APEN SECRETARIAT

Volume 6 Number 4
MAY - JULY 1999

EXTENSIONNET

NEWSLETTER OF THE AUSTRALASIA-PACIFIC
EXTENSION NETWORK (INC) A0029919P AUSTRALIA POST APPROVED PP 34763700014

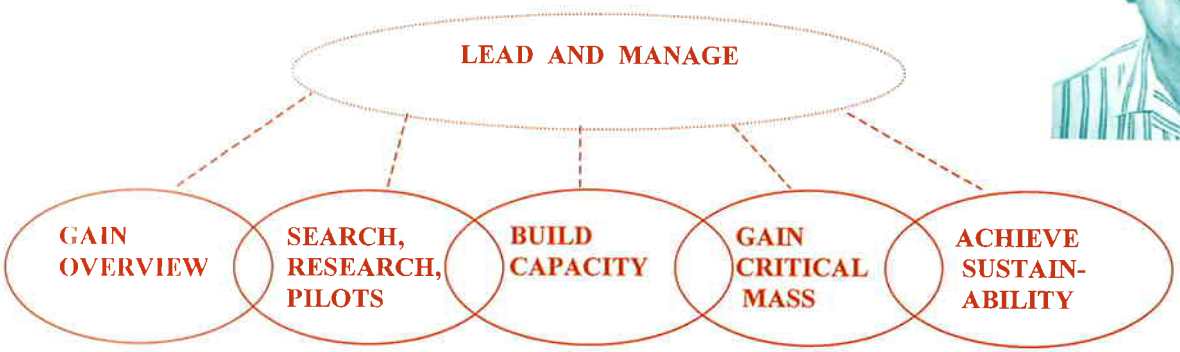
The Rural Innovation Management (RIM) Model - An Introduction

Peter Van Beek - © SyTREC[1]

Version 1

At its core, the Rural Innovation Management (RIM) model envisages innovations to progress through five phases as shown in figure 1.

Figure 1 The core RIM model – version 1



The practical value of the model stems from the guidance it provides when selecting and linking suitable methods used in each phase, and when intervening during transitions. Appropriate intervention can greatly assist in more effective development and adoption of innovations, or in more clearly articulated decisions to stop further developments. Intervention takes place mainly during the transitions between phases when major changes need to occur in key aspects such as: emphasis of the main work; the people involved; organisational support needed; forces and motives driving people; funding / resources used; scientific methods used; legal and emotional ownership; daily control; operational / administrative arrangements; length of time required; approximate number of people involved; and outcomes and results.

Use of the Model

To date, the RIM model has been used as:

- an ***overview*** to check in which phase an innovation is, and the progress made within that phase;
- a ***framework*** in which to link the wide range of activities, skills, techniques and methods necessary for developing and implementing innovations of substance;
- a ***template*** to check if developments during previous phases have been appropriate, and if current arrangements, skills and capacities are suitable; and
- a ***guide*** for strategic and tactical management.

A potentially important use of the model, highlighted during the pilot-workshops, is to provide a long-term framework for individual R and D projects. Most successful rural innovations have taken fifteen years or more for their initiation, development, evolution and general adoption. However, current project-funding is based largely on three-year cycles. Single three-year projects are unlikely to reach sustainability because their funding mostly ends before phase V

(Continued on Page 3)

[1]PO Box 968 Indooroopilly Qld 4068 Ph 61 (0)7 3876 7874 Fax 61 (0)7 3876 7954 E-mail sytrec@gil.com.au

CONTENTS

APEN is pleased to acknowledge the support of:

DPI QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES

LAND & WATER CONSERVATION

Natural Resources and Environment

AGRICULTURE
RESOURCES
CONSERVATION
LAND MANAGEMENT

From the Chair

John Bourne

There were several items of interest from the recent Committee of Management meeting:

