

DEPARTMENT FOR INTERNATIONAL DEVELOPMENT
STRATEGY FOR RESEARCH ON RENEWABLE NATURAL
RESOURCES

NATURAL RESOURCES SYSTEMS PROGRAMME

PROGRAMME DEVELOPMENT REPORT

DFID Project Number

PD093

Project title

**Study of the Impact of Selected NRSP Projects’
Communication Activities and Media Products**

Author

Dr Patricia Norrish

Organisation

Independent Consultant - Communication in Development

NRSP Production System

Crosscutting

Date

August 2001

NATURAL RESOURCES SYSTEMS PROGRAMME

**Study of the Impact of Selected NRSP Projects'
Communication Activities and Media Products**

August 2001

Report compiled by Dr Patricia Norrish

ACKNOWLEDGEMENTS

I would like to acknowledge the work of the review teams whose names and countries are listed below:

Bangladesh

Dr Mokhlesur Rahman

Bolivia

Fidel Hoyos

Juan-Carlos Mejia

Ghana

Dr Owuraku Sakyi-Dawson

Dr Samuel Kwame Offei

assisted by Araba Sey

India

Dr. S.D. Tripathi

Zimbabwe

Nicola Harford

Tendayi Mutimukuru

The case studies presented in the report are edited versions of the reports submitted by the review teams. All errors and omissions are mine.

During the course of carrying out this review a large number of people and organisations were contacted. We are very grateful for the high level of cooperation we received from researchers, intermediaries and farmers.

Dr Patricia Norrish

DISCLAIMER

The findings, interpretations and conclusions expressed in this report are those of the author and should not be attributed to the Natural Resources Systems Research Programme (NRSP) which does not guarantee their accuracy and can accept no responsibility for any consequences of their use.

CONTENTS

EXECUTIVE SUMMARY	1-11
THE REPORT	
INTRODUCTION	12
Background	12
Projects selected for the review	13
Aim of the review	13
Methodology	14
Structure of this report	14
VIEWS OF PLS, PM, DFID ADVISORS AND OTHER UK PROJECT STAFF	15
Responsibility for promotion and uptake activities	15
Main factors influencing the uptake, adoption and dissemination of project outputs	18
CASE STUDIES	20
Case Study 1 R6382 Bolivia	20
Case Study 2 R6621 Bolivia	23
Case study 3 R6756 Bangladesh	26
Case study 4 R6789 Ghana	28
Case study 5: R6799 Ghana	32
Case Study 6: R7085 Zimbabwe	34
Case Study 7: R6759 India	37
Case study 8: R7537 Zimbabwe	41
OVERALL FINDINGS	44
Materials	44
Activities	45
Keeping track of things	46
Which organisations to work with	47
Assumptions	47
Capacity and responsibility	48
RECOMMENDATIONS	48
General recommendations	48
Recommendations according to the project cycle	49
CONCLUSION	53
REFERENCES	54
APPENDIX 1: TERMS OF REFERENCE	55
APPENDIX 2: QUESTIONNAIRES AND GENERIC CHECKLISTS	58
TABLES/BOXES	
TABLE 1: Projects for review	13
BOX: 1 Uptake by farmer not involved in project research	22

EXECUTIVE SUMMARY

PROJECT PURPOSE AND RESEARCH ACTIVITIES

1. This purpose of this study, of the uptake and impact of specific NRSP project communication processes and products, was to inform what the programme requires of project leaders in order for dissemination to be effective. The NRSP recognised the need for a communication strategy for the effective dissemination of project research outputs and set in motion a process which will enable it to learn from past projects and feed that learning into its future communication strategy. Evaluating a selection of communication activities and media products which are intended to help promote uptake is one part of the process.

2. Previous research suggests that effective dissemination is dependent on a number of factors including:

- the extent to which a project is demand led and farmers are involved in the research
- good collaborative working with stakeholders and beneficiaries (e.g. intermediate organisations, policy makers, bi-lateral projects, commercial organisations) throughout the project, this means a focus on a communication strategy
- a good understanding of stakeholder and beneficiary communication context and needs
- the extent to which an iterative process for the development of materials, involving both end and intermediate users in pre-testing and evaluating, has been put in place

3. A previous step in the learning process was a literature review of the documents on past projects assembled by NRSP which led to the development of criteria for selecting completed projects for dissemination. These criteria include:

- demand driven nature of the research
- demand across a range of stakeholders who will be instrumental in uptake and dissemination; links between stakeholders (including DFID bilateral projects/ NGOs/GOs/private sector
- communication activities and media products delivered and used
- a communication strategy or dissemination activities in the RD1
- participation of target organisations. and beneficiaries in the research process and in communication activities and the generation and pretesting of media products
- formation of formal networks/groups through research process or associated activities
- mid-term review report or some other evidence of M&E of project outputs and activities of testing and/or impact assessment of media products.

4. These criteria and the factors on which effective dissemination is dependent formed the basis for the questions to be asked in the study. Eight projects were selected as case studies (Two from Ghana, Bolivia and Zimbabwe and one each from India and Bangladesh. They were selected because they were aimed at the poorest sections of society, either directly

or through policy, and have put particular effort into communication and dissemination. Review activities were carried out in the UK, Zimbabwe, Bolivia, Ghana, India and Bangladesh by local researchers. The main activities were:

- Rapid review of project documents to determine who was involved (intermediaries and farmers) plus follow up with project staff
- Development of semi-structured interviews for use in:
 - Interviews with UK based project staff
 - Interviews with persons involved in decision making about the development, production and distribution of the manuals and videos etc
 - Interviews with those involved in project communication activities and users of the manuals and videos etc.
- Development and administration of a telephone questionnaire for UK based project staff
- Report on each case study
- Synthesis of the case studies for presentation to the NRSP

5. Most of the interviews with project leaders and other UK based project staff were carried out by telephone and a transcript was then sent to the interviewees for their correction. The field reports have been sent to project leaders for comments and those comments have been incorporated into the final report.

6. We had hoped to be able to observe manuals and other leaflets in use, but this was not possible. In some cases this was because manuals and leaflets had not been completed or, if completed had not been distributed. In others it was that activities in which they might be used were not taking place at the time of the review. However, where material had been distributed questions were asked about use.

OVERALL FINDINGS

7. In all but one of the projects reviewed here most of the main criteria for deciding whether a project output is worth disseminating have been met. In most of them some kind of materials have been produced for dissemination purposes, however their impact is slight. Participatory research activities, farm and research station visits, opportunities to interact regularly with extension etc, on the other hand, are successful in achieving uptake during the life of a project, but their continuation once the project is over is often uncertain. The main findings are discussed below.

Materials

8. The extent to which projects try to produce leaflets, posters, manuals and videos indicates the level of importance which is now being given to visible signs of dissemination beyond the academic article. However, the role and importance of materials in relation to activities during a project and their role in wider dissemination is not fully appreciated. Many of the materials have been produced without the involvement of those for whom they are intended and with a lack of understanding of the communication context within which people live and work. Consequently the impact of media products has been low. Materials are seen as inappropriate or incomprehensible by those for whom they were intended.

- language issues are not fully addressed. Farmers want materials in their own language BUT during projects materials are usually created in English. Translation may be left until the end of the project and may not have been properly budgeted for.
- the communication environment of farmers is richer than may at first appear both in relation to information sources and in the range of organisations and individuals who communicate with them but has not been fully explored
- there is still a heavy emphasis on written materials even though farmers have cited cross farm visits, learning by doing, and videos as methods of learning and communication.
- lack of, or incomplete, technical information
- almost no efforts are made to test materials for usability, although leaflets may be shown to farmers
- promotional leaflets and videos may be distributed to farmers, who are looking for materials which will enable them to do something.

9. The other major reason for the lack of impact has little to do with the nature of the materials themselves, but is concerned with a lack of understanding of the real costs (time, skills and money) of producing appropriate materials in sufficient numbers and distributing them. Setting budgets too low to enable materials to be completed before the end of the project is a contributing factor (even where dissemination was the aim of the project). The results of this are that:

- distribution has not happened, in fact it is generally limited, haphazard, unrecorded and untracked
- in some cases products have not been finished, videos not dubbed or copied, leaflets not printed or not distributed, manuals not written translation not done etc.
- dissemination is often a passive activity (e.g. provision of leaflets and manuals at some central location).intermediary organisations, who might use materials, don't know of their existence, nor where to get things from on a regular basis
- very small print runs and also small numbers of copies of videos.
- manuals are not written during the lifetime of the project but have been squeezed in to project leaders own time once the project is over.
- follow on training in the use of manuals, leaflets and videos is not given.

10. Projects do not consider that different groups of stakeholders and beneficiaries may need to be communicated with in different ways. Leaflets designed for farmers are put together to form a manual for extension for example. Whilst this may save money there is no indication of consultation and pretesting to see if it is really what is required. There is little understanding of the need to determine a purpose for materials before they are produced, and to provide training support for the use of materials, particularly manuals once they are distributed.

11. Project leaders acknowledge that at present there is too much reliance on the UK end for the generation and production of materials. Quality is the underlying issue here. In-country staff would often like to be more involved in generating materials, but may need capacity building to do enable them to do this. The end result unfortunately is that many

leaflets and manuals are generated and produced in the UK, far away from where they will be used and where they need to be pre-tested.

12. The uptake pathway for materials and manuals produced in this way is unclear. In one case distribution had been set up before the project finished so that it was clear where the manual would go. In another the institution which might have carried out distribution and provided training support has been radically reorganised. In a third case manuals get carried around by project leaders and their colleagues and methodologies incorporated into their next project proposal, or current field work. Serendipity is the key factor (who you know, bump into etc). This may help to get new methods known about and even in some cases used, but the evidence is that the kind of training given is too short to give local field staff enough confidence to use new approaches once the UK team has departed.

13. The need for farmers to be more involved in promotion and dissemination was raised by many people. Where farmers were involved it was in choice of content and also in giving their views on the way in which material was presented. However, methods for assessing farmers needs and preferences in terms of materials, and their involvement in content generation was limited. Materials need to be usable and the methods employed fall short of usability testing. Asking people what they like is one step, seeing materials in use is quite different and is the only test of their usability and usefulness. Work in Thailand (Turongruang 2000) over the last decade strongly suggests that materials developed with farmers during the life of a project have a much stronger chance of being able to stand alone, for certain kinds of research outputs.

14. It is not always clear what the role of materials is supposed to be. In particular there is often confusion about the distinction that needs to be made between project PR media and activities and those which can be used by and with the farmers. These need to be complete, accurate and usable. This confusion leads to the production of materials not usable by farmers.

Activities

15. Findings in relation to communication activities during projects are positive. Without doubt training activities, workshops, farm visits, research station visits, regular interaction with extension (GO or NGO) and other farmers lead to interest and uptake during the life of the project.

16. However there are areas of concern. The first is that the expectations of people who are involved in communication activities (baseline surveys, farm visits etc. problem census, needs analysis) for projects putting in place a new methodology or carrying out policy linked research need to be addressed. Projects of this kind have to work with technology projects and are often confused with them, or seen as one and the same thing. Raised expectation and confusion set up negative responses in farmers and even in some of the organisations with which they work.

17. Secondly there are concerns that a methodological approach employed by projects funded by one donor, may be significantly different from those employed by projects funded by another donor. Collaborators and intermediary organisations working with more than one donor, and the farmers they work with, find it difficult to respond to these different approaches.

18. Thirdly a serious omission highlighted by this work is that farmers outside the project are not considered serious contenders for future uptake and may not be brought into the dissemination and information circle from the beginning. One complaint heard in this research is that they hear about things in a haphazard and partial manner. This is a serious issue in relation to wider uptake and impact and needs to be urgently addressed. Recent work in Uganda (Norrish and Ocilaje 2001) suggests that farmers not directly involved in research in a project would like to be kept informed throughout the life of a project about what is going on and be included in farm visits, etc. This means they need to be included in the communication strategy from the start.

19. Fourthly there was evidence that organisations and individuals (researchers, extension and farmers) working on and with projects were not fully aware of what a project was doing or what it was trying to achieve. In one or two cases there was even confusion about whether people were collaborators or not. Such confusion does not help in creating good relations and uptake of research outputs. One other critical issue is what happens when UK staff change. The project in India seems to have been adversely affected when the head of project left. There may have been special circumstances which affected the continuity of the project in this case, but it is something that needs to be taken account of. In particular those working with the project (collaborators, intermediaries, farmers) need to know what is happening. This highlights once again the need for good collaborative working.

Keeping track of things

20. The kind of information needed for NRSP to make a judgement on whether a project is worth dissemination (see below) after it is over was hard to find in project documentation. This has implications for project reporting, and especially for what needs to go into the FTR. Communication activities and the status of materials development, production and use are not required to be documented in any strategic way. This makes it difficult to see what has been done, who was involved, whether follow up has been carried out etc.

21. Information needed for further dissemination:

- whether there is a good distribution system in place (for PR, advocacy, promotion, dissemination etc)
- whether support is needed and whether it is in place (e.g. credit, inputs, training, markets)
- whether farmers and organisations working with farmers need training in the use of methods and technologies and whether it is available
- whether support, (training and/or finance) is needed for activities and for the possible adaptation, translation, reproduction, distribution and follow up of materials and is it available
- project outputs have been validated by farmers and researchers and evidence of validation
- that media products (materials) have been developed to the point of usability (in the right language, format, right place) and evidence of validation.

22. There was little evidence of any kind of monitoring or tracking of communication activities or dissemination materials once the projects were finished (putting aside this review). Organisations do not see the necessity for follow up of training activities, the use of manuals, leaflets and videos etc. If they do (CARE, Zimbabwe is a notable example) they

may not have the capacity or skills needed, this means raising funds and hiring in outside consultants to carry out the work.

23. In Zimbabwe CARE is carrying out a follow up which, largely because of this project, will now include a follow up of materials. Nicola Harford who led the team for this review will be part of the CARE review team with a remit to look specifically at leaflets. This should be regarded as an ongoing activity for the NRSP and contact maintained with Jim Ellis Jones who will head the team and with Nicola Harford.

Which organisations to work with

24. Choice of collaborators and intermediate/target institutions is crucial for the ultimate success of the uptake and dissemination activities. Good buy in by target institutions and collaborators who carry out extension activities is a key factor in uptake and impact. In those projects where there has been good buy in organisations have been prepared to pay for the production of materials, are continuing with the work now the project is over and in one case have commissioned a follow up study (see above).

25. There is evidence that flexibility is needed in allowing projects to take on new collaborators and to work with a range of intermediaries. Projects do not always make the right decision on who to collaborate with when setting up a project and events within countries may make it difficult for organisations to carry out their commitments. It is also clear that reliance on one organisation for collaboration can mean that project work and the chance for longer term dissemination and uptake are seriously jeopardised. Changes in the political situation in Bolivia and Zimbabwe badly affected the collaborating organisations. CIAT was clearly an important organisation for both the Bolivian projects and both project leaders feel that work was extremely affected by the changes in that organisation during the lifetime of the projects. This is not an easy situation to deal with, but spreading the load might help. In Bolivia for example although CIAT was badly affected by changes, FAS was not. In Zimbabwe government agencies were unable to carry out their commitments, but so far CARE International has been able to continue.

26. Organisational buy-in is critical in those instances where staff are 'hired out' to a project. Where there has been a buy in by institutions the evidence is that they continue with the activities. However, there is also some evidence that where staff have been involved in a project, but there is no organisational buy-in, staff have to go back to their general duties after the project is over and may not be able to incorporate new methods and technologies into their work. In the words of one respondent your project 'dies'.

27. Project leaders expressed concern about the distinction between those who are collaborators and those who are target institutions. As the role they fulfil is critical it is suggested that all should be collaborators from the word go as a way of increasing the buy-in which is essential for adoption and uptake and dissemination. there may be financial implications if this is to be the case.

28. In-country organisations involved in production and dissemination of materials, often with a government mandate to do so may not have the capacity to carry out the work – may not have resources, staff, paper, budget, or capacity for writing, designing, pre-testing for comprehension, completeness, technical accuracy and usability, distribution and record keeping on distribution etc. However, there is no evidence that capacity is investigated before agreements are signed with them.

Assumptions

29. In some cases factors which are critical for the success of a project have been built in as assumptions or in other ways written off. Nurseries not set up, dissemination in the hands of one organisation with little understanding of what their capacity, reach and effect might be. Although some project leaders, who work very closely with one organisation, are very aware of the costs in manpower and other resources which they commit to a project there is a general lack of understanding of what is really needed from, and by, collaborators and intermediaries after the project is over. Neither money or time appear to be budgeted for further in-country dissemination and training for intermediate users or key individuals within communities. The extent of buy in and the capacity to continue activities, produce and distribute materials etc. is not investigated. Support for the kind of dissemination activities needed after the project has finished were, in one case, expressed as a hope that such and such an organisation will continue with them.

Capacity and responsibility

30. From the interviews with UK project staff it is plain that they are aware of issues relating to uptake, adoption and dissemination, and that they have strong views on issues of responsibility. However, there is a feeling that resources (time, funding, skills) are not available for them to take on more than a limited range of responsibilities. Whilst they acknowledge the importance of in country organisations and the need for a shift in emphasis towards local organisations they are also concerned that the reality is a lack of capacity and resources in such organisations to do what is needed. For some this led to a suggestion that dissemination should be carried out as a separate project employing communication rather than research skills. Whilst this seems on the surface to be a good idea it does not absolve project leaders and their teams from responsibility in relation to dissemination. Findings from previous research (Norrish et al 2000, 2001) suggest strongly that unless a communication strategy, as the basis for dissemination, is put in place from project inception phase, and built on throughout the life of the project, dissemination is unlikely to be successful. The responsibility for putting this in place rests with the project leaders and the project team.

31. These concerns mean that the NRSP and the bi-lateral programmes are seen as the major players when it comes to responsibility for uptake and dissemination beyond the end of the project.

RECOMMENDATIONS

General recommendations

32. At the NRSP workshop in November 2000 at which the initial findings from this research were presented it was suggested that there are three questions which NRSP needs to address in considering a programme strategy for uptake, impact and dissemination:

- Who should do what at project inception and implementation phases?
- Who is responsible, and for what, after the project leaves/is completed and to whom are they accountable?
- Where is the money to come from?

33. The recommendations that follow attempt to help the programme answer these questions. The general recommendation is that responsibility for dissemination between programme and project be determined. This is particularly critical in relation to what happens after a project is over. The following suggestions for the division of responsibility are recommended as a starting point (based on suggestions from interviews with project leaders):

34. The programme should be responsible for ensuring that:

- all the issues relating to uptake, adoption and dissemination are adequately considered by the applicants both at concept note and project document stage
- there are sufficient funds in the budget to do something sensible
- monitoring and evaluation during and after the end of project, monitoring uptake after the project finishes, monitoring the achievements against the log frame is carried out either by hiring consultants or using in-house skills.
- wider dissemination is thought through

35. The programme also needs to consider what happens to further dissemination of a project between the time the project ends and the approval of the final technical report. Organisations may lose interest if there are long delays at this stage. The recommendation from this review is an exit strategy. This would need to take account of possible delays and how 'buy in' can be maintained at this time.

