TOPCROP - integrated marketing meets extension

R. Andrews and S.G. Till

Grains Research & Development Corporation, PO Box E6, Queen Victoria Terrace, ACT 2600

Summary. The development of TOPCROP Australia and its future directions are discussed.

INTRODUCTION

One function for Research and Development Corporations (RDCs) listed in *the Primary Industries and Energy Research and Development Act, 1989*, under which the RDCs are established, is *to facilitate the dissemination, adoption and commercialisation of the results of research and development* (3). A review conducted in 1993 (2) identified a number of impediments to technology transfer in the Victorian grains industry including:

- a lack of formal networks, making access for new players difficult;
- a decline in the number of industry experts;
- a decline in State Government extension funding;
- a lack of consistency in recommendations due to isolation of extension experts; and
- the absence of 'product champions' at the delivery end.

These issues are current throughout the Australian grains belt.

In 1993, a report was commissioned on information delivery mechanisms used to extend the research outcomes of three of the RDCs (4). Conclusions included:

- print media does not stand alone as a source of information and must be enforced by other media vehicles;
- information must match audience needs;
- farmers prefer practical farm recommendations which reflect theory;
- timeliness of articles needs to be considered in line with farm activity cycles;
- RDCs should model important information links to guide investment in their dissemination programs;
- personal contact is the highest rated source of information and discussion group processes are effective in all phases of problem solving, providing a good interface between farmers and researchers;
- timeliness and relevance of information is important; and
- in particular, market signals must reach farmers and their technical advisers to help producers benefit through meeting market needs.

Most of these points were consistent with marketing theory and the conclusions clearly demonstrated a need for integrated activities, which the GRDC has been developing since late 1992. The GRDC has, since, moved to ensure a market focus in its research and development portfolio by involvement in the Strategic Planning Unit processes for several grains industries and increased activity in cooperative research projects with industry.

The GRDC's role in promoting the adoption of technology includes facilitation, investment and promotional activities. The GRDC seeks to coordinate and integrate a broad portfolio of investments in these areas to develop synergistic marketing of new technologies which will benefit not just producers, but also researchers, processors and commodity marketers. One method which is benefitting producers and researchers is a nationwide crop monitoring program called TOPCROP Australia. Within this the GRDC is a partner, making a major investment on behalf of the industry.

Discussion

TOPCROP concept

TOPCROP Australia is a network that aims to give growers a focused awareness and understanding of the key factors influencing their performance. TOPCROP Australia links the services of MEY-Check (Victoria), TOPCROP/West (WA), GrainGain (SA), CropGain (Tasmania) and TOPCROP (NSW and Queensland). Eventually, it is expected that these groups will be known as TOPCROP Australia, while retaining their regional ownership in a partnership with State extension services, agribusiness, private consultants and farmers.

To increase access to information the current State department professional agricultural advisers, private consultants and agribusiness advisers each serve up to 20 groups of farmers (potentially some 200 farmers each), across a number of districts. While not a new approach, this has resulted in improved delivery of research outcomes, and has helped soften the impact of declining numbers of government extension professionals in some States. The TOPCROP Australia ideal is for groups to be as conveniently located for growers as possible.

The backbone of TOPCROP Australia is its proven *new crop* monitoring packages like Canola Check and other integrated check packages for broader cropping systems. These are decision-support systems which help farmers check their way through the critical success factors of production, especially with new crops. CanolaCheck, developed in NSW, has been instrumental in the development of a thriving new Australian industry. These critical *checking* factors typically include: timing and variety choice; rotations; disease control; plant nutrition and fertilisers; pest and weed control; and soil-conserving practices.

Growers involved in the program learn to monitor their paddocks and businesses by using;

- water-use efficiency measurements;
- profit/ margin analysis;
- nutrient audits;
- tables of risk of developing herbicide resistance, etc.;
- interpretation of the checking outcomes; and
- other critical factors limiting production.

Behind the scene, professional advisers use feedback from computer analyses of growers' paddock records and crop monitoring cards. While this enables growers to improve their management through regular "report card" meetings which benchmark them against district best practice, it also feeds vital information back to the research community.

Grower participation

A market research survey was carried out in 1994 for the GRDC by ABARE. Of the 992 growers surveyed approximately 5% were already members of crop monitoring groups affiliated with TOPCROP Australia (with the strongest membership in MEY-Check in Victoria). Meanwhile, some 17% of specialised (non-livestock) growers of wheat and other grains were members of these checking groups. However, 50% of growers said there was no crop checking group in their area.

The survey found that farmers went to the groups for reasons such as:

- increased yields (27%);
- professional advice (25%);
- exchange of ideas (27%); and
- increased grain quality (4%).

In 1993-94, group services were free for 88% of growers. Costs for 4% of participating farmers were under $50, while 5% paid between $50 and $300 and 3% more than $300. With the involvement of new partners and more delivery resources, TOPCROP is expected to move from *free service* to *fee for service*. Some 68% of participants said they had already joined a group for the following season.

Of growers involved in crop checking, 83% said they had a sample of paddocks checked, 17% monitored all their paddocks, 70% monitored cereals, 16% lupins, 11% chickpeas, 9% other grain legumes, 13% monitored Canola and 4% other crops.

One of the strongest affiliated groups was MEY-Check in Victoria, with more than 100 groups (1,200 farmers) participating. In Western Australia under TOPCROP West, 63 groups sprang up in a single season. One third were run by Elders/SBS/IAMA agronomists, others by private consultants, district farmer networks and by State extension professionals. Administration was both by State departmental professionals and private consultants. Some 500 growers are currently involved in the West and there is the capacity to increase membership to 1,000.

