to assess the long-term effects of the program.

Recommendation

The Department of Primary Industries should regularly evaluate the program to assure that it continues to meet its intended outcomes and assess whether the positive health results are sustainable.

3.1 Introduction

Evaluating the effectiveness of a program is important to determine whether the program has met its objectives. This chapter assesses effectiveness of the Sustainable Farm Families (SFF) program in improving health and wellbeing of the farmer participants, in the context of the behaviour change theory on which the program is based. It considers available data on:

- improvements in knowledge and skills
- commitment to change and evidence of changes in participants' behaviours
- positive health outcomes for individuals.

Results from two evaluations are referred to in this chapter:

- The May 2010 report by Western District Health Service, Hamilton (WDHS), describing quantitative results for SFF programs funded by the Department of Primary Industries (the department) and Department of Human Services since 2007.
- The external evaluation funded by the department, which examined SFF programs from the department's first funding allocation (2007–08 to 2008–09). This qualitative evaluation also considered baseline data for participants that had been collated and analysed by WDHS and their research partners.

3.2 Conclusions

While participants are self-selecting, their rates of referral for additional medical attention are high, indicating the SFF program is effective in attracting those in need of health education. The program has received positive feedback from participants, and there is congruence between participants' plans to improve their health, predominately around stress management, weight, fitness, nutrition and farm safety, their self-assessments of positive changes, and the significant improvements in key health indicators, particularly for individuals assessed as being 'at risk'. It is reasonable to conclude that the program is achieving its goal of improving health outcomes for farming families through increased health knowledge leading to changed behaviours.

However, the short follow up period restricts the conclusions that can be made about the long-term effectiveness of the SFF program. Previously run programs have shown that the magnitude of clinical health improvements stabilise or reduce after the initial 12 months. Participants have generally committed to making ongoing improvements to their health, wellbeing and safety, however, further research is required to assess the long-term effects of the program.

3.3 Participants

Participants self-select for the program after recruitment through agricultural industry groups. While self-selecting individuals may not be those at highest health risk, this method provides a population wide approach typically used in health promotion programs to improve health knowledge and provide positive outcomes for the population as a whole.

Data for the farmers who attended the first series of workshops funded by the department indicates that their physical health at the beginning of their involvement in the SFF program was poor. This is evidenced by 70 per cent receiving referrals for further medical attention. Referrals were mostly for the serious conditions of diabetes (24 per cent) and cardiovascular disease (17 per cent).

As the referral rate shows that over two thirds of participants were in need of a health intervention, this indicates the majority of the participant group were those that the SFF program was designed for. This is a strong result given the recruitment was not targeted.

3.4 Changes in knowledge and skills

Changes in health knowledge were assessed through pre- and post-workshop knowledge questionnaires completed by participants in the first series of workshops. Results from the questionnaires showed:

- men's health knowledge increased significantly by the end of the first year workshop in all areas, except knowledge of the leading cause of death for Australian men
- women's health knowledge increased significantly by the end of the first year workshop in all areas.

Qualitative results from the independent evaluation are based on a sample of self-reports from participants from the first series of the programs funded by the department. The self-reports were largely positive and show:

- 99 per cent of farmers interviewed agreed that SFF program had increased their knowledge of relevant health issues. This was reinforced by health and departmental facilitators and is consistent with the questionnaire results.
- 93 per cent felt that the SFF program had provided them with skills to help make changes in their lifestyles, enabling them to implement healthy behaviours.
- 93 per cent reported that they had increased confidence in their ability to manage their own health and wellbeing.
- 70 per cent felt that SFF had helped connect them to relevant health services.

Together these results demonstrate that the SFF program's goal to increase participants' knowledge and skills, the precursors to behaviour change, was met.

3.5 Changes in behaviours

In addition to reporting increased knowledge and skills, participants indicated a commitment to improve their health, wellbeing and safety after attending the first workshop. To reinforce education from the workshops, participants were encouraged to document their plans to improve their health, wellbeing and safety. Data collated by WDHS indicated that 87 per cent of participants completed action plans following their attendance at the first year workshops, refer Figure 3A.

Figure 3A
Participants' plans to improve health, wellbeing and safety

Area of action	Per cent
Stress management	19
Weight management	15
Farm safety	13
Fitness	13
Diet/nutrition	11
Health follow up	10
Farm management	2
Drugs/alcohol	2
Other	2
No action plan	13
Total	100

Note: Data reflects the first year action plans for 1 118 participants in the Sustainable Farm Families programs funded by the Departments of Human Services and Primary Industries. Multiple actions were noted by some participants, and the percentages reflect a total of 2 406 actions documented.

Source: Victorian Auditor-General's Office.

The independent evaluation examined the program's impact on health and lifestyle behaviours. It noted that participants reported making changes as a result of attending the program, most commonly:

- increased cardiovascular exercise (54 per cent of interviewees)
- dietary (53 per cent of interviewees)
- creating work life balance (19 per cent of interviewees)
- getting regular health checks (14 per cent of interviewees).

