

## Farmers of the future: responsive, adaptable and profitable

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### Introduction

As the farming landscape changes, farmers are now more than ever required to be in control of their farming businesses. The successful extension program, Feeding Pastures for Profit (FPFP), supports dairy farmers through providing the principles, skills and tools to make profitable feed management decisions on a daily basis. Aside from increasing the profitability of participants in the program, other less tangible benefits have also been noted. For example, farmer confidence has increased in their on-farm feeding decisions and many acknowledge they feel they have a greater degree of control over their grazing decisions.

Four key elements of the FPFP program have been identified which have led to its popularity and high levels of farmer uptake. These are: 1) the application of a 'coach approach' to build the confidence of farmers to implement the principles, 2) the use of a programmed learning approach to provide underpinning knowledge, 3) the use of practical, on-farm demonstrations to reinforce this underpinning knowledge, and 4) the role of staff mentoring to build the capacity and confidence of staff to deliver the program.

The purpose of this paper is to explore these four key elements. In addition a background and evolution on the FPFP program will be presented with examples of individual case studies detailing tangible on-farm benefits. It will conclude with brief discussion on the future direction of the FPFP program.

### Background to Feeding Pasture For Profit (FPFP)

FPFP has been developed by Phil Shannon from the Department of Primary Industries Victoria, Cobram. FPFP is a simple system that focuses on growing and harvesting the maximum amount of high quality pasture while integrating a better understanding of how to use supplements profitably. The program focuses on developing farmers' ability to successfully implement the tools and skills required to optimise their current resources.

Much of the program's success has been its ability to lift the level of farmer confidence in decisions they make on farm and the degree of control they now have when making feeding decisions. The level of confidence of the farmer is generally lifted by their ability to see the positive changes on farm, such as improvement in grazing residual, better quality pasture available for their herd and a more efficient use of supplements, such as grain.

Formal evaluation of the FPFP program undertaken by Goodrick and Drysdale (2006) showed 95 per cent of the farmers interviewed agreed or strongly agreed that the program had changed their thinking about pasture and grazing management. Eighty per cent of those surveyed also indicated that the program had changed their on-farm practices. The changes implemented ranged depending on the level of farmer confidence, control and resources available.

### The evolution of FPFP in southwest Victoria

FPFP evolved from the Target 10 Grazing Management Program, initially with the development of a new approach to managing pasture rotations, followed by incorporation of a process to help farmers optimise supplement use to complement grazed pastures to achieve profitable feeding. This led to a new extension product to integrate grazing management with the use of supplementary feed and with a focus on profit (Goodrick and Drysdale, 2006).

As FPFP has developed, there has been an opportunity to trial a number of different ways to deliver the information to the farmer participants.

In 2002 a pilot program, which at that time was called Rotation Right, was run in the southwest. This pilot program had a focus on programmed learning, which featured two days concentrating on the principles of grazing management and what to account for when developing grazing rotations. At the end of the two day session, the farmers were given a computer program called Rotation Right that they could use to assist them with their grazing management. The pilot program did not have on-farm day sessions or 1-to-1 farm visits to assist farmers in the implementation of the tools and principles.

The Rotation Right pilot program was considered to be unsuccessful for a number of reasons. It was evident early on that there was scepticism from the participants that the tools and strategies that had been demonstrated in the program would lack applicability in the region.

There was also a belief from the participants that they had grazing management 'under control' and that this new program had nothing to offer them. Not one participant from this pilot program used the principles or tools that had been shown in these sessions.

Failure of this pilot program can be traced back to the lack of on-farm days and 1-to-1 farm visits that help reinforce the principles. These days also assist in identifying any problems that the participant's may be having as they are attempting to implement the principles. These days also present an opportunity for farmers to ask questions of the deliverer, that they may have been reluctant to ask in front of their peers. The failure of this program showed that it was critical to have local information about how to implement the FFPF principles. It was clear that in the continued development of the program, that on-farm days and 1-to-1 farm visits needed to be included to ensure the greater uptake of FFPF principles.