36. Project leaders should be responsible for:

- putting in place dissemination/communication strategies
- keeping records of the activities in the strategy that will be useful to PM in the follow up activities
- ensuring that outputs are presented in a form that is easily understandable to all involved (researchers, intermediaries, end users etc)
- ensuring good communication with stakeholders (including intermediaries) and intended beneficiaries

- thinking how project can help NRSP with the portability of project research results (not just in the form of a journal paper) for further dissemination
- supporting the PM in setting up M&E.

37. In view of the findings on manuals the project should review its role in relation to supporting training in the use of manuals and other materials after a project is over. The recommendation is that the programme look at the example of Stepping Stones as a model for how this might be done. Stepping Stones is a training programme on HIV/AIDs developed as part of the Strategies for Hope Programme of Actionaid. It is based on a manual and video/slide set training package. It has its own support programme and over the last decade has developed programmes for local adaptation and translation. The project is highly successful and has its own UK based and regional administrators.

Recommendations according to the project cycle

38. The recommendations have been inserted into the project cycle at specific points as an illustration of how they might work. However, they can be inserted at different points depending on the overall strategy adopted by the programme and the amount of programme budget which can be committed. The programme needs to decide at which stage things should happen bearing in mind that a communication strategy for the promotion and dissemination of research outputs must be thought about from the start of a project if it is to be effective.

Calls for bids

- a) Calls should stress the importance of communication and dissemination and the extent to which the programme will require this to be taken account of and reported on.
- b) The programme to build up data bases of organisations with capacity to disseminate (e.g. CARE in Zimbabwe, FAS in Bolivia, CNRS in Bangladesh) which will be made available and projects encouraged to work with them.
- c) Information on the communication context from previous projects in a given area to be made available to proposers.
- d) The roles and responsibilities of the programme and the project in relation to uptake, adoption and dissemination should be spelt out.

What should go into Concept Notes?

- a) It is not easy to recommend what should go into a CN. At some point in the project commissioning process proposers need to be able to give evidence to the programme of the following:
 - the commitment of national organisations to the research and to the dissemination of the research outputs (buy in)
 - the communication and dissemination capacity, reach and effectiveness (see BPGs for the kinds of questions which need asking) or proposals for building capacity in these areas and justification for choosing the organisation or organisation proposed for capacity building.

- a realistic appraisal of factors which might hinder eventual dissemination
- a realistic budget for a communication strategy which will lay the ground for later dissemination activities, including the production, reproduction and distribution of materials and training support for their use if needed. FAO recommends 10% of the overall budget for communication activities. The programme might like to consider this as a starting figure to be revised and supplemented after a mid-term review. This will mean having a specific programme budget for dissemination.

Review of CNs

- a) The communication and dissemination aspects of a concept note to be reviewed by someone with expertise in the field.

In preparation for the RD1

- a) The programme to fund a thorough stakeholder analysis to be held with stakeholders in country. This should cover the role and responsibilities of stakeholders in dissemination, promotion, and uptake both **during and after the project**, and their capacity to fulfil their roles. The Best Practice Guidelines (BPGs) (Norrish et al 2001) list what needs to be explored. If capacity building is needed this is when it should be decided on and planned for. A report on this should be presented with the completed RD1.
- b) The programme to provide access to communication and dissemination expertise (either to individuals or groups) to ensure that the workshop covers the right areas. Project proposers with a good track record could work with the BPGs.
- c) Tracking who is involved in a project for continuing communication and later promotion and dissemination should start at this point with the compiling of a database of names and contact points for all who have taken part. Any suggestions for other organisation to be involved should also be noted and followed up.
- d) Project leaders, collaborators and target institutions to have access to BPGs. The programme should consider providing these in more than one form for easy access (e.g. hard copy, web site, email).

What should go into the RD1

- a) Report on the outcome of stakeholder analysis to be attached.
- b) A detailed communication strategy (see BPGs) including:
 - When and how the communication context of stakeholders and beneficiaries will be researched and how that will be reported on (see BPGs).
 - How farmers (and others) not directly involved in research activities will be kept informed of project progress and where possible brought into the project activities.
 - Details of activities which will build links with those who will carry on dissemination after the project. These should be built in from the start of the project.

- Proposals for the way in which decision on the kinds of materials needed by farmers and extension will be made (how will farmers and intermediaries be involved in the decisions).
 - How communication activities and materials produced for use during the project will be monitored.
- c) A budget for communication and dissemination (for communication activities, for the cost of production, and reproduction (in appropriate language), distribution and use of materials and the cost of monitoring impact of project/output) taking into account that final decisions on what will be done will be made at a later stage in the project.
- d) An ‘exit strategy’ (a general view of what this might be should have emerged from the stakeholder workshop). Proposers should specify the roles of collaborators and target institutions both during the project and after the project has finished. in relation to dissemination, uptake and adoption.
- e) Proposers should be made aware of the need to revise the communication strategy as the project progresses and a more realistic assessment can be made of what is needed to support uptake and the capacity available to do that.
- f) Proposers should also be made aware of the fact that they are expected to be flexible in their approach to bringing other organisations on board as the project progresses. For such organisations a workshop similar to the original stakeholder workshop should be held.
- g) There should be a requirement for projects to record their experiences in communication and dissemination, particularly in capacity building exercises, and in working with local organisations (including the media) to produce usable and relevant materials, the actual costs entailed. They should specify how they will do this.

Review of RDI

- a) Reviewers should include people with relevant expertise in communication, uptake, dissemination, commercialisation, promotion and the report on the stakeholder workshop, should be made available to them.
- b) Reviewers to check that factors which are critical for effective dissemination are not built in as assumptions.

Inception phase

- a) Projects should:
- hold project awareness workshops with stakeholders, including those working for the project in whatever capacity
 - identify which member(s) of the project team will be responsible for communication related activities
 - establish name/address list of people interested in the project, for distribution of project reports and materials: people who attend workshops, etc.
 - keep records of who project materials are sent to

- explore communication context (see BPGs on what to look for) including who has access to email, web sites, and whether they can these be set up in-country?
- bring organisations which will be involved in materials production in as stakeholders from the start
- cultivate links with stakeholders who will carry out dissemination after the project is over
- identify how awareness among policy makers will be raised, and how to keep them informed of the project and its outputs

Monitoring and Evaluation

- a) Six monthly reporting should include communication and dissemination activities
- b) At mid-term or two year stage (when the projects outputs will be known more clearly) hold a workshop to review the status of the research outputs, and also to address uptake issues. This is the stage at which the dissemination/promotion and exit strategies should become clear and a detailed budget set. The need for additional funding for these activities, including those planned for after the project is over can be assessed. The dissemination strategy should include names and addresses for distribution of materials and possible training in their use.
- c) For effective dissemination and exit strategies the following information will be needed:
 - the distribution system for PR, advocacy, promotion, dissemination etc
 - whether support is needed if farmers are to adopt a technology and who has agreed to supply it (e.g. credit, inputs, training, markets)
 - whether farmers and organisations working with farmers need training in the use of methods and technologies and who has agreed to supply it
 - whether support, (training and/or finance) is needed for activities and for the possible adaptation, translation, reproduction, distribution and follow up of materials and whether it is available and where.
 - whether project outputs have been validated by farmers and researchers and evidence of validation.
 - which materials and activities are designed for promotion and which are designed to be used for learning and doing (farmers, extension agents, policy makers)
 - whether materials have been developed to the point of usability (in the right language, format, right place) and evidence of how this was done and with what results.
 - how materials will be fed into the distribution system and who is responsible for that
- d) Projects and stakeholders should be working together on the various aspects of communication and it should be reported on to the programme.

At the end of the project

- a) Details of the dissemination and exit strategy (see above) to be provided as part of the FTR.

- b) Monitoring and evaluation of the exit strategy and further dissemination to be determined by the programme.

CONCLUSION

39. The end of the project is not simply the end for the UK team, it is also the end for collaborators, intermediaries and farmers. Unless there has been a well validated research output (validated by farmer and researcher) and buy in from the relevant institutions (this could be intermediaries, but may also mean buy in at national policy level) and with all the relevant information packaged for use then the prospects for uptake and impact other than through informal, slow (and possible incomplete) farmer-to- farmer processes are slim. Planning dissemination for uptake and impact needs to be considered and revised in the light of confirmed and validate output, organisational buy in and farmers uptake.

THE REPORT

INTRODUCTION

This study, of the uptake and impact of specific NRSP project communication processes and products, was carried out as part of a programme learning process for NRSP. The aim of the study is to contribute to the NRSP communication and dissemination strategy and to inform what the programme requires of project leaders through project concept notes, proposals and reports in order for dissemination to be as effective as possible. The Terms of Reference are in Appendix 1.

Background

The need for programmes and projects to have communication strategies for effectively disseminating the outputs of NR research is gaining recognition. Recent guidelines (Norrish et al 2001) suggest that a communication strategy should be planned from project initiation and continue throughout the project cycle and that dissemination should be active and demand led rather than passive and supply driven.

Previous research (Norrish et al 2000) suggests that effective dissemination is dependent on a number of factors including:

- the extent to which a project is demand led and farmers are involved in the research
- good collaborative working with stakeholders and beneficiaries (e.g. intermediate organisations, policy makers, bi-lateral projects, commercial organisations) throughout the project, this means a focus on a communication strategy
- a good understanding of stakeholder and beneficiary communication context and needs
- the extent to which an iterative process for the development of materials, involving both end and intermediate users in pre-testing and evaluating, has been put in place

Since the NRSP started in 1995 projects have produced various dissemination outputs. To a considerable extent these have been refereed papers. Materials for use by extension organisations and farmers coming a poor second. However, the ultimate test for a project will not be peer review but whether its products are used by those for whom they are intended. This means that projects must increasingly be concerned with whether dissemination is effective.

The NRSP has recognised the need for a communication strategy for the effective dissemination of NR projects and has set in motion a process which will enable it to learn from past projects and feed that learning into its future communication strategy. Evaluating a selection of communication activities and media products which are intended to help promote uptake is one part of the process.

A previous step in the learning process was the development of criteria for selecting 'best-bets' for dissemination from completed projects (Mulhall 1999). This was carried out

through a literature review of the documents on past projects assembled by NRSP. The criteria which resulted are:

An FTR with clear indication of project outputs achieved and with evidence of:

- demand driven nature of the research
- demand across a range of stakeholders who will be instrumental in uptake and dissemination; links between stakeholders (including DFID bilateral projects/NGOs/GOs/private sector)
- communication activities and media products delivered and used
- of a communication strategy or dissemination activities in the RD1
- participation of target organisations. and beneficiaries in the research process and in communication activities and the generation and pretesting of media products
- formation of formal networks/ groups through research process or associated activities
- mid-term review report or some other evidence of M&E of project outputs and activities
- of testing and/or impact assessment of media products.

These criteria and the factors on which effective dissemination is dependent formed the basis for the questions to be asked in the study.

Projects selected for the review

The projects that have been selected (Table 1) are aimed at the poorest sections of society either directly or through policy and have put particular effort into communication and dissemination. They cover methods and processes for reaching the poor or enabling decision making and technology development; they offer a range of target groups (policy makers, farmers, extension and NGOs, research organisations); and a range of media products and communication activities for review from street plays and folk songs in India to the use of GIS and the development of CDRoms which can be down loaded from web sites.

Table 1: Projects for review

Project Number and Title	Country	Dates
Forest Agriculture		
R6382 Sustainable agriculture in forest margins	Bolivia	Aug 95 - Mar 99
R6789 Development and promotion of improved techniques of water and soil fertility management (humid forest belt)	Ghana	Jan97 - Jun 00
Land water		
R6756 Investigation of livelihood strategies and resource use patterns in floodplain production systems	Bangladesh	Nov 96 - Feb 00
High potential		
R6759 Integration of aquaculture into the farming system in the Eastern plateau of India	India	April99 -Oct 00
Peri-urban		
R6799 Kumasi Natural Resources management huge project policy and programme linked (not aimed directly at farmers or other peri-urban dwellers)	Ghana	Jan 97 - Mar 00

Semi-Arid		
R7085 Promotion of practical approaches to soil and water conservation for small holder farmers in SS Africa	Zimbabwe	Jan 98 - Dec 98
Hillsides		
R6621 Soil and water conservation technologies	Bolivia	Aug 96 - Sept 99
R7537 Demand assessment for on-farm management of natural resources.	Southern Africa (Zimbabwe and Tanzania)	Jan 00 - Sept 00

Aim of the review

The aim of the review was to determine the extent to which communication activities and products have contributed to the uptake and impact of a projects research output. This in turn will help NRSP to improve the guidelines given to authors of CNs and RDIs concerning a project's communication plans.

Methodology

In order to do this we looked at:

- why and when the decision was taken to produce a particular dissemination product or hold a communication activity and who was involved in that decision, what was its purpose, and what impact has been achieved
- the links between any or all of the following: UK project staff, collaborators, target institutions, end beneficiaries.

As has been pointed out elsewhere (Norrish et al 2000), issues of responsibility for dissemination after the end of a project are still not clear. There are at least six main groups of actors involved in research projects (Programme Managers, Project Leaders, Target institutions, Collaborating Institutions (partners in the design, implementation and analysis of research), Bilateral Programmes, Outside consultants) but responsibility for communication and dissemination (and who should finance it) is unclear. Therefore, the review also explored the views of different stakeholders on who they thought should be responsible for promotion, uptake and dissemination, including looking at their own roles.

Review activities were carried out in the UK, Zimbabwe, Bolivia, Ghana, India and Bangladesh by local researchers. The main activities were:

- Rapid review of project documents to determine who was involved (intermediaries and farmers) plus follow up with project staff
- Development of semi-structured interviews for use in:
 - Interviews with UK based project staff
 - Interviews with persons involved in decision making about the development, production and distribution of the manuals and videos etc
 - Interviews with those involved in project communication activities and users of the manuals and videos etc
- Development and administration of a telephone questionnaire for UK based project staff
- Report on each case study
- Synthesis of the case studies for presentation to the NRSP

Copies of the generic checklists and the questionnaire are in Appendix 2.

Most of the interviews with project leaders (PLs) and other UK based project staff were carried out by telephone and a transcript was then sent to the interviewees for their correction. The field reports have been sent to project leaders for comments and those comments have been incorporated into the final report.

We had hoped to be able to observe manuals and leaflets in use, but this was not possible. In some cases this was because manuals and leaflets had not been completed or, if completed had not been distributed. In others it was that activities in which they might be used were not taking place at the time of the review. However, where material had been distributed questions were asked about use.

Structure of this report

The views of PLs, the Programme Manager (PM), DFID advisors and other UK project staff give a picture of the extent to which current project leaders consider uptake, impact and dissemination, as such they are of use to the programme manager when considering the RDI and other relevant project documents. They are presented first and provide a framework within which to read the case studies. The case studies for each project have been summarised with an emphasis on the main issues that affect uptake, impact and dissemination. The full reports, which have addressed future actions as well as more general management issues can be made available to anyone who wants to read them.

VIEWS OF PLs, PM, DFID ADVISORS AND OTHER UK PROJECT STAFF

Note: Transcripts of the interviews are contained in a separate volume available in the NRSP Library.

Two questions were posed to the programme manager, project leaders, and a selection of UK collaborators and researchers in which they were asked for their views, on who should be responsible for promotion and uptake activities and on the main factors influencing the uptake, adoption and dissemination of project outputs? Their response have been synthesised and are presented below.

Responsibility for promotion and uptake activities

Question 1: Who do you think should be responsible for promotion and uptake activities (who should fund, decide which media products and activities should take place, ensure that anything produced is suitable for its intended audience, follow up distribution, use and impact?)

There was general agreement that promotion, uptake and dissemination should be an integral part of the whole project process in which everyone has a part to play. However, a strong emphasis was placed on the need for issues of responsibility to be addressed by the programme with specific responsibilities for project leaders being spelt out. Ultimately the project outputs and their impact will be dependent on buy-in by collaborators therefore a shifting of responsibility from project leader to collaborators and intermediaries during the project lifetime is also considered important. Although there was general agreement that responsibility should be sorted out early on, at latest by RD1 stage the shared responsibility with collaborators and intermediaries might come later. Project partners, both leaders and collaborators should be responsible for ensuring that the uptake pathways are included as a

design issue, but to what extent the subsequent project directly resources uptake activities should depend on context.

Some project leaders are concerned that although DFID is placing emphasis on sustainable livelihoods and the need to ensure uptake and impact there is a lack of resources (time and money) for this to be effectively pursued. It was suggested that DFID need a forum to support and fund it.

It was also suggested that the use and dissemination of project outputs might be a communication exercise, not requiring research input to follow-up research projects. There would need to be a lot in place by the end of a project for this to happen successfully. Since programme structures will be reviewed after 2005 this possibility could be signalled now as it would have budget implications.

Programme responsibilities

There was agreement that the programme has responsibility for ensuring that :

- all the issues relating to uptake, adoption and dissemination are adequately considered by the applicants both at concept note and project document stage
- there are sufficient funds in the budget to do something sensible
- monitoring and evaluation during and after the end of project, monitoring uptake after the project finishes, monitoring the achievements against the log frame is carried out either by hiring consultants or using in-house skills.
- wider dissemination is thought through

One respondent suggested that research projects need to be integrated much more with development projects. Putting such co-operation in place is seen as the responsibility of the programme managers.

It was pointed out by one respondent that development staff and researchers often have very different perspectives. Development staff find research irrelevant to the needs of development and researchers see country offices as cold and unresponsive to their work. If DFID is funding research M&E is very important to be able to demonstrate to development staff the kinds of development impact it is having. In relation to DFID expenditure overall research project costs are small whereas M&E is resource heavy and the expenditure looks proportionately large. For this reason it was suggested that M&E needs to be viewed strategically. A strategy in which M&E was scaled up would enable the programme to have a view of cross cutting issues, of what is really working and of where research can add value to DFID Development work. all of which would help in making decisions on what to disseminate.

In relation to funding NRSP and DFID are considered jointly responsible. However, there was no real agreement on whether funding should be put in place at the start of a project. It was suggested that things cannot always be planned for and a flexible set of processes to enable more support/resources to go into a project as necessary is needed.

One proposal was that perhaps 5% of the programme budget should be allocated to promotion - some built into projects and some retained by the programme.