- Firstly arrangements are well in hand for **the National Forum for 1999** in Perth, WA. The dates are the **11th and 12th November**. Sally Marsh outlined some of the initial planning and we can be assured of an excellent forum. I would urge everyone to plan now for a trip to WA in November, and I am sure we will be hearing a lot more of the preparations during the next few months. (See Page 6 and Insert)
- Amabel Fulton from Tasmania has recently proposed that APEN initiate an **annual Extension Award**. The concept has been discussed several times at the Committee of Management meetings and received enthusiastic support. The details of how such an Award would work are still being considered but if you have any suggestions, I am sure Amabel would be glad to hear from you. (See Page 5)
- The Private Sector working group led by Peter Davies is continuing to look at opportunities for **greater involvement of the private sector in APEN.** Peter reported that he had spoken further with David Heinjus from Clare in SA. David was a keynote speaker at the Roseworthy Forum, talking about the Property Management Planning Program as a model for private and government sector partnerships. The working group is interested in seeking funding to progress this initiative and has approached RIRDC to see what opportunities may be available.
- Horrie Poussard is now back in Australia after his time in Vietnam, **welcome home Horrie**. He will be taking back the position of treasurer from Bob Edgar, probably in the new financial year, when he and Bob are able to get together to arrange a change-over.

From the Editor

Elwin Turnbull

This edition includes two articles of greater length than normal. The first by Peter Van Beek is a popular topic of conversation and application for those associated with Peter in his teaching and consultancy work. It is a very useful model of the process of intervention that a change agent aspires to because it covers the whole continuum from initiation towards an end goal of a flexible and more sustainable use of technology. As such the RIM model gives us a total road map to allow constant critique and questioning of direction as we move through projects in communities.

The second article by Manir Ahmad, Andrew Davidson and Tanvir Ali is of interest because it shows in objective terms the paradox when extension is funded by private enterprise that the welfare component of government funded extension is no longer a priority. Lost is the mixed bag of productivity and social equity goals that government funded extension has traditionally had to deal with. The recent conference in Roseworthy and the ongoing strategic planning of the APEN Private Sector Working Party are ways we are attempting to adjust to this new scenario in our profession. **If any members have ideas or needs they feel could be met by our APEN network please get into contact with Peter Davies at 03 5881 2314.**

To be a network we need more articles for this newsletter so please send me your observations on the pleasures and trials of your day to day life in the profession of extension. Also if like Peter Van Beek you have a model or approach which you are finding very useful please let us know about it. Send the articles to either Rosemary Currie or Elwin Turnbull.

I'm looking for someone to take over the Editor's job as my two year term comes to an end at the next AGM. – Interested? It's very rewarding!

Continued from Page 1
can be completed. Understanding how far an innovation has progressed within the context of the RIM model may thus be extremely valuable to people who apply for, or make decisions about, funding for sequential projects.

The RIM model and its associated management processes are thus particularly useful for:

- senior field-people who need to understand the wider context of their activities;
- regional managers who need to select methods and staff; and
- program managers and funders of rural R and D who need a long-term framework for their decisions.

Basic assumptions

The Rural Innovation Management (RIM) model is based on the following assumptions:

- managing the development of a potential innovation starts when an idea for something new is acted upon;
- the innovation then often develops through five distinct, but overlapping phases (or can be terminated at any point);
- during these phases, development work consists of sets of diverse but complementary activities;
- in the areas of overlap between phases (the transitions) major changes occur in many key aspects and major decisions are made, currently often by default; and
- strategic intervention during transitions can assist in more effective development and adoption of an innovation, or lead to more clearly articulated decisions to stop further development.

Version 3

The original model in figure 1 benefited greatly from contributions by many people during consultancies, courses and workshops(see Origin and Development), resulting in more detailed versions. Version 3 (figure 2) is the current working version which pays particular attention to the Initiation processes and the intervention between phases. As such it is comprehensive, but rather complex.

