Abstract

Many horticulturalists lack the resources (time, funds, etc) to address marketing issues and complete their production schedules. As post harvest expenses account for some 70% of farm costs, growers are under pressure to provide product integrity and maintain their right to supply. This paper reports on research conducted by the authors in conjunction with the Commonwealth Department of Food Fisheries and Agriculture on developing a strategic approach to training Australia’s horticultural groups. A series of convergent interviews provided insights into industry training needs from those in horticultural production. Training materials were developed and tested with Banana, Mango, Tree Crops (Stone fruit and Lychees), Pineapple, Strawberry, vegetables and other marketing groups. Success of the program is based on the contextualization processes developed underpinning the concept of working as a group and the materials presented. As a result, one supply chain has been formed and is successfully exporting to Asia, while other grower groups are poised to follow. The challenge ahead is to develop a marketing edge through using integrated supply networks to shorten supply chains or alternately build relationships to create greater value or efficiency in an existing chain. However, growers need time to explore ways to work together before advancing.

INTRODUCTION

This paper is drawn from a report evaluating the AAA FarmBiz Australia project, “Developing a Strategic Approach for Australia’s Horticulture Marketing Groups” (2003). The purpose of the project was to introduce a number of established and new horticulture groups to long term strategic planning for farm viability and best management practice within a market-focussed framework. The project scope included primary producers from the Northern Queensland/Australian production growing regions, covering at least the following industries Bananas, Mangos, Tree Crops (Stone Fruit and Lychees), Pineapples, Strawberries, Vegetables and other marketing groups. This project focussed on the implementation of strategic planning with a number of established and new groups within an integrated business system so growers were enabled to do the following:

- Gain more control over the existing systems,
- Increase capacity to change these systems to enable greater equity,
- Increase independence, and
- Create social interdependence that enables/ facilitates market power.

LITERATURE REVIEW

The basis for the literature review came from themes which emerged from convergent interviews in the planning stage, which asked individual farmers how would a project look if they were going to work with a group of farmers on a project aimed at improving how farmer groups plan. The themes which emerged from these interviews were that such a project would need to be: (a) an on-going group process, (b) learning
Learning-based: Learning should comprise both learning about content (e.g. IPM, horticultural practices, how to plan) and process (e.g. group formation and stages, open communication, implications of power). That is, the group should also learn about its' own learning and functioning, and not just about how to plan.

Adult learning: The factors that have been identified as influencing the adult learning process, include, an adult's readiness to learn, orientation to learning, previous experience, self-concept and motivation (Knowles, 1984; Rogers, 1992): Adults tend to have a problem-centred orientation to learning. Consequently they learn most effectively when they can see how learning applies to their own problems.

Action learning: It aims to provide an effective means of obtaining real solutions to real problems in real-life situations. It encompasses the process of experiential learning and is the underlying premise of action research. The term 'Action Learning' was initiated by Revens (1982), who expressed its elements in a learning equation, where \( L = P + Q \), where learning (L) is programmed knowledge (P), plus questioning insight (Q).

Single loop, double loop and triple loop learning: The terms single and double loop learning originates from the work of Argyris and Schön (1974). Single loop learning is focused on correcting errors by changing routine behaviour, double loop learning, corrects errors by examining the underlying values and policies while triple loop learning includes designing norms and protocols that govern single and double loop learning (Groot and Maarleveld, 1999).

Quality assurance: 'Quality' needs its own definition as it is not just about standards, quality systems, certification or external audits, neither is it just about how participants become aware of quality standards within their market place (industry benchmarks), but it is about how they then apply what they've learned to either show others 'how excellent quality is achieved' or how they themselves 'improve their own quality' and is an on-going learning and negotiation process.

Power dynamics in groups: Power in groups emerged in relation to any group functioning effectively with two main ways in which power was seen to influence groups:
1. The issue of power lies in the fact that if there are representatives in the group from various parts of the chain; information and what’s happening needs to be transparent and isn’t always transparent.

