

EXTENSIONNET

NEWSLETTER OF THE AUSTRALASIA-PACIFIC
EXTENSION NETWORK (INC)

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From the Chair

Terry Makin

Great news for APEN. The New South Wales Department of Land and Water Conservation have agreed to be major sponsors for the APEN International Extension Conference to take place in the later half of 1997. We are also pleased to announce that they have become corporate sponsors of APEN. The Victorian Department of Natural Resources and Conservation have also renewed their corporate sponsorship. We thank them for their support.

The Melbourne chapter of APEN have agreed to run a 2 day workshop in conjunction with the 1996 AGM. This will follow a similar format to the very successful Monitoring and Evaluation workshop last year. This year's workshop will revolve around the theme of facilitating successful community and rural development.

APEN is a young organisation that was formed to give people involved in rural development and extension a focus for sharing knowledge and ideas. The initial survey of potential members also saw a need to raise the profile of extension and the professionalism of its practitioners. To do this we need to build a strong organisation that fulfils its members needs. APEN's ability to do this is dependant on its members input into APEN in whatever way they are able.

With the economic rationalists having a major influence on the directions many organisations are taking, it is more

important than ever that the people who understand the process of change in communities have informed input into these processes. Extension is developing some very good programs with high participation rates giving excellent outcomes. Cam Nicholson has a 70% participation rate in the Woody Yaloak catchment region. We are coming to an understanding of the 'why' of this success. We need to inform our practice and our managers and policy makers of the reasons for this success. It is only when they understand the critical success factors, that the appropriate criteria will be applied to funding proposals and programs. APEN can provide a vehicle to do this.

I would like to see some discussion and letters in ExtensionNet about where you think extension is heading in this changing world.

Congratulations to John McKinlay and Matt McCarthy who organised and ran an excellent APEN meeting in Bendigo, Central Victoria. It was great to see the energy and enthusiasm present. It bodes well for the future of APEN and extension.

The Role of Group Learning in Extension

From the Editor



Dale Williams

This issue's theme integrates a regional focus (Northeast Victoria and Southern New South Wales) and group approaches in extension. Participative approaches to change mean affirming the dignity and self-direction of participants and achieving their maximum mutual benefit. Group work can enhance that participation ... or it can hinder it if underlying assumptions of superiority or control create group

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climate and action inconsistent with participative rhetoric. May this issue challenge us to consistency. Jo Millar, Tim Paramore, John Lacy, Fiona Johnson and Geoff Drysdale have kindly contributed articles. Thankyou very much, folks - especially Jo Millar who chased up the articles. Some articles were long and required shortening. My apologies to the authors. You might like to ask Jo, John or Geoff for a copy of their full articles if you are interested. We have also tried to include more 'action' photos and graphics, at your request.

We have the articles for next issue's Intellectual Frameworks for Extension. However, we need articles for the following issue, 'Power, Participation and Extension'. We hope to explore issues related to gender, ethnicity, culture, disability, etc. **Are there new contributors out there?** Please write in a manner that stimulates discourse. Aim at 700 words or less. Submit to me by 4th October. Firstly, give me a call on 045 701392 or fax 045 701750 or E-mail dale.williams@uws.edu.au.

Have Your Say

Have your say! I'd like to encourage discourse in future issues about any matters of your concern. Could we call it 'Discourse Den' or 'Network Netty' (joking)? ExtensionNet is presently limited in size, so total space will usually be one half of a page. Keep letters to a maximum of 150 words ... the shorter the better and the more likely to be published. Perhaps several readers would like to comment or challenge article points in this issue? What about responses from farmers, agribusiness, landcare and community facilitators, etc. not represented in this issue's articles by consultants?

Putting Principles into Practice: The Value of Prograze Groups as a forum for Group Learning.



