

Rapid rural appraisal re-focuses farming systems extension and research in southern Queensland

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Summary. In its initial phase of market research, a Queensland Department of Primary Industries (QDPI) project team used the Rapid Rural Appraisal (RRA) technique to document issues of importance to farming communities in southern Queensland. Semi-structured interviews were conducted with over 100 respondents. The RRA exercise provided new insights into the understanding of farming systems in the region. The exercise showed that differences in farmer and QDPI perceptions about ideal farming systems related more to differences in emphasis placed on criteria used to compare systems than to a lack of awareness by farmers about alternative systems. The importance of working with rural women, agribusiness, rural finance institutions, agricultural colleges and machinery developers, in addition to farmers and farmer groups, was emphasised. Many farmers were unaware of current information, suggesting that it is not what is provided that is important, but how it is packaged and promoted. Further social research will validate and quantify these results.

Introduction

The Queensland Department of Primary Industries (QDPI) has been involved in programs on fallow management and farming systems for over two decades. However the implementation of more viable systems of farming has been below QDPI and industry expectations in some districts of southern Queensland. This was indicated by criteria such as excessive soil erosion incidence, insufficient storage of soil water, declining grain protein levels, sub-optimal use of herbicides and fertilisers, insufficient rotation of crops and sub-optimal crop yields.

To increase the focus on the viability of farming systems in southern Queensland, QDPI extension and research officers formed a project team known as the Viable Farming Systems Group (VFSG). It is been recognised that approaches to information transfer often reflect the scientists perspectives and not that of the farmer (4). To ensure that future VFSG programs and packages are soundly based and that information exchange is efficiently conducted, community knowledge, perceptions and needs in relation to farming systems were researched.

A modification of the qualitative research technique Rapid Rural Appraisal (RRA) was used in the first phase of the social research process. RRA was originally developed to research the complex problems of small farmers in developing countries (1). However the technique was also considered appropriate for researching the complexities of farming systems in southern Queensland, about which the VFSG had extensive experience and firm ideas (3).

The RRA technique is described elsewhere (1, 2, 5 and 6). Briefly, it involves clients in the development of programs. The conduct of the research in itself, is part of the change process. RRA uses a multi-disciplinary team with differing backgrounds and perspectives. The entire exercise is conducted over a relatively short space of time. The use of semi-structured interviews allow respondents to identify and discuss their own issues. RRA documents feelings, attitudes, goals and behaviours, which are difficult to assimilate using quantitative techniques.

The aims of the RRA exercise in this study were to: improve the VFSGs' understanding of farming systems in southern Queensland; identify the people or groups of people who could influence change; determine the major issues affecting people involved in the farming systems and establish a common knowledge base from which the VFSG could develop programs (3).

Subsequent social research using focus groups will validate the RRA outcomes. This paper focuses on the RRA technique and the outcomes.

Methods

Over 100 respondents were interviewed by two teams in the Miles/Inglestone and Pittsworth districts in May, 1991. Each team comprised four interview pairs who were changed daily. Each pair comprised one VFSG member and one external person. Each team was supported by a process manager, a logistics coordinator and a typist.

Day one involved interview training and preparation. Interviews were conducted for the next three days. Each interview pair conducted three to four one to one and a half hour interviews each day. A preliminary report was written on the fifth and final day.

Respondents for the first day of interviewing were nominated by persons with a sound knowledge of the people living in those districts. A cross section of producer respondents were selected according to their level of contact with the QDPI, enterprise type (crop, sheep, cattle and dairy cows) and position on the farm (owner, manager, spouse or worker). Rural service personnel including bankers, accountants, crop consultants, chemical and machinery resellers and public servants were also interviewed. Initial respondents provided contacts for follow up interviews.

Within the bounds of farming systems, respondents were encouraged to establish their own agenda. When necessary, check questions were asked by the interviewer. These were:

- current management of farming systems?
- reasons for the current system?
- past and future changes to the system?

how well the system fitted with lifestyle patterns? information sources used when contemplating change?

Each interview was summarised from tape recorders, notes and memory. Issues were identified, discussed and grouped at nightly debriefing sessions. Important issues became the focus for interviews on the third day (3).

Results

Examples of what respondents told the RRA interviewers are outlined below.

- In addition to other farmers, various individuals or groups influenced decision making. These included rural women, other family members, bankers and accountants, agribusinesses, Land Care groups, agricultural college graduates and machinery manufacturers.
- Farmers found it difficult to make reliable whole farm economic comparisons between zero tillage, minimum tillage, conventional tillage and organic systems of farming. While economics played an important part in decision making, farmers believed it was poorly understood by those in QDPI, agribusiness and rural finance institutions, in addition to themselves.
- Farmers did not base decisions solely on economic rationale. Other factors that interacted in the decision making process included the practicality of fit with the whole farm operation, land stewardship, fit with family, social and leisure requirements, tradition and enjoyment in working on-farm.
- There was major unease with the use of agricultural chemicals. This primarily related to aerial application, environmental consequences and human health. The QDPI was perceived as favouring chemically based farming systems. Farmers wanted a more balanced presentation of the facts on all options including ley pastures, organic farming and chemicals.
- Machinery presently capable of handling reasonable quantities of stubble was considered limiting because of capital cost and unsuitable design. There was also insufficient information on comparisons between different types of machinery. Information was perceived to be lacking on cotton on the eastern Downs and ley pastures on the western Downs.

Concern was expressed that the QDPI was in danger of losing its status as an information source due to less on-farm contact. Status related to individual officers being perceived as impartial, credible and locally

relevant. The interpretation of 'labels' placed upon various farming systems varied widely. Farmers stated that too much 'jargon' was used in extension programs.

Discussion

The RRA exercise provided new insights into the VFSGs' understanding of farming systems in southern Queensland. For example, it showed that many farmers placed a different emphasis on criteria used to compare different farming systems, than the QDPI. While the QDPI used conservation cropping criteria such as protection of soil from erosion and fertiliser and chemical usage as a basis to compare different systems, for many farmers, the ideal system used little or no fertiliser or chemical inputs.

The implications are that the QDPI should provide farming systems information based on farmer objectives rather than on the basis of what the QDPI believes is the optimal system for farmers. This would allow farmers and others to make more informed decisions based on their own value systems. It would also allow the QDPI to be perceived as non aligned with any particular farming system. The provision of information according to farmer objectives implies a greater QDPI role in assisting farmers clarify their own objectives and in educating farmers on how to use appropriate information.

Rural women and other stakeholders are now seen as important targets in extension. There is also a better appreciation of the need to tailor extension programs to include such things as the lifestyle requirements of farmers and their families.

A poor farmer awareness of current information on machinery, cotton and ley pastures supported previous knowledge that information on these topics had been inadequately packaged and promoted. Concerns regarding agricultural chemical usage and insufficient on-farm extension contact also reinforced previous findings.

Despite these positive findings, limitations in the RRA process were identified. Due to shared values on many issues, the RRA exercise did not clearly segment the audience for further research. Contacts given by respondents tended to be reference farmers in the district rather than like minded peers. Accordingly, on the third day it was necessary to select additional respondents to fill these gaps. Logistical problems were also encountered (3).

Nevertheless, the RRA exercise provided a platform for future VFSG activities, built team confidence and provided training in social research. It also identified issues of major importance to farming communities in southern Queensland. Further social research using focus groups is validating these issues. Quantitative techniques will then be used to quantify the issues. Qualitative techniques were used in the first phase of the process to ensure that subsequent quantitative research focused on the relevant issues.

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