2. Power lies in the fact that only certain people (those with expertise knowledge) are only allowed in the group.

**Criteria for membership:** Ife (1995) suggests that there are five conditions in which people will participate in community structures:

1. People will participate if they feel the issue or activity is important.
2. People must feel that their actions will make a difference.
3. Different forms of participation must be acknowledged and valued.
4. People must be enabled to participate and supported in their participation.
5. Structures and processes must not be alienating.

**Different perceptions of reality and different levels of knowledge:** Davies (1994) describes a variety of approaches to what constitutes knowledge, from the ‘single, testable reality’ of positivist realism to modernist understanding of the ‘complex’, and acceptance of post modernist ‘multiple perceptions of reality’. She argues that the emergence of the facilitation of participatory learning as recognised research and extension practice moves a step toward equitable information generation. King (2000) provides insight on the changing role of a facilitator over time. When new ways of learning are introduced into a group environment (eg. participatory action research), a group has to be facilitated through a process of change, in order to accepting and understand new ways of learning. In the light of these insights, the following steps are useful in facilitative learning system development over time:

1. Natural learning and learning using traditional education techniques.
2. Facilitator mixes traditional learning techniques with action learning process to learn about content (potential for single loop learning).
3. Facilitator facilitates action-learning processes to learn about content.
4. Facilitator facilitates action-learning processes to learn about process (potential for double and triple loop learning).
5. Facilitator works with participants in developing and running their own action learning processes about content (with wider networks).
6. Facilitator works with participants in developing and running their own action learning processes about process (with wider networks).
7. Facilitator becomes a participant while others run action learning processes about content and process and assists the group to deal with more complex issues of learning systems (eg. power relations, working with institutional hierarchies, etc.).

These steps are presented as a sequence but the practitioner is required to gauge where in the sequence a group is located. In the overall process with respect to time; trust between the facilitator and the participants increases, dependency on the facilitator decreases, complexity of learning increases, and interdependency between actors and then between learning systems increases.

**Relationship qualities of an effective learning group:** These qualities were drawn from the initial convergent interviews conducted and are summarised by the following points:

- Transparency
- Trust
- Open communication
- Ability to add information to the group - sharing
• Not wasting time on elementary exchanges/ learning
• Give to others as well as take
• Long-term planning - including goals setting and a vision
• Regular meetings
• Presentation of facts, figures etc
• Visiting other venues, enterprises etc
• Must be comfortable in a group and/or working in a team
• Learn about learning (e.g. reflecting regularly on what worked, do we need to improve)
• Engage an independent facilitator
• Context and content specific

These qualities can be compared with those found by King (2000) in studying the qualities of effective participatory learning systems and can therefore be used to identify useful indicators for monitoring and evaluating group processes. King (2000) found that an effective inquiry process is: dynamic, flexible, continuously improving, responsive to change, self-directed and articulated. It also has a recognised balance between being purposive (shared meanings and goals), and collective (collaborative endeavour and concerted action) and diverse (embracing different, and conflicting, meanings and goals).

Research Methodology

A qualitative methodology utilising Action Research (Lewin, 1952; Elliott, 1991) was adopted for this evaluative research. In the initial stages, convergent interviews (Dick, 1991) and focus groups were used to clarify research issues whilst semi-structured in-depth interviews were used to gather the data from which propositions about the research issues were developed (Patton, 1997, 1987). The methods used for this research ensured rigor in data collection with workshop materials being ‘issues-based’ and negotiated and developed with growers to suit their contexts and with appropriate client designed methodologies for Banana, Mango and Stone Fruit Industries. Table 1 summarises the strategic approach adopted in the project.

Data Collection and Analysis

An independent researcher using data collected from semi-structured interviews evaluated the course design, workshop agenda, workshop and assessment materials (formative) and the overall project using a two part interview process (Owen, 1993). This process is outlined in Table 2. Figure 1 shows a numerical representation of the themes and how these themes were discussed in the interviews. While specific questions weren’t asked about the themes that emerged during the convergent interview process, most themes emerged either moderately or quite strongly depending on the type of group that participants experienced. This exploration not only validated the findings from the project research phase but demonstrated the learning process that occurred with workshop participants. The groups were: individual businesses in a group-learning situation; individual businesses in a pineapple packing syndicate in a social-learning situation and individual businesses exploring the formation of a marketing group.

