ERAC-CT-2006-036268

# ACCELERATING THE TRANSFER OF RESEARCH INTO POLICY AND PRACTICE: KEY LESSONS AND ACTIONS FOR THE DESIGN AND COORDINATION OF RESEARCH (D5.2 AND 5.5)

## Coordinating European water research for poverty reduction - SPLASH

Date 17.03.2009

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http://splash-era.net/index.php

Funded by EC framework programme 6

| **Contents amendment record** | | | |
|---|---|---|---|
| This report has been issued quality assured and amended as follows: | | | |
| Revision | Description | Date | Signed |
| 1 | First draft | 9.02.2009 | M. Rabanit, K. Schaber-reiter, A. Blenkinsopp, A. Cotton, M. Kaufmann, A. Hardveld, Peter Furu, Kim Chi Tran-Gulbrandsen |
| 2 | Second draft | 17.3.2009 | M. Alker J. Fisher |

| **Distribution:** Refer to deliverable list in Description of Work 7.3 | |
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| **R** = Report | |
| **O** = Other | **x** |
| **PU** = Public | PU |
| **PP** = Restricted to other programme participants (including the Commission Services). | |
| **RE** = Restricted to a group specified by the consortium (including the Commission Services). | |

# Contents

# 1 Introduction

## 1.1 What is SPLASH?

SPLASH is the European Union Water Initiative European Research Area Network (EUWI Era-Net). It is a consortium of 16 ministries, funding agencies and national research and technological development authorities from 11 European countries. SPLASH aims to improve water research for poverty reduction and thus contribute to the achievement of the Millennium Development Goals (MDGs). Its four main objectives are to:

1. Coordinate existing programmes to minimize duplication and identify gaps,
2. Support the transfer of research into policy and practice,
3. Map good research management to maximise use of resources,
4. Design collaborative research programmes which address identified needs.

It aims to improve the effectiveness of European-funded research on water for development and to develop the capacity of local organizations to coordinate and communicate their research activities. The project focus is Africa and the Mekong region.

## 1.2 What is the evidence base on which the lessons build and what is the purpose of putting them together in this report?

The objective of this document of key lessons is to present the insight generated by the SPLASH project about how to design, manage and communicate water research in developing countries. On the basis of which, the paper outlines recommendations and some suggested strategic activities resulting from each lesson for different audiences, such as (European) research funders, researchers, research managers and potential research users.

The list of main lessons and the plan of activities are deliverables (D) of and build on the work carried out in work package (WP) 5. They also take into account the conclusions and recommendations of SPLASH WPs 2, 3 and 4, providing a synthesis of the main results.

**Box 1: SPLASH Deliverables that contributed to the list of main lessons and strategic actions**

**WP 2 Information Review and Analysis**
D 2.2 Extended Country Report
D 2.3 Synthesis Report
D 2.5 Programme Management and Implementation Procedures Report
**WP 3 Research and Impact Management Practices Improved**
D 3.3 Capacity Building for Research Management
Note from Research Management Workshop
**WP 4 Engagement of Main Actors**
D 4.2 Guidance Note on Transferring Research Knowledge into Action
D 4.3 Guidelines on Improved Multi-actor Research Dialogues
D 4.4 Identify and Validate Good Practices of Demand-led Research Protocols
D 4.5 Results of SPLASH Stakeholders Consultation Meetings in Africa, Mekong and Europe
**WP 5 Knowledge Transformed into Practice**
D 5.1 Report on the Influence of Policy Research on Government Policies
D 5.3 SPLASH e-conference report: “Towards better water policies: how can increase in the uptake of research findings help?”
D 5.4 Findings and lessons learned from the consultations and country visits
Note from Activity “Think Tank for more uptake of water research”
Note from Activity “Involvement of Smaller Research Players

## 1.3 Target audience for this paper

The paper is targeted at the SPLASH project partners and other stakeholders in Developing Countries and EU Member States. Project partner organizations belong to the research policy and administration domain as well as the research domain (comprising research institutes and potential research users in policy, practice and those at end-user level). Other stakeholders can be non-governmental organizations, extension services or other agencies working in the field of water and sanitation.

**Box 2 Definition of terms**

OECD (Organisation for Economic Co-operation and Development) defines research as any systematic effort to increase the stock of knowledge. Solutions to water-related problems often need research from different disciplines and involve research within different sectors such as health, agriculture or urban development. This creates a need for interdisciplinary research and raises specific challenges for research management (see D 5.2 and D 3.3).

The terms research, information and knowledge are defined as forming links in one chain: Research uses data which is analysed in the research process. When put into a context and interpreted, the results of analysis become information. Information becomes knowledge when it is used by people who combine the information with their skills, attitudes and experience. This means that knowledge is created in a specific social, political and cultural context that gives meaning to the information. When knowledge is applied and acted upon, it can develop a final link in this chain of data, information and knowledge, which is wisdom. Wisdom means knowing when, why and how to use knowledge (see D 5.1).

Social learning theory suggests that knowledge and shared meaning is achieved through social interaction. Thus, in the process of transferring research results into policy making, knowledge from research is not only transferred from the research to the policy making domain but is also created at the interface between research and policy (assuming that the term policy has been articulated), when research findings are interpreted to feed into policy decisions. Thus, research results can be transformed when they are “translated” and transferred (see D 5.1)

A definition of ‘policy’ is provided by the Environmental Health Project from USAID which defines it as ‘the set of procedures, rules and allocation mechanisms that provide the basis for programmes and services’. It later refers to written policy documents, and uses the term policy framework to refer to the wider context within which (sanitation) initiatives are implemented. In addition to existing laws, legislative acts, decrees, regulations and official guidelines, the policy also includes current political concerns, as defined by presidential statements, electoral promises and public activism (see D 5.3).

The literature does not provide a simple definition of research management. From our work (WP 3) we conclude that research management comprises a variety of aspects: the management of the scientific aspects of the research by providing guidance to the research team and ensuring results-orientation, human resource management, ensuring good research governance, the logistical and administrative function of research management, which means getting the support structure right, as well as taking care of dissemination and communication (see D 3.3).

Dissemination means distributing information to various audiences according to their information needs. Dissemination aims to increase the awareness of research products and, in turn, to enhance the speed of uptake of research results (see D 4.2).

The term intermediaries is used for organizations and individuals that use research products to deliver information and to provide access to technology. They examine disseminated information and knowledge and prepare usable, targeted syntheses, sometimes also organising the interactive process between the producers of knowledge and the users of it. Intermediaries differ in their constituencies and target audiences, the topics they work on, the resources available for their brokering work and the dissemination and communication activities engaged in. They can include a wide range of individuals, organizations, consultancies, development agencies, knowledge networks, regulatory bodies, business advisers or professionals. Networks can also act as “resource banks” and transport research results to potential users (see D 4.2).

# 2 Key lessons and main actions required to address them

The key lessons on designing, conducting, evaluating, communicating and coordinating research are presented in this chapter. Based both on interviews with research managers and a literature review, Deliverable 3.5 outlines the main tasks in research management. In order to be consistent with this, the lessons and actions required to address the problems described in the lessons are classified according to these elements of research management. D 4.3 differentiated between four main clusters of tasks in research management. In line with the information obtained in the interviews, some of the clusters of tasks are further divided into subtasks as listed in Box 3.

**Box 3 Tasks in Research Management as identified in D 3.5**

**Inception phase/ design and planning**
Priority setting
Logistics and administration
Financial management
Human resource planning

**Implementation phase**
Intellectual leadership
Quality assurance

**Communication and dissemination**
Managing communication and dissemination

**Monitoring and evaluation**
Managing monitoring and evaluation

## 2.1 Inception phase/ design and planning

### *2.1.1 Priority setting*

#### 2.1.1.1 Lesson: Strategic and operational objectives of programmes are not clear enough to allow for effective monitoring and evaluation.

**What is the problem?**

From our work focussing on how to improve research management practices we learnt that formulating clear and shared strategic and operational objectives at the research programme level is still a challenge that many programmes fail to overcome. This is partly due to a lack of or the inadequate application of project planning tools like the Logical Framework Approach (LFA). The LFA is a planning tool used to define the overall (strategic) objective of a project, and its operational (**S**pecific-**M**easurable**A**ttractive**R**ealistic**T**imebound) objectives and activities. Measurable indicators are formulated at each level; these are then used for monitoring and evaluation of the project's impact, outcome and output. The LFA also asks for an assessment of risks and assumptions on the basis of which the programme's objectives are defined.

We have learnt that planning research on a programme basis helps in the formulation of clear strategic and operational objectives for research projects. A programme-based approach implies that strategic objectives are formulated at a programme level and that operational objectives guide the planning of individual projects under the umbrella of the programme.

Moreover, formulating clear research objectives is partly a question of applying the right tools (for example LFA) in an appropriate framework (a research programme). At the same time there are also important issues at the level of interpersonal communication. For interdisciplinary and/or intercultural research programmes and projects, a crucial but difficult process is to define their research problems, and their strategic and operational objectives. This important process of joint reflection enables joint research and learning to be carried out. The research team and the research funder, in collaboration with the other stakeholders, each play a role in agreeing project goals, activities and outcomes which link research knowledge with action. Most importantly, this should not be summarised as a task for external communication and dissemination in a later project phase but rather, needs to be incorporated from the very beginning.

**What examples of good practice can we learn from?**

Research programmes can learn from how strategic and operational objectives are formulated in development cooperation programmes. For examples does **Finland** count on a guiding document which lays down the basic principles, guiding ideas and approaches of Finnish development cooperation and explains how development projects should be planned, monitored and evaluated using the Logical Framework Approach (LFA). This document is available in English. It is assumed that most of the project preparation guidelines of other European funders are not translated into English and are therefore not available to be shared within SPLASH.