This sample of participants' self-reported changes aligns with the most common areas of the action plans, and exceeds the actions all participants set after attending the first workshop, as detailed in Figure 3A. In addition, 38 per cent of the sample indicated they had progressed well with their changes, and a further 31 per cent felt that they had made some progress towards their goals.

Three quarters of participants interviewed agreed that the SFF program had helped them to change or address farm safety issues. A total of 51 per cent reported that they had made changes to their safety practices as a result of the workshops. This is a positive result, and self-reports exceed the changes all participants planned to make.

3.6 Changes in health outcomes for individuals

Clinical health data from the SFF programs funded by the Departments of Human Services and Primary Industries from 2007 to May 2010 is provided in Figure 3B and indicates the following changes from the first to the second year of the program:

- **all males**—significant improvements in body mass index and diastolic blood pressure. The other four parameters showed no significant difference
- **all females**—no significant differences
- **at-risk males**—significant improvements in all six parameters measured
- **at-risk females**—significant improvements in four of the six parameters. There was no significant difference in body mass index and diastolic blood pressure.

Figure 3B
Changes in health outcomes from first to second year

Male	All (408)	At risk (number)	At risk
Body mass index (kg/m ²)	✓ *	300	✓ *
Waist circumference (cm)	✓	123	✓ *
Fasting blood cholesterol (mmol/L)	✓	92	✓ *
Fasting blood glucose (mmol/L)	✗	132	✓ *
Blood pressure—systolic (mmHg)	✗	237	✓ *
Blood pressure—diastolic (mmHg)	✓ *	237	✓ *
Female	All (321)	At risk (number)	At risk
Body mass index (kg/m ²)	✓	199	✓
Waist circumference (cm)	✓	150	✓ *
Fasting blood cholesterol (mmol/L)	✓	79	✓ *
Fasting blood glucose (mmol/L)	✗	90	✓ *
Blood pressure—systolic (mmHg)	✗	237	✓ *
Blood pressure—diastolic (mmHg)	✓	237	✓

Note: ✓ indicates positive change, ✗ indicates negative change, * indicates change is significant.
Source: Victorian Auditor-General's Office.

Improvements in the health indicators are consistent with increases in farmers' health knowledge gained by participating in the program and their stated outcomes regarding adoption of learning.

Recommendation

4. The Department of Primary Industries should regularly evaluate the Sustainable Farm Families program to assure that it continues to meet its intended outcomes and assess whether the positive health results are sustainable.
-

Appendix A.

Summary of all programs

The Sustainable Farm Families program has run in seven states and territories and several Commonwealth and state government departments and non-government organisations have funded it. Figure A1 summarises the program's history and lists the funding bodies.

Figure A1
Summary of the Sustainable Farm Families program's history

Program name	Program start date	Program end date	Number of programs	Number of participants	Funding agency
Broadacre	2004	2006	6	128	Commonwealth Rural Industries Research and Development Corporation (RIRDC)— Joint Venture for Farm Health and Safety
Dairy	2005	2007	11	210	Geoffrey Gardiner Dairy Foundation, WestVic Dairy, Victorian Department of Primary Industries, United Dairyfarmers of Victoria (in kind)
Cotton and sugar	2006	2007	4	63	RIRDC—Joint Venture for Farm Health and Safety
Rural and remote	2006	2008	9	138	Commonwealth Department of Health and Ageing
Train the Trainer Program	2006	2009	9	143	Victorian Department of Human Services and others
Department of Human Services	2007	2009	7	154	Victorian Department of Human Services
Department of Primary Industries—Sustainable Farm Families	2007	2010	50	964	Victorian Department of Primary Industries
Department of Primary Industries—Health and Wellbeing of Farming Families in a Climate of Change	2008	2012	25	397	Victorian Department of Primary Industries
Tasmania	2008	2010	1	16	Tasmanian Department of Human Services, and others
Hamilton	2008	2010	1	16	Western District Health Service
Western Australia	2008	2010	1	16	Combined Universities Centre for Rural Health, Geraldton
Queensland—Department of Justice	2010	2011	4	60	Queensland Department of Justice and Attorney-General, Workplace Health and Safety
Bushfire recovery	2010	2011	1	13	North East Valley Division of General Practice—Commonwealth funding and philanthropic
Total			129	2 318	

Source: Victorian Auditor-General's Office.

Appendix B.

Summary of program participation

Figure B1
Summary of participation in
Department of Primary Industries-funded programs

	2007–08	2008–09	2009–10
First series of programs, 2007–08 to 2009–10			
Number of workshops	50	49	38
Number of participants	964	700	491
Average number of participants	19.3	14.3	12.9
Retention rate from first year (per cent)	n/a	73%	57%
Second series of programs, commencing 2008–09			
Number of workshops	n/a	5	4
Number of participants	n/a	103	68
Average number of participants	n/a	20.6	17
Retention rate from first year (per cent)	n/a	n/a	79%
Second series of programs, commencing 2009–10			
Number of workshops	n/a	n/a	18
Number of participants	n/a	n/a	324
Average number of participants	n/a	n/a	18
Retention rate from first year	n/a	n/a	n/a

Note: n/a indicates not applicable.