In South Australia, where some 500 growers are involved through some 40 affiliated Grain Gain groups, Canola is the major crop being monitored (alongside packages to monitor wheat, barley, lupins, peas, chickpeas, beans and a new package to monitor lentil production).

In NSW crop checking systems were developed in the rice industry in the early 1980s and CanolaCheck followed the development of the rice packages. CanolaCheck is now delivered through TOPCROP Australia groups. CanolaCheck helped farmers more than double the size of this new grains industry overnight and has expanded considerably since spreading to other States. Some 80% of NSW Canola growers have been involved in the program. Much of this growth was attributed to a unity between growers, oilseed crushers and margarine and edible oil manufacturers, whose needs were jointly satisfied by CanolaCheck. Thus, market signals were integrated into the package.

Similarly, in other States, TOPCROP Australia affiliates are beginning to link the farmer-groups served by agribusiness, farmer organisations, State extension and private consultant advisers. This will help avoid conflicting information and better coordinate the grains industry's limited resources of professional advisers relative to smaller and more centralised industries.

Advantages to the industry

GRDC research in 1994 showed that, almost by definition, *best performance* graingrowers:

- use crop monitoring packages,
- attend farmer discussion groups, and
- use professional advisers.

TOPCROP Australia now delivers all three, in all States.

In addition, the GRDC is assisting TOPCROP in the development of a unified national corporate identity and is investing in integrated communications activities - direct marketing, industry brochures, TV and newspapers - to promote TOPCROP at the district and national levels.

Future directions

The GRDC has also assisted in the development of a national business plan for the TOPCROP Australia network which , over two years, is expected to double its participation numbers and improve the marketability, productivity and sustainability of the $5 billion Australian grains industry. A schematic diagram of the TOPCROP business environment on which the business plan is being developed is shown below.

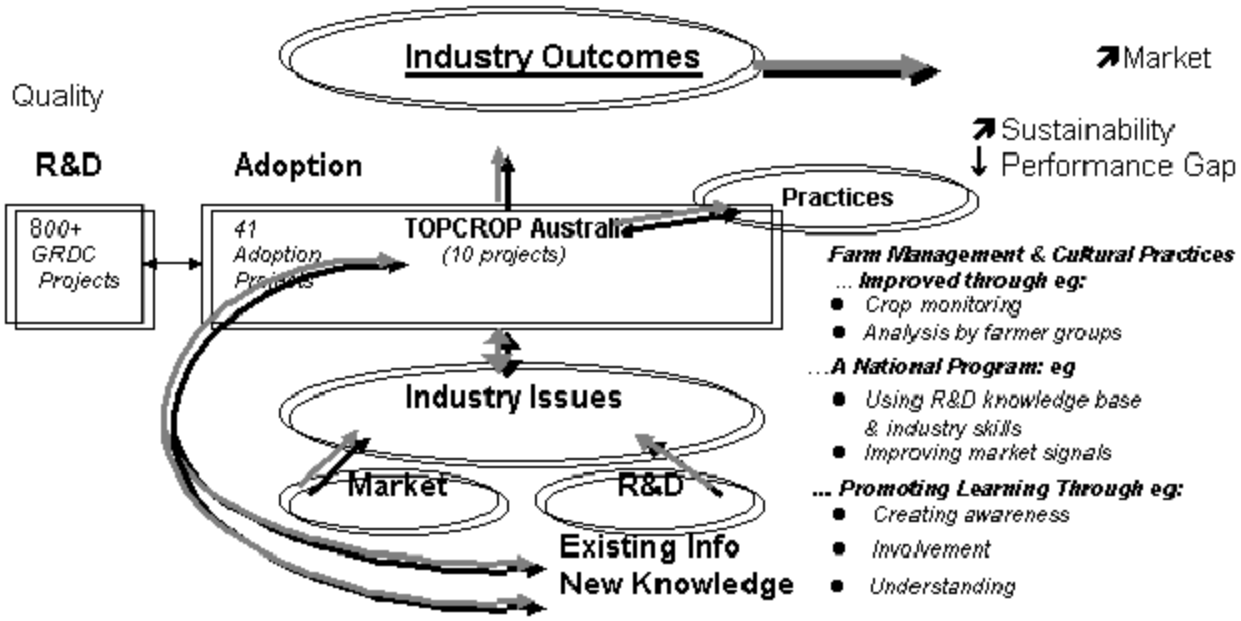

Figure 1. The TOPCROP Australia environment.

Conclusions

It is expected that TOPCROP Australia will enable better coordination between public and private sector organisations and professionals - reducing "*mixed messages*" and assisting farmers in innovation.

Success factors in delivering technology are: clear benefits (demonstrations), consistent messages from all sources, meeting customer needs (easy to adopt, fitting well into present farming systems and low risk), and effective communication packages (1). TOPCROP Australia's success will be indicated by:

- proportion of growers with a measurable increase in productivity;
- number of producers monitoring crops;
- number of crops reaching potential;
- proportion of crops meeting district quality standards;
- proportion of catchment areas meeting amelioration targets for environmental degradation.

REFERENCES

1. GRDC GoGrain Technology Adoption Workshop Report. 1993 , Trawool, 16-18 June.

2. Meyers Strategy Group Pty Ltd, 1993. Foundation Study for GoGrain Farm/Community Action. Technology Support in the Victorian Grains Industry. GRDC.

3. Primary Industries and Energy Research and Development Act, 1989. AGPS

4. Woods, E., Moll, G., Coutts, J., Clarke, R. and Ivan, C. 1993. Information exchange. A report commissioned by Australia's rural research and development corporations. LWRRDC.