Another example comes from **Denmark** where research proposals to be funded by DANIDA have to follow the so called "Aid Management Guidelines" based on the LFA approach (see: http://amg.um.dk/en/menu/TechnicalGuidelines/ProgrammeManagement/ProgrammeManagement.htm and http://amg.um.dk/en/menu/TechnicalGuidelines/LogicalFrameworkApproach/)

Finally, NORAD has published a small handbook in English on the LFA that is available for free download from their website (http://www.norad.no/).

**What is the main strategic action required?**

The main strategic action derived from this lesson is to formulate clear strategic and operational objectives for all programmes. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Application of a programme-based research model in funding schemes. | Assists in formulation of clear strategic and operational objectives for projects. |
| | Proposal requirement for application of project planning tools e.g. the LFA and use of clear strategic and operational objectives. | Specifies the overall strategic objective and operational objectives and activities.<br>Provides a means to monitor and evaluate the projects' impact, outcome and output. |
| | Effective communication with research teams and stakeholders from the outset of the project. | Project goals, activities and outcome can be agreed which link research knowledge and action. |
| **RESEARCH PROGRAMMES** | Training on research management to ensure capacity level of staff is required. | Staff have appropriate skills to be able to formulate and implement clear strategic and operational |

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| | | objectives for projects. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- All SPLASH research-related activities should clarify whether the research is speculative or linked to a specific problem. The research process should result in optimal impact to address the problem.
- All SPLASH research-related activities should make use of appropriate tools e.g. LFA.
- A proposed training module will address a range of issues relating to good research management practice.

SPLASH could develop a tool or methodology for impact assessment and evaluation of all SPLASH-funded projects. This could include a focus on quality and sustainability of networks, availability and sharing of data, and any resulting increased levels of research capacity in DCs.

### 2.1.1.2 Lesson: Actively involving the relevant stakeholder in the research process is a challenge for the future.

**What is the problem?**

This lesson comprises two main aspects. Firstly, it relates to the process of finding out who the relevant stakeholders for a research activity are, and secondly, to how these relevant stakeholders can be actively involved in the planning, implementation, evaluation and dissemination of research results. We learnt that criteria have to be established at the beginning to guide the systematic identification of stakeholders and decisions about the required degree of involvement at each stage. This demands adequate financial resources and time for conducting a sound stakeholder analysis based on systematic criteria for the identification of legitimate stakeholders. A stakeholder analysis identifies the stakeholders and maps out their relative power, influence and interests in a given effort. It identifies assumptions about each stakeholder and indicates the relative priority to be given to meeting the interests of stakeholders (which may change over time), thus assessing the importance of each stakeholder to the success of the project.

Subsequently, a stakeholder cooperation structure has to be set up and the cooperation strategy implemented throughout the research process, starting with setting the research agenda and developing the stakeholder involvement strategy.

The problems associated with stakeholder participation in research have been discussed in various contexts in SPLASH (see also lessons 2.1.1.2, 2.1.4.1, 2.1.4.2 and 2.3.1.3). One main issue was that stakeholder participation in research poses new challenges for researchers. In participatory and consultative research activities the researcher has a role to channel and synthesise knowledge from different sources. Thus, it is a challenge to find a balance between independent analysis and the fact that research knowledge resulting from this process is not a neutral scientific result but rather a resource derived from ongoing negotiation processes of the stakeholders' position. Given the fact that water-related problems often include competing interests by different users it becomes clear that defining the role each stakeholder can, should and want to play, and planning this involvement in terms of time and financial resources, is a priority issue of applied, participatory research in the water sector.

Throughout the work of SPLASH, the role of civil society actors as well as the private sector has arisen as an issue (see for example Notes from Think Tank Workshop, Activity 5.1.2). For example, we agreed that NGOs can play an important role as mediators and intermediaries between different

stakeholders (see also lesson 2.3.1.3. on intermediary actors). However, NGOs may also be interest groups which lack the legitimacy to act as mediators. Transparent criteria to understand how to engage with NGOs in the implementation of research projects are therefore an important tool. Given the fact that the (local) private sector can play a key role in technology transfer in water and sanitation, a special focus should be on setting incentives for private sector involvement. Apart from NGOs and the private sectors, cooperation with extension services and other agencies (the media for example) has to be carefully considered.

**What examples of good practice can we learn from?**

**German IWRM programmes** followed a two step approach where the shortlisted programmes were funded for an initial planning phase before presenting their full proposals. A stakeholder analysis was a requirement for the full proposal, for which the second application round provided financial and time resources.

The **seed money schemes of Denmark and France** show a way to integrate sound stakeholder analysis in the programme design and application phase. SPLASH workshops are envisaged to capture the experiences from these pilot funding schemes in order to make them available to the other EU funders.

A case study from an agricultural research project[1] showed that using the "**outcome mapping" developed at IDRC** helped in considering demands from different stakeholders and agreeing on goals, outputs and desired outcomes of a project.

The **NETSSAF** (Network for the development of Sustainable approaches for large scale implementation of Sanitation in Africa) worked on criteria for identification of key actors and developed guidance on systematic stakeholder analysis (see NETSSAF deliverable 02, chapter 4.3: http://www.netssaf.net/111.0.html).

**For whom is it a problem and who should solve it?**

The problem arises at different stages and levels and affects all stakeholders in research, research users and research funders. Research funders will be able to contribute to the solution, as well as researchers and research managers, by applying and improving their participatory methodologies. Stakeholder analysis, development of a cooperation strategy and a corresponding cooperation structure should be integral steps in the research management guidelines of funded programmes.

**What is the main strategic action required?**

The main strategic action derived from this lesson is to work towards a participatory approach with stakeholders. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and ***programmes*** as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Research proposals to include a stakeholder analysis as a priority and a condition of acceptance. Main stakeholders need to be involved in the governance structure. | Ensures effective identification of and consultation with stakeholders. |

[1] Project: Better policy and management options for pastoral lands: assessing the trade-offs between poverty alleviation and wildlife conservation

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| | Funders to provide the financial resources to carry out an effective stakeholder analysis. | |
| | Define principles/criteria to identify who is a stakeholder at the beginning of the research planning process e.g. outcome mapping. | Helps to agree goals, outputs and desired outcomes of a project. |
| **RESEARCH PROGRAMMES** | Ensure stakeholders are actively involved in the planning, implementation, evaluation and dissemination of research results. | Ensures that stakeholder involvement is optimal and consistent throughout the research process. |
| | Establish a stakeholder cooperation structure and strategy to be implemented throughout the research process. | |
| | Channel and synthesise knowledge from different sources and stakeholders. | Research knowledge is based on continuous negotiation. |
| | Set incentives for private sector involvement. | Encourages private sector involvement. |
| | Allocate adequate financial resources for a stakeholder analysis based on systematic criteria for the identification of legitimate stakeholders. | Establishes criteria from the outset to guide the systematic identification of stakeholders and their involvement. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- Seed money schemes integrate stakeholder analysis in the programme design and application phase. SPLASH could host workshops to learn from and capture the experience of Denmark and France and make them available to other EU funders.
- A proposed training module will address a range of issues relating to good research management practice.
- Increasing participation of academia in the coordination of the sector and more connections with the relevant actors will increase the uptake of research results and will increase demand-led research (i.e.: SWAP).
- SPLASH could support research – policy interaction via policy platforms or sectoral multistakeholder dialogues. Research funders and donors can support this by funding joint (sectoral) evaluation missions, commissioning sectoral research and supporting the participation of national researchers in the platforms. SPLASH could contribute to the development of these platforms through: detailed analysis of the characteristics of these platforms, dissemination of D 4.3., supporting regional or national information exchange and coordination actions, e.g. through proposed research coordination activities/workshops and coordination of SPLASH funders via the Strategic Management Board.

## *2.1.2 Logistics and administration*

### 2.1.2.1 Lesson: The number and the complexity of application and reporting procedures create a high administrative burden on (southern) research organizations

**What is the problem?**

The complexity of administrative procedures for donor-funded research programmes or projects can pose a high burden in terms of work load on recipients in Developing Countries. This binds capacities to administrative rather than to scientific work. Given the fact that most donor-funded research activi-

ties are not delivered following harmonized procedures or via pooled funding in joint programmes, the sheer number of single activities together with the level of complexity of progress and financial reporting requirements poses excessive demands on local research organizations.

With the Paris Declaration on Aid Effectiveness the development cooperation community is trying to learn the same lesson and is already in the process of implementing the Paris Agenda / Accra Agenda for Action, in which it was agreed to harmonise procedures, align to DC priorities and divide work effectively to support these priorities. So far, these approaches have not been expanded to include research for development. As a result, we were not able to find an example where research funding was included in donor basket funds within a Sector Wide Approach to decrease the administrative burden and increase the uptake of research in the specific sector. The problem was discussed by the participants of the regional consultations and during the interviews with key experts. In parallel to the Paris Agenda for Development Cooperation, steps to lower this administrative burden can be a) simplified procedures and/or b) a basket funding of research programmes approach with joint evaluations and reporting.

**What examples of good practice can we learn from?**
Three case studies carried out among African participants of EU-funded projects provide insight into the relevance and characteristics of the problem of excessive administrative procedures. The information was provided by the **African Water Project**. According to the rules of the project the African sources of information remain anonymous. The administrative and budgetary procedures related to EU project participation were seen to be cumbersome. One recommendation is to set time aside for filling in forms and to assure project administration is properly funded. Also the necessity for a briefing session was suggested since project information comes with large parts of legal texts which are difficult to understand. Others reported that since EU documentation is particularly complex, it was not clear what would be covered by the budget, resulting in severe financial difficulties for the project partners. Additionally, the slow release of funds makes project start up and initial meetings very difficult and also affects ongoing progress of activities.