In 2005, a new project called Walking Through The Seasons (WTTS) was developed to address the difficult seasonal conditions that Victorian dairy farmers were facing and was a direct response to a survey of farmers asking them what they felt would help them manage these conditions. The overwhelming response from the survey was that farmers felt that feeding and grazing management decisions had the biggest impact on managing their businesses. The concept of WTTS was to focus on one farm looking at grazing management and feeding decisions made over a duration of 12 months. This program had five on-farm days spread over the year that focused on grazing management and feeding decisions tailored to each season. There was the option for limited 1-to-1 visits for participants but this was not widely encouraged. The core component of the WTTS program was to focus on the FFPF principles; however this was delivered without a programmed learning component.

From the participant evaluation of the project it was very clear that the relative success or failure of the groups depended on how well the application of the FFPF principles occurred on the respective host farms. On the host farm where the FFPF principles had been well implemented, there was a real momentum generated by the participants to apply the principles they had witnessed in practice on their own farms.

In the following year, a FFPF program was run to capitalise on the success of the WTTS group in the same region. A majority of participants in this program had been involved in the successful WTTS group and were very keen to have access to the same tools that the host farmer had been using. Most of these farmers had a good understanding the principles and had tried to implement components of the FFPF program on their farms but were aware they needed a few of the 'missing' links to fully incorporate the system.

This program started with two days of programmed learning, where all participants had the opportunity to develop an understanding of the common language of the FFPF program. Arguably some of the participants from the previous WTTS group may not have required this revision, however the feedback from all participants was that they felt it was important for everyone to have a common understanding. This proved to be beneficial with the implementation of the tools and principles as the participants were able to actively discuss ideas and strategies with each other. The group then had five on-farm days with the same focus as the WTTS days. This program also offered and actively encouraged 1-to-1 farm visits, where the program deliverer and the farmer had the opportunity to look at how to implement the principles and tools on each farm. This approach works well for farmers who have a good understanding of their farm system and have confidence in their abilities. However for the new farmer or a farmer with lower confidence in their decision-making ability (this can occur for a variety of reasons: climatic, financial or personal) only one visit and telephone calls is often not enough support.

In response to this, the program has continued to develop in the way it delivers the principles and tools to its participants. By using a coaching approach, it is possible to assist farmers who may have concerns to successfully implement the system. The main focus of the coaching approach is to empower the farmer to harness the opportunity's the program has to offer – it is about helping the farmer to develop a better level of understanding of the power and control they have on their farming system. However, for the coaching approach to work well it is important that the program deliverer has a well-developed understanding of dairy farm systems. If the deliverer does not have an in-depth appreciation of dairy farm systems they may become overwhelmed with the complexity of decisions that are required to be made on these farms. This can lead to poor decisions being made that have a negative overall outcome.

#### Individual case studies

The level and pace that people adopt the principles demonstrated in the FFPF program is linked to the amount of change required for the participant to adopt concepts. For example, Marg and

Ron are a couple who have been farming for 30 years with the world view that success in farming is being able to pay all the bills. Investing in fertiliser and feeding their herd for production was a new and somewhat foreign concept to them. Ron's confidence in his farming ability had been eroded over time through continual negative signals given to him from financial information and other farmer's expectations. After using most of the FFPF principles for 12 months (e.g. appropriate rotations, maintaining a pasture residual of 4 - 6 cm and strategic feeding of supplements), Marg and Ron have achieved an increase of 11,276 kilograms milk solids for the first full year they implemented the principles. They also conserved 160 more rolls of silage even though the season had finished earlier than usual. Heading into their second season using the FFPF principles, cows are in a much better condition, more profitable feed purchase decisions are being made and the decision to apply fertiliser has also been made. Ron's level of confidence has increased because of the new level of understanding of his business, new measures of success and an improved profit position. This is consistent with the findings from Goodrick and Drysdale (2006), who found that almost half the farmers interviewed could attribute a change in profit to their participation in the program. Without the use of the coaching approach, this couple would have failed to implement any of the FFPF principles.

