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INTEGRATED DEVELOPMENT FOR WATER SUPPLY AND SANITATION

Spreading the word

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THIS PAPER IS based on the interim findings from a Department for International Development (DFID) funded research project concerning the development of practical guidelines for research dissemination strategies. The purpose of Phase 1 of the research was to understand current thinking and approaches to dissemination of research as adopted by sector based agencies both in the UK and internationally. This facilitated an initial analysis of common dissemination strategies used, problems and constraints experienced, and factors that aided effective dissemination. This in turn is used to provide tentative guidance for research contractors and DFID alike for dissemination of projects.

Phase 1 comprised a desk based study, which examined 32 documents in the literature review, presented four selected case studies highlighting both effective and *less* effective approaches to research dissemination, and draws on interviews with key research contractor staff involved in managing research projects for DFID and other donor agencies. The key findings from each of these activities are presented below.

Literature review

The importance and significance of improved sector dissemination has been acknowledged and recognised at various international fora (Visscher, 1998; Lewando-Hundt and Al Zaroo, 1999). Two explicit examples of this acknowledgement include the United Nations Conference on Environment and Development (UNCED), which identified weaknesses in information management and sought ways of improving the sharing of experiences and dissemination of information, and Chapter 40 of Agenda 21, which argued that all stakeholders are users and providers of information, thereby indirectly emphasising the need for dissemination.

The recognition of the central place for sector dissemination has begun to filter down to key institutions in the international community, who increasingly advocate the need for relevant, timely information on available knowledge and past experience in the sector. The Research Councils in the UK, and the European Commission both specify that research proposals must carry strategies outlining dissemination and user engagement (Lewando-Hundt and Al Zaroo, 1999). The World Bank has stressed the importance of 'knowledge management' as a guiding principle in its operations, and the 1998 World Development Report, entitled *Knowledge for Development,* stressed the role of knowledge in advancing economic and social well being. Similarly, DFID's own White Paper on International Development echoes this new thinking about knowledge transfer.

A strong argument for the need for improved research dissemination, focusing on the need to maximise value for money, is made by Hevey (1984). In many spheres, government has invested (over several years) large amounts of money in practice oriented research with the aim of developing guidelines for best practice, or to create databases for informed, rational decision making. However, there is a worrying low level of research awareness amongst sector stakeholders, despite this investment. Policy decisions are frequently taken despite the existence of relevant research findings, and practitioners, for whom much practice oriented research is designed, seldom hear about it. In his study of the dissemination of research within social services departments in the UK, Stapleton (1983) builds on the value for money argument. Many millions of pounds are invested in social services research per year, leading to thousands of research projects, yet the results of the work tend not to surface beyond particular (local) context in which the project was commissioned. Hence much of its usefulness and value is wasted.

An analysis of the literature on the need for improved dissemination indicates that the production of research outputs should not continue without a critical consideration of its value, usefulness and impact. Attention to the effective dissemination of research in order to realize its true potential and benefits for fellow researchers, academics, policy makers and practitioners is therefore central to development. The literature review focused on a series of key issues, including: models of dissemination; dissemination media; barriers to effective dissemination and dissemination impact. A digest of the key findings are as follows:

- Information and knowledge tends to stay where it is generated. Hence the need for more effective dissemination strategies for research.
- A critical challenge is to improve the accessibility of research, not only in terms of its physical availability but also in terms of user comprehension.
- It is recognised that the linear, unidirectional model of information flow lacks credibility. Interactivity, feedback and the central position of users in dissemination need to be stressed.
- Reliance on a single research output will rarely meet the needs of all target audiences; researchers should produce more than one kind of output, and disseminate it through a variety of media to maximise exposure.

Table 1. Modes of dissemination, DFID Engineering Division proposals, selected contractors

	No.	*%*
Final report	20	54.0
Selected distribution list	15	40.5
UK workshop	3	8.1
Regional workshop	15	40.5
Article (popular journal)	24	64.8
Academic refereed paper	19	51.3
Face-to-face conference	2	5.4
Electronic conference	3	8.1
Global Applied Research Network (GARNET)	7	18.9
Other network	15	40.5
Website	5	13.5
Training course	9	24.3
Peer review comment	5	13.5
Demonstration project	5	13.5
Dissemination via:		
• Extension services	1	2.7
• British Council offices	1	2.7
• International organisation	7	18.9
Total cases (37)		

- The importance of intermediaries as interpreters of research results is critical for the adaptation of findings to the local context.
- Support to active research networks and the creation of new ones, especially those that cut across intellectual or institutional boundaries, is to be encouraged (Platt, 1987: 196).
- The main barriers to improving dissemination are ones of time and institutional (dis)incentives acting on the researcher.
- Not all researchers have the will or the skills to be active disseminators themselves, but if donor agencies wish to see more active dissemination they might influence this by the way they distribute their resources.
- There are many methodological problems associated with dissemination impact. How can the impact arising from the use of a particular dissemination pathway be disentangled from the importance and value of the research findings themselves? How can dissemination impact be measured?
- A key conclusion was that dissemination activity per se should not be confused with the *impact* of the research disseminated.

