Experiences from using Action Learning Groups to develop Sustainable Farming Systems for Central Queensland

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ABSTRACT

Farmer-based action learning groups have been used to conduct on-farm research in the "Sustainable Farming Systems for Central Queensland" project, with the aim of developing profitable and sustainable farming systems and having them adopted. Group facilitators and technical staff help guide the groups using the action learning process. This guidance, and the use of adult learning principles has ensured that groups remain focussed on achieving their goals and that profitable and sustainable farming systems are adopted. This paper details the experiences gained in facilitating action learning at key points in group development, including group formation, planning and implementing research and evaluation. Key factors needed for effectively using action learning to develop profitable and sustainable farming systems and improve adoption are identified and discussed.

KEY WORDS

Action learning, groups, farming systems, sustainability

INTRODUCTION

Large scale agriculture began in Central Queensland (CQ) in the late 1940s, with the Brigalow Scheme leading to the development of large areas of brigalow soils for cropping from 1962 (6). Since then, there has been a marked decline in the nitrogen fertility of cropping soils in CQ (3). In their review of CQ farming systems, Spackman and Garside (6) noted that soil fertility decline along with the availability and efficient use of soil water were major factors affecting farming systems in the region. These issues became the impetus for the initiation of integrated research, development and extension aimed at developing more sustainable farming systems in CQ.

The project "Sustainable Farming Systems for Central Queensland" began in 1997 to address the issues, with the aim of developing more profitable and sustainable farming systems and having them adopted throughout the region. A participatory action learning approach has been taken, with ten farmer groups throughout CQ investigating components of more profitable and sustainable farming systems on development sites associated with the groups. Each group consists of eight to ten producers, a primary and a secondary facilitator, a technical liaison officer and an agricultural consultant. Such an approach, which integrates research, development and extension to develop farming systems on-farm has not been used in the region before. This paper details the challenges faced and learnings derived in facilitating action learning at key points in group development, including group formation, planning and implementing research and evaluation.

MATERIALS AND METHODS

Processes Used

At the start of the project, facilitators contacted a prominent producer in each district, and asked them to suggest other growers in their area that may be interested in being involved in the project. These growers were then contacted and invited to attend the initial meeting of the group. Group discussions with each

group were used to identify issues and decide on areas for research. These discussions resulted in the establishment of a number of on-farm development sites to investigate the prioritised issues for each group. The action learning cycle (5) has been used by group facilitators to guide progress at group meetings and ensure that the group remains focussed and able to achieve its goals. The action learning cycle has also been used to develop strategic directions for each group (such as planning research questions) and to generate learnings from the research that has been implemented.

A modified SWOT technique (Strengths, Weaknesses, Opportunities and Threats) was used in the initial evaluation and benchmarking meetings as documented by Kelly *et al*. (4). This was carried out in mid 1998, some 6-12 months after the project started with the aim of documenting KASAP (Knowledge, Attitudes, Skills and Aspirations and Practices) (1) of group members. Since then, ad-hoc narratives have been recorded at group meetings to help document changes in knowledge, skills and practices. Discussions at post harvest meetings where learnings are discussed have also provided valuable evaluation data.

RESULTS AND DISCUSSION

Learning outcomes

We were concerned initially that criticism could be levelled at the process used to select group members, as there was potential that the group may be seen as exclusive or selective by other growers in the district. There has been some contention as to whether or not this was the most suitable process to use, although in our experience it has resulted in the involvement of interested and willing producers in each district. The process used has also meant that groups have formed around existing social clusters, which has in most cases resulted in more cohesive groups. Social boundaries need to be quickly recognised and acknowledged by the group facilitator in order to build trust with group members and to foster a joint partnership between project staff and group members. Social clusters that interact well socially often perform well as a group, acknowledging that being a group accelerates their learning. Doughton and Sparkes (2) have noted that there have been a number of specific activities carried out by the project that have built on this existing social network, defined as ‘social capital’. This is a key factor in the success of groups, although maintaining social capital requires considerable amounts of human resources, with those involved requiring both technical and social skills (2).

The issues identification process had a strong impact on the success of groups, by setting the direction of the group. It has also had a significant effect on the groups acceptance of on-farm research as a method of developing sustainable farming systems. It has been learnt that the process used must result in a common issue being identified, and that the research question is relevant to the wider community. This has meant that dominant personalities in a group need to be well managed in order to ensure that all group members are interested in the investigations carried out on the development site. Without this, some group members have become disillusioned as the development site activities are not relevant to their own farming system. In some instances, this has resulted in group members either being disruptive at meetings or simply leaving the group, which has had a negative impact on the dynamics of the group.

Separating the group formation meetings from the issues identification meetings has also meant that those growers not interested in participating after the group formation meeting could leave comfortably, without any negative social implications. In some cases, both of these meetings occurred in a relatively short space of time, which led to issues identified being unclear and eventually concern that the development site was not able to answer the groups’ questions. This had a negative impact on group dynamics, and required significant effort from both project staff and the group to make changes that better reflected the needs of both the project and the group.

The action learning cycle has been a useful tool for both planning and implementing research on the development sites. Group meetings held pre- and post- harvest have been used to plan and then reflect on issues being investigated. Using the cycle at both of these meetings has helped ensure lively discussion, which has promoted greater co-learning amongst group members. Adhering to adult learning principles, particularly providing a comfortable learning environment, was essential to the success of

these meetings. Many group meetings incorporate an activity on the development site, such as a site inspection or a technical presentation. This allows group members to 'learn by doing' in a situation in which they are familiar with – in the paddock.