'Prograze' is an educational program for producers that began in 1994. Its aim is to develop pasture and livestock assessment skills, in order to make better decisions regarding the setting of production targets, fodder budgeting and grazing management. Prograze is part of the Sustainable Grazing Systems Key Program. It is an initiative of the Meat Research Corporation, supported by the International Wool Secretariat, Land and Water Research and Development Corporation, Murray Darling Basin Commission and state departments of agriculture and other agencies. The course is generally conducted by Department of Agriculture extension officers in districts covering the high rainfall (600mm+) areas of south-eastern Australia. There are monthly sessions in the course, beginning in autumn.

Topics covered are:

pasture assessment; livestock production from pasture; setting production targets; sheep condition scoring and requirements for breeding and production; cattle assessment and breeding targets; pasture growth and management; grazing management options; fodder budgeting and paddock recording.

Existing farmer groups and individual landholders do the course for a set fee. Due to its success in NSW (e.g. 1350 graziers took part in 1994/1995), it has been adapted and extended to run in Victoria, Tasmania and South Australia. My research interest in Prograze as a forum for group learning, stems from my current research into the role of farmer knowledge in the information system (research, extension, education) as it relates to the sustainable management of perennial grasses.

What are producers gaining from group learning through Prograze?

Producers value interaction with departmental officers, as well as drawing on the experiences of farmers in the group. Information and advice is tapped relating to both theory and practice and opportunity is provided for

Jo Millar, Charles Sturt University-Albury

integration of pasture and livestock information. Farm visits were valued, as was discussing pasture management strategies with other producers. Departmental officers were seen as fellow participants rather than outside experts. One producer commented, "They probably learnt as much from us some days as we learnt from them". Producers also appreciated opportunity to influence the content and direction of the course, highlighting flexibility in meeting local needs.

Producers learn not only valuable assessment skills, but a set of principles that could be applied to their own farm situations, rather than recipes or packages of recommendations.

The success of the Prograze course in meeting producers learning needs has been reflected in the number of groups continuing to meet after completion of the course, and the desire expressed for follow up workshop or group meeting covering broader issues of farm management and profitability.

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Have you paid your 96/97 membership?

Perspectives of course coordinators and deliverers on Prograze

Cross-pollination of ideas and experience between staff from different disciplines, resulted in greater co-operation; more uniform messages; better integration of disciplines; and learning from one another. Prograze also assisted in integrating human and technical resources across state boundaries. However, improving the confidence and competence in both technical and process skills was seen as paramount in facilitating group learning. Issues of quality control through training, provision of core competencies and involvement of consultants were raised. Course deliverers were convinced that producers were provided with improved skills in pasture and livestock assessment, resulting in better decision-making and ability to meet production targets. They saw Prograze as unique in its emphasis on concepts rather than recipes.

Prograze as an effective framework for group learning in extension

Co-learning in group extension approaches was emphasised, necessitating an interdependency between producers and extension and research professionals, since their knowledge and experience was complementary (see Coutts and Daniels, 1996, 6). My observations were that interactions between group members and extension staff were

greatest when practical, hands-on activities were used, when time was allowed for effective dialogue, when the complexity and relevance of issues were addressed and when actual on-farm figures were used in setting production targets and making calculations. Coutts and Daniels (1996, 9) reported, 'It appears to be filling a niche both for producers looking for practical opportunities to advance their management capacity and for providers of extension in providing a structure and opportunity consistent with a focus on 'group benefit', group processes and a reducing resource base.'

Where to from here?

An advanced Prograze course has been proposed to assist producers develop and implement whole farm grazing

plans. This will involve both private and public sectors delivering a comprehensive program dealing with financial benchmarking, feed profiling across the farm, mapping physical resources and enhancing monitoring skills. The advanced course is anticipated to be available for delivery in 1997. Other activities are also currently being pursued locally to maximise opportunities for co-learning on farms.

REFERENCES:

- Coutts, J. and Daniels, J. (1996) Review of Prograze. Report to the Meat Research Corporation.
 Millar, J (1996) Putting Principles Into Practice: A focus group evaluation of Prograze. Report to NSW Agriculture, Albury.



The Burrumbuttock Prograze Group taking pasture cuts for digestibility and dry matter production.