The phases

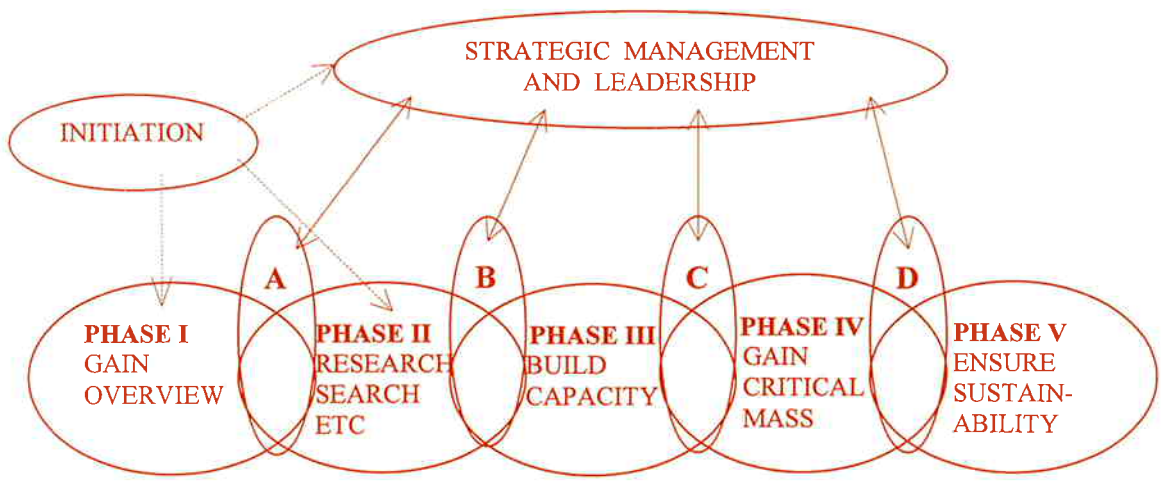
Initiation
An innovation is here seen as something new and potentially useful to an individual or group. Ideas for innovations can come from flashes of insight, careful situation analyses, policy decisions, research, literature and market searches, or general learning. However, the RIM process starts when someone decides to turn the idea into reality. From then on, there is an increasing need to be clear about what the innovation really is. The perception of what the innovation is often changes considerably during its development.

Phase I - Gain overview
The main aims in phase I are to obtain an overview of the relevant situation(s), and to identify or confirm relevance, opportunities and potential problems. Methods suitable for use in phase I include: Rapid Rural Appraisal, Participatory Rural Appraisals, Rapid Multi-perspective Appraisals, archive studies, public meetings, focus groups, scientific analyses, surveys, problem - tree analyses. (NB most methods can be used in several phases.)

Phase II - Search, research, develop pilot products, and conduct marketing studies
The aim of phase II is to develop the innovation and associated activities far enough to gain clarity about its possible value(s) and chances of success. Phase II can include: searching and researching; developing pilot products and conducting preliminary market studies; and assessing effectiveness, social impacts, ecological effects, marketing and economic viability. Methods suitable for use in this phase include: literature searches; traditional laboratory and on-station research; farming systems research, on-farm research, participatory research; pilot studies; building prototypes; using test sites and technical reference groups; Local Consensus Data (LCD) and Best Practice Groups; and marketing studies.

Phase III - Build capacity
The aim of phase III is to build enough capacity to produce or provide the

Figure 2 The Rural Innovation Management Model – Version 3



innovation en-masse. This involves: assessing and / or developing the capacity of existing exchange and distribution agents to extend the product and of stakeholders to use it; assessing the need to bring in new ones; building alliances; establishing linkages; and, where needed, develop or acquire new resources. An important part of this phase is the design of a monitoring system, including performance indicators.

Suitable methods include: Knowledge Systems analysis; selecting and / or setting up extension systems such as Training and Visit; developing appropriate extension methods and techniques such as functional groups or demonstration sites; training staff; conducting detailed market analyses; and liaising with commercial, educational and other organisations.

Phase IV - Gain a critical mass

The aim of phase IV is to ensure that sufficient adoption is achieved within appropriate time limits to create an effective demand for the innovation from key-market segments. This involves implementing extension / consulting / teaching / development projects; using many extension methods and techniques; monitoring progress; and evaluating results. Methods used or developed during phase III continue or are applied in phase IV. However, due to changes in the environment or the innovation, other methods may become more suitable.