Researchers/PLs responsibility

Whilst there was agreement that the principle investigators, that is fund holders, are wholly responsible for delivery of the project outputs there was less agreement about what their responsibilities are in relation to uptake, impact and dissemination. Suggestions for what their responsibilities might be included the following:

- keeping records that will be useful to PM in the follow up activities
- ensuring that outputs are presented in a form that is easily understandable, to all those involved in conducting the research, to intermediaries, end users and other researchers.
- ensuring that scaling-up can happen if appropriate (related to the robustness of the intervention, the degree to which findings can be extrapolated - content and process).
- ensuring good communication with stakeholders (including intermediaries) and intended beneficiaries of the project.
- thinking how project can help NRSP with the portability of project research results (not just in the form of a journal paper).
- assisting (or supporting/facilitating), the strategic decision that dissemination/ communication strategies are in place.
- there is general agreement that project leaders should not be expected to carry out M&E but that they have a role to play in helping the PM to get it set up.

The activities related to these responsibilities should be designed in from the beginning and most importantly should be carried out locally with people who are closely involved in the project

To fulfil these responsibilities researchers need resources. It was suggested that DFID programmes do not have the resources to allow this, £60-80,000 p.a. is not enough to realise these responsibilities. PLs are restricted within the budget to do the research specified, this means there is not much left for training, for development of dissemination materials for different audiences, for dissemination activities and follow-up.

Collaborating institutions - in-country partners, collaborators and intermediary organisations

It is accepted that responsibility for dissemination of outputs gets left with local collaborators and target institutions who often have insufficient resources and capacity to promote adequately. It is also acknowledged that the role of collaborating institutions varies depending on their mandate. In some cases they are government organisations mandated to carry out training and dissemination either through extension or through other kinds of structures, but government departments don't necessarily have the appropriate skills and background required for this work.

Whilst funding for communication and dissemination is seen as the direct responsibility of DFID and the Programme there is some evidence to suggest that collaborators and intermediary institutions might provide funds for dissemination activities and materials when the research output and/or methodology fits directly with their own aims and activities. If the project has produced useful research products then collaborators will go ahead anyway (e.g.

collaborators in project R6789, Ghana, have requested additional funding for training). In-country partners are already co-funders in the sense that they provide staff resources.

It was suggested that target institutions should be brought in and named as collaborators and be involved in design and implementation to ensure that commitment and interest from the start. Target institutions (including farmers groups) have a critical role in assessing the suitability of project activities/outputs, and looking at the impact - this implies more than simply 'does it work'.

Bi-lateral programmes

In general it was considered that there need to be relations with bilateral programmes (BPs) and other projects, there wasn't so much agreement on what these relations should be. Although some people thought that the BP had a major responsibility others suggested that this should happen, but didn't partly because DFID staff are very busy, but perhaps most importantly because there appears to be a tension between the bilateral development projects and Natural Resources Research Projects which is not helpful to dissemination and follow up. One advisor said that there is a tendency for PLs to assume that the UK bilateral programme should pick up the results of UK funded research. This assumption frequently stops project implementors from properly engaging with country processes and means they fail to actively seek best options. Because there are many research programmes with projects in each country DFID advisors could be swamped with requests for additional funding.

Bilateral programmes operate at the country level, and are getting more independent of each other whereas research programmes operate at the regional level. However, one or two project leaders said that the bilateral programmes might be able to provide a framework for promotion activities within a country. Others felt that BPs have funding responsibilities, and should flag up the broader landscape. If a project is linked to a bilateral programme, funding for dissemination should come through this and Programme Managers need to ensure that funds are available for this follow-up activity.

Farmers/beneficiaries

It was thought that smallholder farmers can't be expected to take on the role of extensionists, although they may disseminate informally farmer-to-farmer. One suggestion was that it might be possible to arrange a contract with farmers - they gain knowledge from the project, and then they have to pass this on to others.

Outside consultants/communication specialists

Project leaders felt quite strongly that they need strategic guidance and specialist inputs on communication and dissemination. Work on dissemination is too often done by a group of well-meaning people when the real need is for professionalism. Too often someone just decides that 'posters' would be good, but without the experience to make a comparison with other media, or to understand how posters will fit into a particular communication context and need.

Other approaches - Shared responsibility

People had various views on the issue of shared responsibility. One approach could be a consortium consisting of project leaders and outside consultants. Another approach is to have

an understanding from the concept note stage to bring a group together for the RDI this would include communication and extension specialists. There was no real agreement on whether the communication specialist should be an in country specialist or from the UK. Some thought the need is for a person with wide experience of how things are done in other countries and someone on the ground with knowledge of local context as outside consultants are not generally best placed for local promotion and uptake activities. Outside consultants are more useful for generic promotion.

Two other suggestions were a project dissemination committee to discuss and bring issues to top of the pile from time to time and a pull-down contract for media advice.

Main factors influencing the uptake, adoption and dissemination of project outputs

Question 2: What do you think are the main factors which influence the uptake, adoption and dissemination of project outputs?

Relevance of project outputs

There was agreement that the most important factor for uptake and adoption is that project outputs are relevant, appropriate and acceptable to the end-user, related to their main priorities, and robust. Robust in this context means applicable to different circumstances, relevant to one or more identified category of user and fit for the purpose as determined by the involvement of users in the research process.

Ensuring that project outputs are relevant is seen to be related to the extent to which end beneficiaries are involved in setting the research agenda and the extent to which projects are developed overseas rather than in UK universities. According to one DFID advisor ‘...one of the key issues is seen to be insufficient rigour in the identification and prioritisation of demand. It is very easy for a UK institution to get enough collaborators, both representative of supply and demand, to sign up to their project application stating that the problem identified is a priority. If we get this stage wrong, there is not much hope for the outputs. Where reasonable systems exist in country for demand prioritisation, these systems should form the framework in which UK funded research operates. Whether the research is well embedded into country institution priorities in the first place, rather than seen as an outsider-led activities which may bring funds to resource-strapped staff, will have a big effect on uptake. This would result in more adoption.’

Uptake will depend greatly on in-country rather than UK based activity yet there are often inequalities between UK and local project partners which contribute to uptake being poorly considered. Examples of this are the skew of project budgets towards UK costs rather than local and the sometimes superficial engagement with the local institutions both of which contribute to projects being UK dominated and insufficiently responsive to the country context.

Good local relationships are considered to lead to impact but when a project finishes ‘what disappears is local relationships’. When new projects come in even though they may be with same counterparts (of whom there is a limited pool) everyone has to build relationships all over again, this lack of continuity in relationships is seen as a real problem by some.

The extent to which uptake is considered from the start and everyone is involved in thinking about it is vital. As is ensuring that local mechanisms are in place to allow dissemination.

Uptake will be affected by the links between users and the institutions that link producers and users of research. Strong farmer - research - extension interaction channels. The huge gap between research and extension was cited as an example of the kind of poor links that can badly affect uptake at the farm level.

There was a considerable level of agreement on the need for projects to have a longer time frame. One suggestion is that the focus should not be on projects, but instead a system needs to be developed for integrated programmes with some parts projectised. Longer time frames are considered necessary for impact and to provide much needed cohesion in and across Natural Resources Research programmes management. There should be a specific requirement that programmes map onto each other and fulfil needs at the local level.

Buy in

There has to be buy-in by the whole range of stakeholders (must involve NGOs, bilateral programmes, extension agencies, collaborators, etc) through full involvement from the project planning stage on. There was an emphasis on the need to include those not directly involved in the project in communication and dissemination activities and to ensure that they have access to any useful materials.

Capacity among local collaborators is not easy to find and NRSP do not have the mandate to improve capacity of local collaborators. An institutional analysis of organisational capacity would be very useful at the pre-project stage. Any such activity would need to be self-analysis of capacities and interests, in order that institutions have ownership of the underlying objectives.

Financial sustainability

The financial sustainability of project collaborators and target institutions was cited by one respondent as a key factor. Project R6382 (case-studied for this research) was given as an example. In R6382 much of the design and implementation seemed to get it right, there was active farmer participation and a network of target institutions - but as the project was finishing many of the target institutions had severe financial problems and reduced or ceased activities relating to dissemination and adoption. The issue here is whether the project could have done anything to improve this situation short of hugely increasing its budget and continuing to directly fund activities? Could the problems have been identified earlier and alternative intermediaries/collaborators actively sought?

Flexibility

Flexibility is seen as important. Projects have to be able to respond to changing opportunities and adjust their strategy accordingly. Uptake is not something to be considered at design to just get the box checked but should be reviewed explicitly throughout implementation. A mid-term review of progress, for example, to see the extent to which outputs are being taken up, would enable necessary adjustments to be made.

Other factors

Other factors which received less attention include:

- if final beneficiaries realise benefits that make it worthwhile for them to take up project products organic spread will be the main dissemination system.
- evidence of input availability and accessibility to support and develop activities
- Research Programmes need to be working more closely together to look at cross cutting issues and develop a strategy and have a more coherent view of things. Laos is the example given here – a small country (three and a half million population) which has received a lot of research attention, often using the same collaborators, but there are no links between the different programmes funding the work.
- having a local person who is championing the project.

Dissemination

Dissemination, for which expertise and resources are needed, has to be taken seriously and project leaders need to be aware of opportunities for dissemination. There is an awareness that there is still a tendency to produce written materials possibly driven not only by lack of imagination but the need to keep budgets down. The main factors raised in relation to effective dissemination were:

- the capacity and commitment of local NGOs and formal institutions: to assimilate and disseminate messages; their intensity of coverage; methods of communication and ability to work with different groups are vital for effective dissemination
- the strength of local networks
- having appropriate materials that have been tested with the target audiences is considered important.

THE CASE STUDIES

This section contains summaries of the case studies. The full report on each case study is available in the NRSP Library.

CASE STUDY 1: R6382 Bolivia, Aug 1995 – Mar 1999

Sustainable Agriculture in Forest Margins

(Linked to R6008 Weed management for Sustainable Agriculture in Forest Margins)

The aim of the project was to optimise sustainable productivity from the forest agriculture interface in the moist tropical lowlands of Bolivia. This was to be achieved through working with local institutions and slash and burn farmers to generate and adapt relevant technologies. The project also sought to develop and promote improved management strategies for the integration of crops, livestock and agroforestry. The project grew out of a series of workshops held by CIAT, PRODISA and NRI in Sara and Ichilo provinces and in this sense can be said to be demand led.

The project worked in participation with local institutions and farmers in an extensive on-farm trials programme, testing systems based on annual crops, perennial crops, cover crops, pasture and agroforestry species. It established close links with local NGOs and Government institutions in the project area through an informal Adaptive Research Network co-ordinated by CIAT and supported by NRI. The formation of a Zonal Technical Committee (one of the

strategies of technology transfer for CIAT) which involved all the extension agents of the area meeting monthly to exchange experiences (including the new agroecological concepts focused in participatory methodologies, gender issues and the systems approach) helped in getting project approaches taken on board.

The technology was new to the farmers and the participatory methodology was new to the collaborators and target institutions making training an important issue for the project. However, at the time the project started funding training was not considered to be part of strategic projects and it was not until the second year of the project that training started. Likewise with dissemination. At the start of the project uptake and impact were not top priorities in NRSP. In spite of this dissemination was planned and built in from the start and a wide range of different approaches were proposed for different stakeholder groups, these included: international journal articles and conferences, personal contact, workshops, publication based networks, training for NGOs and GOs (FPR and technical), booklets, posters, face-to face communication with farmers, and the establishment of an Adaptive Research Network. As the project developed uptake and adoption, and consequently dissemination, became a major focus for all DFID RNRR Programmes and £36,000 was made available specifically for that purpose.

Uptake and Impact

Uptake was observed during the project (Bentley 1998, Warren 1997 and is now said to be slow but steady through farmer-to-farmer contact. Farmers are said to be interested in, and continuously adapting, the technologies. The true nature of the impact may only be seen further down the line because the technologies have a long adoption and adaptation process.

However, uptake and impact has been affected by several factors, some of which were to do with the planning and implementation of the project and others which were outside the projects control.

At the outset the level of participation by farmers in the research process does not appear to have been clearly defined. For example, project staff were not clear to what extent farmers could change components of the experimental systems. However, this changed as the project developed and farmers became very involved in their own experimentation. Unfortunately there is not complete documentation of this which would enable others to take the results on board. This is an important issue in the light of the need for technologies to be validated scientifically and by the farmers. In addition the lack of community participation in farm selection limited community involvement in the project (and consequently adoption). Finally not all the technologies were considered relevant to the farmers (e.g. peach palm and Taiwan grass) as they require credit.

The end of the project coincided with an institutional crisis in CIAT (financial and political) which resulted in drastic personnel reduction at all levels and changes in the way the organisation was to work. At the same time many of the target institutions had severe financial problems (donors withdrew funding) and reduced or ceased activities relating to dissemination and adoption. PRODISA (which belonged to the Development Corporation of Santa Cruz and was charged with promoting sustainable development) which had been instrumental in supporting the project by funding the technicians' wages in several NGOs, and by providing seeds, plants and other inputs for the establishment of the validation plots had its funding from GTZ withdrawn. It was then dissolved as part of the decentralisation process and its role given to the local municipalities. The Adaptive Research Network, which

had been a strength of the project went into decline, in part because of the loss of funding from GTZ and CIAT.

Communication and dissemination

The communication and dissemination processes of the project were extensively reviewed in 1998 as part of SEM 52 R7037 (Norrish et al 2000 Vol 2, Bentley 1998). The conclusion then was that a project in which ‘an experimental, information-intensive technology, requiring new genetic material and some initial capital investment was adopted by a full 15% of the neighbours of the farmer-experimenters, within the first 2-3 years’ (Bentley 1998) was doing well. The research was just finishing at that time and the need for dissemination to begin in earnest was clear. Two years later this research project has found a similar, urgent, need for a dissemination strategy.

Communication activities

The communication activities (training, workshops, on farm research activities) in the identification, preparation and execution stages of the project were effective in bringing farmers and target institutions on board. However, the project was not able to capitalise on this good collaborative work due to the changes in the structure of CIAT, which affected its work priorities and emphasis.

BOX: 1 Uptake by farmer not involved in project research

Mr. Andrés Grizada was not one of the participating farmers however, he was motivated to attempt to take on the projects outputs by the demonstration days and informal visits to his neighbours.

He began by establishing citrus plus components that the project had not used (e.g. yucca, beans). He considers that citrus planted with cover crops is a better use of his plot than the traditional system of rice/yucca.

Now he plans to establish cover crops to control weeds since he realised that from the second year of cultivation it is more difficult to control weeds.

He would like dissemination products with good technical information to be made available. In the absence of technical assistance, the inexperienced farmers usually make a series of unnecessary errors during a long process of trial-and-error. For example, he thought that with a deeper planting of citrus it could root better and he did not carry out pruning because he thought that might slow the growth of the citrus.

Although the activities had a positive impact on farmers in most cases they were carried out only with project farmers, farmers in the wider community were not targeted in the on-farm trial process. This has important implications for uptake and adoption as the example in Box 1 shows.

The media products

The media products have had much less success and both their preparation and distribution have come in for criticism.

The manual of methodologies ‘Experiences in Methodologies of Participatory Research’ in the Sara and Ichilo Provinces was published at the end of the project. At this stage CIAT is reported to have already ‘buried’ the project and the Farming Systems Program of which it

was a part and the Zonal Technical Committee had disbanded. There was thus no forum for discussion and promotion of the manual. It is probable true to say that in spite of its importance as a contribution to knowledge in Bolivia it has been read more outside the country than inside.

A poster promoting the achievements of the project produced in Spanish and English appears to have had a limited distribution and was not mentioned at all by the extension agents and farmers interviewed for this research. A promotion video 'Toward a sustainable agriculture' seems to have suffered a similar fate.

A criticism of the two technical leaflets and videos 'Establishment of citrus under a sustainable system' and 'The tembe crop' is that they were produced without extension agents help, were not pretested on the farmers, do not acknowledge the farmers represented in videos and illustrations (although they are said to have been produced in a participatory way), lack technical content, and that the content as presented is inappropriate for farmers (more appropriate for technical staff). Poor dissemination and distribution (e.g. video and poster not in the public domain) has led to poor use of the products by extension. This means that farmers outside the project are once more excluded from finding out about the outputs of the project.

Conclusions/issues

The project appeared at the outset to have got a lot of things right, it had active farmer participation and a network of target institutions. However, in the end it could be concluded that from the communication viewpoint, although the project started well, it ended badly.

Without doubt this had a lot to do with the financial and political crisis which affected CIAT, PRODISA and many of the NGOs. However, the lack of flexible communication strategy also played a significant part.

If a flexible communication strategy for uptake, adoption and dissemination had been put in place it might have enabled the project to 'spread the load' by identifying other organisations which could be involved producing and distributing materials for example. This lack of focus on a communication strategy meant that little attention was paid to the communication context within which farmers work and opportunities for wider dissemination (the use of different media and bringing in a wider range of institutions as 'uptake pathways) were missed. In Sara and Ichilo provinces for example there are three agricultural colleges, attended by farmers' children, which could have been involved. Radio is popular and available and radio programmes (e.g. on successful components of the project, including a brief description of its approach and philosophy, showing its strategic importance for the sustainability of the local production system) could have contributed to more efficient dissemination.

The lack of involvement of end and intermediate users in materials development has contributed to the production of leaflets and videos which have little to contribute, even if they had been distributed, to dissemination.

On the face of it CIAT had all the capacity necessary for producing and distributing materials (a specific communication section, in house production facilities and distribution networks/links with major NGOs). However changes in CIAT's structure which means they now have to recover the costs of dissemination seem to have resulted in material not being promoted/disseminated. Farmers, extension officers and institutions involved in the project

did not know about the media products and the regional offices of CIAT did not have copies of them. NGOs are eager for such materials but say that it is difficult to obtain them from CIAT due to its institutional bureaucracy.

CASE STUDY 2: R6621 Bolivia, Aug 1996 – Sept 1999

Strategies for improved soil and water conservation practices in hillside production systems in the Andean valleys of Bolivia.

The aim of this project was to improve economical land, soil and water management practices, to improve hillside cultivation techniques and develop improved methods to enhance and maintain soil fertility through the use of live barriers.

The project worked at two different sites each with its own collaborating institution. In Cochabamba the project collaborated with FAS, and in Vallegrande (Santa Cruz) with CIAT. From the start of the project a range of activities was planned for both sites, and the information generated by the project was to be packaged for dissemination for different audiences.

Activities planned for the project included: workshops, farmer participation activities, cross farm visits, farmer discussion groups, NGO participation in the project, nurseries, training in Participatory Research Methods (university students, field researchers).

Information was to be packaged as follows: research reports, scientific papers, papers presented at international workshops, web site (Cranfield), workshop proceedings, extension material prepared in conjunction with NGOs, leaflets, manual on research procedures and use of vegetative practices.