Generally, the literature within the WSandS sector on dissemination of research has shown itself to be poor and incomplete; a much richer body of material has been found in disciplines outside international development and many lessons can, and need to, be learnt from these sources. This is particularly true with regard to market segmentation of research outputs, use of a variety of dissemination media and the accessibility of research findings.

More specifically, it is clear that the literature lacks sufficient depth with regard to three subject areas:

- The user perspectives on dissemination of research:- very little consideration is given to the perspective of NGO's, government and other development organizations in the South concerning their needs, problems, constraints and priorities regarding dissemination.
- The impact and evaluation of the success of dissemination:- including comparisons between different dissemination pathways, the application of different dissemination media for different audiences and indicators of impact of dissemination.
- Ways of overcoming barriers to effective dissemination.

Case studies

This section of the research focused on (i) an analysis of the dissemination pathways proposed in DFID Engineering Division research bid documents (37 cases), and (ii) a series of short case studies (4 cases) drawn from a cross-section of organizations working in the WSandS and health sectors are reviewed.

Proposal documents

Several points of note arise from this table. There is no mention of summary reports (not the same as an executive summary in the final report). Therefore, unless the final report document is a brief and concise publication, a separate summary publication will be crucial if it is to be read by staff with limited time in target audience organizations. It is also informative to see that publication in academic refereed journals is a common dissemination

pathway. This may reflect more the institutional incentives which exist within many research organizations to be seen to publish in academic arenas, rather than an objective assessment of the best way in which to disseminate findings. Academic journals, although having a definite place in dissemination, are not widely read outside the academic community or accessible for a cross-section of potential research users. Their value as a primary dissemination pathway should be critically reviewed.

In light of this point, it is encouraging to see the emphasis which is placed on writing articles in popular journals (such as *Waterlines*, and DFID *WATER*). However, these figures may be skewed somewhat by the presence of HR Wallingford proposals which include, as a matter of course, reliance on DFID *WATER*, which is edited in-house.

Networking, in one form or another, is popular as a pathway. This may indicate the considerable potential that networking initiatives have to reach a wide, geographically dispersed audience at low cost and to indirectly infiltrate adjacent intellectual networks.

However, at present there is considerable emphasis placed on the use of documentary modes of dissemination, with the final report as the principal means of presenting research findings. Although it is recognised that researchers will naturally wish to bring together all aspects of their research activities as part of the process of gaining an understanding of the subject in question, it may not be the most effective way of reaching target audiences. If researchers were to put greater emphasis in the production of non-technical reports and non-documentary modes of dissemination (such as the preparation of training materials) then there may be flexibility to recycle this material in different formats, such as journal articles or briefing papers designed for a variety of target audiences.

Case studies

Analysis indicates a degree of consensus between the case studies with regard to the approach to dissemination, particularly over the identification of target audiences to be reached by the research; through the decentralization of dissemination activities to intermediaries; and reliance on a variety of dissemination media.

An important difference in approach can be identified between UK (re: HEP; Sisterhood Method projects) and non-UK (re: UWEP; MANAGE projects) based contractors experiences. In both instances, the non-UK based contractors had developed a framework and strategy to guide dissemination which underpinned the research project. This framework laid emphasis on factors such as analysing the information needs of target audiences; disaggregating dissemination activities according to the relative skills of project partners; and giving dissemination a high profile throughout the course of the research. The MANAGE project encapsulates a critical conceptual gulf: here, dissemination is viewed as a dialogue with project partners with the aim of stimulating a process of mutual learning and capacity building. The dissemination programme is the second phase of the MANAGE project, with a new budget for wider sharing of the results of this participatory action research on community managed water systems.

Emphasis is given to the use of a decentralised dissemination approach in the majority of the case studies, relying on intermediaries to reach end users, particularly at community level. Closely associated with this approach is the need for rigorous monitoring and evaluation of dissemination plans. The HEP example demonstrates that it cannot be assumed that dissemination will proceed as planned, even when a framework has been established.

Key informant interviews

A series of semi-structured interviews were conducted with selected research personnel with a view to understanding how each institution approached dissemination of research findings. The key findings to emerge from this exercise are as follows:

- Only one of the contractors interviewed possessed a formalised dissemination strategy. This tended to reflect the commercially oriented nature of that organization. In most other cases, dissemination had happened in an informal, ad hoc manner.
- There was very little commonality over dissemination pathways employed. The main consensus was over the use of concise, readable summaries of research (either in 'newspaper' format, or through glossy marketing style leaflets on research projects).
- The main constraints to dissemination were identified as lack of time and resources for dissemination, and the institutional disincentives which acted on the type of research outputs produced.
- Increased recognition of the need to 'slice' research data into a variety of outputs targeted at different audiences.
- Research contractors are not necessarily best placed to manage dissemination activities or write outputs for specific audiences (context specific dissemination at community level) should be left to intermediaries, as contractors may lack the skills required for the task).