Phase V - Ensure long-term sustainability of the innovation

The aims of phase V are to ensure that the innovations can be adapted to diversity and changes in the environment, and to make them independent from external funding. Flexibility thus needs to be incorporated from the start. The ultimate aim of the RIM process is to make the innovation part of mainstream activities, and no longer considered to be innovative. Methods suitable for use in this phase include: incorporating into technology eg seeds or machinery; including in curricula; commercialising; building local farmer / community organisations or setting up functional groups and transferring ownership of the innovation to these organisations.

Phase V includes transferring the management of the innovation to permanent management entities. The RIM process is ended once management is transferred. Ultimately new technologies and developments are likely to overtake most innovations.

The transitions

Transitions between the phases are the times when major changes occur. The RIM model derives its practical value from the assumptions that these can be managed and that this will increase effectiveness of progress. Aspects in which changes are likely to occur are:

- *emphasis of the main work* (the nature of what is / will be achieved in this phase)
- *actors* (the people actively involved, eg researchers, extensionists, commercial people)
- *driving forces or motives* (what motivates the actors eg publications, profit, keeping jobs)
- *main methods* used or needed (traditional science, extension, marketing)
- *funding / resources* used (what funds or resources the actors use / need, which can be little in the earlier, but very substantial in the later phases)
- *organisational support* (needed and provided / not provided)
- *ownership* - legal, commercial and emotional (who can cut the project short by withdrawing necessary resources, support or enthusiasm)
- *control* (who controls / should control the daily work)
- *operational / administrative arrangements* (what are / should be the optimum operational or administrative arrangements; these can become very complex in the later phases)
- *length of time* (how long does / will this phase last, eg 1, 2, 4, 8 years; this can be long during phase 2, but often needs to be short during phase 4)
- *number of people involved* (few (<5) in earlier phases, some (5-12), many (13-36), a lot (37-108), or masses (>108) in later phases; this number effects communications and other aspects)
- *outcomes and results* (what are / will be the desirable outcomes or results of this phase in terms of technical products and scientific, social and commercial developments).

Management methods which can be used during the transitions, include: completing an evaluation of the previous phase; Soft Systems Methodology; strategic planning methods; project and change management; and designing evaluation and monitoring for the next phase. Techniques used in the design of individual projects include: problem-tree analysis, to analyse specific tasks or challenges; Log-frame, to design specific and targeted activities; and IMPROVE, an integrated monitoring and evaluation model.

Leadership and management

RIM processes can benefit from informed leadership, and from management at three levels. Leadership is seen as developing and fostering a vision and supporting initiatives at appropriate times and levels of management.

The three management levels are seen as: **strategic** - maintaining long term progress in the face of changing environments, maintaining visions;

tactical - short term interventions to effect the changes in aspects discussed before; and

operational – on-going day-to-day management of the project at ground level, doing the work.

Following the decision to act, the key-roles of strategic management are seen as: initiating phase I, or verifying data from that phase, and managing the

progression of the innovation through subsequent transitions and phases. The ultimate aim is to ensure that the emerging innovation becomes self-sustaining.

Strategic management involves:

- identifying appropriate times for transformations;
- involving existing and new stakeholders in reviewing the progress of the innovation through the RIM processes, and re-visioning;
- supervising transitions; and
- harmonising subsequent operational and tactical management.

The role of tactical management is to: implement the changes during transitions; ensuring an appropriate mix of methods for each phase; and linking methods across phases. The role of operational management is to ensure that the selected methods are used correctly and achieve, at the least, the minimum specified results within budget, resources and time.

Origin and development

The model has its origin in a description about how research in secondary industries leads to the development of pilot products and building of special factories (the reference has been lost). The concept was transformed into RIM version 1 and used in 1995 and 1996 in the International Courses in Rural Extension in the Netherlands. It proved to be very useful as a framework for arranging the wide range of methods and techniques needed in Participatory Technology Development. It was then used to look at similar processes in rural innovations in Australia. This led to identifying gaps in the overall extension system (Van Beek, 1996).