R6621 was linked to R6638 for training in participatory methods. R6638 was a project on participatory planning, implementation and evaluation for which decisions on dissemination were made in a participatory workshop at the end of the project. From that workshop a decision was made to produce a training manual (*Guías metodológicas para la planificación, implementación y evaluación de proyectos de investigación participativos*, Anna Lawrence and Michael Eid, CIAT, 2000).

The project was participatory, flexible, responsive to individuals socio-economic circumstances, and took into account local knowledge on soil conservation. The problem of soil degradation, especially in the Andean zone, is critical and the low cost, simple, easy to use technology, was welcomed by NGOs and farmers.

The collaborators worked differently at the two sites and are therefore discussed separately.

Cochabamba

Who was involved and how

The concept note arose from visits by FAS extension officers and Brian Sims (acting for DFID) to organisations working in Cochabamba to gain an understanding of soil erosion. FAS has a long history of working with NGOs in the area. The NGOs introduced the project

to farmers at an early stage in its development, and preparatory to getting volunteers, presented the work plan to them.

Activities and impact

Most of the workshops and activities took place in Pairumani. Farmers were involved in training, workshops, and participatory evaluations. The evaluations led to a change in project focus. Initially the project focused on live barriers as a means of conserving soil and water, but the farmers priority was forage. The project responded to this need by combining grasses with bushes in the live barriers, a combination which the farmers found acceptable. The involvement of women in the participatory evaluations of the plots, workshops and courses was important, as they contributed to the selection of the forage species.

Initially, in the Pairumani community the project worked with three farmers, but by the time of this research more than 40% of the farmers already had live barriers (120 families in the community), and there is more demand for *Phalaris* sp. to establish live barriers.

The vegetative material for the establishment of live barriers is bought from farmers that worked with the project and also from the Centre of Research In Forages which is part of the University of San Simon in Cochabamba.

From the second year the number of farmers involved increased through the activities of NGOs. For example CIPCA complemented its work in cattle raising and agriculture and PROMIC used the project technology to combine with their recommendations to farmers in eight municipalities of Cochabamba. The good relationship between the project and intermediary institutions was evident from the beginning of the project. In the case of PROMIC the co-ordination of activities began when they were carrying out a Rapid Rural Appraisal in the community of Pairumani, and then decided to change to PRA methodology, which was being used by the project.

Also from the second year FAS ran ‘academic’ workshops which brought together students (working on related thesis), university lecturers and technicians and executives of the different NGOs to learn from the outputs of the project. The process of learning together is said to have had an important impact on all stakeholders. It has led to increased solidarity between stakeholders and has helped the continuity of the project.

The project produced leaflets for farmers to reinforce the training activities. The leaflets also provided support for the technicians who used them to clarify activities when they started work in a new community. These were distributed to NGOs according to lists of people involved in the project. In spite of having produced publications specifically for farmers, distribution was not done on a large scale. At the time of this research organisations could request copies of the leaflets and one or two free copies were given to each institution. Additional copies have to be paid for.

To increase the dissemination of the technology an agreement was made with the journal PROCAMPO to publish articles from the project free of charge and to provide the project with 50 copies of each publication to be passed on free of charge to collaborating institutions and technicians.

FAS has a commitment to the work, and the resources and community contact to enable it to continue once the project had finished. They are continuing activities related to

dissemination and training in hillside soil and water conservation practices. FAS has kept track of the impact of the project and is aware of its potential for the different stakeholders.

Vallegrande (Santa Cruz)

In general there were less activities in Vallegrande although the project has had a positive impact in terms of the raised awareness of the farmers directly involved. They value the importance of the live barriers in the soil and of the humidity retention in hillsides. They also noticed better yields of the crops and a decrease in the attack of pests when the live barriers are established. Unfortunately, the project has not taken advantage of the experiences and outputs achieved by farmers as they have not been systematically recorded for dissemination.

The NGOs and the local extension agents appear to be unaware of the materials produced for Cochabamba and there appears to have been no planning for similar dissemination materials (using local information and an appropriate language) for Vallegrande.

In spite of the success of the project at the farmers level lack of support for the activities of extension agents, and a lack of growing material (nurseries were not established) has led to a different level of impact from that seen in Cochabamba.

General conclusions

The project has had a good impact, although it has had a greater effect in Cochabamba than in Vallegrande. The reasons given for its success are the acceptability and ease of use of the technology,

Although dissemination was planned from the start, the perception of extension agents involved in the project is that this was not the case and that many of the activities only started in the last year of the project. The main route for uptake and impact has been the range of activities provided, particularly in Cochabamba. Although some printed materials were produced their effect appears to have been minimal, largely because of poor distribution. Farmers in the areas have expressed a need for good materials, both for their own use and to use with their children.

The reasons given for the greater success in Cochabamba are: the flexibility of the project in encouraging local experimentation and adaptation; the wide range of NGOs interested and involved; the activities of the main collaborator, FAS, in bringing stakeholders together, in regularly publishing results and disseminating them and in enabling students to carry out their thesis work on the project activities with NGOs and farmers.

The difference in impact at Vallegrande is said to be due mainly to the political and financial problems being experienced by CIAT which resulted in many staff leaving their jobs and in the need for CIAT to raise money through the sale of publications. The changes in CIAT raise doubts over the impact of the manual produced from the linked project (R6638). This manual was produced as a result of demand expressed through a participatory dissemination workshop held by the head of project. Unfortunately, CIAT's need to raise money on publications means that organisations will need to ask for and pay for the manual. Whether it is being actively promoted is open to doubt. CIAT cannot continue dissemination as their role is now research rather than extension. However, NGOs and municipalities of the zone have shown interest in financing publications for farmers based on the outputs of the project, specifically those related to cover crops and forage. This is a route which needs to be

followed up by NRSP. Particularly as the current executives of CIAT are reported as not having direct knowledge of the project impact or its potential.

The general lack of communication between CIAT and other participating organisations is highlighted by the following two examples:

- There is material from a training course on improved hillside soil and water conservation practices. However, the technician who helped to plan the workshop does not have a copy of the final document and mentioned that the material is only available in the offices of CIAT in Santa Cruz.
- The technicians did not know about the practical training course on Hillside soil and water conservation practices, run by CIAT. In spite of having interest in the topic and being somehow related with this institution, it is apparent that there were communication deficiencies between both collaborating institutions of the same project.

This project raises the same issue, and for the same reasons as Case Study 1. How can projects cope when the main collaborator is undergoing political and financial upheavals which result in major changes to the way in which it works? Although this project was flexible in its approach and ways of working with farmers, it did not have the flexibility to change partners as needed to achieve the same kind of impact on both sites.

CASE STUDY 3: R6756 Bangladesh, November 1996 - February 2000

Investigation of livelihood strategies and resource use patterns in flood plain production systems based on rice and fish in Bangladesh (systems evaluation framework with participatory methodology).

This project set out to develop an understanding of the bio-physical and socio-economic determinants of flood plain production systems based on rice and fish. This was to be achieved through the development of a systems evaluation framework and methodology for development projects to identify options in flood plain management. The first part of the project was a one year data gathering exercise. Documenting the resource base and the patterns of use in the flood plain. This used direct measuring by researchers, a GIS system, monitoring by village enumerators, semi structured interviews and questionnaires. In its latter stages the project piloted the systems evaluation methodology on small scale farmer/fisher participatory research interventions and technology development.

The concept note was developed by the UK team based on experiences with an earlier project. The main collaborators (BRRI, BAU and RU) had worked on the previous project and were all involved in the planning workshop for this project. The topic was considered to be very useful in the context of Bangladesh. However, although the collaborators had performed well on the previous project, their academic status was not so useful in this project and further collaborators with more experience of field work with farmers were brought in as the project evolved. The most important of these was CNRS who had the capacity and commitment for the work. The project also suffered from some weak local intermediaries (one, CED, seems to have disappeared altogether). The capacity of collaborators and intermediaries for the work appears not to have been properly assessed. Although communication between the project and the collaborating and target organisations appears to

have been good, there is little evidence that collaborators or target institutions communicate with each other. All of this undoubtedly has had an effect on uptake.

Communication activities and impact

The project developed a participatory methodological framework of workshops to stimulate dialogue between farmers and researchers for analysis. Training was given in this methodology and a range of workshops with different stakeholders was held to disseminate the findings. There appears to be general high regard for the methods used (problem census and village workshops) by farmers and intermediaries. Intermediaries have taken on new ideas and been trained in new approaches. CNRS, has adopted the methodology and is using problem census and village workshop methods in other projects. The PRA training was said to be very good but the institutional staff trained in PRA were not those involved in fieldwork. The project helped to build the local capacity of BARCIK (in IK networking and documentation).

CNRS was involved to some extent in communication activities (problem census and village workshops), but otherwise there was little role for collaborators and intermediaries in promotion and uptake activities (although they facilitated some village workshops). Towards the end of the project involvement was said to be irregular and people were not always informed of project workshops. Some farmers said that their only involvement was to provide the researchers with information; although others stated that they were involved in a range of project activities.

Media products and impact

Media products for wider dissemination were not planned for at the start of the project although there was always an intention to produce a wide range for different target audiences. The generation of dissemination materials was led by the UK team with some involvement of collaborators but almost no involvement of intermediaries apart from CNRS. However, at the time of the research (nearly one year after project completion) project results had not been shared with Bangladeshi collaborators and dissemination to villagers and intermediaries of results, guidelines and workshop reports was poor. The project leader is aware of this problem and has made the following comments which raise issues beyond this project:

- (a) ‘We didn't complete all the written reports before the end of the project, and it has been very difficult to get them completed (by me & others) now the project has finished (raises the same issue as that to do with completion of manuals and other dissemination materials)’.
- (b) ‘I have not been as diligent as I should have in distributing materials, partly due to (a), and wanting to send the materials out as a job lot rather than a trickle.’
- (c) ‘The issue ... of not knowing when a project is finished, and therefore being uncertain of the status of project documents in this long period in post-project limbo. It's not worth spending a small fortune on duplication and sending out documents when the FTR is under review as it may all have to be modified. I did, just before Christmas, get the official project finished

letter from NRSP, so I am now progressing the dissemination of our documents, albeit nearly one year after the end date.'

Issues raised by the project

The project encouraged the re-formation of a local fishermen's society (in Charan Beel). However, this group, and others, were disappointed as their expectations had been raised through the village workshops and these expectations were not then fulfilled by project. There is a problem in this project over the raised expectations and the fact that technologies were being tried as an adjunct to the methodology research. There is an additional issue over raised expectations to do with collaborating organisations. In this case they had expected a follow on project for putting the research into practice absence of this caused frustration (and with end users).

Methodological projects need vehicles, in this case small scale farmer/fisher participatory research interventions and technology development, through which to test the methodology. As the project leader pointed out 'impact at the village level is difficult both practically and morally. The activity was research, not development, but the mere presence of the project raised expectations which were compounded by the workshops. It is wrong to be there and not try to have some direct positive impacts. ...yet by the same token...the research was not aiming to develop a widget or a technology, it was aimed towards policy outputs, but grounded in empirical evidence. There was thus no obvious or tangible output to hand over to farmers at the end of the project. The participatory action planning methodology (being developed further in a current project) clearly had a local impact. However, it appears to be the tangential activities, like levering some soil fertility training out of the local Agricultural officer, that the farmers found most useful (i.e. straight development, not research).

Putting the research into practice after the end of the project is problematic. Even if project outputs are taken up by a target organisation, there is no guarantee they will put them into practice in the same village as that in which the research was done. However, according to the project leader, in the case of Charan Beel, the fisheries regulation and beel excavation needs identified in the project WILL be addressed. This will occur under a bilateral project of which CNRS is implementing part.

Farmers had good links with collaborators during the project, but, except for the links with CNRS, these stopped as soon as the project ended. There is some disagreement about whether other collaborators and intermediaries have good links with farmers in general. There was a lack of co-ordination among the local collaborating agencies and individuals which caused communication problems with the field level officers and staff.

In relation to general communication around the project stakeholders seems to be confused about what the project was about and what kind of outcome they might expect. Because of the association of the methodology with technology the expectations were that the project would be making recommendations about technologies. The workshops lead to an expectation that what was discussed would somehow be implemented. Local collaborators were not clear about the goal and use/dissemination of project findings, and about lines of responsibility, and there was some confusion about the research objectives of the project. One respondent is quoted as saying 'only the foreigners know the objectives of the project'. This is particularly serious in the case of the farmers whose expectations of action based on their analysis of the problems were raised by the village workshops. This is an issue which needs to be addressed by the programme. This is an issue that needs to be addressed by

methodological projects. Good communication with stakeholders and a clear understanding of expectations of all parties and what that may mean in terms of delivery for the farmers in particular.

In the absence of the dissemination products we have to conclude that the reason for any impact has largely occurred because of the communication activities and the transfer to a more sympathetic collaborator (CNRS).

CASE STUDY 4: R6789 Ghana, January 1997 - June 2000

Development and promotion of improved techniques of water and soil fertility management (humid forest belt).

The aim of the project was to improve crop production on previously forested land. Working with CSIR and the Integrated Food Crop Systems the project hoped to increase the production and quality of dry season vegetables through the increased availability of water and soil nutrients. This review concentrates on the soil fertility component of the work.

Involvement of collaborators, target organisations and end beneficiaries

The concept note was prepared by NRI. However the local project management team contributed to the initial project design. Local project staff, intermediate and end users were brought in at different stages after the initial design of the project. The project was supported by top personnel in the Ghanaian Agricultural Development and Research sectoral ministries at both the national and regional levels.

The relevance of the project to the communities was determined through a series of focus group discussions. The involvement of the UK team, local collaborators, intermediate and ultimate users, in PRA activities and group discussions to design the on-station and on-farm trials, ensured the active participation of all stakeholders in the implementation of the project.

Through consultations with farmers the project identified that demonstrating the use of animal manure and promoting the concept of manure were important for promoting the use of organic fertilisers. This was carried out by working with farmers to evaluate, in a series of on-station and on-farm trials, different amounts and mixtures of animal manures, and a range of different green manures, both indigenous and exotic, for their effect on subsequent dry season vegetable growth. Traders and farmers selected vegetable varieties from research stations and farmers used their own management practices, activities which should lead to greater buy-in.

Communication at the preparatory stage involved only the local and UK project management team and took the form of surveys to identify areas for research, and meetings to discuss the components of the project. It does not appear that the other stakeholders were involved in the preparatory stage, except as subjects of the research surveys.

The project staff (local and UK) were the only stakeholders involved in the decision to engage in communication activities and prepare media products. None of the other stakeholders were involved in decision making at this stage.

Impact of project

The procedures required for the use of green manure were considered too cumbersome by most farmers. Issues mentioned were the length of time it took to grow the plants, the difficulty in incorporating it into the soil, as well as unavailability of green manure seeds. Delivery systems in collaboration with seed companies and farmer support networks are important in ensuring widespread adoption of soil fertility and soil water management techniques. As a result, although there seems to be a high level of interest in green manure, very few farmers have taken up the technology. The use of animal manure is relatively higher but is also constrained by unavailability of the manure and problems with applying it on a large scale. Those non-project farmers who adopted the technologies were motivated when they observed success on the farms of project farmers.

Planned communication activities and dissemination materials

There appears to have been no budgetary allocation from the start of the project for the dissemination activities, for the generation and production of materials or their distribution. Those planned in the RD1 were:

1. Involvement of farmers in assessment of on-station trials
2. Implementation of on-farm trials
3. Manuals for SMS and extensionists
4. Leaflets for literate farmers.

Apart from the above dissemination does not seem to have been an element of the project at the outset. The other activities engaged in were introduced in response to suggestions from the Ghanaian project team and dissemination materials were added to during the project according to need. At the time of this review (November 2000) the production and distribution of technical and workshop reports and the production of manuals and leaflets had almost been completed.

The project staff (local and UK) were the only stakeholders involved in the decision to engage in communication activities and prepare media products. However, decisions on production of the leaflets were taken at workshops at which the intermediary and ultimate users of the products were present. The members of the local project team made decisions on the form and content of the products, assembled data and produced draft manuals and leaflets; the staff of intermediary agencies and farmers commented on the drafts; whilst the UK team assessed the drafts. Although there is insufficient local capacity for writing and printing leaflets and extension materials, there is the capacity for art work, type-setting and commercial capacity for printing (although this was of variable quality). Extension was constrained by lack of training, mobility and lack of funding which limited distribution.

Communication activities included PRAs, on-station demonstrations/trials, on-farm trials, workshops and training sessions, field days and follow-up visits. The local project management participated in all the project activities, whilst the intermediate and end users of the outputs participated in all except the on-station trials. There was an active participation of the local project staff, collaborators and intermediate users in decisions on the communication activities. They were also involved in the design of the trials, selection of farmers and needs assessment. In addition, they contributed to the decisions to hold field days and acted as facilitators during such communication activities. However, there was limited involvement beyond the local project staff in the organisation of the workshops and

the development of presentations. Staff of the intermediary agencies (such as AEAs of MoFA), assisted in selecting farmers to attend workshops and helped with planning and facilitation of some workshops, but there was no other involvement by other stakeholders.

Extensive, regular and formal collaborative linkages have been developed during the project, which have provided mechanisms for effective communication now and in the future. The project has links with various organisations within Ghana and in the UK. Local links include the Regional Directorate of the Sector Ministry, local and international NGOs with interest in sustainable agriculture, major national research and educational institutions. One local NGO, GOAN has particularly good local capacity for dissemination via its newsletter which is distributed through its local network. There are also linkages with farmers. These linkages have been initiated mainly by the project. and there were few links between the different stakeholders. It remains to be seen whether they will continue now that the project is over and people have returned to their usual duties within their organisations.

The project had good relations with a wide range of organisations (e.g. MoFA, GTZ, GOAN, CARE, Crop Research Institute, Soil Research Institute) which enabled them to explore a wide range of uptake pathways. Some of the intermediaries such as GOAN have developed very efficient systems and pathways to communicate to farmers and other users of technologies.

Impact

The effectiveness of the project's participatory communication activities is shown by positive changes in the cognitive, attitudinal and behavioural dimensions of the operations of all stakeholders. The local project team has changed its perception of the role of farmers in research and development and has developed more participatory approaches to its work. Similar changes have occurred in the staff of the intermediary organisations, who have acquired new knowledge on improved soil fertility and soil water management, and in record keeping, and who are now more willing to learn from farmers.

Farmers who have participated formally in the project, and those who have learnt from the contact farmers now know the benefits of organic fertilisers and this has led to a more positive attitude towards the use of animal manure in particular.