**For whom is it a problem and who should solve it?**
It is a problem for the staff of research organizations that have to handle the administrative procedures. The problem can be alleviated by research funders, who on the one hand shape the funding schemes and formal requirements for application and reporting, and on the other hand decide about how to cooperate with other research for development funders.

**What is the main strategic action required?**
The strategic action derived from this lesson is to match capacity in research management with the complexity of application and reporting procedures. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Simplify application and reporting procedures. | Decreases the administrative burden on research organizations and releases capacity for scientific rather than administrative tasks. |
| | Provide adequate funding for completion of project administration procedures. | |
| | Provide briefings on administrative issues specific to the funding requirements. | |

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| | Implement donor basket funding of research programmes with joint evaluation and reporting within a SWAP. | |
| | Align to DC priorities and divide work effectively to support these priorities. | Increases the uptake of research in the specific sector. |
| **RESEARCH ORGANIZATIONS** | Train administrative staff adequately beforehand. | Staff better able to complete tasks. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- A proposed training module will address a range of issues relating to good research management practice.
- SPLASH could generate supporting evidence of the complexity of these procedures and the administrative burden hypothesis. This will involve some means of quantifying the administrative burden.
- A potential joint call from SPLASH on a clearly delivered theme could be delivered within an ongoing programme or institution (e.g. UN org GWP) which has established and better understood administrative procedures in place.

## *2.1.3 Financial management*

### 2.1.3.1 Lesson: Available (national) funding is insufficient to capitalise on local research skills.

**What is the problem?**

The interviews carried out for WP 5 (see D 5.4) and WP 4 (see D 4.3) clearly show that national funding for southern research is not sufficient to develop the potential of southern researchers and this therefore limits the effectiveness of research as well as its influence on decision-making.

Developing countries' research institutions have well qualified and able staff (often trained in developed countries) with an awareness of local issues and terrains. However, opportunities to carry out research are severely limited where costly equipment, funding for highly trained staff or better access to scientific literature is required. Since political priority for investing in socially relevant research and consequently the available public funds are often very limited, these barriers can only be overcome in collaboration with research initiatives in the North or with support from regional southern partners. The effect of these limitations is to reduce the incentives for the local research community to develop its own research plans and activities.

In summary, the environment for research in Developing Countries is often characterised by severe funding shortages, insufficient physical infrastructure, limited scientific tradition and insufficient networking and exchange, all of which hinder the possibility for these nations to capitalise on their research knowledge and resources for national development.

**What examples of good practice can we learn from?**

The International Foundation of Science (IFS) aims to strengthen the capacities of southern research organizations to conduct relevant and high quality research on sustainable management of water and biological resources. It provides funds to young researchers, helps to enhance core capacities to ensure sustainable financing of research activities (fund raising, proposal writing, etc.), and initiates dialogues for an exchange of experience and knowledge in the South (see D 4.3).

A good example of local investment into water research is the **Water Research Commission (WRC)** in South Africa: a certain proportion of the fees paid by end-users for water supply is used for research projects that focus on the direct application and impact of research for the end-users.

Further efforts to improve good practice are proposed approaches to developing DC national funding systems such as the **NEPAD initiative for establishing the Centres of Excellences for Water in Africa** which is currently undergoing implementation. This initiative aims to improve the regional research landscape and proposes a capacity building budget to provide scholarships and other activities. The NEPAD Office of Science and Technology (OST) implements the process with the assistance of WRC (Water Research Commission, South Africa and IRD (Institute of Research for Development), France.

Most of the research in DCs is carried out in the universities. However, due to low salaries, most of the researchers dedicate their time to teaching and work as consultants in the private sector. In order to increase the participation of southern partners in research projects, the IRD (French Institute of Research for Development) have created a special fund for supporting research teams at universities. The support provided includes an extra payment to the researcher's salary, together with funds for travel and materials. The teams are selected on their scientific projects and their partnership with IRD.

**For whom is it a problem and who should solve it?**
Although it is a problem for southern researchers in the first place, it is also a problem at the national level since improved national research capacities would enhance the development of a country.

**What is the main strategic action required?**
The strategic action derived from this lesson is to increase national funding for local researchers. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Provide funds to (young) researchers in developing countries | The potential of southern researchers is increased |
| | Make the engagement of national (southern) research obligatory in funding schemes. | |
| | Fund costly equipment when required | Costly equipment becomes affordable and the problem of poor physical infrastructure is alleviated.<br>The possibility of carrying out research based on knowledge of local issues and terrains is increased. |
| | Increase the awareness of the funders about the positive role of demand-led research on economic growth. | Support from national policy makers for the research community in DCs can be strengthened. |
| **RESEARCH INSTITUTIONS** | Increase research collaboration between research organizations in the North and the South. | Improves networking and knowledge exchange in order to address more clearly the research demands of low income groups. |
| | Initiate dialogues with the South for exchange of knowledge and experience. | |
| **RESEARCH PROGRAMMES** | Capacity development in core areas such as fund raising and proposal writing. | The potential of southern researchers is increased. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- SPLASH can provide evidence in support of strengthening national funding by identifying both the role of research within a Sector Wide Approach (SWAP) and a mechanism to increase this role.
- SPLASH could provide further supporting evidence based on available literature to try to show a possible link between effective research (specifically relating to water issues) and economic growth. The EUWI could be one dissemination path for this work.
- SPLASH could provide support for water professionals to collaborate with southern partners, e.g. to improve groundwater management skills at all levels across all African countries and to promote demand-driven and target oriented groundwater research and academic activities, linked to support for the African Groundwater Commission.
- SPLASH could provide support to the development of centres of excellence in the water sector in Africa that would :
    - increase the visibility of African research;
    - increase the participation of academia in the sector;
    - improve the curricula based on a sectors needs approach; and
    - improve dissemination and uptake of research results by increasing the networking activities between the different kinds of actors.

### *2.1.4 Human resource planning*

#### 2.1.4.1 Lesson: The involvement of southern research organizations in European-funded research programmes is inadequate.

**What is the problem?**

The empirical evidence analysed in WP 4 (see D 4.5) and WP 5 shows that southern research organizations are only seldom lead partners in research programmes, whereas it is much more common for researchers from the donor countries to be leading partners. A further observation was that existing research organizations in Developing Countries are also insufficiently involved in setting the research agendas to incorporate their (southern) perspective into the research problems.

Involving southern partners in research for development is crucial due to the following reasons. Firstly, joint planning and implementation of research provides the possibility to link research funds more effectively to demands in developing countries (for more information about demand-led research see SPLASH outputs D 4.4 and D 4.5). This, in turn, is a prerequisite for increasing the uptake of research into policy and practice. Secondly, joint research can impact positively on management and research capacities within southern research organisations. Thirdly, joint research in research groups with an equitable share of power fosters ownership of the research results and increases the level of researcher motivation.

Through interviews and group discussions we learnt that one facet of this problem is that demand for research partners by northern research funders is often focused on a small number of internationally known researchers in Developing Countries. These researchers or well known universities get a high number of requests for cooperation from northern partners and often lack the capacities in terms of available working time, administration and infrastructure to respond to requests as they would like to. In conclusion, it is important to get more southern research organizations involved and to focus on

capacity development for the southern research partners to participate in European-funded research programmes.

**What examples of good practice can we learn from?**
**DANIDA** supports a series of pilot projects in Vietnam and Tanzania, in which Danish research funds are provided for local research institutes to formulate programmes for which they also have to find Danish research partners. These pilot projects will initially run from 2009-2011 (see D 4.3).

The **Priority Solidarity Fund (PSF) of the French Ministry for Foreign and European Affaires (MAEE)** finances French support for institutional, social, cultural and research development in countries with French bilateral development cooperation. In this way, researchers in France and in Developing Countries, as well as research funders, together define both the geographical location and the focus of the research calls (see D 5.1). The research topics are defined through a process including several consultation rounds between beneficiaries and funders. The involvement of southern partners extends from the design phase of the projects to the implementation phase. Southern as well as French partners can lead the projects.

The **Water Research Fund South Africa (WARFSA)** provides a dialogue platform to formulate programmes in IWRM. This research fund is an example of one with which European funders can cooperate to increase the involvement of southern research organizations in their programmes (see D 4.5).

**For whom is it a problem and who should solve it?**
Limited leadership by southern research organisations is a development issue because it is a missed opportunity for southern capacity development and the generation of development impulses through research. For some northern researchers, this may involve an additional challenge of overcoming any cultural barriers which may inhibit their commitment to long term collaboration. At the same time, it is a challenge for research funders to find innovative ways in which to channel their funds through southern research organizations. Furthermore, southern research organizations have to build up their capacities to become a fully active, managing partner in European-funded projects. This is a demanding task, as it includes all aspects of the research process, not only financial and administrative procedures (see lesson 2.1.2.1 on administrative burden).

**What is the main strategic action required?**
The main strategic action derived from this lesson is to increase the involvement of southern research organizations in European-funded research programmes. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Funders to require clear evidence in proposals of collaboration between research organizations in the North and the South. | The involvement of southern research institutions is increased in terms of programme identification, planning, implementation and evaluation. Consequently results will have greater in-country ownership and long term sustainability, together with increased capacity development. |
| | Funders to channel their funds more effectively through southern research institutions. | |
| | Funding to be paid directly to southern research organizations in order to formulate programmes based on local demand, in collaboration with research institutions in the North. | |
| | Funders to provide a dialogue platform for | Knowledge of local demand is more |

| | | |
|---|---|---|
| | programme formulation. | widely known and the focus on these research needs is increased. |
| **RESEARCH INSTITUTIONS** | Southern research institutions to be active at all stages of the design and implementation of research. | Southern research capacity is strengthened. |
| | Northern research institutions to seek long-term partnerships with southern research institutions to build trust and formulate a shared agenda of research topics. | |
| | Capacity development initiatives for those working in institutions in the South would reduce the differential in research knowledge and capacity between these institutions and those in the North. | |
| **RESEARCH PROGRAMMES** | Plan and implement research jointly with southern organizations. | There is a positive impact on management and research capabilities within southern research institutions. |
| | | Research funds are linked more effectively with demand in DCs. |
| | | Increases uptake of research into policy and practice. |
| | Research is carried out in research groups with an equitable power share. | Fosters ownership of research results and increases the level of researcher motivation. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- Future joint calls could be jointly designed, managed and implemented with southern organizations, preferably building on existing long-term partnerships between the research organizations.
- Workshops could be organised as learning opportunities for European research funders on how to involve southern research actors. The experience from DANIDA and MAEE (see examples above) could be an important input into these workshops.