Version 1 was also applied during consultancies in Australia with the Tasmanian DPIF and CSIRO. These involved technical innovations and a complex computer-based simulation program. The applications showed the model's usefulness in identifying the current phase of development, and in indicating changes in management needed to progress the innovations.

During two pilot-RIM workshops, the model was applied to: the Property Management Planning Program; a rural development project on the Eastern Darling Downs; and the use of self-managing groups in dealing with changes. Participants especially developed the model's potential to guide intervention during transitions, and refined the initiation processes. This, and its application to tactical management of development processes at community level, lead to version 2 (Colles et all, 1998). Subsequent desktop comparisons with case histories (Paine 1997, Röling and Wagemakers 1998), and reflections led to the current version 3.

The RIM model forms the framework for an accredited twelve-day workshop of the Rural Extension Centre. Participants focus on learning about, selecting, applying and linking key-processes used at strategic, tactical or operational management levels. They can select particular phases, methods and levels of management to suit their needs and projects.

References

Colles E J, M Cruickshank, R F Fell and M A Letts, 1998, *A report on the use of RURAL INNOVATION MANAGEMENT, A Model for Facilitating Change,* Rural Extension Centre, The Univ. of Queensland, Gatton

Röling N G and M A E Wagemakers (eds) 1998, *Facilitating Sustainable Agriculture,* Cambridge University Press

Paine MS, 1997, *Doing it together, Technology as practice in the New Zealand Dairy Industry*, PhD thesis, Agricultural University, Wageningen, the Netherlands

Van Beek Peter 1996, Transferring A Learning Model From Commercial To Rural R And D, in: *Australian Systems Conference: Learning through Systems Thinking*, Monash University, Melbourne.

Acknowledgments

I thank the following persons for their many and extremely valuable contributions to the development of the model. Their combined contributions have made the model sufficiently robust to be presented more widely and, hopefully, contribute to managing other innovations.

- Dr Frans Doorman, co-leader, and Mr Ruud Ludeman, course director, 1995 IAC course;
- Mrs Mona Dhamankar, co-leader, Mr Bert Huizinga, course director, 1996 IAC course;
- Ms Ruth Nettle and Dr Peter Carberry, leaders of projects in which the model was tested;
- Mr Malcolm Letts, Mrs Margaret Cruickshank, Mr Ed Colless, and Mr Dick Fell participants in the first pilot RIM workshop; Mrs Cherryl Sisson, Mrs Merrin Brown, Ms Sue Heisswolf and Mr Phil West, participatns in the second RIM pilot workshop of the Rural Extension Centre and
- Dr Jeff Coutts, Director of the Rural Extension Centre, The University of Queensland, Gatton Campus.

However, the responsibility for shortcomings in the material presented remains entirely mine. Peter Van Beek

APEN Award for Innovation in Extension

As part of its charter of promoting excellence in extension, the national committee is offering an award for innovation in extension. The award is open to individuals from the Australasia Pacific region and people of all ages and professions are invited to nominate before the closing date of August 20, 1999. The winner of the award will be presented with a plaque, and provided with flights, accommodation and registration to participate and present at the WA 1999 APEN National Forum in November.

Nomination forms can be obtained from the APEN Secretariat.

Improving the Interpersonal - an APEN training program
A Personal Response

Penny Wolf and Sam Reinholtd, CFA

In early December last year, the APEN Melbourne Chapter ran a two-day training workshop on improving interpersonal relationships. The workshop aimed to provide participants with the skills to develop better interpersonal relationships and work at deeper levels of group process and management.

The workshop presenters/facilitators were **Bevan Bessan**, a consultant from Western Australia, who works with a range of industry groups; and **Lyn Sykes**, a consultant from Dubbo, who works with rural families and groups to encourage the development of good communication skills. Most participants in the workshop were employed to work with groups of people where behaviour change is a desired outcome.

