Implementing a framework for action to assess research impact: Case studies on impact assessment from two global research projects of the International Water Management Institute (IWMI)

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Keywords: impact assessment, capacity building, empowerment, participatory action research, stakeholder analysis, organizational learning

Abstract
Through its research on land and water management, IWMI strives to have a “positive impact on the activities and perspectives of policy makers, water managers and poor rural communities in developing countries” (IWMI, 2001, 10). However, evaluating the impact of research activities is a much-discussed topic and continues to be a challenge. Furthermore, with the growing importance of the concepts such as ‘participation’, ‘capacity building’ and ‘empowerment’, there is an increasing concern to know how to monitor and assess the effect and impact of such qualitative processes.

To address these challenges, IWMI developed a framework for assessing the impact of its research in 2003. The framework addresses both conceptual and practical considerations for measuring and tracking impacts of natural resource management research and serves as a road map for IWMI to better assess its contributions towards improved land and water management in developing countries.

This paper discusses IWMI’s Framework for Action to assess research impacts, describes a logical thought process for considering nature and scale of desired impacts and the pathways for impact achievement, and outlines a methodology for practical impact assessment. Building on the impact framework, the paper then examines the process of establishing impact and learning systems in two research projects- “Smallholder Systems Innovation in Integrated Watershed Management in Sub-Saharan Africa (SSI)” which is implemented in South Africa and Tanzania; and “Models for Implementing Multiple-use Water Supply Systems for Enhanced Land and Water Productivity, Rural Livelihoods and Gender Equity (MUS)”, which operates in five international river basins in Central America, Africa and Asia.

The paper also provides an overview of a diverse set of generic indicators used by IWMI for in evaluating the impact of natural resource management research at local, basin and national levels. Finally, the paper discusses how impact evaluation can be made concurrent process in the life cycle of the projects and established as a powerful learning tool, not only for the project, but also for institutional learning and change within an organization.

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**Introduction**

Measuring the impact of natural resource management research is a complex and challenging process. However, to be credible as a research approach, integrated natural resource management (INRM) research has to demonstrate impact (Campbell, et al., undated). Today stakeholders, including research funding organizations are increasingly demanding that researchers demonstrate, and are held accountable, that their research has “impact. In other words, it expected of every researcher that s/he is aware how the knowledge generated through research is used, at a minimum, and to do what s/he can to increase the likelihood that the research has an impact. This changed paradigm/ expectation to show results has- over the last decade- substantially changed the way in which research is designed, implemented and assessed for research outcomes.

Since it’s inception in 1984, IWMI’s research has focused around having a positive impact on the activities and perspectives of policy makers, water managers and poor communities in developing countries. IWMI demonstrated this not only through influencing policy and management decisions, but also through positive impacts on the lives and livelihoods of individual farmers. While IWMI has been always proud of the quality of its research and the role that research played in improving water and land management, it initiated rigorous efforts to formalize impact assessment procedures during 2002/03. This was first highlighted in IWMI’s 2000-2005 Strategic Plan which clearly demonstrated a need for such a system, not only to improve IWMI’s internal management and priority setting process but also to ensure that research activities meet the needs of IWMI stakeholders and partners. Further, it was felt that without a formal system for measuring the research outcomes, the true value of some of IWMI’s work might go unrecognized while the mistakes of other projects might be repeated. To address these concerns IWMI developed a conceptual framework for developing and implementing an impact assessment program at IWMI in 2003.

This paper discusses IWMI’s Framework for Action to assess research impacts, describes a logical thought process for considering nature and scale of desired impacts and the pathways for achieving impact, and outlines a methodology for practical impact assessment. The paper then moves on to examine how IWMI recognized the need for integrating knowledge sharing and learning systems not only within its research programs but within the organization itself, not only to establish impact but also to integrate learning in what it was doing. This is discussed through two case studies- “Smallholder Systems Innovation in Integrated Watershed Management in Sub-Saharan Africa (SSI)” which is implemented in South Africa and Tanzania; and “Models for Implementing Multiple-use Water Supply Systems for Enhanced Land and Water Productivity, Rural Livelihoods and Gender Equity (MUS)”, which operates in five international river basins in Central America, Africa and Asia.