Another aspect of the FFPF program is the unique ability to put farmers in control of their business. Mark and Lisa, having farmed for 25 years are considered by local farmers to be one of the better performers in the region. Mark and Lisa had a good understanding of most of the FFPF concepts shared, with the exception of leaf stage grazing and appropriate grazing residual. Due to their well established pasture base they were able to easily implement these FFPF principles to their grazing system. In the first year of fully implementing the program, they witnessed an increase in production of 2 litres/cow/day. This was achieved using similar inputs to what they had traditionally used. Mark and Lisa identified the most significant benefit for them was the sense of control they had over their business. This has led to a significant reduction in stress and an increase in the confidence they have in making the most profitable choice each day when it came to feeding their herd.

To successfully use the FFPF principles does not require farmers to have a well-developed farm. One of the key messages shared in the programmed learning days is that of utilising the resources they currently have to drive their profitability. The emphasis is not on being perfect, but an appreciation of where they are trying to get to.

Peter started implementing the FFPF principles in 2003 during his second year on a newly purchased farm. Financial and physical resources were limited, however Peter utilised what he had available and implemented the FFPF principles. These principles enabled him to focus on the key profitability drivers in his business and enabled him to consolidate his business faster than originally anticipated. Over time he has been able to increase his pasture consumption from six tonnes to nine tonnes per hectare, and increased his milk solids per cow from 500 kilograms to 650 kilograms with no additional supplement. Recently he has been able to build a new dairy, and purchase an additional 25 hectares of land whilst increasing equity in his business.

What is the coaching approach?

Historically, programmed learning and practical demonstrations has been the cornerstone of much extension work. Whilst it is a critical part of FFPF, it has become apparent that one of the keys to successful application of the principles is the 'coaching approach'.

The coaching approach is where the deliverer aims to determine where the farmer is positioned. It encourages farmers to develop confidence in their ability to make good decisions and a sense of what they can and can not control. Traditionally, extension practitioners have been seen as experts and someone to get answers from. Using a coaching approach requires the extension practitioner to move from this expert role to a coaching role where they not only provide technical information but also focus on what motivates participants, what their level of understanding is and what barriers are stopping them from achieving their goals.

The most important aspect of the coaching approach is understanding where the farmer is situated in the Landsberg Skill / Will Matrix (Figure 1). Over the course of the program, the deliverer develops a clear understanding of where the farmer is positioned on the matrix. A farmer who has low will and low skill is usually a disillusioned learner and will usually require assistance to develop a plan to implement the principles. These farmers need praise and quick wins to develop their motivation to continue using the tools and principles and usually require more one to one support than a farmer who fits in the high skill, high will area of the matrix or a self-reliant learner. These self-reliant farmers only require assistance occasionally and this assistance is usually of a technical nature.

Figure 1. The Skill/Will Matrix

HIGH WILL	GUIDE Coach	DELGATE Support
LOW WILL	DIRECT Facilitate	EXCITE counsellor
	LOW SKILL	HIGH SKILL

Source: Landsberg (1997)

A farmer who has high will but low skill could be described as an enthusiastic beginner. These farmers require an investment of time early on explaining and answering questions. It is important for these farmers to see success quickly so they do not become disillusioned when they make mistakes. Alternatively, farmers who have high skill but low will require evidence that the principles work and be motivated to try them. These farmers also need reassurance that what they are attempting is not too risky.

A critical aspect of the success or failure of the coaching approach is the skill level of the deliverer. Not only do deliverers need to be technically competent, they also require a good understanding of other's world views and how these world views impact on their decision making. It is imperative that these deliverers understand the farm system and the implications of the resources that are available to the farmer. These include physical, financial or emotional resources.

#### Programmed learning and on-farm demonstration

For the successful implementation of the FFPF tools and principles is important to use a combination of extension techniques. From the early days of the Rotation Right pilot program it was shown that without the opportunity to practically demonstrate the success of the principles the barriers to adoption were insurmountable.