Running Farmer Based Groups



What is so different about running groups with farmers as members? Well basically farmers are not usually used to being members of groups. They may have absolutely no concept of what a group is, how it should function and really what is the point of having a group? Most groups

at the start are therefore a mixture of hope and trepidation, within an initial climate of doubt and hesitation.

Adults learn best in a milieu that minimises anxiety and encourages freedom to experiment. This is what guides me, as does the precept that what is to be learned needs to be relevant to the context of the farmers. Farmers also need to have input into what, why, and how they will learn. This will develop group ownership.

Tim Paramore, Agricultural consultant, Albury

There needs to be no perceived bias from your organisation, as may occur if groups are run for retail companies.

When setting up a group it helps if there is a local identity, a community of need and interest and a relatively limited geographical area. A community group where farmers already know each other develops a momentum of its own, and can feed off social intercourse that takes place at

church or bushfire meetings, for example.

The aim of my group work is to give farmers the opportunity to increase awareness of various issues and to improve skills and knowledge. This is often best achieved through farmers doing things themselves, such as being involved in taking measurements at demonstrations. It is very important for farmers to see other realities and reflect on them and to try and fit new concepts into their own world and farming system. This is probably the most difficult barrier experienced in group work with farmers.

Keep in mind that each group member learns in a different way, when you organise sessions. A lecture style suits few adult learners. Variety and stimulation is provided by change in presentation style and group structure. Small group discussions feeding back to the whole group can be useful in setting goals, priorities and directions

for the group. Physical activity is vital to reinforce theoretical learning. I have found that farmers want to know the activities, content and expected outcomes of meetings. I send a personal letter to each participant stating these things as well as meeting time and location.

An excellent facilitator keeps the ball rolling and is aware of differences people bring to a group, such as agendas and ideas. It is important to give credence to the experience and knowledge of participating farmers. It can be very humbling to stop and think of the combined years of farming experience facing you! Humour, enthusiasm and a bright personality are important ingredients in the repertoire of the facilitator, as is a relaxed interactive style of communication. I need to take risks, put myself out on a limb. I sometimes get shot down. There is no challenge if no risks are taken. People want challenge to stimulate them and provide interest in sessions.

The facilitator needs to have experience in handling group members who might provide different group process problems. You need to learn strategies in managing them or they will ruin the dynamics of your group.

As facilitator you need to ensure a balance between task and maintenance of the group or the group will fall apart. The task is what the group exists for, the maintenance is about forming cohesion so that the tasks can be done. An autocratic facilitator is likely to be totally task oriented. A laissez faire facilitator is likely to only concentrate on maintenance. You need to be a democratic facilitator who can balance both items and also ensure you have a changing role in the group and that you can share the leadership of the group as appropriate. You need to be willing to let go, to consult with group members and to involve them in decision making processes.

Good luck with your groups!

Why has Ricecheck been so Successful?

John Lacy District Agronomist, NSW Agriculture, Finley



Ricecheck is a collaborative learning system based on crop checking aimed at improving crop yields. It commenced in 1986 and after 11 years is still the basis for delivery of recommendations to farmers. Ricecheck pioneered the development of other crop checking and monitoring packages. Industry yields averaged 6.8 t/ha in the 20 years preceding Ricecheck. Average yield since has been 7.7 t/ha, and the last six years has averaged 8.4 t/ha.

Ricecheck is based on farmers checking 7 factors. These are:

1. develop a good field layout with a min. 40cm bank height
2. sow each variety at the recommended times
3. achieve 150-300 plants/m² establishment
4. apply herbicides and insecticides as needed to prevent economic yield loss
5. apply sufficient pre-plant nitrogen to ensure panicle initiation topdressing requirement does not exceed 50kgN/ha.
6. topdress Nitrogen based on shoot counts, dry weight and NIR analysis using Rice NIR Tissue Test
7. achieve 20-25cm deep water during early pollen microspore stage.