### 2.1.4.2 Lesson: North – South research partnerships are often asymmetric.

**What is the problem?**

North-South research partnerships are an important instrument to enable joint research, building on expressed demands in the South, while enabling capacity development on both sides. Long-term funding strategies are important enabling factors for building up sustained partnerships. However, our analysis showed that short-term and northern focused funding systems (see lesson 2.1.3.1 and lesson 2.1.1.2), the inflexible and complex administrative procedures (see lesson 2.1.2.1), the unequal capacities of the partners, representation and decision-making modalities all add up to asymmetry of power in North-South research partnerships (see D 4.2, D 4.3, D 4.4, D 4.5).

Analysis in WP 4 showed that research partnerships need to develop a shared code of conduct that governs the discussion as well as setting the rules for working procedures. This helps to achieve a common understanding and to overcome any contentious developments. A full-time coordinator can ensure a high level of motivation and participation amongst the members by maintaining efficiency. Insufficient communication and communication skills work against the creation of a habit of

knowledge sharing and collaboration. Therefore, face to face meetings are essential to forge balanced research partnerships.

With regard to the capacity building impact of research partnerships, the analysis of WP 4 revealed that North-South partnerships are more successful when they are established between research institutions than between single individuals as this maximises the capacity building impact of research partnerships for southern institutions. This implies that the northern partner should engage in capacity development within its research partnership which may not be part of its original work remit.

A power imbalance is also felt between researchers and other stakeholders and is manifest in the value attributed to the knowledge of each group of actors. Symmetric partnerships which deliver applied, impact oriented research have to deal with the "co-production" of knowledge between researchers and other knowledge stakeholders such as representatives from the private and voluntary sectors (see also lessons 2.2.1.1, 2.1.1.2 and 2.3.1.3).

**What examples of good practice can we learn from?**
Switzerland promotes North-South as well as South-South research partnerships through its **Commission on Research Partnerships with Developing Countries (KFPE**). The commission developed 11 widely acknowledged principles for North-South research partnerships. These are:
1. Decide on the objectives together, 2. Build up mutual trust, 3. Share information; develop networks, 4. Share responsibility, 5. Create transparency, 6. Monitor and evaluate the collaboration, 7. Disseminate the results, 8. Apply the results, 9. Share profits equitably, 10. Increase research capacity, 11. Build on the achievements.

Furthermore, it addresses issues such as how to design, revise and implement project selection processes in North-South research partnership programmes. In this way, it also addresses the challenge of how to integrate the adherence to partnership principles with the objective of scientific quality and development relevance (see: http://www.kfpe.ch/key_activities/publications/index. php).

An example of the Swiss research cooperation is that between the **Swiss National Centre of Competence in Research (NCCR) and West African research institutions**; this demonstrates that North-South cooperation may also contribute to South-South cooperation. The establishment of a permanent regional coordination office at the Swiss Centre for Research in Abidjan, Côte d`Ivoire contributed to establishing a South-South platform, and an increased collaboration between universities, research institutions and further stakeholders in the region. The approach is oriented towards the individual rather than the institution. Hence, individual capacity enhancement (training, PhD scholarships, etc.) is more developed than institutional capacity building. However, the demand for a consideration of institutional issues such as harmonising curricula is increasingly mentioned (see D 4.3).

The analysis of D 4.2 leads to the conclusion that most research partnerships do not focus on advocacy tasks. The **SWITCH Learning Alliances** however, described in D 4.2, give an example where a multi-actor research partnership includes activities to get research results into use. With regards to the power balance within a partnership, the SWITCH Learning Alliances are a response to recognition that new products and processes are brought into use, not just by the activities of researchers, but through the activities of a number of widely different actors and organizations. This group of interconnected players typically includes *public sector* (e.g. line ministries, utilities, regulators, educators, research institutes), *private sector* (e.g. industry, financial services), and *civil society* players (e.g. NGOs, media, professional bodies and unions, advocacy organizations). However, funding is time limited so that the sustainability of these LAs may be open to question.

Another example of symmetric partnership is the development of joint curricula that permit student exchange between universities or engineering high school: **2ie, Burkina and Polytech-Montpellier**, France have signed an agreement in June 2008. Students have spent six to 12 months in the partnership institution and their modules have been validated for their curricula. Joint supervision of a PhD is also a good case study of symmetric partnership.

The Danish University Consortium on Sustainable Land Use and Natural Resource Management (**SLUSE**) comprises two Danish universities and facilitates education and research on a wide range of topics pertaining to sustainable land use and natural resource management. The development of education, training and research capacity at partner universities is a key objective for SLUSE. Partnership between SLUSE and local universities in Malaysia, Thailand, South Africa, Botswana and Swaziland has been developed since the programme started in 1998. The cooperation has focused on education and training, however, research and case study development have been crucial to sustain high quality teaching.

**For whom is it a problem and who should solve it?**
In the first place European research funders can address the problem when designing research partnership funding. Secondly, developing national DC funding systems and co-funding schemes would equalise decision-making power between the partners and help to ease the problem described. This is, however, still a big challenge in many developing countries (see also lesson 2.1.3.1). The problem can also be addressed by the management of a research programme and the individual researchers and other stakeholders through joint reflection over power and knowledge in their specific programme.

**What is the main strategic action required?**
The main strategic action derived from this lesson is to strengthen both personal relationships and clarify governance structures leading to continuity in collaboration. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | EU funders can assist in the design of long term research partnership funding i.e. implementation of national DC funding schemes and co-funding schemes. | Equalises decision making power between the partners.<br><br>Builds on expressed demand from the South. |
| **RESEARCH ORGANIZATIONS** | North to South partnerships should be between research institutions rather than single individuals. | Maximises capacity building impact of research partnerships for southern institutions. |
| **RESEARCH PROGRAMMES** | Develop a shared code of conduct with partners and agreed working procedures. | Achieves a common understanding and overcomes contentious issues. |
| | Appointment of a full time research coordinator. | Maintains motivation and participation of members by maintaining efficiency. |
| | Effective communication including face-to-face meetings. | Creates ethos of knowledge sharing and collaboration. |
| | Northern partners engage in capacity development within the partnership. | Enables capacity development to be achieved on both sides. |

**Recommendations for the SPLASH ERA-Net**
The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- SPLASH could ensure that the design of any future research programmes accommodates more equality of relationships in order to allow full participation by southern practitioners.

#### 2.1.4.3 Lesson: Efforts to build capacity can have negative effects if this leads to trained personnel seeking better jobs elsewhere or leaving the country

**What is the problem?**
The problem is often referred to as the "brain drain[2]" which describes the phenomenon that highly trained experts turn to better paid jobs in other sectors or other countries. UNCTAD estimates that 21% of the population with tertiary level education from Least Developed Countries leave their countries (UNCTAD, LDC Report, 2000). The problem is manifested at different levels. At the level of an individual research programme, capacity building components do not impact on the programme as intended. The participants of the SPLASH research managers' workshop described the severe negative effects on a research programme of training people who subsequently do not stay with the programme; it is also sometimes the case that training is provided to people who are selected due to political reasons by decision-makers in DCs. At university and higher education level, while investment can be made into PhD research programmes, there is often a shortage of appropriate applicants for researcher and professorial positions within these organizations. Therefore, the critical questions for capacity building initiatives are: who should be in receipt of capacity building measures and what can the programme do to ensure that those trained stay with the programme.

The effects and causes of "brain-drain" can also be found at a second level of national research policy. Our interviews and workshop brought up the issues around an "under-valuation" of science within the social and political systems of DCs (see WP 3, D 4.5, D 4.3, D 5.4) resulting in a disabling scientific environment. Brain-drain as one facet of migration might also have positive effects. However, from our work, we have learnt that the re-integration of DC scientific diaspora is very often difficult, since the academic system is not sufficiently developed and there is limited demand for research by politicians. In effect, the contribution of research is not as significant as it could be.

However, a number of initiatives and political declarations have been issued which hint at a growing recognition of the importance (examples: AMCOW Tunis declaration, AMCOST Plan of Action) of research for development (see also http://www.oefse.at/Downloads/publikationen/WP_Braindrain.pdf, p. 18)

**What examples of good practice can we learn from?**
**IRD** (France) gave the example of students from Senegal, whose stays abroad are legally limited to three months with the aim of letting the student gain experience and skills while at the same time, not becoming alienated from their home countries. Another example, also from IRD (France), was that overseas students have to register with their home university in order to maintain professional exchange, shared responsibility and good personal contact between the student and the DC university.

The **Association for Higher Education and Development (AHEAD),** a diaspora group based in Canada, conducted a study in 2004 on the role of Africa's diaspora in capacity building efforts and

[2] http://www.oefse.at/Downloads/publikationen/WP_Braindrain.pdf

organised workshops to discuss the findings with funding from the International Development Research Centre (**IDRC**) The main result was that the diaspora showed increasing efforts towards assuming a more active role in Africa's development (see http://www.idrc.ca/en/ev-71249-201-1-DO_TOPIC.html)

The study examined the potential of virtual participation to facilitate an effective and sustained diaspora commitment to Africa's development efforts. The study concluded that virtual participation has tremendous potential to channel the untapped intellectual and material input from the African Diaspora. Moreover, it recorded a growing awareness among the African Diaspora of its moral, intellectual and social responsibility to contribute to Africa's development efforts.