Issues

Although leaflets and manuals have been drafted, tested and reviewed they are yet to be multiplied and distributed. It is not clear why the manuals (being produced in the UK) are not ready (Note: the manual has been completed since this research was carried out. However, there is now a realisation that the it is more like a subject specialist manual than one which can be used by extension (and farmers) more widely. It is therefore being evaluated (NRSP project R7992) and will be rewritten according to the results of that evaluation. It will then be promoted and training will be provided in its use. However, production of the leaflets is said to have been delayed by the heavy work schedule of the ISU and by financial constraints. In the absence of the materials we have to assume that such enthusiasm as has been generated has been achieved through the project activities.

Although the project staff have returned to their original schedules after the project ended, most of them are located within MoFA in the region and could therefore, continue with the promotion as part of their normal duties.

The research has revealed the diverse views of the project team and intermediaries on who should be involved in decision-making on communication activities and products. Such diversity highlights the need to involve all stakeholders from the start.

The farmers use diverse sources of information for their natural resource activities. The most widely used are MoFA/government extension officers, radio, other farmers and family members, but only print has been considered in the project.

Although there has been some dissemination and use of products (with CARE and some AEAs) distribution has been uneven and as far as farmers are concerned it has not reached beyond those farmers directly involved in the research trials.

Lack of financial resources through budgetary provision in the project design for dissemination and follow-up activities has meant that promotional and follow-up activities have either been minimal or have not taken place at all. Financial constraints for multiplication and distribution of manuals and leaflets have limited the benefits that could have been derived from the project by a wider population. The leaflets were targeted at literate farmers and would therefore not be useful for illiterate farmers, thus limiting the extent of usage. The project applied for extra dissemination funds (manual) which is now complete and in the process of distribution. Responsibility for distribution (of manual) has been assigned. In respect of the funding of promotional activities, the general perception that this should be done by MoFA and other stakeholders suggests an opportunity to reach agreements for local contributions towards the cost of dissemination.

This project seems to have generated a high degree of interest (one kind of impact), This suggests that the on-farm trials were an effective dissemination tool and should therefore be used more extensively. Their positive experiences from the project, such as changes in attitudes towards farmers and certain farming practices, would make them good spokespersons and role models for other institutions and individuals to emulate. but the difficulties encountered seem to suggest that longer term impact in terms of use of green and animal manure is less likely. Although there is now a training manual in place and leaflets about the technology for literate farmers questions over the suitability of the technology remains..

CASE STUDY 5: R6799 Ghana, January 1997 – March 2000

The Kumasi Natural Resources Management Research Project (KNRMP) (Consolidated and revised for project phase 2).

The project was aimed at improving the management of natural resources in a sustainable manner which increases the welfare of peri-urban population. To focus on livelihoods constraints with particular reference to natural resource system in peri-urban area of Kumasi, Ghana.

KNRMP arose out of a lengthy process of consultation and preliminary research activity to define the focus of the project. It incorporated a separate project to install, maintain and support an integrated GIS system, KUMINFO, for the peri-urban area. KNRMP was extensively reviewed under SEM 52 R7037, this current research has, therefore, concentrated on the GIS facility. GIS systems are increasingly incorporated into projects and DFID has an interest in the way in marginalised groups can gain access to new ICTs and benefit from their use.

The KUMINFO GIS Facility

The local collaborators (staff of the University in Kumasi) were actively involved in decision making from the design stage of the project when the availability and dissemination of information was identified as a key constraint to natural resources management. It was decided that all the information generated and collected under the KNRMP, as well as other relevant research findings, should be fed into a GIS database and the outputs made available on a regular basis.

The system provides access to maps, to integrated attribute data (including data from PRAs); to key elements of individual studies, and ergonomic and intuitive interfaces for analysis. Its success depends on careful organisation of datasets, provision of information on data, data quality, and education of users, including local planners, on the use of the system.

The strategies developed to educate users on the KUMINFO system included the organisation of workshops, seminars and training sessions, and the preparation of media products such as leaflets, manuals and newsletters. Participants in training activities included researchers, lecturers, district planners and NGOs. Provision was made for hands-on experience with the software and hardware.

There are several constraints to the use of KUMINFO. The majority of the chiefs and community members were either illiterate or did not have computer knowledge. Many of the staff of intermediaries taking part in sessions have no computing skills. And many of the intermediary organisations, especially the District Assemblies either do not have computers, or where they do, the specifications or capacities are such that the specialised software (Arcview Explorer) cannot run on them. The only exception is the Kwabre district, where the software has been installed. However, even in their case, the only suitable computer is the one in the Office of the District Chief Executive which is not accessible to the district planning team.

Communication products include: Demonstration CDs, KUMINFO Arcview Explorer, KUMINFO users manual, Data managers manual, newsletters and leaflets. Although great efforts were made to involve all stakeholders in the generation of these products the review

concludes that work was dominated by the UK team and that pre-testing was largely confined to peer review in the UK. However the KUMINFO Data Manager was actively involved in the design, development and delivery of communication activities, and made direct inputs into workshops, seminars and training sessions in the KUMINFO laboratory in KNUST.

Impact

The communication activities have resulted in awareness, leading to the use of KUMINFO as a source of information for research and teaching (the system is also being used by another DFID funded project).

Perhaps more importantly seminars and workshops involving staff of NGOs, DAs and farmers have created awareness at the community level, resulting in beneficial use of the information. For example, as a result of participation in the workshops at which visual images (e.g. aerial maps) of the rate of deforestation of peri-urban Kumasi was shown, community members from Swedru in the Kwabre District, have taken measures to protect watersheds and have undertaken land use planning activities.

Farmers who participated in the workshops (some of whom are illiterate) remarked that these presentations were extremely useful and felt that the approach should be used in future development interventions. The visual images are said to have stimulated interest particularly among opinion leaders and enhanced learning through better retention and memorising especially for community members. They have informally shared information with other farmers who have not participated in the workshop sessions.

BIRD have indicated their dependence on the outputs of KUMINFO for their planning programmes. BIRD has effective links with district planners in the Kumasi and peri-urban districts conducting pre- and in-service training programmes for planning officers. They have also been actively facilitating development of district assembly planning schemes and programmes and this is likely to continue. Following the workshop sessions where visual presentations on land use were made, some Chiefs have contacted BIRD to assist them to redefine their boundaries.

Issues

Although there has been some impact the project has not been able to capitalise on the interest generated by the visual images amongst communities, and is further hampered by the lack of interest amongst planners for participatory work involving the communities.

Workshops, the key communication activity, were organised for the KNRMP as a whole and not specifically for KUMINFO. Thus, activities that are more directly observable (e.g. enhanced soil fertility) overshadowed the presentations on KUMINFO. Although the views expressed by some participants immediately after the workshop sessions were encouraging, there was no lasting effect. Most of the community members and staff of intermediaries interviewed either had forgotten about KUMINFO or had a vague memory about it after intense probing.

Apart from the lecturers of KNUST, there was no evidence of direct usage of the KUMINFO GIS among District Officers in at least four district assemblies who had been trained. Staff of District Assemblies formed about 37% of a total of 57 participants who attended workshop sessions, but those interviewed said that they had not attended any training sessions. In this case workshops did not result in effective communication nor did they achieve any impact. It was also evident that different people from the same organisation either were invited or participated in workshops and training sessions on different occasions. This meant that no one person was able to acquire sufficient skills to be able to use KUMINFO or the information it provides. Since there are plans to engage KUMINFO as a semi-commercial activity, it is even more important to inform the intended users about the facility. This is of serious concern since KUMINFO consists of very useful information that can be utilised in planning of programmes in the districts.

Some of communication products such as the leaflets on KUMINFO, which were produced and distributed at workshops, had limited usability because they were in the English and some of the participants, particularly the chiefs and farmers, were illiterates. Pictorial presentations demonstrating some of the outputs would have engaged a higher appreciation. Similarly, some of the communication activities such as workshop sessions to which community members were invited were delivered in the English language with no translation into the local language. This could have adversely affected uptake.

Potential users indicated that they would have expected an announcement stipulating conditions under which KUMINFO could be used but have not received any such notice. This was not set out in the objectives of the project and it is an omission.

There are no mechanisms or resources for ensuring continued dissemination and follow-up of KUMINFO information. Furthermore, no systematic or conscious effort has been made for the follow-up of participants of workshops and training sessions to ascertain their use or application of the knowledge acquired on KUMINFO.

Effectiveness of the communication strategies in situations that require the use of equipment such as computers, are constrained by inadequate skills and lack of access to equipment. No systematic exploration of skills and equipment was carried out in spite of the fact that the success of the project depends on them. This highlights the need for extensive needs analysis in this area.

The end result of the project is that although some awareness was created, the necessary information or effort to re-enforce the messages to ensure a good understanding and subsequent use of KUMINFO has not occurred. Dissemination has only had a limited effect.

CASE STUDY 6: R7085 Zimbabwe, January 1998 – December 1998

Promotion of practical approaches to soil and water conservation for smallholder farmers in SS Africa

The project set out to promote the use of appropriate and improved soil and water options for small scale farmers in Southern and Central Africa through the dissemination of farmer friendly print materials that would enable farmers to select technologies to meet their management capabilities and resource constraints.

This was a low budget (£30,000) short time scale (9 months), dissemination project. It was demand led in the sense that it grew out of 6 years of collaboration and participatory work between GTZ and DFID SWC projects. This collaboration had resulted in strong, active links between the UK project staff, the collaborators and the target institutions. The key GOs and NGOs (e.g. Agritex, ZFU, CARE-Zimbabwe, IT-Zimbabwe, Hinton Estates) either had an extension and technology transfer remit and /or were involved in materials development for extension workers and farmers and offered many opportunities for dissemination (field days, farmer exchanges, training sessions, ZFU magazine etc.). Materials were to be produced under the joint auspices of Agritex and ZFU.

What follows needs to be set in the context of a country in which the changing enabling environment has had a dramatic impact on the project and the ability of individual stakeholders to carry out their intentions. These include:

- Major changes in ZFU involving staff changes due to suspensions and resignations.
- Restructuring in the Ministry of Lands giving priority to resettlement and land reform and ZFU shifting its priorities accordingly
- The death of the main contact in the Training Branch of Agritex (a key stakeholder) was a tragedy with implications for the project. CARE has subsequently become the main stakeholder, but is also affected by the political situation.
- Lack of fuel due to national shortages
- Major restructuring of Agritex in Masvingo
- Suspension of funding by donors to government meaning there is no budget to carry out agreed work.

Who was involved

During the project farmers, technical experts, extension workers and other major stakeholders were actively involved in a range of consultations and workshops designed to

- create ‘buy in’ to the project
- enlist professional and technical expertise
- ensure representation of a variety of viewpoints
- determine the possible contribution of different stakeholders
- assess the needs of target groups in terms of information packaging

These activities led to the production of 15 different titles as separate booklets that are generally believed to be of great value. Together the booklets form A Guide to Good Land Husbandry. This is a considerable achievement given the timescale and the budget.

The project team was responsible for producing the booklet design and camera-ready copy in the UK, ZFU for translation and for printing and distribution whilst illustrations were commissioned from a local artist. Although the project ended in September 1998 the first print run of the finalised English version was not commissioned until January 1999. and the translation into Shona and Ndebele has only been completed on two of the 15 booklets. At the time of the review only short print runs had been produced, and distribution was low.

However, CARE funded their own print run in a number of different packaging options from the Belmont Press and hope to translate and sell copies to farmers once demand is known. They had distributed two sets of the leaflets in ring binders to community mobilisers at a

workshop as part of a pilot scheme to assess demand. It was intended that community mobilisers would lend individual leaflets from the sets to group members of the small dams project.

Impact

The review team interviewed group members who had borrowed leaflets and the community mobilisers. Unfortunately very few farmers had borrowed any of the booklets at the time of the review and no records had been kept as to who had borrowed what. Those farmers interviewed were generally positive about the booklets but they also raised some problems. They said they could not read much English but that they can ask their children to read for them. A straw poll taken during the review suggest that the high official literacy figures for English vastly overstates functional reading ability in that language and that people need encouragement to read. Group members said they would be prepared to pay \$5-10 for a booklet if it was in Shona. One CM said she found it difficult to understand the English but that the diagrams are clear and one can learn a lot from them. Master Farmers get written materials for free and group members can sometimes get them for free, however, non-members of the dam scheme could only access the booklets if they were for sale. Although the booklets are intended for resource poor farmers they still need resources that they wouldn't have (e.g. a donkey).

Although community mobilisers and one or two farmers said they had read and learnt from the booklets it is not always easy to ascribe change to that reading as they have other sources of similar information available to them. Most of the changes observed within the small dams project are more likely to have been the work of a highly energetic and motivated Community Mobiliser passing on the advice he has read about. More generally farmer exchange visits were cited as an important source of information.

The booklets have had a more direct impact on some of the intermediary organisations: They have been used by CARE as the basis for topics to be covered in the M&E guidelines they have developed and the two booklets translated into Shona and Ndebele have been adapted for study materials in the Smallholder Drought Mitigation Project (SDMP). Agritex Institute for Agricultural Engineering has written a proposal to be submitted to FAO to revise training manuals to bring their content and approach into line with the content of the booklets and more generally the more participatory, farmer-led research and extension approaches being introduced in Zimbabwe.

Issues

Issues critical to the success of the project were sidelined as risks in the logframe. For example 'Extension agencies participate in the planning and distribution of guidelines', yet the reality is, according to one individual consulted that work through the NGOs has greater impact. The success of the project ultimately rested on the efforts and capabilities of ZFU: their capacity to continue the activities effectively was either not assessed at all or incorrectly assessed. Internal mechanisms for dissemination and publicising new information within many organisations, especially governmental, are not strong. Although Agritex technical branches were heavily involved, the Training Branch with responsibility for dissemination and extension was minimally involved. This is of particular concern given that interviewees mentioned that Agritex agents are not always familiar with or promoting the techniques elaborated in the booklets.

The project was let down by an over-reliance on the capacity and mechanisms of the main distributing organisation, ZFU, and its capacity to source funds for translation and printing – in itself affected by the events unfolding in Zimbabwe over the last two-three years. raised by the project.

The second factor to be sidelined was: ‘Target institutions invest in the uptake and application of research results’. However, only CARE has actually taken up the work in any concerted way. It seems that perhaps insufficient attention was paid to insertion points within bilateral/operational projects to trial the materials except for the CARE small dams project.

The line budget for communication activities and media products was small (13% of the total budget) given that this was a dissemination project, even with the caveat that printing and distribution was intended to be the responsibility of organisations in-country (dissemination committee was set up to raise money with little success). No money or time was budgeted for further in-country dissemination and publicity. Unstable political and economic situation in the country has meant funds for translation and printing and distribution were not as forthcoming as expected. It may also have led to other pressures on personnel affecting their ability and willingness to continue this work for which no actual incentive exists. Funding from the Swedish Cooperative Centre enabled ZFU to translate the booklets on Soil and Water conservation.

However, when the total budget is considered it is hard to see how the research and development of 15 booklets could have been achieved more cheaply. In practice the time taken to develop the materials was not fully costed since it relied on the goodwill of the collaborators, as part of their normal duties, and much overtime on the part of the Project Leader.

Some of the publicity mechanisms identified have not worked as planned due to circumstances outside the project’s control. For example the 4th edition of the newsletter of the network for farm mechanisation, FARMESA, which was supposed to carry Steve Twomlow’s article (written in early 1999) about the Guide to Good Land Husbandry, has not yet been published due to the lack of articles from the country programmes. Thus potential communication through circulation of 2000 copies, plus 500 to each of the five country programmes, has not materialised.

Lack of time and skill among grassroots activists, project staff and field officers to carry out monitoring and evaluation is a general problem. For example CARE Field Officers already carry a large information-gathering burden in the course of their existing work.

The toll taken by AIDS on skilled managerial staff in Zimbabwe affects sustainability of projects and ideas, and institutional memory.

Although intended to cater for different categories of farmer by resource base, no real attempt was made to characterise the audience or to cater for different communication needs. Similarly, although the uptake pathways were to be reviewed there was no plan to investigate the dissemination materials and promotion pathways actually used by farmers or to assess the potential mechanisms for creating demand for materials among the target audience. This means that opportunities for distribution and cost recovery which exist in Zimbabwe were not fully explored, nor were other channels for promotion such as radio and TV. The way in which extension works at the community level e.g. show and tell days, could also have been

looked at more. Activities for learning are important in situations where farmers may not be part of a reading culture. No analysis of the number of farmers to be reached by the materials was carried out nor was there any attempt to distinguish between categories of farmers according to literacy levels, gender and other factors key to the uptake of the materials.

There were no time bound, qualitative or quantitative targets for the numbers of booklets to be distributed to which farmers, where and with what result. No indicators of reach, uptake, use and impact were incorporated into the research design in spite of the extensive consultation through the workshops. Development communication expertise was not used to draw up indicators of reach, use and impact during the project's implementation, at least to provide a basis for ZFU and CARE to assess impact in the future.

There is no overall database for the distribution of the sets of booklets which makes tracking their whereabouts extremely difficult. With a number of organisations involved there is no overall responsibility for monitoring and evaluating distribution. Furthermore few of the target institutions involved seem to be fully aware of the importance of monitoring and evaluating the impact of materials and/or to have the experience and expertise to do so.

It is worth noting here that CARE is planning a systematic evaluation of the booklets use and impact in the near future. This will be carried out by one of the UK collaborators to this project, Jim Ellis Jones. Nicola Harford, who is a communication specialist will be a member of the team. It would be worthwhile for NRSP to keep track of this evaluation.

CASE STUDY 7: R6759 India, April 1999 - October 2000

Integration of Aquaculture into the farming systems of the Eastern Plateau of India

The project set out to respond to the following research problems: that the socio-economic context and farmer resource priorities are not given enough consideration in research and that there is a problem in developing and disseminating aquaculture technological innovation.

The main collaborators were KRIBP-E, CIFA and ICAR. Both government and NGOs were already involved in aquaculture and training was available. CIFA and Director of Fisheries were involved in initial project discussions and the first workshops, but not in deciding communication activities. Recently KRIBCO has promoted a separate legal entity, a Trust, called Gramin Vikas Trust (GVT), which has taken over from KRIBCO the entire responsibility for community development through employment generation, skill improvement, poverty reduction and empowering the disadvantaged groups.

The project had three main aims: to raise awareness that aquaculture is quite feasible in seasonal water bodies for poorer farmers; to train farmers and staff from collaborating research or extension institutes in specific skills (e.g. how to stock, harvest, feed, breed or transport fish) and in participatory research methodology.

The project used a participatory research methodology to work with poor farmers within their own particular environmental, social and economic constraints, to develop new recommendations for Aquaculture. The farmers being targeted were diverse in their needs, in their resource base, in their basic knowledge and understanding of aquaculture, and in their access to and preference for different kinds of media and extension. The project developed a

good understanding of these differences through research and attempted to tailor its dissemination strategy accordingly.