Note: Retention rates in 2009–10 are based on the number of programs held by 30 June 2010.

Note: Eight programs originally scheduled to occur in 2009–10 have been held since 1 July 2010.

Source: Victorian Auditor-General's Office.

Appendix C.

Audit Act 1994 section 16— submissions and comments

Introduction

In accordance with section 16(3) of the *Audit Act 1994* a copy of this report was provided to the Department of Primary Industries with a request for comments or submissions.

The comments and submissions provided are not subject to audit nor the evidentiary standards required to reach an audit conclusion. Responsibility for the accuracy, fairness and balance of those comments rests solely with the agency head.

Submissions and comments received

RESPONSE provided by the Secretary, Department of Primary Industries



Department of Primary Industries

Our Ref: SI006319

Mr D.D.R Pearson
Auditor-General
Victorian Auditor-General's Office
Level 24, 35 Collins Street
MELBOURNE VIC 3000

1 Spring Street
GPO Box 4440 Melbourne
Victoria 3001 Australia
Telephone: (03) 9658 4000
Facsimile: (03) 9658 4400
ABN 42 579 412 233
DX 210404

Dear Mr Pearson,

Our Ref:

AUDIT ACT 1994, S16(3) - PROPOSED AUDIT REPORT SUSTAINABLE FARM FAMILIES PROGRAM

Thank you for your letter of 10 August regarding the audit of the Sustainable Farm Families Program. The Department of Primary Industries (DPI) is generally comfortable with the findings overall, which support our view that this is an effective and valuable program.

I would like to respond to the four recommendations outlined in the proposed audit report.

Recommendation 1

The Department of Primary Industries should research why participants drop out. to identify any issues with the program's content or delivery.

Sustainable Farm Families has an extensive evaluation process including a detailed questionnaire that every participant completes at the end of each workshop. This questionnaire includes questions about workshop format, venue, content, language used, pace, the balance between information, activity and questions and suggestions for improvement. The externally conducted Impact Evaluation conducted by Roberts Evaluation Pty Ltd also researched what participants liked about the workshops and improvements they could suggest to the ways the workshops are run. These findings are continually used to improve and update the workshops.

DPI and Western District Health Service (WDHS) have been informally recording the reasons why participants do not return to subsequent workshops. The list of reasons recorded include clashes with important dates (funerals, annual holidays, essential farm activities), farmers had ceased farming or moved away from the area, farmers had been forced to take on off-farm work, issues during the February 2009 fire season and health problems.

DPI is currently conducting an extension to the external evaluation work by Roberts Evaluation Pty Ltd to ascertain through phone interviews the benefits to participants of the final, third year workshop. This research will also involve phone interviews with participants who did not return to the final workshop, which will formally address Recommendation 1.

Recommendation 2

The Department of Primary Industries should develop alternative service providers to deliver the program so that scale of the program is not limited by the program developer's capacity

SFF was initially piloted with small groups of farmers and then, based on the success of these initial workshops, extended by DPI to reach 1,500 more farmers across Victoria. The audit report mentions that this only allows 3 per cent of the target population to participate in the SFF program.

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**RESPONSE provided by the Secretary, Department of Primary Industries –
continued**

Currently, all of the intellectual property and copyright for SFF sits with WDHS. Health professionals from across Victoria are used to assist with co-delivery of the program.

If the intent is for SFF to have greater market penetration with the Victorian farming community and is to use a range of service providers to deliver the program, this would require significant resourcing. This may be part of a larger health initiative which would allow for economies of scale and that an initiative such as this may not necessarily be delivered by DPI.

Recommendation 3

The Department of Primary Industries should strengthen oversight of Western District Health Service's expenditure and financial reporting.

The department accepts that the six-monthly financial reports on WDHS expenditure have not always been obtained and this issue will be rectified. However it is important to emphasise that, as VAGO states in the audit report, 'under the latest agreement, WDHS has an obligation to refund any funds not expended.'

Recommendation 4

The Department of Primary Industries should regularly evaluate the project to assure that it continues to meet its intended outcomes and assess whether the positive health results are sustainable.

DPI has conducted two thorough external evaluations through Robert Evaluation Pty Ltd focussing on both the process and the impact of the SFF program. As stated, DPI is currently conducting an extension to this evaluation focussing on the role of the Year 3 workshop, whether participants have been able to achieve the intended outcomes of the project and whether they see themselves maintaining the health changes they have made into the future.

This evaluation work is in conjunction with the evaluation work of WDHS, including the recently funded Rural Industries Research Development Corporation project to review the long-term impact of some of the original SFF programs, five years after they started.

Ongoing contact with past participants through SFF newsletters and an e-health newsletter (emailed) assists the project to keep reinforcing the messages from the workshop long after the workshops have finished.

Yours sincerely,



Richard Bolt
Secretary

25/8/2010

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Local Government: Interim Results of the 2009–10 Audits (2010–11:3)	August 2010
Water Entities: Interim Results of the 2009–10 Audits (2010–11:4)	August 2010
Public Hospitals: Interim Results of the 2009–10 Audits (2010–11:5)	September 2010
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