A 1989/90 survey on crop checking clearly demonstrated higher yields resulted from an increase in the number of the 7 key checks adopted. Another industry-wide survey showed excellent overall adoption of Ricecheck at a

significant improvement in the number of checks adopted (Figure 1 - see pg 5).

Discussion Groups One of the main ways of communicating with farmers in the delivery of Ricecheck has been the use of discussion groups. About 45 groups are run by 7 district agronomists. Many groups have been running for 11 years and continue to prosper. The groups are based on locality. Attendance varies from 8 to 30 per group. Momentum for the success of Ricecheck and the groups has come from having a focus on the 7 key checks or factors linked to yield. These checks were developed following surveys of farmer paddocks and then combined with the latest research information in a recommendation package booklet. The 7 key checks are described simply and objectively which aids communication and understanding by farmers.

Learning and two-way communication is a basic feature of the groups. Farmers are educated in the implementation of the key checks for higher yields through a number of progressive learning steps of the Check Approach. The steps are **observing, measuring, recording, interpreting and acting**. The aim is to educate farmers to improve their learning and performance within each step, as well as moving from step to step over time.

To facilitate paddock measuring and recording, simple aids have been provided eg. rulers, rice rings, knives, fertiliser decision slide rules, water depth pegs, etc. Records and booklets have always been kept as short as possible and easy to fill in. The whole idea is to encourage participation by farmers, rather than drive them away because records were too complex to fill in. Farmers are encouraged to collaborate and learn from each other.

The groups meet at key decision stages. These include: (i) establishment (ii) panicle initiation (iii) microspore (iv) drainage (v) evaluation and interpretation after harvest - assessing relationships between management activities, measurements and yield results. This meeting identifies factors or practices which reduced yield, and actions and changed practices to overcome any limitations for the next cropping cycle.

All discussion meetings held during a 12 month period follow a learning cycle. This involves: the planning or setting of targets prior to planting; actions to improve management during crop growth; and evaluation of the actions and identification of improved practices for the coming season.

How can farmers be kept coming to group meetings for 11 years? All farmers attending the groups grow rice, with rice usually providing the major farm income. Thus there is strong farmer interest in improving performance. Farmers have the opportunity to discuss nonrice topics at

meetings e.g. winter cropping and pasture recommendations are discussed at meetings on drainage in early autumn. Sustainable landuse practices may be included. Farmers often suggest topics for following meetings. Farmers have given positive feedback that they like a range of topics being included. Farmers should have ownership in the planning of group meetings.

Just as individuals have different needs and ways of doing things, so too do groups. Some groups meet only twice a year, others 6 times. Some groups like recreational activities. My own groups like following one crop through the season. Other groups like looking at different crops. It is very important that meetings are dynamic. For each new cropping cycle, meeting programs should always include something new, such as the latest research findings, recommendation changes or learning from the previous year. I do a reflection after each round of meetings, noting ideas for next year and topics of interest to farmers.

Another factor for the success of groups is teamwork between district agronomists and other members. Agronomists have been in their districts for many years and built up significant experience and credibility. Presumably it would be more difficult to maintain groups if facilitators or leaders changed frequently. District agronomists

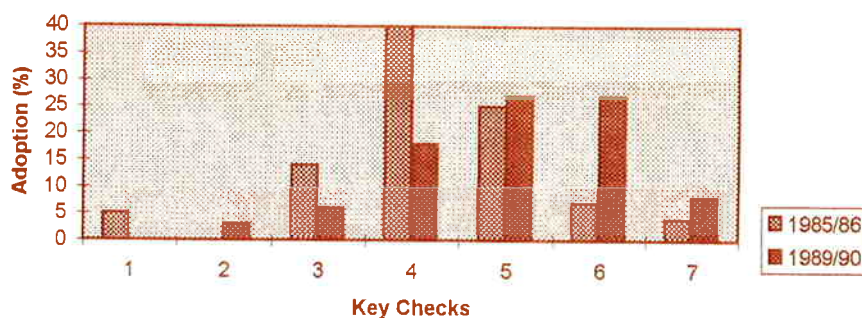
encourage farmers with group or leadership skills to help facilitate meetings, though willing farmers have not been easy to find.