Conclusions and recommendations

It is a truism to say that research cannot be used unless it is available to those who might best use it, at the time they need it, in a format they can use and with findings that are comprehensible and adaptable to local circumstances. The lessons learnt from the literature review, case study and interviews support this view. However, dissemination of research, as practised by UK based research contractors investigated in Phase 1 fail to meet these fundamental criteria. Undue emphasis is still placed on the production of a single, often lengthy output for a (perceived) homogenous audience.

The reason for this may be attributable to several factors. The first is that in the majority of cases dissemination activities do not have legitimacy within the research life cycle or within those organizations working in international

development. Researchers and others involved in communicating research need to feel that time allocated to this task is time properly spent. For dissemination efforts to be improved the activity needs to be viewed as part of the research process; a central part of the wider process of planning and executing research. Appropriate institutional incentives are required to bring about this change in status and behaviour.

Secondly, the typical conceptual approach to dissemination is one which places it firmly at the end of the project. The orientation of research contractors at this stage of the research may be to satisfy the donor agency by producing a report commensurate to the funding available, rather than focusing on the needs of potential users of information. The cases analysed in this report demonstrate that dissemination is a continuing process, which is likely to occur before, during and certainly after the research has been completed. This approach is one which offers opportunities for feedback and learning *during* the research life cycle, potentially increasing the added value of the work commissioned. Embedding dissemination into a research project in this way implies an enhanced role for quality assurance procedures to prevent communication of partially informed findings.

Thirdly, there is very little awareness or critical analysis of the dissemination media available to research contractors, or to incorporating the views of the potential users of research into a strategy guiding its dissemination. Because there is very little interaction between the producers of information and the intended users, it is unsurprising if research outputs fail to meet information needs in the South. Given the diversity of potential users of research information, it is inevitable that information needs will vary depending on experience and capacity. The needs of those already exposed to many different sources of information will differ markedly from those in rural and urban communities who still have very little information at their disposal. More appropriate packaging of information (leaflets, summaries, policy briefings, videos, theatre) will facilitate the process of dissemination, and is one way in which these diverse needs of a range of information users can be met.

Dissemination of research is not a precise science, in which measured inputs lead to specific outputs. Likewise, an optimal amount of dissemination cannot be specified; this depends on the project and the range and nature of the audiences for a study. Some projects will inevitably warrant much less dissemination than others, and this needs to be judged objectively during the project's life cycle. The recommendations which follow are to be taken as broad guidelines and suggest ways in which research contractors and DFID can improve the process of research dissemination.

The following recommendations are based on an analysis of the activities undertaken during Phase 1. In order to ensure that these points have some basis in what can be practically achieved, it is intended that Phase 2 of the research be used to validate and consolidate these recommendations through more thorough user consultation and peer review processes both with relevant DFID staff and a cross-section of research contractors.

For research contractors

- Plan and integrate a dissemination strategy into the life cycle of the research project. Make reference to, or cross check, individual dissemination plans against a series of key planning questions when submitting ENGKAR research proposals (see Annex II for an example).
- Use a 'cascade' model of research outputs of increasing detail, complexity and technical specialisation. This model needs to be linked to a clear understanding of target audiences, and appropriate dissemination pathways to reach those groups. Production of brief, concise summaries of the key research findings which communicate the range and importance of the conclusions should be a high priority. Research outputs need to be accessible - i.e., attractive to pick up and simple to navigate around. Outputs do not need to include everything that has been found by the research.
- Identify, assess the information needs, and write research outputs for different target audiences (i.e. policy, practitioner, researcher, public, etc).
- Use variety of dissemination media when communicating research. Consider who the research is intended for and link outputs to target audience information needs.
- Adopt an 'equality of dissemination pathway' approach to the production of papers from research. For every academic refereed paper submitted to a journal, a paper written for a popular outlet should be submitted.
- Consider dissemination opportunities during the life of the project, rather than at the project end (this assumes that quality assurance procedures are designed into the research from the beginning). Interim reports could highlight potential dissemination outputs.
- Submit a dissemination report with DFID's formal terminal report detailing what channels have been used, and any instances of impact of dissemination (this to be used in assessing future ENGKAR proposals from the same contractor). Early written material is invaluable in dissemination terms. Contractors should produce a short summary of their findings before they write up their results formally, to give DFID a sense of what is available, and to assist in the process of planning dissemination.

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