Walking Through The Seasons showed that the opportunity to see the principles practically applied led to motivation to try the principles, however without the programmed learning and one to one support it was often difficult to maintain management changes.

Before the coaching approach was implemented, it was found that some participants 'fell through the gaps'. This meant they struggled with the management changes that were required and if they had low levels of confidence they would not adopt the principles. Since the coaching approach has been incorporated into course delivery, more farmers have been able to implement the principles successfully and been able to manage changing seasons and milk price fluctuations better than before.

#### A unique skill set and staff mentoring

Because of the complex nature of the farming system, it is important that the deliverer has the ability to operate at a highly integrated systematic level. The deliverer needs to have a good understanding of how a farming system works from the component level, (e.g. cow nutrition, fertiliser usage, grazing management) a business level (e.g. cashflow implications of feeding decisions, key profit drivers) and the human level (e.g. world view of the farmers, goals and motivation).

When a deliverer is unable to operate at this highly integrated systematic level, the participants have less confidence in the principles and therefore are less willing to adopt the changes required.

Because of the complex nature of this program it has become obvious that a presenter's kit could never be written to cover all the possible challenges that can occur when implementing this program. Therefore it has become evident that a rigorous mentoring process needs to occur before a deliverer is confident and competent to deliver the FFPF program. Just as it takes small steps of success for farmers to adopt the principles and build confidence, deliverers also need the opportunity to develop their skills and confidence in manageable sized pieces. This has been achieved by staff working side by side with a farmer participating in a program. New staff members are able to see the success of the program first hand, but it also helps the farmer to implement the program as they have additional support. In terms of staff development, it becomes evident when working with these farmers whether staff are able to operate at the highly integrated level. This also gives the mentor the opportunity to identify the staff members' strengths and weaknesses and allows the mentor to focus the staff members' development. In

the second year of training more time is spent developing the staff member's skill in delivering the program and developing troubleshooting skills. By the third year, a staff member would be able to successfully deliver FPPF to a small group of participants.

#### Future directions of FPPF

As the program continues to develop it is becoming evident that the level of control that farmers now have over their business has increased due to participating in the FPPF program. The program has given them the flexibility to be able to adapt to externalities such as seasonal conditions and milk price fluctuations and has enabled them to stay in control of one of the biggest driver of farm profit, which is feed costs.

A second year of the program is currently being developed which focuses on more complex farming system issues, such as stocking rate, available physical resources, and business structure. It will be even more important that the deliverer's involved in these future programs has a well established understanding of dairy farming systems.

#### Conclusion

Some of the lessons learnt upon reflecting on the success of FPPF are:

- Using a combination of extension techniques is critical to success. When one element is missed, for example practical on-farm demonstrations, it can undermine the performance of the FPPF program.
- Effective deliverers require a unique skill set and for this skill set to develop it is important that staff are supported to develop a broad understanding of dairy farming systems and extension techniques.
- By using coaching, the level of practice change on farm is far more significant than if coaching is not used. A major challenge of using the 'coaching approach' is that the 'coach' requires a broad understanding of dairy farming systems and this takes time to develop.
- The result is that staff mentoring becomes as critical as the coach approach itself.

Although these four key elements have been identified over the last seven years within the framework and development of FPPF, these elements are widely applicable to other agricultural extension programs.

#### Acknowledgements

The authors would like to thank the farmers who have shared their success stories with us and Phil Shannon for his foresight in developing this program.

#### Reference List

- Drysdale G and Shannon P 2005, 'Dairy Moving Forward: Victorian Department of Primary Industries Walking Through The Seasons Groups', Department of Primary Industries, Melbourne, Victoria
- Goodrick D and Drysdale G 2006, 'Feeding Pastures for Profit: An Evaluation', Department of Primary Industries, Melbourne, Victoria
- Landsberg M 1997, c1996, *The tao of coaching*, Harper Collins, London, UK.