Both the New Partnership for Africa's Development (NEPAD) and the African Union (AU) have formally recognized the African Diaspora as a key player in the development agenda of the continent. In 2003, the AU amended its Charter so as to "… encourage the full participation of the African Diaspora as an important part of the continent." (See http://www.idrc.ca/en/ev-71249-201-1-DO_TOPIC.html)

**For whom is it a problem and who should solve it?**
It is a problem for research managers who have to decide, often together with their counterparts in the South on criteria for choosing the "right" people for capacity development programmes. European research funders can address this problem in the implementation of capacity building by requiring shared criteria and agreements for capacity development measures in their programmes.
In general, it is a bottleneck for building up scientific capacities in Developing Countries and is seen to be hindering development. This problem should be addressed by DC governments and supported by their development partners in the North.

**What is the main strategic action required?**
The main strategic action derived from this lesson is to develop appropriate capacity development criteria which do not lead to the brain-drain effect. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | EU funders require shared criteria and agreements for capacity development measures in funded programmes. | Assists research programmes in deciding who to put forward for training schemes. |
| | | Gives greater value to science. |
| | Support to regional centres of excellence | Could limit the brain-drain by increasing the attractiveness of the research centres in DCs. |
| **RESEARCH ORGANIZATIONS** | Limit the duration of overseas stays and ensure good linkages and communication with home organization. | Prevents alienation from home country. |
| **RESEARCH PROGRAMMES** | Decide who should be involved in training programmes based on funding criteria. | Increases scientific capacity in the South. |

**Recommendations for the SPLASH ERA-Net**
The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- SPLASH could provide evidence of the positive impact of capacity building activities on the successful outcomes of research.
- A proposed training module will address a range of issues relating to good research management practice.

## 2.2 Implementation phase

### *2.2.1 Intellectual leadership*

#### 2.2.1.1 Lesson: Good research management includes clearly defined roles for all partners, and the inclusion of partners who can demonstrate their ability to fulfil these roles

**What is the problem?**

Research management practices in transnational research programmes are a key issue in the work of SPLASH to improve the coordination and the impact of research for development. One result is that the joint definition of objectives, cooperation and the responsibilities of each of the research partners in the North and the South is a crucial step. Therefore, good research management has to prioritise these tasks.

Building up a transnational research group needs time and involves a lot of resources to bridge cultural, language and capacity divides. The SPLASH research managers' workshop showed that longer-term international research groups are more likely to build capacities, by developing joint research agendas and stakeholder networks than are consortia formed according to the latest call for proposals.

Research consortia need to develop a common vision on research concepts, on the rules of engagement of the partners, and on the roles, rules and responsibilities of managers, researchers and other stakeholders. Qualified research managers with experience in interdisciplinary and demand-led research are required, who can establish good relations between researchers in research consortia, as well as with end users.

Agreeing on the (active) role of end-users of the research results during the course of the research process is a second key issue for research management. Early and active involvement is seen as important for increased research impact (see also lesson on "timing" in 2.2.2.1, lesson on "research partnerships" in 2.1.4.2, and lesson on "intermediaries" in 2.3.1.3 and in more detail in the SPLASH reports: D 5.1, D 5.4, D 4.2, D 4.5, Notes from Think Tank Workshop WP 5, Notes from research Management Workshop WP 3).

A third set of issues cluster around the management challenges posed by demanding interdisciplinary water research. Integrated approaches are seen as key to solving broad and complex problems resulting in policy relevant insights. Similar to working in transnational and/or trans-cultural research groups, working in multidisciplinary teams requires individual communication skills and time dedicated to reflect on and agree joint problem definitions, research questions and synthesis of results. Thereby the researchers from different disciplines have to cope with the fact that they are using language differently, may interpret concepts differently and are facing incentives to specialise in a single discipline

rather than working in an interdisciplinary way, since research funding and academic careers are mainly organised along disciplinary lines[3].

**What examples of good practice can we learn from?**

**CIRAD** (International Centre in Agronomical Research for Development) has developed a long partnership with the **IER** (Institute of Rural Economy) in Mali to define levels for cotton treatment in order to decrease the use of insecticide on crops. The study has assisted in a policy process by providing expertise that has resulted in a 60% decrease in insecticide use by informing the farmers about when it is appropriate to apply treatment. In this project the relevant actors were involved and the research results have been effectively taken up.

**For whom is it a problem and who should solve it?**

The lesson describes problems relating to research management. Research funders can assist those facing these problems by acknowledging the challenges of transnational and interdisciplinary applied research in setting the criteria for their funding schemes, in the resulting time planning for the funded programmes as well as in monitoring and evaluation procedures.

**What is the main strategic action required?**

The main strategic action derived from this lesson is to establish effective transnational research programmes. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | When setting the criteria for funding schemes, time planning and monitoring and evaluation procedures, funders are to accommodate an interdisciplinary approach. | Acknowledges the challenges for researchers of transnational and interdisciplinary applied research |
| **RESEARCH ORGANIZATIONS** | Longer term international research groups to be established. | More likely to build capacities and develop joint research agendas and stakeholder networks. |
| | Research consortia need to develop a common vision on research concepts, rules of partner engagement, rules and responsibilities of research managers, researchers and other stakeholders. | Improves coordination and therefore increases the impact of research for development. |
| | | Joint definition of objectives and responsibilities between research partners in the North and the South. |
| **RESEARCH PROGRAMMES** | Experienced research managers with experience of interdisciplinary and demand-led research required | Establish good relations between researchers in consortia and with end users |
| | Agree early and active role of end users | Increases research impact |
| | Integrated approach of inter- and multidisciplinary and trans cultural research teams. | Solves broad and complex problems resulting in policy relevant insights. |

[3] See also Molinga, P. (2008): The Rational Organisation of Dissent. Boundary concepts, boundary objects and boundary settings in the interdisciplinary study of natural resources management, ZEF Working Paper No: 33, Bonn

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- SPLASH could identify under which conditions seed money schedules prove to be effective for an initial planning phase before presenting full proposals. This allows the integration of a sound stakeholder analysis in the programme design and application phase.
- A proposed training module will address a range of issues relating to good research management practice.

## *2.2.2 Quality assurance*

### 2.2.2.1 Lesson: The timing of research and policy cycles is not synchronised and follows different paces: the research cycle is often too short for influencing policies as well as rapidly developing policy processes that cannot be sufficiently supported by research.

**What is the problem?**

The data collected in WP 5 highlight the significant degree of disconnect between research findings and policy and decision making processes. The key informant interviews (see D 5.4 and case studies in D 5.1) reinforced the importance of this lesson which was originally identified in the literature review (see D 5.1). The different time frames of research and policy hinder research use and effective interaction between research and research users in policy making. The problem of unsynchronised time frames occurs in different ways and due to different reasons.

Firstly, limited alignment of research to the needs of research users contributes to the problem that demand is not taken into account and can thus not be met in time. However, as we have seen, policy processes can also happen rapidly and cannot “wait” for research to catch up. This can only partly be solved through conducting research into future strategically important fields in preparation for future demands. Secondly, this lesson is linked to the fact that policy decisions can be guided by politics, specific interests and lobbies rather than being based on evidence from research. It is therefore not dependent of research cycles and does not adapt to them.

As explained above the problem of unsynchronised time frames can only be indirectly influenced through researchers being prepared to use “policy development windows” and better meet demands of research users. Some organizations are identified that take on an important intermediary role between different institutions involved in research and in policy making (see also lesson 2.3.1.3) Linking back to improved dissemination (see lesson 2.3.1.1 on dissemination) these organizations, as well as programme coordination units, can help to bridge gaps in timing through dissemination of higher aggregated results that are specifically targeted to the potential users and ensure effective dissemination at the right time for uptake. Intermediaries and/or programme coordination units can convey messages and sustain communication processes in the longer-term. Strategic communication and networking via multistakeholder platforms, other intermediary institutions or programme coordination units allows agreement to be made on future research priorities, the joint planning of research processes to meet demand and harmonise timing of research outputs and the potential demand for it by decision makers.

**What examples of good practice can we learn from?**
One approach to developing DC institutes is the **Think Tank Initiative** of the International Development Research Centre, in Canada, which aims to strengthen independent policy research institutions in DCs for improved uptake of research by policy makers. Think Tanks can form the important link that bridges the different timings of research information supply and policy information demand.

One way of narrowing the timing gap is to **commission research** in advance of political decisions. Examples for this are the drafting process of the German Water Sector Strategy where the Ministry of Economic Development and Cooperation (BMZ) commissioned two complementary studies which fed into the new sector strategy (See D 5.1). Another similar example is the research commissioned by the Water Resource Commission (WRC) in Ghana in the preparation of the WRC's policy on basin management (see D 5.4).

**For whom is it a problem and who should solve it?**
This lessons touches all actors in research, research funding and research use.