The workshop covered areas such as:

- establishing the foundations for effective working relationships,
- developing guidelines for working within groups,
- building trust through communication,
- tips on questioning,
- recognising different behavioural styles,
- working with self esteem,
- dealing with agendas in groups,
- facilitation skills and
- dealing with conflict management and resolution.

Lyn and Bevan referred to the 'six pack of skills' that move people from talk to action. They modelled their sessions very much along this line, and facilitated participant interaction at numerous points during the workshop.

They opened the workshop and each session with a purpose that involved their stated objectives, a discussion of group expectations and ground rules or guidelines.

Throughout the workshop, participants were encouraged to:

- listen and consider other viewpoints,
- to identify differences and similarities in their viewpoints,
- look for common ground and reconnect these to the purpose.

Lyn and Bevan ran the sessions by summarising progress, maintaining focus and relevance and restating objectives. At the completion of each session they:

- summed up,
- reflected and
- acknowledged the contributions of the group.

CFA's approach to Community Education is based very much on this interactive approach. The workshop provided us with a valuable opportunity to discuss our work practices with a number of extension professionals. In sharing our common experiences, it became clear that ;

we were all in the business of helping people make decisions and live with them.

1999 National Forum in Perth

Planning is now well underway. Scheduled for the **11th and 12th of November**. Agriculture WA will be also be holding a meeting in conjunction with the Forum on the 10th November.

Mark the dates in your diary and plan to make the trip Way Out West!

Ryegrass Endophyte: An Essential New Zealand Symbiosis –
"Harnessing the good, avoiding the Bad, and Turning Around the Ugly"

Notice of Major Symposium

Ryegrass endophyte has a major impact on farm production and profits, affecting pasture persistence, animal health and animal production. There is a lot of research being done on this subject, and many advances have been made in recent years. The Ryegrass Endophyte Symposium will be of interest to farmers, farm advisers, veterinarians, seed industry representatives, and agribusiness companies.

This is your only opportunity to catch up with all the information on ryegrass endophyte, and pick up ideas to improve animal or plant production on your (or your client's) farm.

Speakers will include; Dr Syd Easton, Mr Lester Fletcher, Dr Barry Smith, Dr Reg Keogh, Dr Dave Clark, Dr Chris Morris, Dr Brian Tapper – and papers also from farmers, veterinarians, seed industry representatives and other researchers.

Programme: Twenty spoken papers will be presented, with panel discussion after each of four sessions. Sessions will cover:

- Endophyte and sheep production.
- Endophyte and dairy production.
- Endophyte basic science.
- Selected endophytes - a solution?

When: Friday 8 October 1999.
(immediately following the New Zealand Grassland Association Annual Conference on 5-7 October).
At: War Memorial Theatre, Napier.
Registrations: Registration can be made on the registration form for the 1999 New Zealand Grassland Association Annual Conference. For registration forms contact:
The Secretary
New Zealand Grassland Association
C/- AgResearch Grasslands
Private Bag 11008
PALMERSTON NORTH
For more information contact:
Dr Derek Woodfield, Chairman, Organising Committee,
Telephone: (06) 356 8019
email: woodfieldd@agresearch.cri.nz

Is Privatisation the Solution for Agricultural Extension in Pakistan?

Munir Ahmad, Dr. Andrew P. Davidson** and Dr. Tanvir Ali**
** University of Agriculture, Faisalabad, Pakistan*
*** University of New England, Armidale, NSW*

Traditionally governments have been and still are performing a dominant role in providing extension services to farmers. This service is important given that agriculture makes a significant contribution to a country's economic well-being, particularly in developing countries such as Pakistan. In 1987 the FAO conducted a study to determine the share of various organisations involved in extension worldwide. According to the results of the survey, 81 per cent of extension work is conducted through a ministry or department of agriculture, at the national, state, or provincial level (Figure 1). This is beginning to change, however, with the private sector assuming a larger role. The private sector's share, only five per cent in 1987, is estimated at double that now. While this trend is more common in Western countries such as Australia and New Zealand, the privatisation of extension services is increasing in developing countries as well. Pakistan is no exception.