Group members have indicated that meetings need to be an efficient use of their time, in terms of both duration and learning opportunities. It is important that group facilitators are aware of this, and that the project staff involved are well prepared prior to each meeting. Post-harvest meetings need to be held as soon as possible after the data has been analysed so that group members can easily recall events that may have influenced the outcome. Also, project staff need to have a clear understanding of what the group members see as their goals and the path they wish to follow in achieving them. However group members also need to understand the goals and aims of the project and staff involved, particularly in relation to site design and layout. This means that a strong partnership needs to develop between project staff and the group members, in particular the cooperator, if the site is to be successful. We also found that there needs to be a clear commitment from the cooperator to be involved in collating the necessary data. This has required good rapport between project staff, particularly the group facilitator and technician, and the owners of the development site.

The initial evaluation meetings were a valuable experience; a common facilitation process across all farmer groups allowing cross-group comparisons to be made. Developing a common process also improved the awareness of evaluation tools amongst project staff, which has since made facilitators more aware of the need for evaluation. Timing of the evaluation meetings was scheduled to allow all group members to attend, which was vital in recording the KASAP of the entire group. As such, a significant amount of effort was required by project staff to ensure that group members were aware of the importance of the process and ensure their attendance. An external evaluator was present at the meetings, to provide another viewpoint in recording observations. This was useful as they were also able to ask the more challenging and uncomfortable questions that project staff may have had difficulty in asking. This resulted in more directed questioning and provided greater focus at the meeting.

The more ad-hoc processes used since the initial evaluation meetings have been useful in recording changes in KASAP as well as changes in farming practice over time. However, more formal processes are needed to provide another consistent, cross-group "snapshot" of these changes. Ensuring that evaluation is an on-going process within the groups is seen as an essential part of measuring group progress.

Implications of learnings

From the learnings generated by our involvement in the project, there are a number of implications for projects considering the use of action learning groups as a method of developing sustainable farming systems. Firstly, the group formation and issues identification process have a significant effect on the success of groups and the ease with which they operate. We believe that there may be a number of processes that could be used to identify participants. Regardless of the process used, those not interested are likely to leave the group. Others that were not initially involved and are committed enough to join will seek opportunities to do so. Perhaps the most important factor at the beginning of group formation is to recognise existing social boundaries and form the groups around these. It is also important that staff involved with technical and facilitation aspects of the project build rapport with group members and cooperators. Without a partnership between project staff and the group, there is little ownership of the site and its outcomes.

In terms of planning and implementing research, the identified research issues need to be clearly understood by all parties, realistic and achievable. Time needs to be spent ensuring this occurs as unclear objectives lead to outcomes that fail to answer questions posed by the group, resulting in disillusionment and a lack of ownership of group objectives. It is vital that groups are run using processes that encourage questioning of site results, and enable learnings to be developed from both the results and the experience of others in the group. The action learning cycle and adult learning principles are useful tools that can be used to achieve these aims. The success of groups relies on these processes to ensure that the group sees value in what they are doing.

The attitude and commitment of site cooperators is just as important, as they need to believe in the importance of collecting data for the benefit of others in the group and the wider community rather than exclusively for their own benefit. Cooperators need to be seen by others in the district as a key producer, with good social skills. They also need to be willing to implement treatments for the benefit of others in the group and the wider community rather than exclusively for their own benefit. Such characteristics in a cooperator are not always well developed, and exceptional facilitation skills would be required to progress these over time. If the cooperator does not exhibit these characteristics, management of the site becomes difficult and group cohesion diminishes. As such, it is essential that a partnership is developed between the group members, particularly the cooperator, and project staff who are closely involved with the group and its development sites.

Evaluation is an important part of using action learning groups to develop sustainable and profitable farming systems, although the processes used need to be well planned before the start of the project to gain maximum benefit from them. An evaluation culture amongst project staff is important in ensuring that there is ownership of the processes used. Initial evaluations to benchmark KASAP of group members need to carried out before on-farm work commences, and at least every few years to monitor any changes. Ongoing evaluation needs to be formalised, but flexible enough to be included as a part of normal group processes. Evaluation is a useful way of measuring group progress and change over time.

In a broader sense, it can be seen that using action learning groups to develop sustainable and profitable farming systems can be a complex process. As such, significant amounts of physical and human resources are required in order to ensure that the groups are able to reach their potential. Adequate technical and facilitation resources are critical to the success of groups and hence the development of more sustainable and profitable farming systems. As such, organisations considering the use of action learning groups in similar situations need to ensure that adequate technical and facilitation resources are available for the duration of the project.

CONCLUSION

In addition to the number of learnings gained from our experiences in this project to date, there are a number of key success factors that have been identified. These factors are critical to the formation of committed, motivated groups who are keen to implement research that will provide answers to their questions.

1. Groups need to be built around existing social networks, with site cooperators keen to work with project staff and committed to collecting necessary data from the development sites.

2. A partnership needs to be developed between the group members, particularly the cooperator, and project staff for the group to develop to its full potential.

3. Groups need to clearly identify achievable issues they wish to investigate. Without this, groups lose focus and can quickly become disillusioned when objectives are not met.

4. The action learning cycle is a useful tool for guiding meeting process, developing strategic directions for the group and helping the group reflect on site outcomes to formulate learnings.

5. Evaluation is necessary in order to measure KASA change and needs to be initiated before the project commences activity on the development sites. Ongoing evaluation processes need to be incorporated into group activities but flexible enough to be used across all groups involved.

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