INFORMATION NEEDS IN AGRONOMY ON THE DARLING DOWNS, QUEENSLAND

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Summary. An analysis of information needs in agriculture on the Darling Downs was performed in 1995 involving farmers, agronomists, industry representatives, resellers and extension staff. Information on chemicals in the farming system and fallow weed control were top priority for most participants. Improved access to research updates was identified by most participants. A searching facility to search world wide to identify research projects underway was suggested by consultants. Pest control and seasonal updates were suggested as were lists of events, and trials in particular localities. Farmers requested information on comparisons of herbicides in particular situations, and on irrigation methods and planting options.

INTRODUCTION

The information age is upon us. Access to information in agriculture on the Darling Downs is largely through one-to-one contact, the media, and some written technical information. There is a concern within the grains industry that communication and technology transfer are not working as effectively as might be expected. There is a belief that *R, D & E providers have masses of information in their files which would be invaluable to farmers* (3).

This study hoped to identify the information important to some key sectors within the grains and cotton industries, namely farmers, consultants, agribusiness resellers and advisers, researchers and extension workers.

The aim of the study was to identify issues and topics. These could then be explored in more detailed market research relevant to particular projects.

MATERIALS AND METHODS

The study involved a combination of a written survey, focal group discussions and one-to-one interviews. Survey forms were sent out to a large number of consultants, resellers, DPI Field Crop extension and research staff, and Land Care facilitators throughout the Darling Downs. Participants were asked about information that is difficult to access, and any specific information or resource needs they had. Focal group discussions were carried out with a group of private agronomists from the Darling Downs, and a group of farmers in the Clifton area. Survey responses identified key issues. Individual interviews and focal group discussions explored these issues further.

Interviews were partly structured to identify key areas, with open ended questions to allow the participants to direct their comments towards their particular areas of concern. Responses were recorded and a list of information needs of participants and other key issues was compiled.

RESULTS AND DISCUSSION

Table 1 outlines the key topics of interest to various groups participating in the study. Note that only those topics suggested by a group were nominated in the table. It is probable that members of a group would like information on other topics also.

Table 1. Topics on which information was sought by various sectors in agriculture on the Darling Downs.

Topic	Farmers	Consultants	Resellers Advisers	Extension	Research	Grain Traders	LandCare Facilitators

Chemicals	X	X	X	X	X			
Fallow weed control	X	X	X					
Seasonal/pest updates		X	X	X				
New crops		X				X		
Irrigation	X			X				
Markets	X				X	X		
Value adding						X		
Past research	X	X		X				
World research	X	X		X				
Personnel			X	X	X			
Research updates		X	X	X				
Crop stress responses		X						
Weed control	X	X						
Legumes, pastures							X	
Tillage machinery	X						X	
Decisions, options	X			X				
List of events			X					
Trial sites		X	X					

Chemicals in the farming system

Information on chemicals was top priority for agronomists, agribusiness and farmers. Chemicals in the cropping system was a critical issue, including chemical registrations, plant back periods for crops, withholding periods and chemical compatibilities, mixing rates and environmental effects on the efficacy of chemicals. Information on chemical application issues were also identified as important.

Weed control

Information on fallow weed control was also a high priority for agronomists, agribusiness and farmers, particularly how changing combinations of weeds, environmental conditions, and weed size affected the efficacy of herbicides. Information on comparisons of different herbicides and different herbicide combinations on weeds of different sizes and combinations was requested by farmers and agronomists.

What's happening and who's doing what

A compilation of up and coming events was requested. A list of experts working in various fields and personnel in various organisations was requested. A list of referral points for complex enquiries was suggested. Agribusiness advisers requested a list of trial and demonstration sites on a local basis.

Industry information needs

Industry issues identified as part of the analysis were the need to reduce chemical use in our farming systems and therefore access to world wide information to assist in this would be beneficial. The need to remain updated on overseas research relevant to our cropping systems was identified. With the exception of cotton and within-DPI research projects, access to overseas research appears to be minimal within agronomy on the Darling Downs. This situation is different in the horticulture industry on the Granite Belt where there is reasonable access to overseas and southern technical and farming information (1).

Research information

Research information is a highly sought after commodity. Farmers wanted information on past trials and research in the local area and summarised research updates. Consultants requested access to research reports and an index on DPI research, and access to a world wide database listing out research projects currently underway. Information on overseas research was seen as important especially in the areas of herbicides, insecticides, and cotton management. Insecticide resistance was identified as a specific topic on which regular information was required. Extension workers requested access to information on past research and extension projects in districts, data from these projects and lists of journal articles on local particular issues. Consultants, researchers and extension suggested access to conference proceedings would be beneficial in their work. Researchers identified a difficulty accessing Australian publications on particular cropping research topics.

The different types of requests for research information have highlighted the fact that information providers therefore should be considering client information needs more directly and attempting to target products to various client groups.

Pest control

Agribusiness workers acknowledged difficulty accessing information on pest outbreaks and control measures. This situation, hopefully is remedied with the establishment of DPI Farmfax. It's use in pest situations was highlighted during the mice plague by providing up to date information 24 hours a day.

Cropping and Options

Information on new crops and on less common crops such as Adzuki beans and Peanuts was requested by consultants and agribusiness. Grain quality management guidelines were requested by agribusiness advisers. Crop responses to various stresses were identified by consultants as a topic about which it is difficult to access information. Nitrogen management information, particularly in irrigation systems, was requested by growers. Seasonal and planting updates would also be useful to many participants.

Farmers requested comparisons between herbicides for specific weed situations, information on planting options and irrigation method comparisons. Crop water needs were also important. Farming options, technical information and off farm options could be compiled in the context of decision making and economics according to farmers and extension workers. Land Care extension workers and facilitators wanted more information on legume crops, pastures and ley pastures for different locations, and also herbicides and tillage machinery.

Market Information

Information on market projections and a list of markets for various produce was identified by farmers, and researchers wanted better access to crop statistics and market information. Grain traders would like better access to overseas and Australian usage of grain and various products.

Information access

Participants identified that they would like to access information through newspapers, fax, and telephone. Approximately 90% of agribusiness participants indicated they would like to access information on-line through their computers. Approximately 70% of growers with computers indicated they would be prepared to purchase the equipment (modems and software) to access an on-line information system. Of the farmers in the study, at least 40% owned computers.

CONCLUSIONS

The study showed the range of information that the various groups within the industry found difficult to access. The large number of requests for research information does support the comments and concerns of the Grains Research Foundation. In considering these concerns, it must be remembered that much of the research and development on the Darling Downs is performed with industry and public money.

One of the main issues to consider in the presentation of information for farmers is that landholders value information and knowledge based on practical experience (2). Tours to other farms and local 1-2 day seminars are the preferred methods of learning and obtaining new information for farmers rather than attending meetings or reading publications (4). The potential for using videos as a means for presenting information is significant and yet it continues to remain untapped.

The lack of information on new crops, irrigation methods and management is of concern, especially considering hardships encountered in the industry due to drought and poor returns.

The Broadacre Farming Information Centre and Network will provide some of the information identified in this study. Although this study was limited to farmers, consultants, resellers and research and extension workers, it must be remembered that there is a larger number of clients of technical information. These include rural women, students, bank managers, accountants, advisers, potential farm buyers and surveyors, to name a few. Many of these people do not have the network of contacts in agronomy that many agricultural professionals do. It is for this reason that initiatives such as the Broadacre Farming Information Centre should be supported, as they provide a major role in servicing enquiries from these clients.

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