From Paddock To Plate - The First Step

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ABSTRACT
SQF 2000™ Quality Code has generated much interest throughout Australia since its launch in May 1995. It has been seen by large sections of the food industry, including fruit and vegetable growers, packers, processors and distributors as a useful tool for ensuring food safety and quality.

The SQF 2000™ Network Implementation Program is one method that enables an organisation to develop and implement their HACCP based quality system.

Keywords: Food Safety, Quality, Hazard Analysis Critical Control Points (HACCP), SQF 2000™, SQF 2000™ Network Implementation Program, Small and Medium Sized Businesses

1.0 Introduction

SQF 2000™ Quality Code was developed by Agriculture Western Australia (AGWEST) as a practical alternative to AS/NZS ISO 9001/2 for the small to medium food business (which includes primary producers) to meet growing demands by consumers (and retailers) for assurance on the quality and safety of foods that they consume.

The purpose of SQF 2000™ is to provide a quality management system designed for the food industry which encompasses Hazard Analysis Critical Control Points (HACCP) system, a proven method used by the food industry to reduce the incidence of unsafe food reaching the marketplace, and which is audited by an independent third party. The code is not intended to replace AS/NZS ISO 9001/2 standards. Rather it is designed to fill a void for those food or food related businesses that have no requirement for AS/NZS ISO 9001/2 standards, or who do not have the resources or the infrastructure to implement or maintain it.

Most businesses have some problems with implementing a quality system. In a small business these problems are potentially greater due to:

- Minimal available resources
- Difficulty in understanding and applying the standards
- Costs involved in setting up and maintaining a quality system (SAA/SNZ HB66, 1996, p.7)
Small businesses also often feel overwhelmed by the prospect of preparation for ISO 9001/2 certification (Bolton, 1997, p. 12) whilst larger companies find that the system gives them an improved ability to manage the business. SQF 2000™ offers improved ability to manage the business but without the substantial preparation required for certification. Like ISO 9001/2, recognition of SQF 2000™ is achieved through certification by accredited certifying bodies.

1.1 SQF 2000™ Network Implementation Program

One method of assisting organisations to achieve SQF 2000™ Quality Code certification is to take them through a process of training consisting of 15 modules which helps participants understand, develop, implement and maintain their own HACCP based quality system. This process is known as the SQF 2000™ Network Implementation Program.

The training package is designed to be delivered to a group or network of growers, packers, distributors or processors. It meets the requirements under the code for HACCP Plan developers to have undergone approved training and assists participants to develop, implement and maintain their own systems without additional external assistance. The implementation program is delivered by accredited facilitators who have undergone training, have appropriate industry skill and are licensed by AGWEST. The cost for participant organisations is $2500.

1.2 The Paper

This paper looks at some of the learnings associated with the conduct of this program.

2.0 Putting a Group Together

It is only in recent times that grower or support organisations have begun to discuss the implications of the recently amended Food Act (Vic) 1984, the proposed changes to the Australia New Zealand Food Authority (ANZFA) Food Code and quality systems in general. This has been due in part to some of the major chain supermarkets insisting that their suppliers put into place a quality system that addresses food safety and quality risks if they want to continue to supply them. Prior to this there was little discussion or interest shown in documented quality systems.

The few individuals or groups that did decide that they wanted a documented quality system found it difficult to obtain advice. Not much was known and few people or representative organisations were prepared to advise or commit themselves to something that was largely unknown. After a number of individual and group discussions, two groups the author had an association with committed themselves to starting the Network Implementation Program.

The author then had the opportunity of working with a group of seven family based potato growing businesses from the Thorpdale district and eight family based strawberry growing businesses from the Yarra Valley. Both of these groups were formed with the assistance of an
individual grower or small grower network. The Horticultural Group of the Victorian Farmers Federation assisted with the initial contact.

Some of the more committed individuals saw the way ahead as positive and wanted to lead by example and implement a HACCP based quality system. Others were prepared to participate but were not sure if there would be substantial benefits for them. Initially the cost of the program was a stumbling block for many, however the VFF the assisted the growers with the application for a grant from the Rural Finance Corporation of Victoria. The subsequent 75% funding provided additional incentive to form a group and start training.

3.0 The Training Process

For many participants this was the first training program that they had attended in many years. As a number openly said, 'This is like going back to school again'. The idea of sitting at a table and listening and taking notes for a couple of hours is not appealing for many, particularly for some of the older generation. There would also be an ongoing dilemma of 'what could I be doing in the field?' instead of sitting indoors and participating in the program. This provided a challenge for the facilitator.