RESEARCH FINDINGS

The funding from AAA FarmBiz Australia achieved the purpose of enhancing the business management skills of the primary industry sector through education, training and
skills development and is validated through the data drawn from growers stating their changes in practice and resultant improvements in either production or financial planning processes (see Appendix 1). The perceived benefit is a ratio of government funds to estimated-farmer perceived benefit in a range of 1:1.32 to 1:1.42 (Kilpatrick, 1996). To extrapolate this, although the project cost $325,000, the benefit to farmers overall as a result of the training project is estimated to provide gross operating surpluses of between $10.3 and $13.6 million. (see Appendix 1 - an assessment of the AAA Farmbis program using Bennett’s (1975) evaluation framework).

Furthermore, Kilpatrick, (1996, p.14) found that for farm business that had undertaken workshops, overseas missions, extra training in business structures and had progressed through the second action research cycle in training, and where there were more than ten training events, the average operating surplus for farms in the mid asset range ($500k to $1m) and the high assets range (> $1m) was found to be $76,980 and $156,418 respectively.

CONCLUSIONS AND RECOMMENDATIONS

This paper summarises the two years formative stage of the AAA FarmBiz Australia project “Developing a Strategic Approach for Australia’s Horticulture Marketing Groups” which has succeeded in assisting growers to gain a marketing edge because the program has been grower ‘issue based’ and the developers of the program have responded to these needs by working with farmers on program development. It should be noted that for the AAA FarmBiz program, the perceived benefit calculated from developmental funding is a ratio of government funds to estimated farmer perceived benefit in a range of 1:1.32 to 1:1.42. Because of this it is recommended that the AAA FarmBiz Australia strongly consider funding the development of a range of new materials designed and developed from needs that emerged during the enhancement phase for other industry specific modules not funded through AAA FarmBiz Australia. These modules are as follows: Marketing in Different Cultural Markets, Export Terminology, Logistics, Business Negotiation and Business Structures.

Literature Cited


Kilpatrick, S. 1996. Change Training and Farm Profitability, NFF, Volume 10, University of Tasmania.


Fig. 1. Individual responses cross-referenced against themes.

Source: developed for this research from the literature.
### Tables

Table 1. The log-frame matrix: AAA FarmBiz Developing a Strategic Approach for Australia’s Horticulture Marketing Groups.

<table>
<thead>
<tr>
<th>Broader goal</th>
<th>Narrative summary</th>
<th>Measurable indicators</th>
<th>Means of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enhance the business management skills of the primary industry sector through education, training and skills development</td>
<td>To improve the market power of horticulture growers through improving strategic business planning with both individuals and groups</td>
<td>Formative and summative evaluation processes with data collected from convergent interviews, focus groups and semi-structured interviews</td>
<td>Data collected is valid and informs the design and development of workshops and materials; and that horticulture growers are motivated to move/change</td>
</tr>
</tbody>
</table>

| Purpose | To introduce horticulture producers to long term planning for farm viability and best management practice within a market-focussed framework | Implementation of strategic planning within a number of established and new groups | Go through a number of strategic cycles and evaluate their progress against clearly defined benchmarks | Horticulture growers are willing to experience adult learning situations |

| Outputs | Flexible workshop design and delivery | Industry contextualisation of workshop design and delivery needs to be negotiated with growers on an ongoing basis | Growers negotiate their needs and the speciality inputs as outputs are sourced and delivered | Growers know what they know, but also that they don’t know what they don’t know and are open to ongoing learning |

| Activities | Intensive preliminary, ongoing monitoring and post-project research to inform development of workshops and materials | Existing and new groups to be engaged for testing workshop processes. Manuals, workshop venues, catering etc coordinated. | Accepted schools of academia in marketing, law, economics, accounting and extension theory bounded in practical thinking frameworks | Strategic business planning for horticulture growers needs to draw on a eclectic academic base to meet growers needs |

*Source: Modified from AIDAB (1991) and Farrington and Nelson (1997)*
Table 2. The questioning framework used in this project evaluation.