From the start there was a strong focus on uptake, impact and the dissemination of project outputs. Early on it developed one of its most important tools, the Aquaculture Bulletin, which was to be responsive to the needs of farmers and extension. Unusually the logframe had a 'dissemination' review built in and costed. This is a project which was full of good omens for uptake and impact.

Who did what

Collaborators were involved in a variety of ways:

- One of the key collaborators, the Central Institute of Freshwater Aquaculture (CIFA) Bhubaneswar carried out training mainly to extension agents. GVT shared the responsibility of preparation of the draft of the Rural Aquaculture Bulletin and the Manual respectively.
- The UK team carried out the costed needs assessment for the dissemination strategy.
- Researchers provided support from seed supply to training for development and from fabrication to trials for the research activities

Impact can be seen by the wide range of agencies who are interested in the project and in promoting it.

The promotion pathways initially identified for the uptake were the two GVT/IBRFP in the East and West, CIFA and the KVKs, FFDAs, and possibly some other agencies such as the SRI.

Determining the extension/dissemination strategy

A costed needs assessment for the development and testing of dissemination materials was conducted during September and November 1998. Key-informant interviews were held with a wide range of stakeholders, but not farmers, to establish what methods were currently used within agri-and aquaculture extension, and how the findings from the project could best be shaped to fit in with the existing aquaculture extension framework.

Extension recommendations with approximate costings were grouped into three steps: awareness creation, skills training and spreading the project approach. Different media and approaches were to be used depending on audience:

- Awareness raising -Scientific community:
National and international journals
- Awareness raising – Farmers:
 - Traditional street play about aquaculture (translation in several dialects)
 - Video of the play (translated in four languages)
 - Cassettes with 'traditional folksongs' about aquaculture

- Fairs and markets for farmers to share information about the project
- Skills training:
 - Local aquaculture extension agents – specific techniques recommended by the project
 - Farmers in the project area – specific skills recommended by the project (using pre-tested posters and video)
- Spreading the project approach
 - Forum for local GO and NGO aquaculture extension agents to share experiences
 - Handbook in participatory research .

Impact

The overall success of the project can be gauged by the levels of enthusiasm expressed during the review and the requests for more copies of the Aquaculture Bulletin (with specific requests on content) being made by farmers and organisations working in aquaculture. This enthusiasm was seen in those directly involved in the project and from other villages who had observed what was happening. The farmers are keen to learn more about diseases, water quality, fish culture practices through the media products (bulletin and video). Women who cannot leave the family and go out for training wish to be trained in fish disease and fish feed.

Considerable awareness exists and it is suggested that perhaps people need only guidance. The proof of their awareness is reflected in their interest in diversification (especially with high value species, prawns and *magur*) and their desire to use the communication activity (exposure visits, demonstrations) as well as the media product (bulletin) to meet their requirements.

However, some obstacles to uptake were identified by the project team and by farmers and intermediaries. These are: the shortage of relevant skills (only 5 Fisheries Community Organisers in the 3 states); the technology is not understood by everyone; fish seed is not easily available and there has been only a limited (research) success in raising fry/fingerlings in seasonal ponds.

Finally some questions hang over the appropriateness of the technology, this may be because the technology has been validated by observation only rather than through scientific processes of evaluation. The other issue is that the systems approach to the adoption of technology which the project has been advocating appears not to be fully understood and single technology adoption is more likely to be the case.

Impact of training

One of the main communication activities was training. Its impact can be seen in the establishment of fish production, improved nutrition and increased income which is being utilised for building assets in terms of ponds and social activities (one community has refurbished their temple with the extra income). The community organisers (Cos) have job satisfaction as their work has borne fruit. They also voiced farmers' demands in suggesting that the bulletin may incorporate fish breeding and culture techniques as well as control

methods for common diseases. In Ranchi the two COs (Fisheries) work together though one is involved in aquaculture development and the other in research in *magur* culture.

Training of the jankers (farmer group leaders) is considered to have been effective. Through it they have gained confidence for their work in the villages, although of course some appear to be more dynamic and energetic than others. However, there is need for more trained jankers and also for learning by doing expertise and for better training of groups.

A good beginning is made to improve their nutrition as well as income. The proof of the impact of the communication activity is clearly seen in the fall out effect as well as their own desire to improve their production and go in for more ponds.

Impact of media products

The impact of the media products has been variable. Part of the problem is that products have not been finished and distributed (e.g. reports of workshops were not distributed among participants), and part is attributed by the review to the weakness of some dissemination partners. Some specific examples are discussed below.

The Aquaculture Bulletin: The first major dissemination approach was through the Aquaculture Bulletin which, at the instigation of the original project leader, was targeted at farmers. It is generally considered to be effective and extension staff have been vocal during the review about its usefulness and what they would like to see in it in the future. Farmers are happy when they find their photographs in the bulletin and show greater interest in the work which is one way of encouraging them.

However there have been some problems. There has been a lack of expertise for providing the content which is being demanded by villagers; it has not been an issue as often, or as regularly as it should have been due to staff shortages; it was not being distributed to all project collaborators; it is only useful to literate people (although it was read to others).

During the review a great demand was shown for the bulletin, to meet this demand would mean stepping up production and compiling an adequate mailing list to ensure that people receive it. This would also enable evaluation to be carried out.

Street play and folk songs : The street play was played in only one village, although the original plan was to use it in 20 villages. The folk songs did not materialise although it was planned to have large numbers of them written. The street play was well received and performed well in terms of awareness raising, but needs to be followed up by training etc.

Manual: Although the manual was planned and has been written it has not been produced and distributed. Its production is said to have been halted by the departure of the project leader.

Video: For reasons which are unclear there have been considerable problems with the video. The different language versions could not be completed owing difficulties in dubbing and hence could neither be tested nor distributed. Only one copy of each video (Hindi and Nagpuri versions) was available. This in spite of the fact that the master copy was available from University of Stirling, a fact fully detailed in the more than 100 page briefing left by the original project head for his successor. This means that very few villages have seen the video which was for awareness raising. It is reported that in those villages where it was shown

awareness was already high and the demand was for videos on technology. Its possible effect in villages where awareness needs to be raised is, therefore, hard to determine.

If copies were available the lack of an audio visual van is still considered to constitute a serious bottle neck for getting out to the villages and showing it is seen as a bottle neck for showing the videos.

Posters and pamphlets: Posters and pamphlets were said to have been useful in the initial period and to be a necessity even now. However, although a few pamphlets produced at beginning they have not become part of the dissemination strategy.

Issues

A promising approach has not materialised as planned. The project set out with a dissemination plan and mechanisms for putting the plan into action. The initial high input and interest in the communication activities if carried on should have led to use of the products. The staff on the project were making great progress but needed nurturing in decision making. Unfortunately the project leader left the project at what appears to have been a critical time in the dissemination process. His departure was planned and had been known about for six months, but for some reason, he was not immediately replaced and this caused a hiatus which has not been filled. The lack of someone to handover to in this kind of situation means that work which should have been done to further the dissemination was not covered. Apart from issues to do with continuity this raises serious issues about the level of input of UK and local collaborators, intermediaries and beneficiaries, and the extent to which responsibility is handed over in the early stages of the project.

This review has revealed a wide range of other agencies who could be involved in project dissemination and who are already working in the area, and mass media (radio and TV) are also interested in the project. Education TV (ETV Bangla) Perulia is an example of an agency ready to help, which has filed four reports on the project's work on its own. This shows the need for a wider investigation of the communication context of end beneficiaries and the need to involve them in decisions on the extension and dissemination strategy.

This was, in dissemination terms, a visionary project. It has been well documented through a full report on the costed needs assessment and through an article analysing the process which has recently been published.

CASE STUDY 8: R7537 Zimbabwe, January 2000 – September 2000

Demand assessment for technologies for on-farm management of natural resources

In response to limited adoption of technologies for soil and water conservation this study set out to investigate the reasons for this and to assess the demand (present and potential) for technologies for soil and water conservation, soil fertility management and the enhancement of plant generic resources on farms in semi-arid areas of Zimbabwe (Harare and field sites) and Tanzania (Morogoro and field sites). Strategies for integrated crop and livestock management were developed and promoted.

The purpose of the project was to validate new strategies for the sustained use and management of catchments in semi-arid areas. This was to be achieved through an improved

understanding of factors influencing farmers use of technology for soil and water conservation, soil nutrient management and plant genetic resource diversification. This in turn would enable more efficient targeting of future research investments and extension activities.

This review has concentrated on Zimbabwe and on the use of a methodology, Participatory Farm Management (PFM). PFM was developed in Project R6730 'The development of farm management type methodologies for improved needs assessment' (DFID: NRSP) and were packaged as a training manual (Dorward and Shepherd, 1997) 'Participatory farm Management methods for agricultural research and extension: a training manual'. Twenty copies of the manual were distributed to interested parties in this project. Two tools from the manual (Scored Causal Diagrams and Participatory Budgets).were to be used with groups of adopters and non-adopters. This part of the project provided an opportunity to look at a very specific dissemination activity relating to a recently completed project for which there is little in the way of a supporting and formal dissemination plan.

At the time of the review the planned communication activities and media products had not been completed and it is not possible to come to any conclusions about their actual reach, use and impact. However, certain pre-requisites for successful reach, use and impact were in place at inception and strengthened during implementation including:

- extensive literature review
- personal consultation to ensure the research was needs-based
- broad consultation with target institutions
- involvement of enthusiastic collaborators with access to promotion pathways and dissemination opportunities
- participatory research design
- identification of some communication activities and media products appropriate to the intended users of the findings.

The project is expected to contribute at Policy level to the NRSP's goal for the semi-arid production system. The goal is 'livelihoods for poor people improved through sustainably enhanced production and productivity for RNR systems'. Principle users of the research are NRSP management and the implementing institution of the project (University of Stirling). Key target organisations are research and extension agencies in the region, including NGOs. The intention is to reach them through articles in scientific publications.

Issues raised by the project overall

The review has raised issues to do with the dissemination of project outputs. In Harare dissemination was expected to take place among headquarters level staff of target institutions rather than among the provincial and district level professionals actually responsible for the promotion of resource-conserving technologies. Their specific communication needs were not systematically evaluated. Even the responsibility for giving feedback to farmers participating in the research was only belatedly taken as a result of this review. Responsibility for distribution to NRSP management and project leaders appears to reside with NRSP, but there is no indication of who is responsible for checking whether NRSP commissioned research is informed by the results of this project. Budgeting for dissemination was not sufficient for the limited activities outlined in the RD1 and wholly inadequate for deeper dissemination.

A major flaw in terms of actually measuring the reach, use and impact is that no responsibility is assigned in the RD1 for verifying that by March 2001 target institutions' research programmes include projects to test and validate catchment strategies based on selected technologies for natural resource management.

Key problems therefore revolve around the issues of responsibility for dissemination both during and after the project's lifetime; the need for forward planning and budgeting of post-project evaluation activities; the need to include systematic analysis of communication needs and opportunities in project design as well as indicators to measure the effect of communication activities and media products.

The use of participatory farm management (PFM) techniques

Field officers, researchers and farmers were expected to use the participatory farm management (PFM) techniques. Researchers and field officers were given two days training before going to the field to use them. Farmers were exposed to the techniques by field officers. Their different experiences are discussed below.

Field Officers. Field officers from different organisations were trained for two days in PFM techniques and a limited follow up was done to see if they were using them.

Most of them were not using the techniques, even though they thought them quite useful. The Assistant Project Manager for Care-Zimbabwe suggested three possible reasons for this:

- it is difficult for the field officers to use the techniques since most of the projects have many enterprises they are working on, such that farmers will get confused in trying to produce budgets for each enterprise in which they are involved
- all Field Officers for Care have a minimum of six sites where they are supposed to be working and they may not have enough time to use the PFM techniques, since they are time consuming. However, he had been trying to encourage them to use such techniques, for say just one crop.
- PFM techniques were introduced at a time when CARE was not conducting relevant assessment activities with their target beneficiaries.

In spite of refresher training it is debatable to what extent these techniques have been institutionalised within the CARE's operations. No attempt has been made to reflect on and document their experiences with PFM techniques.

CIMMYT, ICRISAT and DR&SS are using the techniques with farmers on a variety of projects and find them useful. Agritex was one of the main collaborators and recipients of training in PFM but still feel that they need to pilot the techniques in order to decide how to integrate them into the work of their front-line staff.

Researchers. Researchers felt that the limited training and testing was insufficient to make them experts and that they didn't know how to analyse the collected data. They were also unclear in some cases as to the main purpose of the qualitative survey, some thinking it was to test the PM methods. They did not realise that they were to be used to distinguish characteristics of adopters and non-adopters of resource-conserving technologies.

Farmers. Farmer innovators in Chivi Ward 25 who participated in the on-farm natural resource management project were interviewed. Most researchers working in that area consider the farmers to be at a high level of empowerment due to their wide exposure to the many NGOs in the area. However, none of them had used SCD although they said they intended to use the PBs as soon as they start their production. They also identified several problems they face in trying to keep records and budget for their production processes. These include tiredness after a long working day; other activities take precedence; and forgetting under the pressure of the working day. Most farmers confessed that even if they keep records, they have no idea of how to use them. The farmers said that it is very difficult for old people to keep records on prices of goods, and activities they carry out on their farm.

Issues arising from the use of PFM techniques

The issue here is that the techniques are known about and being spread by peer dissemination. It was fortunate that Peter Dorward was able to provide training, but, as can be seen from the comments above there are problems about the introduction of such techniques. One is the length of training given, which was not long enough for people to feel confident to practice what they have learned. The other is the extent to which training enables people to see the real usefulness of the techniques and how to integrate it into their own work. This is particularly important in the context in which field officers and farmers now have to work with multiple donors and NGOs all pushing their own approaches and technologies. Bad enough for researchers and extensionists, but what are farmers to make of it if they are subject to many interventions with different methodologies. Researchers working with the NARS admit that it is not easy to spread the word, and that there are many different extension initiatives all competing for time and attention.

OVERALL FINDINGS

In all but one of the projects reviewed here most of the main criteria for deciding whether a project output is worth disseminating have been met. In most of them some kind of materials have been produced for dissemination purposes, however their impact is slight. Participatory research activities, farm and research station visits, opportunities to interact regularly with extension etc, on the other hand, are successful in achieving uptake during the life of a project, but their continuation once the project is over is often uncertain. The main findings are discussed below.

Materials

1. The extent to which projects try to produce leaflets, posters, manuals and videos indicates the level of importance which is now being given to visible signs of dissemination beyond the academic article. However, the role and importance of materials in relation to activities during a project and their role in wider dissemination is not fully appreciated. Many of the materials have been produced without the involvement of those for whom they are intended and with a lack of understanding of the communication context within which people live and work. Consequently the impact of media products has been low. Materials are seen as inappropriate or incomprehensible by those for whom they were intended.

- language issues are not fully addressed. Farmers want materials in their own language BUT during projects materials are usually created in English. Translation may be left until the end of the project and may not have been properly budgeted for.
- the communication environment of farmers is richer than may at first appear both in relation to information sources and in the range of organisations and individuals who communicate with them but has not been fully explored
- there is still a heavy emphasis on written materials even though farmers have cited cross farm visits, learning by doing, and videos as methods of learning and communication.
- lack of, or incomplete, technical information
- almost no efforts are made to test materials for usability, although leaflets may be shown to farmers
- promotional leaflets and videos may be distributed to farmers, who are looking for materials which will enable them to do something.

2. The other major reason for the lack of impact has little to do with the nature of the materials themselves, but is concerned with a lack of understanding of the real costs (time, skills and money) of producing appropriate materials in sufficient numbers and distributing them. Setting budgets too low to enable materials to be completed before the end of the project is a contributing factor (even where dissemination was the aim of the project). The results of this are that:

- distribution has not happened, in fact it is generally limited, haphazard, unrecorded and untracked
- in some cases products have not been finished, videos not dubbed or copied, leaflets not printed or not distributed, manuals not written translation not done etc.

- dissemination is often a passive activity (e.g. provision of leaflets and manuals at some central location).intermediary organisations, who might use materials, don't know of their existence, nor where to get things from on a regular basis
- very small print runs and also small numbers of copies of videos.
- manuals are not written during the lifetime of the project but have been squeezed in to project leaders own time once the project is over.
- follow on training in the use of manuals, leaflets and videos is not given.

3. Projects do not consider that different groups of stakeholders and beneficiaries may need to be communicated with in different ways. Leaflets designed for farmers are put together to form a manual for extension for example. Whilst this may save money there is no indication of consultation and pretesting to see if it is really what is required. There is little understanding of the need to determine a purpose for materials before they are produced, and to provide training support for the use of materials, particularly manuals once they are distributed.

4. Project leaders acknowledge that at present there is too much reliance on the UK end for the generation and production of materials. Quality is the underlying issue here. In-country staff would often like to be more involved in generating materials, but may need capacity building to do enable them to do this. The end result unfortunately is that many leaflets and manuals are generated and produced in the UK, far away from where they will be used and where they need to be pre-tested.

5. The uptake pathway for materials and manuals produced in this way is unclear. In one case distribution had been set up before the project finished so that it was clear where the manual would go. In another the institution which might have carried out distribution and provided training support has been radically reorganised. In a third case manuals get carried around by PLs and their colleagues and methodologies incorporated into their next project proposal, or current field work. Serendipity is the key factor (who you know, bump into etc). This may helps to get new methods known about and even in some cases used, but the evidence is that the kind of training given is too short to give local field staff enough confidence to use new approaches once the UK team has departed.

6. The need for farmers to be more involved in promotion and dissemination was raised by many people. Where farmers were involved it was in choice of content and also in giving their views on the way in which material was presented. However, methods for assessing farmers needs and preferences in terms of materials, and their involvement in content generation was limited. Materials need to be usable and the methods employed fall short of usability testing. Asking people what they like is one step, seeing materials in use is quite different and is the only test of their usability and usefulness. Work in Thailand (Turongruang 2000) over the last decade strongly suggests that materials developed with farmers during the life of a project have a much stronger chance of being able to stand alone, for certain kinds of research outputs.

7. It is not always clear what the role of materials is supposed to be. In particular there is often confusion about the distinction that needs to be made between project PR media and activities and those which can be used by and with the farmers. These need to be complete, accurate and usable. This confusion leads to the production of materials not usable by farmers.

Activities

8. Findings in relation to communication activities during projects are positive. Without doubt training activities, workshops, farm visits, research station visits, regular interaction with extension (GO or NGO) and other farmers lead to interest and uptake during the life of the project.

9. However there are areas of concern. The first is that the expectations of people who are involved in communication activities (baseline surveys, farm visits etc. problem census, needs analysis) for projects putting in place a new methodology or carrying out policy linked research need to be addressed. Projects of this kind have to work with technology projects and are often confused with them, or seen as one and the same thing. Raised expectation and confusion set up negative responses in farmers and even in some of the organisations with which they work.