The first challenge was to maintain interest and participation levels and manage the learning process. Relevance, appropriateness of the content and active participation were the key - adult learning principles needed to be adhered to. Due recognition also had to be given to the existing knowledge of the participants because, after all, they were the industry experts. They knew how to grow their produce. The facilitator, however, could help them approach their work from a new perspective.

The next challenge was the conversion of concept into practical application so that the learning outcomes would enable participants to manage their own quality system? Again the facilitator would need to enlist the support of the industry experts - the participants. The training program helped them with the conversion on a step-by-step basis. During the training process the entire work operation was reviewed and questions like 'What?' 'How?' 'Where?' 'When?' 'Who?' were asked. Participants were required to answer these in terms of their own operations. The answers were then converted into documented procedures or checklists that could be used for the standardisation of work practices and training - both offering a higher degree of control of the critical processes.

English was not the first language for some of the participants and this presented some early problems. However, the groups were soon to work together and help each other with interpretation and understanding of key words, definitions and concepts. In fact, this situation helped to reinforce some of the author's own understanding of the program - viewing the material from two differing perspectives - that of the facilitator and learner.
The training material had been prepared by Food Operations under licence from AGWEST Trade and Development. The material combines theory with practical application and encourages participants to draw from their own experience of work processes. The modular approach enables the facilitator to set the pace of training to the group's specific needs. Sessions require around two hours to cover the learning outcomes and time permitting, another one to two hours is scheduled for participants to work on the development of the HACCP Plan and the supporting quality system documentation. The additional time also allows for one-on-one coaching if this is necessary.

It was interesting to note that early in the piece growers tended to work individually and were careful not to reveal too much to the other participants whom they perceived as competitors. However, by the time the program reached the halfway mark they could identify themselves as a collaborative group working together to solve regional and at times industry produce problems. The process became extremely interactive with everyone sharing the learning responsibilities.

It also soon became apparent that the program be conducted when the growers could afford the time away from their core activities in the field. They became very distracted when faced with the choice of learning activities or essential crop work. The group decision was to decide when the next module would be conducted at the conclusion of the former rather than stay with the pre-planned schedule. This alleviated much of the potential angst.

4.0 Assessment

To demonstrate competency participants are encouraged to sit an examination based on the principles and application of HACCP in their general field of horticulture. The pass mark of 85% is needed if those sitting wish to obtain 'Skilled HACCP Practitioner' status and meet the Code's requirements. The exam and the required pass mark was daunting for many, if not intimidating. This was the most difficult issue that the participants had to face in the entire Network Implementation Program. They were obviously worried about the potential end result and had little confidence in their ability to cope with an examination, let alone do well.

The examination is both open and closed book and asks participants to apply their knowledge of HACCP and horticulture to a number of questions. It is not a memory test but rather a demonstration of understanding and application of learning. Participants are encouraged not to worry about what they don't know but concentrate on what they do know. Pass rates have been very encouraging with over 95% achieving 'Skilled HACCP Practitioner' status for their own organisation.

For those with English language difficulties additional assistance is provided e.g. simpler explanations of questions, an extension of time to complete the examination etc.
5.0 The Benefits

Like any quality system there are benefits for those businesses, small and large, undertaking the process. Some of these are:

- Improved customer-supplier relationship
- Improved understanding of skills required and the training flow-on
- Renewed control of work processes

5.1 Improving the Customer-Supplier Relationship

The Network Implementation Program philosophy encourages grower groups and their customers to work together on the production of produce specifications that meet consumer needs and expectations as well as being realistic and achievable. The whole idea of documented produce specifications is relatively new and as a result there are many lines where specifications are incomplete or not yet completed. This gives the grower the opportunity to take the initiative and produce specifications themselves or work hand-in-hand with the major retailers to produce them. Specifications include produce description, properties and customer delivery requirements. To ensure that the specification is still appropriate, businesses are encouraged to discuss their ongoing relevance with their customers.

As a result of the above interactions both parties are able to obtain a better understanding of each others business. For the retailer it means a deeper understanding of harvest and packaging limitations of the business and the quirks of nature. For the grower, an insight into large distribution systems and the requirement to deliver produce that both meets specifications and is delivered on time.

There have been a number of opportunities for growers and the distribution centres to work on common problems and develop flexible solutions e.g. delivery schedules.

5.2 The Training Flow-on

The Network Implementation Program reinforces that need for competent operators in those areas where there is significant risk anywhere in the process for food safety or quality. Control of operations is critical at these points and appropriate monitoring and corrective actions must be in place if the system goes out of control. Many growers have come to realise that they cannot do everything themselves or actively supervise all operations. To manage the risk they need to train their workers to do the necessary tasks effectively and empower them. Traditional hierarchical principles of structure and accountability do not work as effectively as the development of individuals to become more autonomous and to take responsibility for their own actions. For some this has been difficult. 'It is like giving away the family business' some growers have said. They change their minds when they see the 'new way of working' working for them.
The total process and hazard analysis facilitates the identification of the skills required to minimise the risk across all areas of the operation. Where gaps are identified, businesses can review the training requirement and can make arrangements to bridge them. This review should take place on an annual basis unless there is a drastic change to the method of operation. In this case, the review should occur before the implementation of the change.