<table>
<thead>
<tr>
<th>Part 1 – Initial broad question about the whole program design</th>
<th>We’ve worked with groups of producers to improve how groups’ plans – what are your views about the programs aim?</th>
</tr>
</thead>
</table>
| **Part 11 – Specific questions about what should be left the same and what should be changed?** | **Course plan**  
What was your impression of the workshops overall?  
**Workshop agendas**  
How did the design of each workshop meet your needs?  
Should the workshop sequence be left the same or changed?  
**Training package**  
How were the workshop manuals of benefit to you or otherwise for your planning?  
**Assessment materials**  
Did we help you see what you learned? |
Appendix 1. Evaluation framework for AAA FarmBiz Australia Project drawn from Part Two, Milestone Eight report using the Bennett’s Hierarchy Model.

<table>
<thead>
<tr>
<th>Level</th>
<th>End Result</th>
<th>Practice-Change</th>
<th>Knowledge</th>
<th>Reactions</th>
<th>People</th>
<th>Activities</th>
<th>Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 7</td>
<td>End Result</td>
<td>End results of practice change e.g. an increase in farm income, from working as a group. This falls outside the project outcomes require at least 3-5 years from onset of a program.</td>
<td>98% of participants stated they’d adopted of new practices, technologies or changes in behaviour eg instigated on-farm succession planning, used spreadsheets, financial analysis and budgeting etc</td>
<td>Demonstratble knowledge with 70% of participants seeking to gain RPL under the Australian National Training Authority module outcomes for their course participation and on-farm business applications</td>
<td>98% of participants held positive reactions to the learning activities and applied the selected or applicable activity to their own situations</td>
<td>External evaluation shows 80% of participants starting workshops have completed training and/or are continuing</td>
<td>AAA FarmBiz Australia $120,000 with matching, primary and secondary researchers engaged, training materials researched and developed, and specialist’s engaged as negotiated by growers</td>
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<td>Level 6</td>
<td>Practice-Change</td>
<td>98% of participants stated they’d adopted of new practices, technologies or changes in behaviour eg instigated on-farm succession planning, used spreadsheets, financial analysis and budgeting etc</td>
<td>Demonstratble knowledge with 70% of participants seeking to gain RPL under the Australian National Training Authority module outcomes for their course participation and on-farm business applications</td>
<td>50% On-going groups with participants seeing the importance of working as a strategic planning team to achieve entry to venues otherwise closed to individuals and exploring market opportunities (potentially in export markets).</td>
<td>50% On-going groups with participants interpreting, and setting group direction as decided, and 98% individuals applying skills in planning, human resource management, financial analysis and strategy design, development and application in a range of different situations.</td>
<td>50% On-going groups, and 98% individuals developing group or individual directions and developing strategies for group or individual situations.</td>
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<td>Level 5</td>
<td>Knowledge</td>
<td>Demonstratble knowledge with 70% of participants seeking to gain RPL under the Australian National Training Authority module outcomes for their course participation and on-farm business applications</td>
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<td>Level 4</td>
<td>Reactions</td>
<td>98% of participants held positive reactions to the learning activities and applied the selected or applicable activity to their own situations</td>
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<td>Level 3</td>
<td>People</td>
<td>External evaluation shows 80% of participants starting workshops have completed training and/or are continuing</td>
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<td>Level 2</td>
<td>Activities</td>
<td>Business Planning - 8 workshops by 9 groups, Marketing Group Formation - 4 workshops by 3 groups, 3 one-day Introduction to Marketing working and 1 Strategic Marketing Skills Workshop</td>
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<td>Level 1</td>
<td>Inputs</td>
<td>AAA FarmBiz Australia $120,000 with matching, primary and secondary researchers engaged, training materials researched and developed, and specialist’s engaged as negotiated by growers</td>
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Adapted from Lenne and Hartley (1984)