**What is the main strategic action required?**
The strategic action derived from this lesson is to improve the synchronization between research findings and policy decision making. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Commission research which anticipates and predicts strategically important areas of research in advance of political decisions. | Decreased time lag between research results and policy decision making. |
| | | Rapidly developing policy processes are better supported by research. |
| | | Improves uptake of research by policy makers, with greater influence on policy decisions. |
| | Build and maintain long-term relationships through multi-stakeholder and dialogue platforms. | Allows agreement on future research priorities. |
| | Strengthen independent policy research institutions in DCs through Think Tanks. | Increased interaction between researchers and research users/policy makers. |
| | Design programmes that ensure aggregation of results which can provide strong evidence to support policy decision making | |
| **RESEARCH ORGANIZATIONS** | Build consultancy capacities. | Research organizations are prepared to adequately feed results into the policy process. |
| **RESEARCH PROGRAMMES** | Use organizations which can play an intermediary and sustainable communication role between researchers and policy makers. | Improves uptake of research by policy makers, with greater influence on policy decisions. |
| | Effective dissemination (see 2.3.1.1) of aggregated results to targeted users at the right time. | |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- SPLASH could provide support to enable research outputs to be better used. This would involve identifying research outputs that have the potential to make a greater impact than they did originally, if they are further updated, translated, marketed and disseminated.
- SPLASH research (work packages 4 and 5) has highlighted the role of effective mediation between researchers and policy makers by those organizations that have good linkages with both parties. It is possible that SPLASH could provide support to strengthen such dialogue platforms between research and policy and to facilitate the set up of additional organizations able to act in this way. This would speed up knowledge sharing between researchers and practitioners (policy and decision makers) and support the transfer of research into policy and practice.
- A further contribution by SPLASH could be to apply good dissemination of SPLASH findings and lessons learned to relevant stakeholders; these lessons could be incorporated into future programme design.

## 2.3 Communication and dissemination

### *2.3.1 Managing communication and dissemination*

#### 2.3.1.1 Lesson: Dissemination of research results is inadequate

**What is the problem?**

Strategic communication and dissemination activities are not sufficiently integrated in research funding schemes, and the resulting proposals and implementation of the programmes and projects. Therefore research results may not be made available and used to their full potential.

The evidence for this lesson results from our data collection in WP 2 (mapping of existing research programmes and their practices), WP 3 (expert workshop on research management) and WP 5 (Think Tank workshop, literature review, expert interviews in developing countries) as well as from work carried out in WP 4 (D 4.2 Guidance Note on Transferring Research Knowledge into Action).

The lesson on dissemination has three components. Firstly, development of targeted products and adequate mechanisms to deliver these to the intended end-users could be improved. Secondly, developing and implementing a communication strategy that indicates with whom to engage and how to do this is often a weakness in research programmes. The analysis of existing water for development research programmes revealed that only 53% of the programmes evaluated have a communication strategy. The third crucial question is how to set the right incentives for researchers to actively disseminate their results to potential users. This last aspect is illustrated particularly well by evidence from WP 5 which shows that current reporting systems do not help sufficiently to tailor research findings to the needs of potential local beneficiaries. A further contributory factor is that researchers in developing countries are encouraged to present their research findings in foreign, peer reviewed journals (as this is a means to career promotion), and do not tend to put in place processes for local follow-on dissemination whereby these peer-reviewed papers are versioned to briefing-notes and fact sheets for use down the information chain (see D 5.3, Notes from Think Tank Report).

**What examples of good practice can we learn from?**

**DFID** has been working towards better communication of DFID-funded research for a number of years. It has provided a set of principles of research communication, which also include a benchmark of ten per cent of the overall budget for dissemination and communication activities, as well as a prac-

tical guide to develop a communication strategy for the DFID-funded Research Partnership Consortia (**RPC**) (more information: http://www.dfid.gov.uk/research/communication-research.pdf). It has also funded the **Spreading the Word** research (http://wedc.lboro.ac.uk/publications/details.php?book=978-1-84380-047-7) which provides specific advice on effective dissemination for anyone engaged in development-related research, whether as contractors, practitioners or donors, at all stages of the project cycle. Another good practice example is Research for Development (**R4D**) R4D is a free access on-line database containing information about research programmes supported by DFID. R4D provides the user with the latest information about research funded by DFID, including news, case studies and details of current and past research in over 20,000 project and document records.

In Mexico, academic researchers receive additional payments for the number of publications and types of publications successfully achieved e.g. peer-reviewed international journals and those with a citation index rate higher than local journals and newspapers. This policy provides a strong incentive for researchers to publish.

**For whom is it a problem and who should solve it?**
This is a problem for research funders, researchers and research users because it limits the impact of research on policy and practice. Funders should play a crucial role in encouraging systematic research communication. A communication and dissemination strategy that defines the objectives and measures at the programme and the individual project level should be embedded in the funding schemes. Furthermore, strong personal motivation of researchers to promote their work is crucial; an important element of this can be engaging with intermediaries to help with transferring messages. Universities can also assist by including communication skills in their curricula.

**What is the main strategic action required?**
The main strategic action derived from this lesson is to embed a requirement for effective dissemination of research results at programme and project level. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Funding schemes should demand evidence of the systematic communication of research through the planning and implementation of a communication and dissemination strategy that defines the objectives and measures at the programme and the individual project level. | This creates incentives for researchers to actively disseminate their results to potential users. Research findings are tailored more to the needs of potential local beneficiaries. |
| | Reporting systems should include progress on dissemination, based on an effective monitoring and evaluation of how target groups are reached. | Dissemination activities are more likely to be prioritized and therefore more likely to be tailored to meet the needs of target groups. |
| | Programme design should include adequate resources (at least 10% of the total budget) for dissemination. | |
| **RESEARCH INSTITUTIONS** | Include training in the curricula in professional skills such as those relating to effective communication. | Research personnel have greater learned and theory-based communication skills. This is important for new research staff who cannot necessarily be expected |

| | | |
|---|---|---|
| | | to have expertise or experience in the area of dissemination as well as in their particular area of specialism. |
| | Strengthen the incentives for researchers to produce publications in non-academic journals and other sources. | Researchers are credited for such publications as well as for those in international peer reviewed academic journals, for the purposes of career progression.<br>The research has wider reach to target groups who do not have access to academic journals. |
| **RESEARCH PROGRAMMES** | Increase engagement with intermediaries to assist with transferring messages. | Local dissemination mechanisms are established that use locally produced materials. This has benefits for the end-users in terms of providing cost-effective materials in appropriate formats and for the intermediary organizations in terms of possible capacity strengthening and in promoting cooperation with EU partners. |
| | Improving targeted dissemination in terms of content level. | This ensures that the research outputs are used to their full potential by the various target groups. |
| | Improving targeted dissemination in terms of delivery mechanisms taking into account the digital divide. | |
| | Ensuring that the language is suitable for the target group. | |
| | Develop and use quantitative and qualitative measurements for dissemination evaluation. | Analysis of impact and uptake of research allows the researcher to know whether the dissemination methods used are appropriate for the target groups. The data from monitoring and evaluation exercises can be used to make changes and improvements to a dissemination strategy and ensures high quality outputs reach their target. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- Current and future research activities undertaken under the SPLASH ERA-Net have a robust communication and dissemination strategy, relating to content levels, formats and dissemination methods, in combination with the application of appropriate quantitative and qualitative measurements for monitoring and evaluating its effectiveness,
- Any joint calls developed from SPLASH will also require the inclusion of all of the above elements in the proposal stage. An adequate proportion (at least 10%) of any planned budget should be allocated to these activities.
- Capacity development workshops on communication and dissemination of both programme- and project–level outputs and activities could strengthen the coordination of EU-funded water research. This could take place at both EU and local level (MS funders, local ministries and researchers) and could include the principles outlined in the above table.

- A proposed training module will address a range of issues relating to good research management practice.
- Key SPLASH public outputs will be available in English and French. Some outputs may be translated into more languages. SPLASH research (work packages 4 and 5) has highlighted the role of effective intermediation between researchers and policy makers by those organizations that have good linkages between both parties. It is possible that SPLASH could provide support to strengthen such dialogue platforms between research and policy and to facilitate the set up of additional organizations able to act in this way. This would speed up knowledge sharing between researchers and practitioners (policy and decision makers) and support the transfer of research into policy and practice.

#### 2.3.1.2 Lesson: Duplication of research occurs and existing knowledge is not used to its full potential.

**What is the problem?**

This lesson describes a key problem of making better use of research results in policy and practice. Firstly, it describes the remaining challenges for scientific communication already outlined and the need for improved interaction of researchers and potential research users to speed up the uptake of existing knowledge. Secondly, this lesson is drawn from the observation that material related to water supply, sanitation and hygiene is often produced through individual research or development cooperation projects. This leads to the situation that this material tends to be unpublished except as grey literature. In most cases no national documentation centre exists where this grey literature is made accessible for future use. Consequently, it is difficult or sometimes even impossible to include existing knowledge in scoping studies for new research programmes. Adding to this, publications in scientific journals are often hard to access for many local organisations due to poor library facilities and/or non-affordable journal subscriptions. Thirdly, this lesson points towards the importance of testing research results in order to transform theoretical results into practical recommendations relevant for the targeted future users.

The lesson directly corresponds with one of the four main goals of SPLASH to “coordinate existing programmes to minimize duplication and identify gaps”. Given the fact that access to knowledge is key in avoiding duplication and to increase the application of existing knowledge, the water related ERA-Net projects provide examples of good practice in their attempt to develop knowledge management tools such as databases containing European-funded water research. Currently, each water related ERA-Net (SPLASH, IWRM.Net, SKEP, CIRCLE, ERAARD) work independently on similar tasks. Linking these activities could be an optional next step to increase transparency and avoid duplication when planning new research activities.

**What examples of good practice can we learn from?**

An interesting example from the agricultural sector is the **DFID-funded project “Research into use” (RIU)** which aims to increase the access to knowledge and technology for poor people through using existing knowledge already generated through previous DFID-funded research. Getting research into use works in national and regional partnerships to promote innovations. National partners are being identified during country assessments, regional partners in sub-Saharan Africa include NEPAD’s Comprehensive African Agricultural Development Programme (CAADP) and the Framework for African Agricultural Productivity (FAAP) programme, managed by the Forum for Agricultural Research in Africa (FARA). Corresponding partnerships in South Asia are less well developed. Future partners can be the Asia–Pacific Association of Agricultural Research Institutions (APAARI) and the South

Asian Association for Regional Cooperation (SAARC). RIU also aims at collaborating with major NGOs and foundations in the agricultural sector (see D 5.1).