Comparative group reports are great aids to groups. Farmers can compare their own performance to the average and highest 25% of the group. Group reports stimulate a lot of discussion and provide an objective base for greater learning. In newer groups farmers prefer to keep their results confidential. However, once they have built up confidence with each other, they are quite happy for their name to appear on the results, promoting even more discussion and learning.

Changed Learning and Attitudes

We aim to provide farmers with skills for creating change and solving problems. Discussion groups provide a great learning environment for developing farmers' skills in oral communication, listening and teamwork. Measurement of seedling and shoot numbers develops skills in observing and counting. Record booklets or sheets develop skills in writing, recording and interpretation. These learning processes are supported by other extension aids such as field days, pre-season meetings and written material. Feedback suggests farmers critically observe their crops much more than in the past. In the last 2 years the number of paddocks sampled for the NIR Nitrogen Tissue Test was 1500. The success of this service where it takes farmers 2.5 hours to sample a

Figure 1: Change in the % farmer adoption of the 7 key checks between 1985/86 and 1989/90



crop can be attributed to the change of culture in the Rice Industry whereby farmers are prepared to walk into and check crops.

Farmer attitudes have also changed. Many who once thought rice was simple to grow, now realise it is not so easy and recognise the significance of achieving more of the key checks.

What Have We Learnt? Probably the key to the success of Ricecheck is team effort. Farmers, researchers, extension

officers, educators and agribusiness have contributed, learned and shared their skills. People are committed to a decision or activity in proportion to their involvement and influence in the planning and decision making. In discussion groups we encourage farmer feedback on changes to the Ricecheck recommendations. Rice Research Committee farmers also give direct feedback on changes and layout of the annual Ricecheck recommendation booklet. This allows farmers to influence change and gives them

ownership of the management package and recommendations. Funding of Rice Research Committee projects approved by farmers representing the the industry ensures that farmers and industry have a key say in deciding what problems need to be investigated. Having a market driven vertically integrated industry situated between farmer backyards has helped ensure a closeknit industry with good communication networks. The discussion group network has played a part in this.

Community Drains

Fiona Johnson, Community Surface Drainage Coordinator, Victoria

"I can hardly believe it. I just keep having to come outside to listen to the sound of the excavators", exclaimed Beryl, when I rang her up to see how the construction of her community drain was going. The catchment in which she lives has 70 irrigation farms (mostly dairy). The problems is that there is no way for drainage water to get away. Farmers had been striving for 4 years to get agreement from every landholder to the location and design of the drain. There had also been the matter of paying for it as well!

The Community Surface Drainage (CSD) Incentive Scheme provides government grants to Victorian landholders to design and build drainage schemes. Once built, organisational and financial maintenance is the responsibility of landowners in a drainage catchment. To be eligible, all landholders must be involved. Landholder diversity can be enormous, depending on drainage needs, enterprise, finances, attitudes to community involvement etc. There are 45 active schemes in the Shepparton Irrigation Region at present, ranging from 2 to 75 landowners in each. Groups work for 2 to 5 years, during which substantial changes occur. Community drains allow many people to become extremely skilled in organising, negotiating and lobbying to make things happen. They know what services are available and how to utilise

them. They develop a strong sense of the need to look beyond their farm gate, if they are going to have an impact on the management of natural resources. Most groups go on to form or join existing landcare groups. It has been interesting to see them becoming an important part of community action for both salinity and nutrient management.

The underlying philosophy of the program is that community drains belong to the community. Agency officers provide technical and advisory support, but decisions and major work must be done by the community. This is essential because in reality the drain will be on their properties and they will be managing it into the future. There are many groups that have designed and built their own drains. Many are keen to host a visit from a new group or to share their knowledge at a meeting. The landholders have even set up their own 'Community Drain Network', where they get together and share their experiences and work to improve 'the system'.