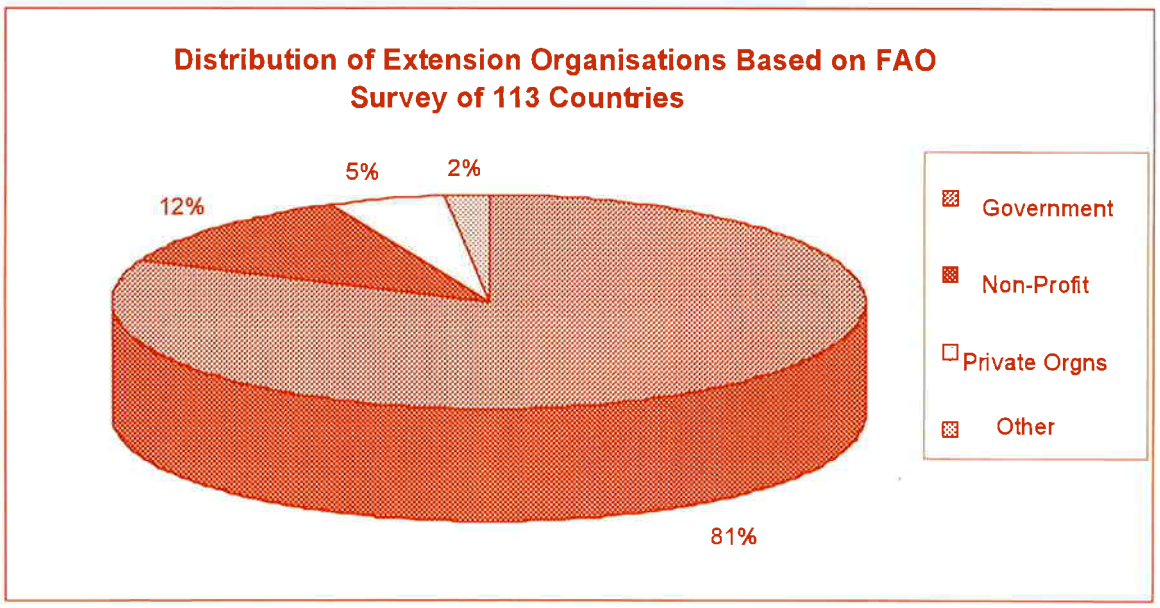
As in many other countries, Pakistan is looking for alternative extension paradigms that are more cost-effectiveness and client-oriented. To this end, the government is looking to privatise the provision of agricultural extension services in an attempt to better disseminate agricultural technologies and information to farmers. Currently, the public and private sectors are working parallel to each other in the process of agricultural extension. Unfortunately, there is little information in Pakistan to substantiate whether or not the private sector is more capable. This study was conducted to help address some of the paucity of empirical information in determining the comparative effectiveness of public and private extension in Pakistan.

The T and V System: Public Extension in Pakistan

The implementation of the T and V system was an effort to reform and improve the effectiveness of public extension services in Pakistan during the late 1970s. The T and V system is a system of extension based on two step flow of information, from contact farmers to the rest of the community. However, there is no hard and fast rule that determines the number of an extension worker's contact farmers nor who those farmers will be. Among other things, it depends on an extension worker's mobility, the density of population in the area, the types and diversity of crops, the types of farming systems, and so on. Usually, on average, the number of contact farmers in a group varies from eight to ten.

Despite initial successes, there are some serious problems with this type of extension. In general, too few farmers have access to extension personnel and the T and V system relies primarily on the 'trickle-down' of information from the contact farmers to the wider farming population. In addition, this system

Figure 1 Distribution of Extension Organisations Based on FAO Survey of 113 Countries



Source: Swanson et al. 1990 quoted in Umali and Schwartz 1994.