**For whom is it a problem and who should solve it?**
The fact that there are many duplications in research efforts and insufficient use of existing knowledge poses a problem for all, researchers, research funders (and ultimately the tax payers) and potential research users.

**What is the main strategic action required?**
The strategic action derived from this lesson is to increase the coordination of existing programmes. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Research proposals have as a requirement a scoping study of existing knowledge. | Strengthens scoping studies for new research by allowing the consultation of existing knowledge and experience, thereby minimizing duplication and identifying gaps. |
| | Practical testing of research results is required to check applicability. | Transforms theoretical results into practical recommendations relevant for targeted future users. |
| | Include requirement in funding schemes that interesting results and findings are published and available in an environment where they can be downloaded free of charge. | |
| **RESEARCH ORGANIZATIONS** | Establish and strengthen national and regional partnerships to promote networking and knowledge sharing. | Promotes networking and knowledge sharing. |
| | | Improved interaction between researchers and potential research users within the national innovation system. . |
| **RESEARCH PROGRAMMES** | Development of knowledge management tools relating to research information. | Increases transparency and avoids duplication when planning new research activities. |
| | | Material not just published as grey literature which is inaccessible to most potential users. |
| | | Speeds up use of existing knowledge. |

**Recommendations for the SPLASH ERA-Net**
The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- Within future SPLASH-related activities, a synthesis of existing knowledge should always be part of the scoping of a new project or programme.
- SPLASH is providing the EC with links to websites from their own countries which have water research for development information.
- SPLASH could act as a catalyst for the improved coordination of ongoing research programmes, by developing relationships and networking opportunities between staff. This pro-

vides knowledge sharing between programmes and the potential for future collaboration and coordination between programmes. It also disseminates knowledge and grey literature that is not formally published.

- SPLASH could provide support to enable research outputs to be better used. This would involve locating research outputs that have a potential to make a greater impact than they did originally, if they are further updated, translated, marketed and disseminated.
- SPLASH is a mechanism to improve knowledge sharing and lesson learning, thereby avoiding the duplication of efforts and improving the knowledge base of decision makers. Through a collaborative approach including national actors in research and development, key priorities for future research can be formulated.

#### 2.3.1.3 Lesson: Intermediary actors play an important role in helping to make better use of research results, however, their functions and ways to support them are not well understood

**What is the problem?**

Our work in WPs 4 and 5 yielded the insight that intermediary actors like individuals, organizations, networks, multistakeholder platforms and practitioner networks, are important in improving the uptake of research in policy and practice (see D 4.2, D 4.3, D 5.1, D 5.3, D 5.4) in the role they play as knowledge broker. They need to bridge different time lines between research and research user, form a link between different styles of communication, and mediate between different systems of incentives and accountabilities. However, how different intermediary actors facilitate knowledge exchange seems to depend very much on the specific institutional set-up and is not fully understood. We have collected some examples in D 4.2, D 4.3, D 5.1 and D 5.4.

Researchers also have a role to play in carrying out “boundary work” to facilitate the interaction between the internal research sphere and external research users in order to get their results into use (see D 5.4) (CID working paper). This raise issues already covered in the previous lessons. One approach is setting up, facilitating and following-up on multi stakeholder dialogues. Part of this boundary work can also be the integration of boundary workers in the team / knowledge exchange people/ contact points. This boundary work is part of the intermediary action of internal researchers and external actors and/or facilitates the knowledge brokering role of intermediary actors.

**What examples of good practice can we learn from?**

DFID-funded **Science and Development Network** (SciDev.Net) mainly functions as an “info”-mediary through its website. The website contains reports on and analysis of the latest developments in science and technology that affect the developing world. The network aims to increase research impact, enable dialogue, through capacity building workshops on the communication of science.

The multistakeholder platform **the Mekong Program on Water, Environment and Resilience (M-Power)** acts as an intermediary which aims to improve water governance and social livelihoods in the Mekong Region by developing a coherent set of demand-led research activities. Dialogue (in terms of deliberation, diplomacy and negotiation) as well as knowledge (in terms of assessment, practice and communication) are core themes that drive M-Power research (see D 4.3).

**Academies of science** are also a good example of intermediaries who work to promote the uptake of research in decision-making and improved interaction between research and policy. Ongoing initiatives like the African Science Academy Development Initiative, a project backed by the Bill and Melinda Gates Foundation are working towards improving the impact of science on (African) policies (see http://www.nationalacademies.org/asadi/about.html).

One example of support to intermediary actors through a research funder is the approach of the DFID- funded climate change adaptation network "**Africa Adapt**". Africa Adapt is a knowledge sharing network on climate change adaptation in Africa which is working with "knowledge exchange officers" whose task is to access, evaluate, synthesise and communicate research findings to practitioners (extension services, farmers, population, other researchers, political decision-makers). The knowledge exchange officers are one important way of bringing knowledge about climate change adaptation to the most vulnerable to the negative effects of climate change.

**For whom is it a problem and who should solve it?**

The fact that the role of intermediary actors is not fully understood is a lesson for social science researchers need to improve our understanding of ways to improve the uptake of research through intermediary actors. Furthermore, the lesson also targets research funders who should consider the importance of boundary work and cooperation with intermediary actors in their funding schemes. Research users can learn this lesson by engaging and supporting platforms and other intermediary actors in their field.

**What is the main strategic action required?**

The main strategic action derived from this lesson is to recognise the role of and actively support intermediary organizations between research and practice. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Consider the importance of and provide support to intermediary actors in funding schemes. | Recognition of the important communication route provided by these. |
| **RESEARCH ORGANIZATIONS** | Engage with and support intermediary actors | Increased dissemination and uptake of research findings. |
| **RESEARCH PROGRAMMES** | Facilitate multi stakeholder dialogues | Assists in creating demand-led research initiatives. |
| | Use of knowledge brokers and infomediaries for evaluation, synthesis and communication of research to practitioners | Improved uptake of research in policy and practice |
| | | Increases research impact |
| | | Enables dialogue and capacity development and strengthens the role of the researcher in dissemination. |
| | | Bridges time lines between research and research users |
| | | Links different styles of communication |
| | | Mediates between different systems of incentives and accountabilities |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- A proposed training module will address a range of issues relating to good research management practice.
- SPLASH research (work packages 4 and 5) has highlighted the role of effective intermediation between researchers and policy makers by those organizations that have good linkages between both parties. It is possible that SPLASH could provide support to strengthen such dialogue platforms between research and policy and to facilitate the set up of additional organizations able to act in this way. This would speed up knowledge sharing between researchers and practitioners (policy and decision makers) and support the transfer of research into policy and practice.

## 2.4 Monitoring and evaluation

### *2.4.1 Monitoring and evaluation*

#### 2.4.1.1 Lesson: Research impact and outcome assessment is still weak

**What is the problem?**

Non-academic outcomes and impacts of research, such as on government policies and on different dimensions of using water and sanitation, on capacity development, intercultural learning, or institutional and organisational development are difficult to assess and cannot be measured by peer reviewed academic publications or citation analyses in peer reviewed documents. Hence, assessing the non-academic outcome and impact of research using a sound and valid methodological approach is still a challenge.

Methodological approaches do exist (see D 5.1). However, the mapping exercise carried out in WP 2 showed that moving from monitoring and evaluating the outputs of a project to outcome and impact monitoring and evaluation is still a challenge for many of the MS research programmes. In the Programme Management and Implementation Procedures report (SPLASH D2.5), the project application procedures of 43 programmes of water research in developing countries were assessed and summarized together with comparisons between programmes. Most of the projects we analyzed are subject to external and internal evaluation, while impact assessment conducted by stakeholder evaluation is implemented only in a few of them.

Moreover, the procedures differ between programmes within each country and a lack of common guidelines for impact assessment may inhibit better cooperation, use of research results and investment in research.

**What examples of good practice can we learn from?**

RAPID group from ODI provides a synthesis of research impact assessment tools and case studies (see: Hoveland, Ingie (2007): Making a difference: M& E of policy research. ODI Working Paper No.: 281 and Court, Julius, Ingie Hovland, John Young (eds.) (2005): Bridging Research and Policy Development: Evidence and the Change process. ODI ITDG Publishing) D 5.1 applied some of the instruments to assess impacts of research in policy formulation

The literature presents cases where research projects added more detailed outcome planning and monitoring components to their initial logframe. This allowed them to improve their outcome monitoring and reporting with the aim to better take into account the interests of research users in project management (Kristjanson et al. (2008): Linking International Agricultural Research Knowledge with Action for Sustainable Poverty Alleviation: What Works? CID Working Paper No. 173 and ILRI Innovation Works Discussion Paper).

This is a problem for research funders when designing new programmes since they often lack evidence of the impact of funded programmes. All other stakeholders could potentially profit from sound, participatory monitoring and evaluation through potential opportunities for joint learning, increasing ownership of the programme and improvements made as a result of M&E.