5.3 Re-Gaining Control of Work Processes

One of the key learnings for all concerned was just how easy it is to let go of control of processes and then respond to the eventual hiccup. Prevention is certainly better than cure. The hazard analysis of the operational process reinforced the potential food safety and quality problems when there is loss of control. By applying the principles of HACCP and supporting strategies such as good management practices and agricultural chemical spray programs, the risks are clearly identified. Strategies are then put into place to minimise and manage the significant risks. Often growers find that they have been putting an emphasis on risk management in the wrong areas of their business e.g. concentrating on post harvest rather than pre-harvest where they can do much to prevent, eliminate or reduce many of the food safety and quality risks.

Corrective action is an important part of any quality assurance system. The SQF 2000™ Quality Code builds on the HACCP principles and specifically requires that a procedure be developed to manage corrective action. Growers are required to outline how problems will be identified (usually by applying HACCP), who has responsibility for deciding what action needs to be taken and what will be done to prevent the problem from recurring. As a result growers have been able to keep abreast of potential problems, often handling them before produce is affected.

6.0 Maintaining the Quality System

Once the hard work of development and implementation of the quality system is done growers tend to take a well earned break from quality management. This in itself is not a problem if it is off season or the break is short. Some growers have fallen into the trap of letting things go for far too long. As a result they have a well documented quality system based on what they should be doing rather than what they are doing, and more importantly, they have no records which confirm that the process has remained in control.

The Network Implementation Program attempts to prepare growers for external audit in two ways:

- Firstly, the two external auditing bodies are encouraged to visit the program participants during the conduct of one of the workshops and to discuss their methodology, schedules, fees etc. The growers then have the opportunity of selecting which auditing body they want to deal with.
- Secondly, the program facilitator conducts a desk-top audit of the prepared documentation to ensure that there are no obvious gaps or weaknesses in the system. Facilitators are also in a position to assist with the implementation process.
6.1 Internal Auditing

Internal auditing is a good way of not only reviewing that the system is working the way it was intended but that the necessary checks and balances have taken place. Small businesses find this extremely difficult and often the auditor is auditing their own work. As long as the integrity of the review is sound there should be no problems. Ideally in the case of small businesses the owner/manager will hand over either the audit or daily management responsibilities to someone else. The facilitator has encouraged businesses to check each other but this has occurred rarely.

Internal auditing also provides a forum for review in that businesses are able to confirm that their quality system is effective or not. This provides an opportunity for renewal in the case where documentation and scheduled checks/internal audits have fallen behind.

6.2 The Big Test - External Audit

For those growers aspiring for certification, external audit can be a testing time. For many this is the first time that someone outside the business has had an in depth view of their operations. Like ISO 9000, the first external audit for SQF 2000™ is a review of the quality system documentation. This can be conducted on-site or in the auditors office. Experience has shown that an on-site audit is better because it enables the grower to explain how their system works and it serves as a valuable introduction to the business operations for the auditor. A positive audit result can be a good indication that certification is a possibility but only if the documentation is a reflection of the practices taking place. Many growers feel a lot better after the documentation review but they still somewhat apprehensive about the next step.

The certification audit requires the auditor to view business operation and compare it with the quality system documentation. Usually the auditor reviews the operational process from beginning to end. Records are checked along the way to prove that the system is working effectively. In the case of very new systems with few records the auditor may need to return after allowing sufficient time for the system to mature and records developed. Once the quality system is certified there is an obvious sense of relief for the grower. The network facilitator will in many cases be present for the certification audit, acting as moral support for the business, and if necessary, to assist the grower to explain some of the detail of how the system works.

The successful certification audit is really only the start of the quality process and for many growers comes the realisation that the quality system is more than a framed certificate hanging on the wall or a logo on the labels and packing boxes. The quality journey has just begun.

7.0 Conclusion

No quality system is easy to develop, implement and maintain. SQF 2000™ Quality Code is a practical solution for the small to medium sized horticultural business. It does however take time
and a high degree of commitment by all concerned is needed for organisations to achieve certification. The path is not easy however it is achievable. Over 375 organisations have already done so and there are many more who are active within the process.

References

AGWEST Trade and Development [1997], SQF 2000™ Quality Code, Department of Agriculture, Western Australia, Perth