10. Secondly there are concerns that a methodological approach employed by projects funded by one donor, may be significantly different from those employed by projects funded by another donor. Collaborators and intermediary organisations working with more than one donor, and the farmers they work with, find it difficult to respond to these different approaches.

11. Thirdly a serious omission highlighted by this work is that farmers outside the project are not considered serious contenders for future uptake and may not be brought into the dissemination and information circle from the beginning. One complaint heard in this research is that they hear about things in a haphazard and partial manner. This is a serious issue in relation to wider uptake and impact and needs to be urgently addressed. Recent work in Uganda (Norrish and Ocilaje 2001) suggests that farmers not directly involved in research in a project would like to be kept informed throughout the life of a project about what is going on and be included in farm visits, etc. This means they need to be included in the communication strategy from the start.

12. Fourthly there was evidence that organisations and individuals (researchers, extension and farmers) working on and with projects were not fully aware of what a project was doing or what it was trying to achieve. In one or two cases there was even confusion about whether people were collaborators or not. Such confusion does not help in creating good relations and uptake of research outputs. One other critical issue is what happens when UK staff change. The project in India (R6759) seems to have been adversely affected when the head of project left. There may have been special circumstances which affected the continuity of the project in this case, but it is something that needs to be taken account of. In particular those working with the project (collaborators, intermediaries, farmers) need to know what is happening. This highlights once again the need for good collaborative working.

Keeping track of things

13. The kind of information needed for NRSP to make a judgement on whether a project is worth dissemination (see below) after it is over was hard to find in project documentation. This has implications for project reporting, and especially for what needs to go into the FTR. Communication activities and the status of materials development, production and use are not required to be documented in any strategic way. This makes it difficult to see what has been done, who was involved, whether follow up has been carried out etc.

14. Information needed for further dissemination:

- whether there is a good distribution system in place (for PR, advocacy, promotion, dissemination etc)
- whether support is needed and whether it is in place (e.g. credit, inputs, training, markets)
- whether farmers and organisations working with farmers need
- training in the use of methods and technologies and whether it is available
- whether support, (training and/or finance) is needed for activities and for the possible adaptation, translation, reproduction, distribution and follow up of materials and is it available.
- project outputs have been validated by farmers and researchers and evidence of validation.
- that media products (materials) have been developed to the point of usability (in the right language, format, right place) and evidence of validation.

15. There was little evidence of any kind of monitoring or tracking of communication activities or dissemination materials once the projects were finished (putting aside this review). Organisations do not see the necessity for follow up of training activities, the use of manuals, leaflets and videos etc. If they do (CARE, Zimbabwe is a notable example) they may not have the capacity or skills needed, this means raising funds and hiring in outside consultants to carry out the work.

16. In Zimbabwe CARE is carrying out a follow up which, largely because of this project, will now include a follow up of materials. Nicola Harford who led the team for this review will be part of the CARE review team with a remit to look specifically at leaflets. This should be regarded as an ongoing activity for the NRSP and contact maintained with Jim Ellis Jones who will head the team and with Nicola Harford.

Which organisations to work with

17. Choice of collaborators and intermediate/target institutions is crucial for the ultimate success of the uptake and dissemination activities. Good buy in by target institutions and collaborators who carry out extension activities is a key factor in uptake and impact. In those projects where there has been good buy in organisations have been prepared to pay for the production of materials, are continuing with the work now the project is over and in one case have commissioned a follow up study (see above).

18. There is evidence that flexibility is needed in allowing projects to take on new collaborators and to work with a range of intermediaries. Projects do not always make the right decision on who to collaborate with when setting up a project and events within countries may make it difficult for organisations to carry out their commitments. It is also clear that reliance on one organisation for collaboration can mean that project work and the chance for longer term dissemination and uptake are seriously jeopardised. Changes in the political situation in Bolivia and Zimbabwe badly affected the collaborating organisations. CIAT was clearly an important organisation for both the Bolivian projects and both project leaders feel that work was extremely affected by the changes in that organisation during the lifetime of the projects. This is not an easy situation to deal with, but spreading the load might help. In Bolivia for example although CIAT was badly affected by changes, FAS was

not. In Zimbabwe government agencies were unable to carry out their commitments, but so far CARE International has been able to continue.

19. Organisational buy-in is critical in those instances where staff are 'hired out' to a project. Where there has been a buy in by institutions the evidence is that they continue with the activities. However, there is also some evidence that where staff have been involved in a project, but there is no organisational buy-in, staff have to go back to their general duties after the project is over and may not be able to incorporate new methods and technologies into their work. In the words of one respondent your project 'dies'.

20. Project leaders expressed concern about the distinction between those who are collaborators and those who are target institutions. As the role they fulfil is critical it is suggested that all should be collaborators from the word go as a way of increasing the buy-in which is essential for adoption and uptake and dissemination. There may be financial implications if this is to be the case.

21. In-country organisations involved in production and dissemination of materials, often with a government mandate to do so, may not have the capacity to carry out the work. They may not have resources, staff, paper, budget, or capacity for writing, designing, pre-testing for comprehension, completeness, technical accuracy and usability, distribution and record keeping on distribution etc. However, there is no evidence that capacity is investigated before agreements are signed with them.

Assumptions

22. In some cases factors which are critical for the success of a project have been built in as assumptions or in other ways written off. Nurseries not set up, dissemination in the hands of one organisation with little understanding of what their capacity, reach and effect might be. Although some project leaders, who work very closely with one organisation, are very aware of the costs in manpower and other resources which they commit to a project, there is a general lack of understanding of what is really needed from, and by, collaborators and intermediaries after the project is over. Neither money or time appear to be budgeted for further in-country dissemination and training for intermediate users or key individuals within communities. The extent of buy in and the capacity to continue activities, produce and distribute materials etc are not investigated. Support for the kind of dissemination activities needed after the project has finished were, in one case, expressed as a hope that such and such an organisation will continue with them.

Capacity and responsibility

23. From the interviews with UK project staff it is plain that they are aware of issues relating to uptake, adoption and dissemination, and that they have strong views on issues of responsibility. However, there is a feeling that resources (time, funding, skills) are not available for them to take on more than a limited range of responsibilities. Whilst they acknowledge the importance of in-country organisations and the need for a shift in emphasis towards local organisations they are also concerned that the reality is a lack of capacity and resources in such organisations to do what is needed. For some this led to a suggestion that dissemination should be carried out as a separate project employing communication rather than research skills. Whilst this seems on the surface to be a good idea it does not absolve project leaders and their teams from responsibility in relation to dissemination. Findings from previous research (Norrish et al 2000, 2001) suggest strongly that unless a

communication strategy, as the basis for dissemination, is put in place from project inception phase, and built on throughout the life of the project dissemination is unlikely to be successful. The responsibility for putting this in place rests with a project leader and the project team.

24. These concerns mean that the NRSP and the bi-lateral programmes are seen as the major players when it comes to responsibility for uptake and dissemination beyond the end of the project.

RECOMMENDATIONS

General recommendations

25. At the NRSP workshop in November 2000 at which the initial findings from this research were presented it was suggested that there are three questions which NRSP needs to address in considering a programme strategy for uptake, impact and dissemination:

- Who should do what at project inception and implementation phases?
- Who is responsible, and for what, after the project leaves/is completed and to whom are they accountable?
- Where is the money to come from?

26. The recommendations that follow attempt to help the programme answer these questions. The general recommendation is that responsibility for dissemination between programme and project be determined. This is particularly critical in relation to what happens after a project is over. The following suggestions for the division of responsibility are recommended as a starting point (based on suggestions from interviews with project leaders). The programme should be responsible for ensuring that:

- (a) all the issues relating to uptake, adoption and dissemination are adequately considered by the applicants both at concept note and project document stage
- (b) there are sufficient funds in the budget to do something sensible
- (c) monitoring and evaluation during and after the end of project, monitoring uptake after the project finishes, monitoring the achievements against the log frame is carried out either by hiring consultants or using in-house skills
- (d) wider dissemination is thought through.

27. The programme also needs to consider what happens to further dissemination of a project between the time the project ends and the approval of the final technical report. Organisations may lose interest if there are long delays at this stage. The recommendation from this review is an exit strategy. This would need to take account of possible delays and how 'buy in' can be maintained at this time.

28. Project leaders should be responsible for:

- (a) putting in place dissemination/ communication strategies
- (b) keeping records of the activities in the strategy that will be useful to PM in the follow up activities
- (c) ensuring that outputs are presented in a form that is easily understandable to all involved (researchers, intermediaries, end users etc)
- (d) ensuring good communication with stakeholders (including intermediaries) and intended beneficiaries
- (e) thinking how project can help NRSP with the portability of project research results (not just in the form of a journal paper) for further dissemination
- (f) supporting the PM in setting up M&E.

29. In view of the findings on manuals the project should review its role in relation to supporting training in the use of manuals and other materials after a project is over. The recommendation is that the programme look at the example of Stepping Stones as a model for how this might be done. Stepping Stones is a training programme on HIV/AIDs developed as part of the Strategies for Hope Programme of Actionaid. It is based on a manual and video/slide set training package. It has its own support programme and over the last decade has developed programmes for local adaptation and translation. The project is highly successful and has its own UK based and regional administrators.

Recommendations according to the project cycle

30. The recommendations have been inserted into the project cycle at specific points as an illustration of how they might work. However, they can be inserted at different points depending on the overall strategy adopted by the programme and the amount of programme budget which can be committed. The programme needs to decide at which stage things should happen bearing in mind that a communication strategy for the promotion and dissemination of research outputs must be thought about from the start of a project if it is to be effective.

Calls for bids

- (a) Calls should stress the importance of communication and dissemination and the extent to which the programme will require this to be taken account of and reported on.
- (b) The programme to build up data bases of organisations with capacity to disseminate (e.g.CARE in Zimbabwe, FAS in Bolivia, CNRS in Bangladesh) which will be made available and projects encouraged to work with them.
- (c) Information on the communication context from previous projects in a given area to be made available to proposers.

- (d) The roles and responsibilities of the programme and the project in relation to uptake, adoption and dissemination should be spelt out.

What should go into Concept Notes?

31. It is not easy to recommend what should go into a CN. At some point in the project commissioning process proposers need to be able to give evidence to the programme of the following:

- (a) the commitment of national organisations to the research and to the dissemination of the research outputs (buy in)
- (b) the communication and dissemination capacity, reach and effectiveness (see BPGs for the kinds of questions which need asking) or proposals for building capacity in these areas and justification for choosing the organisation or organisation proposed for capacity building
- (c) a realistic appraisal of factors which might hinder eventual dissemination
- (d) a realistic budget for a communication strategy which will lay the ground for later dissemination activities, including the production, reproduction and distribution of materials and training support for their use if needed. FAO recommends 10% of the overall budget for communication activities. The programme might like to consider this as a starting figure to be revised and supplemented after a mid-term review. This will mean having a specific programme budget for dissemination.

32. The programme needs to decide at which stage this should happen.

Review of CNs

33. The communication and dissemination aspects of a concept note to be reviewed by someone with expertise in the field.

In preparation for the RD1

34. The programme to fund a thorough stakeholder analysis to be held with stakeholders in country. This should cover the role and responsibilities of stakeholders in dissemination, promotion, and uptake both during and after the project, and their capacity to fulfil their roles. The Best Practice Guidelines (BPGs) (Norrish et al 2001) list what needs to be explored. If capacity building is needed this is when it should be decided on and planned for. A report on this should be presented with the completed RD1.

35. The programme to provide access to communication and dissemination expertise (either to individuals or groups) to ensure that the workshop covers the right areas. Project proposers with a good track record could work with the BPGs.

36. Tracking who is involved in a project for continuing communication and later promotion and dissemination should start at this point with the compiling of a database of names and contact points for all who have taken part. Any suggestions for other organisation to be involved should also be noted and followed up.

37. PLs, collaborators and target institutions to have access to BPGs. The programme should consider providing these in more than one form for easy access (e.g. hard copy, web site, email).

What should go into the RDI

(a) Report on the outcome of stakeholder analysis to be attached.

(b) A detailed communication strategy (see BPGs) including:

- When and how the communication context of stakeholders and beneficiaries will be researched and how that will be reported on (see BPGs).
- How farmers (and others) not directly involved in research activities will be kept informed of project progress and where possible brought into the project activities.
- Details of activities which will build links with those who will carry on dissemination after the project. These should be built in from the start of the project.
- Proposals for the way in which decision on the kinds of materials needed by farmers and extension will be made (how will farmers and intermediaries be involved in the decisions).
- How communication activities and materials produced for use during the project will be monitored.

38. A budget for communication and dissemination (for communication activities, for the cost of production, and reproduction (in appropriate language), distribution and use of materials and the cost of monitoring impact of project/output) taking into account that final decisions on what will be done will be made at a later stage in the project.

39. An ‘exit strategy’ (a general view of what this might be should have emerged from the stakeholder workshop). Proposers should specify the roles of collaborators and target institutions both during the project and after the project has finished. in relation to dissemination, uptake and adoption.

40. Proposers should be made aware of the need to revise the communication strategy as the project progresses and a more realistic assessment can be made of what is needed to support uptake and the capacity available to do that.

41. Proposers should also be made aware of the fact that they are expected to be flexible in their approach to bringing other organisations on board as the project progresses. For such organisations a workshop similar to the original stakeholder workshop should be held.

42. There should be a requirement for projects to record their experiences in communication and dissemination, particularly in capacity building exercises, and in working with local organisations (including the media) to produce usable and relevant materials, the actual costs entailed. They should specify how they will do this.

Review of RDI

43. Reviewers should include people with relevant expertise in communication, uptake, dissemination, commercialisation, promotion and the report on the stakeholder workshop, should be made available to them.

44. Reviewers to check that factors which are critical for effective dissemination are not built in as assumptions.

Inception phase

45. Projects should:

- (a) hold project awareness workshops with stakeholders, including those working for the project in whatever capacity
- (b) identify which member(s) of the project team will be responsible for communication related activities
- (c) establish name/address list of people interested in the project, for distribution of project reports and materials: people who attend workshops, etc
- (d) keep records of to whom project materials are sent
- (e) explore communication context (see BPGs on what to look for) including who has access to email, websites, and whether they can these be set up in-country
- (f) bring organisations which will be involved in materials production in as stakeholders from the start
- (g) cultivate links with stakeholders who will carry out dissemination after the project is over
- (h) identify how awareness among policy makers will be raised, and how to keep them informed of the project and its outputs.

Monitoring and Evaluation

46. Six monthly reporting should include communication and dissemination activities.

47. At mid-term or two year stage (when the projects outputs will be known more clearly) hold a workshop to review the status of the research outputs, and also to address uptake issues. This is the stage at which the dissemination/promotion and exit strategies should become clear and a detailed budget set. The need for additional funding for these activities, including those planned for after the project is over can be assessed. The dissemination strategy should include names and addresses for distribution of materials and possible training in their use.

48. For effective dissemination and exit strategies the following information will be needed:

- (a) the distribution system for PR, advocacy, promotion, dissemination etc

- (b) whether support is needed if farmers are to adopt a technology and who has agreed to supply it (e.g. credit, inputs, training, markets)
- (c) whether farmers and organisations working with farmers need training in the use of methods and technologies and who has agreed to supply it
- (d) whether support, (training and/or finance) is needed for activities and for the possible adaptation, translation, reproduction, distribution and follow up of materials and whether it is available and where
- (e) whether project outputs have been validated by farmers and researchers and evidence of validation
- (f) which materials and activities are designed for promotion and which are designed to be used for learning and doing (farmers, extension agents, policy makers)
- (g) whether materials have been developed to the point of usability (in the right language, format, right place) and evidence of how this was done and with what results
- (h) how materials will be fed into the distribution system and who is responsible for that

49. Projects and stakeholders should be working together on this and it should be reported on to the programme.

At the end of the project

50. Details of the dissemination and exit strategy (see above) to be provided as part of the FTR.

51. Monitoring and evaluation of the exit strategy and further dissemination to be determined by the programme.

CONCLUSION

52. The end of the project is not simply the end for the UK team, it is also the end for collaborators, intermediaries and farmers. Unless there has been a well validated research output (validated by farmer and researcher) and buy in from the relevant institutions (this could be intermediaries, but may also mean buy in at national policy level) and with all the relevant information packaged for use then the prospects for uptake and impact other than through informal, slow (and possible incomplete) farmer-to- farmer processes are slim. Planning dissemination for uptake and impact needs to be considered and revised in the light of confirmed and validate output, organisational buy in and farmers uptake.

REFERENCES

Mulhall A. (1999) Development of an NRSP strategy for the dissemination of completed projects, Report to NRSP, November 1999.

Norrish P. Lloyd Morgan K. and Myers M. (2000) Improving communication strategies for the promotion and dissemination of NR research outputs to intermediate and end users. Final Technical report Vols. 1 & 2, NRSP, SEM 52 Project R 7037.

Norrish P. Lloyd Morgan K. and Myers M. (2001) Improved communication strategies for renewable natural research outputs. *Socio-economic Methodologies for Natural Resources Research*. Best Practice Guidelines. Chatham, UK: Natural Resources Institute.

Norrish P. Lloyd Morgan K. and Myers M. (2001) Improved communication strategies for renewable natural research outputs. Annex: Practical aspects of communication media use. *Socio-economic Methodologies for Natural Resources Research*. Best Practice Guidelines. Chatham, UK: Natural Resources Institute.

Turongruang D., Demaine H. (2000) *Participatory development of aquaculture extension materials and their effectiveness in transfer of technology: the case of the AIT Aqua Outreach Programme, Northeast Thailand*, In: Rural aquaculture (eds P. Edwards, D.C.Little and H.Demaine).

APPENDIX 1: TERMS OF REFERENCE

A study of the impact of selected NRSP project communication activities and media products

Background

The need for programmes and projects to have communication strategies for effectively disseminating the outputs of NR research is gaining recognition. Recent guidelines (Norrish et al 2000) suggest that a communication strategy should be planned from project initiation and continue throughout the project cycle and that dissemination should be active and demand led rather than passive and supply driven.

Whether dissemination is effective is dependent on a number of actors including:

- the extent to which a project is demand led and farmers are involved in the research
- good collaborative working with stakeholders and beneficiaries (e.g. intermediate organisations, policymakers, bi-lateral projects, commercial organisations) throughout the project
- a good understanding of stakeholder and beneficiary communication context and needs
- the extent to which an iterative process for the development of materials, involving both end and intermediate users in pre-testing and evaluating, has been put in place

Since the NRSP started in 1995 projects have produced various dissemination outputs. To a considerable extent these have been refereed papers with materials for use by extension organisations and farmers coming a poor second. However, the ultimate test for a project will not be peer review but whether its products are used by those for whom they are intended. This means that projects must increasingly be concerned with effective dissemination.