**What is the main strategic action required?**

The main strategic action derived from this lesson is to strengthen the outcome planning and monitoring components of research. Related to this main action are a number of associated actions as outlined in the table below. These require intervention at the level of the research funders, research institutions and programmes as indicated. The potential benefits of implementing these approaches are also outlined.

| INTERVENTION LEVEL | ACTION REQUIRED | ANTICIPATED BENEFITS & TO WHOM |
|---|---|---|
| **FUNDERS** | Add outcome planning and monitoring components as a funding requirement. | Allows interest of users to be taken into account and provides evidence of impact of funded programmes. |
| **RESEARCH ORGANIZATIONS** | Poverty impact in addition to academic impact as an alternative measure of the value of publications. | Leads to increased incentives for researchers. |
| **RESEARCH PROGRAMMES** | Add outcome planning and monitoring components to the LFA. | Allows a demonstration of the interest of users being taken into account and provides evidence of impact for reporting purposes. |
| | | Measures the non- academic impact of research. |
| | | Improved dissemination and uptake of research results. |
| | | Potential for increased investment in research. |
| | | Leads to opportunities for greater cooperation, joint learning, and increased ownership of the research amongst stakeholders. |

**Recommendations for the SPLASH ERA-Net**

The following recommendations outline what SPLASH could contribute to achieve the above strategic action:

- SPLASH will require outcome planning and monitoring components in all SPLASH-funded projects. A study into these impact evaluation practices in SPLASH-funded projects would then identify capacity building needs in this area.
- Find evidence and investigate the literature available to show the benefits of research linked with economic growth.
- A proposed training module will address a range of issues relating to good research management practice.
- Concept note on impact assessment will aim at developing a methodology for long term evaluation of research project.

**Box 4 Summary of Lessons**

| | |
|---|---|
| **Inception Phase** | |
| 2.1.1.1 | Strategic and operational objectives of programmes are not clearly enough stated for effective monitoring and evaluation |
| 2.1.1.2 | Actively involving the relevant stakeholder in the research process is a challenge for the future |
| 2.1.2.1 | The number and the complexity of application and reporting procedures create a high administrative burden on (southern) research organizations |
| 2.1.3.1 | Available (national) funding is insufficient to capitalise on local research skills. |
| 2.1.4.1 | The involvement of southern research organizations in European-funded research programmes is inadequate |
| 2.1.4.2 | North – South research partnerships are often asymmetric |
| 2.1.4.3 | Efforts to build capacity can have negative effects if this leads to trained personnel seeking better jobs elsewhere or leaving the country |
| **Implementation Phase** | |
| 2.2.1.1 | Good research management includes clearly defined roles for all partners, and the inclusion of partners who can demonstrate their ability to fulfil these roles |
| 2.2.2.1 | The timing of research and policy cycles is not synchronised and follows different paces: the research cycle is often too short for influencing policies as well as rapidly developing policy processes that cannot be sufficiently supported by research. |
| **Communication and dissemination** | |
| 2.3.1.1 | Dissemination of research results is inadequate |
| 2.3.1.2 | Duplication of research occurs and existing knowledge is not used to its full potential |
| 2.3.1.3 | Intermediary actors play an important role in helping to make better use of research results, however, their functions and ways to support them are not well understood |
| **Monitoring and Evaluation** | |
| 2.4.1.1 | Research impact and outcome assessment is still weak |

# Summary of key issues and actions

## 2.5 Priority ranking of actions

These key lessons represent the insight generated by the SPLASH project about how to design, manage, communicate and evaluate water research in developing countries. On the basis of these, this report outlines recommendations and some suggested strategic actions resulting from each lesson for different audiences, such as (European) research funders, researchers, research managers and potential research users. These have been presented above in line with the key elements of the

research management cycle, as identified in D 3.5. Accordingly, there has been no attempt to rank the lessons learned and their corresponding actions. The concluding section addresses this concern, highlighting the lessons and their corresponding actions that have emerged as the most important for accelerating the transfer of research into policy and practice.

It is clear that the major actors to whom these actions are relevant are the research funding agencies. The actions which have been identified for research institutions and programmes are typically derived from these main actions which relate to funders. For this reason, the following summary focuses firstly, on the research funders and is therefore, the first level of ranking applied. A second level of priority ranking is applied to the lessons themselves, indicating those which are seen to be the most important issues for transferring research into policy and practice. These focus on:

- coordinated research from the outset: getting the partnerships right
- sound research implementation practices: getting the issues right
- the outputs of research: getting the product right.

## 2.6 Coordinated research from the outset: getting the partnerships right

Lessons 2.1.1.2, 2.1.3.1, 2.1.4.1, 2.1.4.2, 2.1.4.3 (see for summary of lessons Box 4) are all responses to different aspects of the problem of ensuring that southern research actors and stakeholders are sufficiently involved in the different stages of a research programme. Various concerns are noted in these lessons around the importance of a participatory approach, stakeholder analysis and adequate funding leading to a more symmetrical research partnership.

For funders the corresponding key actions are:

- EU funders can assist in the design of long term research partnership funding i.e. implementation of national DC funding schemes and co-funding schemes and pprovision of a dialogue platform for programme formulation.
- Research proposals to include a stakeholder analysis as a priority and the engagement of national (southern) research as a condition of acceptance.
- Define principles/criteria to identify who is a stakeholder at the beginning of the research planning process e.g. outcome mapping.
- Funders to require clear evidence in proposals of collaboration between research organizations in the North and the South.

## 2.7 Sound research implementation practices: getting the processes right

Lessons 2.2.1.1 and 2.2.2.1 are concerned with good management and implementation of research, relating to getting certain key facets of the research cycle right so that research activity matches the known demands for coordinated transnational research concerns and for future policy making.

For funders the corresponding key actions are:

- When setting the criteria for funding schemes, time planning and monitoring and evaluation procedures, funders are to accommodate an interdisciplinary approach.
- Commission research which anticipates and predicts strategically important areas of research in advance of political decisions. Build and maintain long-term relationships through multi-stakeholder and dialogue platforms.
- Strengthen independent policy research institutions in DCs for example through Think Tanks.

## 2.8 The outputs of research: getting the product right

Lessons 2.3.1.1, 2.3.1.2, 2.3.1.3, 2.4.1.1 (for summary of lessons see Box 4) were generated out of the problem of maximising the use of research results, through effective dissemination and communication of research outputs in the first place and of subsequently monitoring and evaluating their impact.

For funders the corresponding key actions are:

- Funding schemes should demand evidence of the systematic communication of research through the planning and implementation of a communication and dissemination strategy (with at least 10% of the total budget allocated).
- Reporting systems should include progress on dissemination, based on an effective monitoring and evaluation of how target groups are reached.
- Include requirement in funding schemes that findings are published and available in an environment where they can be downloaded free of charge.
- Add outcome planning and monitoring components as a funding requirement.

## 2.9 SPLASH supporting actions

Finally, the main actions for SPLASH are listed below, which can assist funders with the concerns above.

### *2.9.1 Coordinated research from the outset: getting the partnerships right*

1. SPLASH could host workshops to learn from and capture the experience pilot projects to let southern partners lead research programmes of Denmark and France and make them available to other EU funders.
2. A proposed training module will address a range of issues relating to good research management practice.
3. SPLASH can provide evidence in support of strengthening national funding by identifying both the role of research within a Sector Wide Approach (SWAP) and a mechanism to increase this role.
4. SPLASH could provide further supporting evidence based on available literature to try to show a possible link between effective research (specifically relating to water issues) and economic growth. The EUWI could be one dissemination path for this work.
5. Case study evidence of the level of capacity development required for strengthening Centres of Excellence is a further lever in support of national funding. Identification of those centres which would benefit can be based on existing institutional profiles and funding opportunities.
6. SPLASH could provide support for water professionals in collaboration with southern partners. This could be in linked to support for the African Groundwater Commission.
7. SPLASH could enhance southern demand-led research capacity through provision of a short course on demand-led research for practitioners.

### *2.9.2 Sound research implementation practices: getting the processes right*

1. A proposed training module will address a range of issues relating to good research management practice.
2. These will help to raise awareness of this issue and will strengthen regional cooperation on this.
3. SPLASH could support research – policy interaction via policy platforms or sectoral multi-stakeholder dialogues. Research funders and donors can support this by funding joint (sectoral) evaluation missions, commissioning sectoral research and supporting the participation of

national researchers in the platforms. SPLASH could contribute to the development of these platforms through: detailed analysis of the characteristics of these platforms, dissemination of D 4.3. (Guidelines on improved dialogue procedures), supporting regional or national information exchange and coordination actions (SPLASH in Ethiopia) and coordination of SPLASH funders via the Strategic Management Board.

### *2.9.3 The outputs of research: getting the product right*

1. A proposed training module will address a range of issues relating to good research management practice.
2. SPLASH could support capacity development workshops on communication and dissemination of both programme- and project–level outputs and activities which could strengthen the coordination of EU-funded water research. This could take place at both EU and local level (MS funders, local ministries and researchers).
3. SPLASH could act as a catalyst for the improved coordination of ongoing research programmes, by developing relationships and networking opportunities between staff. This provides knowledge sharing between programmes and the potential for future collaboration and coordination between programmes. It also disseminates knowledge and grey literature that is not formally published.
4. SPLASH could provide support to enable research outputs to be better used. This would involve locating research outputs that have a potential to make a greater impact than they did originally, if they are further updated, translated, marketed and disseminated.
5. SPLASH could create a mechanism to improve knowledge sharing and lesson learning, thereby avoiding the duplication of efforts and improving the knowledge base of decision makers. Through a collaborative approach including national actors in research and development, key priorities for future research can be formulated. In this line SPLASH is providing the EC with links to websites from their own countries which have water research for development information.
6. SPLASH research (work packages 4 and 5) has highlighted the role of effective mediation between researchers and policy makers by those organizations that have good linkages with both parties. It is possible that SPLASH could provide support to strengthen such dialogue platforms between research and policy and/or to facilitate the set up of additional organizations able to act in this way. This would speed up knowledge sharing between researchers and practitioners (policy and decision makers) and support the transfer of research into policy and practice.
7. SPLASH will require outcome planning and monitoring components in all SPLASH-funded projects. A study into these impact evaluation practices in SPLASH-funded projects would then identify capacity building needs in this area.
8. SPLASH could develop a tool or methodology for impact assessment and evaluation of all SPLASH-funded projects. This would include a focus on quality and sustainability of networks, availability and sharing of data, and any resulting increased levels of research capacity in DCs.