CSDs have become a catalyst for other works in the catchments. The drains not only provide some final hope for many farmers, they also lead to a mind-change. where other developments that were put on hold can also be realised. Neighbour and drainage catchment relations between farmers have improved. Farmers can also make more money from their



Fiona Johnson

properties and their land is now worth (on average) 20% more.

The question is why does it work? How can a group of landowners gather together and develop to a stage where they employ consultants and contractors, make hundreds of decisions, successfully build and pay for a drain and develop enormously as a group? I believe there are a few key things involved. The importance of each varies, depending on individuals and groups:

1. the bottom line is that farmers can be legally forced to be a part of the scheme by using the Local Government Act, although this is rarely enacted. Groups commonly quickly get between 90 and 100% involvement and support.
2. groups have a strong, common focus for discussion and needed action, ie the drain
3. landholders can be involved to the extent that suits them as an individual - be that for group tasks, concentrating on what is happening on their own farm, hosting farm visits, utilising group newsletters and meetings for mutual information sharing, etc.

Landowners have a strong sense of ownership of the drainage scheme. They will make it to the end if they survive the first couple of hurdles. In Beryl's words,

"If we don't work together, there won't be any land worth farming for our grandchildren. Also I'm busy and I can't do everything myself. This way I do my bit but so does everyone else".

APEN sponsors: QDPI, Vic. Dept of Natural Resources & Environment, NSW Dept of Land & Water Conservation

Group Learning in Dairy Extension

Geoff Drysdale, Dairy Industry Development Officer, Victoria

My interest and experience with group learning has been driven by leading and conducting an extension program for the dairy industry in North East Victoria over the past 8 years. Initial emphasis was on developing dairy discussion groups and networks, followed by a more comprehensive program supported by demonstrations and benchmarking. More recently I have been conducting Target 10 courses with follow-on group and individual learning activities.

Why Discussion Groups? The dairy industry has a long history of discussion groups. The relative isolation of dairy farming and the co-operative marketing of dairy products means that discussion groups provide a non-competitive environment, where dairyfarmers can meet and exchange ideas. But history alone is no guarantee of success. Each group is different and the needs of members change over time. Two critical success factors stand out for me (i) group activities must be timely and relevant (ii) participants must feel free to openly express their opinions without fear of ridicule or embarrassment. Within this framework I also see quite a difference in the preferred balance of group sharing verses 'brought in' knowledge, the frankness of discussion, and level of discussion.

The power of the discussion group for learning never ceases to amaze me. Whilst changes in learning are not always apparent, comparison with a newly formed group or group benchmarking over time points to massive changes in knowledge, decision making skills, attitudes and practice.

My experience is that farming practices and attitudes by group members tend to converge over time, as they access a common pool of knowledge. However, the similarity may also isolate new members. Another huge benefit of discussion groups is as learning opportunity for extension officers.

Action Learning in Discussion Groups I have always wanted to use a "best practice" approach whereby groups set goals, identify information gaps, and set their agenda to achieve those goals through action learning activities - but I have never really formalised this process although many of the elements are in place. When I look back on the way that discussion groups operate they do in fact revolve around the action learning cycle. Group members ACT on a particular management decision; they discuss and REVIEW it; discussion leads to GENERALISATIONS; members PLAN their future management based on the discussion. There is advantage in groups completing this cycle a number of times.



Discussion groups provide a non-competitive environment where dairyfarmers can meet and exchange ideas.

One-off groups can partially compensate for this through group dialogue techniques (such as the ORID process) whereby discussion moves from objective analysis of a situation, through reflecting and interpreting the experience and finally making a decision.

Benchmarking using comparative farm analysis (CFA) has probably been the single most successful extension approach I have used with discussion groups. This tool also enables the action learning cycle to operate but adds to this concept in two ways: firstly individuals can more easily monitor their own learning, and secondly the process generates and documents a pool of information to be analysed and shared amongst participants similar to outcomes from action research. Interestingly "increased motivation" is a major outcome of comparative analysis. This way each of the 400 farms potentially becomes a dairy research station contributing to collective results.