The NRSP has recognised the need for a communication strategy for the effective dissemination of NR projects and has set in motion a process which will enable it to learn from past projects and feed that learning into its future communication strategy.

As one part of this process the programme plans to evaluate a selection of communication activities and media products which are intended to help promote uptake. These have been produced by projects that have put particular effort into communication and dissemination.

The projects that have been selected are aimed at the poorest sections of society either directly or through policy. They cover both methods/processes for reaching the poor or enabling decision making and technologies; they offer a range of target groups (policy makers, farmers, extension and NGOs,

research organisations); and a range of media products and communication activities for review from street plays and folk songs in India to the use of GIS and the development of CDROMs which can be down loaded from web sites.

Projects for review

Project Number and Title	Country	Communication products (not complete)	Communication Activities (not complete)
Forest Agriculture			
R6382 Sustainable agriculture in forest margins	Bolivia	Guidelines on bush-fallow productivity Manuals Pamphlets Posters Report on 5 part. methods and lessons learned	Field days Farmer led workshops Cross visits Ichilo-Sara informal network
R6789 Development and promotion of improved techniques of water and soil fertility management (humid forest belt)	Ghana	Publicity leaflets Extension leaflets Extension Manual	Participatory work at inception phase on leaflets Workshops
Land water			
R6756 Investigation of livelihood strategies and resource use patterns in floodplain production systems	Bangladesh	Documentary video Web site/CD Rom Methodology Report Academic Papers	Local NGO training activities
High potential			
R6759 Integration of aquaculture into the farming system in the Eastern plateau of India	India	Papers Street play Video of street play Trad folk song cassettes Participatory approaches handbook	Training workshops Exposure visits Learning forum
Peri-urban			
R6799 Kumasi Natural Resources management huge project policy and programme linked (not aimed directly at farmers or other peri-urban dwellers)	Ghana	Training manual on GIS CD BBC programme "In the field"	Workshops
Semi-Arid			
R7085 Promotion of practical approaches to soil and water conservation for small holder farmers in SS Africa	Zimbabwe	16 'farmer friendly' guides Web site for bibliog. reference on Soil and Water management ... (bbsrc?)	Workshops
Hillsides			
R6621 Soil and water conservation technologies	Bolivia	Manual Leaflets and booklets Website (Cranfield)	Workshop Word of mouth Nurseries
R7537	Southern Africa (Zimbabwe and Tanzania)	Report for publication Web site	Workshops

Aim of the review

The aim of the review is to determine the extent to which communication activities and products have contributed to the uptake and impact of a projects research output. This in turn will help NRSP to improve the guidelines given to authors of CNs and RD1s concerning a project's communication plans.

In order to do this we will look at:

- Why and when the decision was taken to produce a particular dissemination product (manuals, or videos and other communication materials), have a workshop or training course and who was involved in that decision and what was its purpose

- For each dissemination product:
 - who was involved in producing it
 - how it was produced
 - who was the intended target audience
 - who was it distributed to
 - who has used it
 - how it has been used
 - why it has been used
 - how effective its use has been.

As has been pointed out elsewhere (Norrish et al 2000), issues of responsibility for dissemination after the end of a project are still not clear. There are at least six main groups of actors involved in research projects (Programme Managers, Project Leaders, Target institutions, Collaborating Institutions (partners in the design, implementation and analysis of research), Bilateral Programmes, Outside consultants) but responsibility for communication and dissemination (and who should finance it) is unclear. This review will, therefore, also explore:

- The mutual understanding amongst stakeholders of their respective roles and responsibilities in relation to promotion and uptake activities.

Activities

Review activities will be carried out in the UK, Zimbabwe, Bolivia, Ghana, India and Bangladesh.

The main activities will be:

- Rapid review of project documents to determine who was involved (intermediaries and farmers) plus follow up with project staff
- Development and administration of a questionnaire for UK based project staff
- Development of semi structured interviews for use in:
 - Interviews with UK based project staff

- Interviews with persons involved in decision making about the development, production and distribution of the manuals and videos etc.
- Interviews with those involved in project communication activities and users of the manuals and videos etc.
- Observation of manuals and videos etc. in use (if possible)
- Report on each case study
- Analysis and presentation of results.

Overall responsibility for putting in place the review team, coordinating the review, developing the methodology, briefing the review team, analysis of the results and reporting back to NRSP will be with Dr Patricia Norrish (Independent Consultant). In addition the review will require:

- a second UK reviewer
- two reviewers each for Zimbabwe, Bolivia and Ghana
- one reviewer each for Bangladesh and India.

In those countries where two reviewers are required it is proposed that there is a lead reviewer who will be responsible for delivery of the case study reports and an assistant to help conduct the case studies.

APPENDIX 2: QUESTIONNAIRES AND GENERIC CHECKLISTS

QUESTIONNAIRE for PLs and other UK based project staff (for telephone interviews/will be revised for those who will do it by post)

Note: Questions 1-5 were also used as a questionnaire for which was administered to the Programme Manager and DFID in country advisors.

AIM OF THE REVIEW

The aim of the review is to determine the extent to which communication activities and products have contributed to the uptake and impact of a projects research output. This in turn will help NRSP to improve the guidelines given to authors of CNs and RD1s concerning a project's communication plans.

What we want to know:

General issues

1 Who do you think should be responsible for promotion and uptake activities (who should fund, decide which media products and activities should take place, ensure that anything produced is suitable for its intended audience, follow up distribution, use and impact?)

Possibilities:

- Programme Managers
- Project Leaders
- Target institutions
- Collaborating Institutions (partners in the design, implementation and analysis of research)
- Bilateral Programmes
- Outside consultants
- Other

2 What do you think are the main factors which influence the uptake, adoption and dissemination of project outputs?

3 Which of these factors would you rank as the most important?

4 Can you give us an example of a project which has achieved good uptake and adoption?

5 What factors do you think influenced this?

6 Were any particular constraints faced by the project which would affect uptake and adoption? If so, what efforts were made to overcome these?

- 7 Were gender issues considered in relation to :
- the kind of communication activities which took place during the project
 - the way in which project outputs were to be packaged for dissemination
- 8 Will any follow-up activity be carried out with the participants or their organisations once the project has finished?
- 9 Would you do anything differently in relation to uptake, adoption and impact if you were starting a similar project now?

Project specific - Materials

- 10 Why and when was the decision taken to produce each piece of material?
- 11 What was the purpose of each piece of material?
- 12 Who was the intended target audience - do you have lists of target audiences to distribute material to? If so who did you supply those lists to?
- 13 Who was involved in the generation and production of materials and what was their role?
- Possibilities:*
- *Project leader*
 - *Collaborators*
 - *Intermediaries/target institutions*
 - *Beneficiaries*
- 14 Why and how was the decision taken to involve them?
- 15 How were materials produced (using local agencies, media units within collaborating institutions, UK production units or companies, project personnel etc)? Why were these individuals /organisations chosen?
- 16 Have all the planned materials been produced, reproduced and distributed?
- 17 If not why not?
- 18 Has any provision been made for more production runs if necessary or for adaptation into other local contexts and languages ?
- 19 Was material field tested, if so how and who with?
- 20 If material has been completed and distributed what do you/your organisation know about:

- who has used it
- how it has been used
- why it has been used
- how effective its use has been.

21 Will you/your organisation follow up the use of any of the materials to see what effect they have had? If so what methods will you use to track such impact?

22 Is any support provided for the use of the material (e.g. training in the use of the manual)? If yes who is providing that support and how is it funded?

Your use of the materials

23 Do you have copies of the materials in which project outputs have been packaged? (Draft or finished)

24 If not, why not?

25 If yes, how are you using them, who with and with what effect?

Project specific – communication activity

26 When (stage in the project cycle) and why was a decision taken to run a specific communication activity (workshop, farm visit) and who was involved in that decision?

27 Who was the ‘intended target audience’ - do you have lists of people to invite to workshops and go on farm visits? How are such lists compiled?

28 What was the reason for running a specific communication activity (workshop farm visit)?

29 Who was involved in designing, planning, implementing each activity?

30 Was any follow up carried out after an activity ?

31 How effective were the activities and what criteria are you using to judge effectiveness?

32 Have reports from any of the activities been distributed to anyone other than the participants (if so who, why).

Links with collaborators

Project specific

33 Why were these collaborators chosen

34 Were any of the collaborators involved in planning the project?

- If yes, which ones and how?
- If not, at what stage were they brought into the project?

35 Who initiates communication? (is it always from the UK institution/individual?)

36 What kind of links do you/your organisation have with collaborating institutions (personal, organisational, formal, informal)?

37 Do you carry out any activities, other than project related, with collaborating institutions (regular or irregular basis, formal or informal), if so what are they, and who initiates such activities?

38 What kind of links do the collaborating institutions/individuals have with

- intermediary or target institutions
- potential beneficiaries

Links with intended beneficiaries

Project specific

39 Have you/your organisation carried out any communication activities with beneficiaries in relation to the project, either during its implementation or since it finished?

40 If so what activities and who with?

41 What kind of links do you/your organisation have with intended beneficiaries

42 Who initiates these links?

43 Who do you communicate with (individuals, community based groups and organisations?)

44 Who initiates communication

45 How and when are community /beneficiary needs determined and who by?

46 Can you/your organisation offer support to beneficiaries in the uptake of project outputs e.g. training, technical. loans, inputs information only et?

Links with intermediary organisations

Project specific

47 Have you/your organisation carried out any communication activities with the target/intermediary institutions in relation to the project either during its implementation or since it finished?

48 If so what activities and who with?

49 Do you/your organisation have links with the target institutions/intermediary organisations, other than through the project? If so what kind of links and who with (organisation to organisation, individual to individual, organisation to individual etc)?

50 Who initiates these links?

51 Do you/your organisation carry out any non-project related activities with the target institutions/ intermediary organisation (regular or irregular basis, formal or informal)?

52 If yes, what kind of activities?

53 Who initiates the activities?

54 What kind of communication do you/your organisation have with intermediary organisations ?

55 Who initiates communication?

56 For what purpose?

GENERIC CHECKLISTS

I Collaborators checklist

Below is a check list of issues to explore with the **Collaborators** and listed. The kind of detailed probing that may be needed is left for you to decide on as you do the interviews.

Please look at this list carefully and get back to me if there are any queries. I am particularly interested in any comments you may have about whether and how these lists may need to be adapted to the specific project which you are covering.

Any suggestions for improvement would be greatly appreciated.

Involvement with the project

- When and why, they/their organisation became involved with the project
- Whether they were involved in writing the concept note/project memorandum
- What kind of communication took place with the project
- Who initiated communication.

Role in promotion and uptake

- What role do they think their organisation/themselves as individuals should play in promotion and uptake activities (who should finance, decide which media products and activities should take place, ensure that anything produced is suitable for its intended audience, follow up distribution, use and impact?).
- Whether they were involved in the decisions made on communication activities and media products ?

If they were involved we need to know the following:

- when and why was a decision taken to produce a particular media product (manual, video, leaflet etc) or run a specific communication activity (workshop or training course) and who was involved in that decision
- what was the purpose of a particular media product (e.g. manual, video, leaflet etc) or the reason for running a specific communication activity (e.g. workshop or training course).

For each media product they were involved in we need to know:

- how was it produced (using local agencies, media units within collaborating institutions, UK production units or companies, project personnel etc)
- who was the intended target audience
- who was it/will it be distributed to?

If a media product has been completed and distributed what is known about:

- who has used it
- how it has been used
- why it has been used
- how effective its use has been.

For each dissemination product either not completed or not distributed we need to know:

- why has the media product not been completed?
- why has the media product not been distributed

For each dissemination activity completed we need to know:

- Has any follow-up activity been carried out with the participants or their organisations since the project finished, especially if recommendations had been made during the activities, or in the reports which were distributed to participants.
- Have reports from any of the activities been distributed to anyone other than the participants (if so who, why). Note to reviewers: if you are given any names please try and track some of them to see if there has been any 'take-up' of what has come out of the workshops etc. Especially if there were any recommendations being made.

Links with intended beneficiaries

- What kind of links the organisation/individual has with intended beneficiaries
- Who initiates these links?
- Whether they carry out any activities with beneficiaries (regular or irregular basis, formal or informal).
- Who do they communicate with (individual beneficiaries, community based groups and organisations)?
- Who initiates communication?

- How and when are community /beneficiary needs determined and who by?
- What support they can offer, e.g. training technical. loans, inputs information only etc. (both in general and in relation to the project)?

Links with intermediary organisations

- Whether the individual/their organisation has links with intermediary organisation and if so what kind of links and who with (organisation to organisation, individual to individual, organisation to individual etc)
- Who initiates these links?
- Whether they carry out any activities with intermediary organisation (regular or irregular basis, formal or informal)?

If they do carry out activities we need to know:

- What kind of activities?
- Who initiates the activities?
- What communication they have with intermediary organisations ?
- Who initiates communication?
- For what purpose?

2 Intermediaries checklist

Below is a check list of issues to explore with the **intermediaries** listed. The kind of detailed probing that may be needed is left for you to decide on as you do the interviews.

Please look at this list carefully and get back to me if there are any queries. I am particularly interested in any comments you may have about whether and how these lists may need to be adapted to the specific project which you are covering.

Any suggestions for improvement would be greatly appreciated.

Involvement with the project

- When and why, they/their organisation became involved with the project
- Whether they were involved in writing the concept note/project memorandum

- What kind of communication took place with the project
- Who initiated communication.

Role in promotion and uptake

- What role do they think their organisation/themselves as individuals should play in promotion and uptake activities (who should finance, decide which media products and activities should take place, ensure that anything produced is suitable for its intended audience, follow up distribution, use and impact?).
- Whether they were involved in the decisions made on communication activities and media products ?

If they were involved we need to know the following:

- when and why was a decision taken to produce a particular media product (manual, video, leaflet etc) or run a specific communication activity (workshop or training course) and who was involved in that decision
- what was the purpose of a particular media product (e.g. manual, video, leaflet etc) or the reason for running a specific communication activity (e.g. workshop or training course).

For each media product they were involved in we need to know:

- how was it produced (using local agencies, media units within collaborating institutions, UK production units or companies, project personnel etc)
- who was the intended target audience
- who was it/will it be distributed to?

If a media product has been completed and distributed what is known about:

- who has used it
- how it has been used
- why it has been used
- how effective its use has been.

For each dissemination product either not completed or not distributed we need to know:

- why has the media product not been completed?
- why has the media product not been distributed

For each dissemination activity completed we need to know:

- Has any follow-up activity been carried out with the participants or their organisations since the project finished, especially if recommendations had been made during the activities, or in the reports which were distributed to participants.
- Have reports from any of the activities been distributed to anyone other than the participants (if so who, why). Note to reviewer: if you are given any names please try and track some of them to see if there has been any 'take-up' of what has come out of the workshops etc. Especially if there were any recommendations being made.

Links with intended beneficiaries

- What kind of links the organisation/individual has with intended beneficiaries
- Who initiates these links?
- Whether they carry out any activities with beneficiaries (regular or irregular basis, formal or informal).
- Who do they communicate with (individual beneficiaries, community based groups and organisations)?
- Who initiates communication?
- How and when are community /beneficiary needs determined and who by?
- What support they can offer, e.g. training technical. loans, inputs information only etc. (both in general and in relation to the project)?

Links with collaborating organisations

- Whether the individual/their organisation has links with collaborating organisations and if so what kind of links and who with (organisation to organisation, individual to individual, organisation to individual etc)
- Who initiates these links?
- Whether they carry out any activities with collaborating organisations (regular or irregular basis, formal or informal)?

If they do carry out activities we need to know:

- What kind of activities?
- Who initiates the activities?

- What communication they have with collaborating organisations ?
- Who initiates communication?
- For what purpose?

3 Farmers checklist

Involvement with the project

- When and why, they became involved with the project
- What kind of communication took place with the project (e.g. direct contact, through intermediaries, through farmers groups)
- Who initiated communication.

Participation in project communication activities

- Which project activity farmers were involved in?

For farmers involved in helping to select the basket of technologies we need to know:

- Whether helping in the activity has changed their views on how they carry out their own farming.
- If so what changes have they made.

For those farmers involved in evaluating the existing extension materials:

- Has it changed their view of how materials should be produced
- Has it changed their view of how they might access and use materials

For those farmers involved in testing the new materials

- Have they got copies of the materials
- Do they know where the materials are available
- Have they recommended their use to other people
- Have they used the materials to change a practice, adopt a new technology or initiate a discussion with other farmers.
- Has there been more discussion amongst farmers because of their involvement in selecting the technologies and working on the leaflets?

- Whether any follow-up activity been carried out with them as individuals or with any organisation/group they belong to since the project finished.

Generation of media products

- Whether they were involved in the generation of media products (the farmer friendly materials) and if so what was their role?
- Whether all the planned media products have been produced and distributed?

If not we need to know for each media product either not completed or not distributed:

- Why it was not completed?
- Why it was not distributed?

Their use of the media products

- Have they received any of the finished media products?

If they have received any of the finished media products we need to know:

- Whether products were in a usable form ?
- Whether products were in an appropriate language?
- How they are using them, who with, and with what effect/impact?

Note to reviewer; if they are using materials with other farmers please track the other farmers down and try to find out what impact there has been, if any

- If they have not received the finished media products have they had any draft/pilot versions?
- If so how are they using them, who with and with what effect/impact?

Note to reviewer; if they are using materials with other farmers please track the other farmers down and try to find out what impact there has been, if any

- Whether they know why the media products have not been finishes/distributed.

Links with collaborators

- Whether they have links with the collaborating institutions involved in the project.

- If so what kind of links do they have (e.g. formal, informal, regular, irregular, for training purposes)?
- Who initiates these links/activities?
- What communication they have with collaborating institutions
- Who initiates communication
- For what purpose?

Links with intermediary organisations

- Whether they have links with the collaborating institutions involved in the project.
- If so what kind of links do they have (e.g. formal, informal, regular, irregular, for training purposes)?
- Who initiates these links/activities?
- Whether they carry out any activities with intermediary organisation (regular or irregular basis, formal or informal)?

If they do carry out activities we need to know:

- What kind of activities?
- Who initiates the activities?
- What communication they have with intermediary organisations ?
- Who initiates communication?
- For what purpose?

Information sources

- Where do they get information on farming from (a list of possibilities is given below)

Extension officers - government - non-government
Newspapers
Television
Leaflets (where from)
Radio
Farmer field schools (FFS)
Industry representative from outside local area

Pesticide dealers
National Agricultural Research Station farmer field days
NGOs
Family member (specify)
Other farmers
Other (specify)

- For each source listed:
 - Why do they go to that source
 - What kind of information do they get from that source