**Framework for Impact Assessment at IWMI**

IWMI’s 2004-08 Strategic Plan stipulates that “By 2008, IWMI will be a world class impact, performance and service oriented Knowledge Center, specializing in research on Water, Food and Environment’. Bringing about a positive change in land and water management practices, policies and beliefs in developing countries has been at the core of
IWMI’s research. Through its research on land and water management, IWMI strives to have a “positive impact on the activities and perspectives of policy makers, water managers and poor rural communities in developing countries” (IWMI, 2001, 10). However, evaluating the impact of research activities is a much-discussed topic and continues to be a challenge. Furthermore, with the growing importance of the concepts such as ‘participation’, ‘capacity building’ and ‘empowerment’, there is an increasing concern to know how to monitor and assess the effect and impact of such qualitative processes.

Establishing an effective impact assessment system requires clear procedures for identifying, monitoring, evaluating and communicating impacts of individual projects and programs and a logical linkage to the organizational goals and objectives. This logical thought process is especially important for an organization such as IWMI where impacts are designed to occur over wide geographic and temporal scales and are therefore inherently difficult to quantify.

To address these challenges, IWMI developed a framework for assessing the impact of its research in early 2003. The framework addresses both conceptual and practical considerations for measuring and tracking impacts of natural resource management research and serves as a road map for IWMI to better assess its contributions towards improved land and water management in developing countries (Giordano, 2003). To accomplish its mission, IWMI is organized along interrelated research themes, each of which implements individual projects. Projects are designed to impact water and land use decisions either directly or through a series of impact pathways (Figure 1).
The outcomes of these individual projects contribute to the theme goals, which in turn contribute to IWMI’s overall mission. From measurement perspective, it is always much easier to qualify and measure outcomes that are directly originating from the projects. Most often, research organizations like IWMI work through its projects in partnership with other organizations to increase knowledge and influence the behavior of a variety of agents including the scientific community, government policy makers, project implementers, and individual farmers. These partner organizations/agents are then expected to further change knowledge levels and behavior of actors at other levels. In order to properly assess the impact of research work, projects should clearly articulate from the very beginning their immediate boundary partners (whom they want to directly influence as an outcome of the project) and also the direct and indirect pathways through which intended results will reach outside agents and eventually impact the resource environment. This forms the basis for developing outcome indicators, which needs to be conceptualized at the project design stage.

Another factor that needs consideration here is the scale at which the project intends to have an impact. While as an organization, IWMI hopes all of its projects will have a lasting, global impact on water and land management. However, beyond the conceptual level, it is many times unrealistic to expect that such impacts could be easily measured or attributed. Hence the projects should clearly articulate the scale-geographic (global, basin, local) temporal (seasonal, annual, decadal), social (individual, household, community, nation), and sectoral (agriculture, health, energy, industry, environment)- in the project design (Figure 2). While “scaling up” is now a popular concept, projects at broader scales should also consider their potential impact in “scaling down” (e.g., understanding the potential for translating policy suggestions at the global or basin scale to local communities). Various partnerships within the impact pathways, again, may serve as important conduits in this process. (Giordano, 2003)

**Measuring impact**

As discussed above, at IWMI the measurement of impact is considered at two distinct levels. The primary level consists of direct impacts a given project is supposed to have on completion. This relates to the change/impact on the immediate boundary partners.
defined by the project. The second level consists of the broader, secondary and tertiary impacts a given project may have. This includes the desired changes at secondary and tertiary levels, which result from the impact at the primary level. These are the changes that IWMI would desire to have at a broader level, but has no direct control over.

For example, the immediate purpose of a project may be to generate new knowledge for the scientific community, to influence resource-related policies, and/or to directly promote changes in water usage. The means to achieving these goals might be through the publication of journal articles based on the results of original research, hosting workshops for policy makers, or developing training materials for use by extension agents. The impact of these can be measured with the increased acceptance of research findings at scientific community level or changes in policies or policy makers thinking or raised awareness or enhanced capacity or strengthened partnerships or a combination of the above depending on the project purpose. This is illustrated in Figure 3 and only after the exact pathways to impact are articulated, one should consider the specific indicators that might best be employed to measure whether or not the project met its immediate impact objectives.

**Building partnerships for enhanced impact**

IWMI engages with a diverse set of partners in collaborative activities ranging from-governments, civil society organizations, private sector institutions, international organizations and community- based on project requirements and needs. These partners serve as implementers, facilitators, funding agencies or advocacy and knowledge
partners, as the case may be. Partner institutions bring in the complimentary expertise needed in a project to share the knowledge and have the desired impact. Working with national and regional partners facilitates the incorporation of area specific ‘local’ knowledge and better understanding of the ground realities. Local partners help in defining research problems from their perspective and hence making research more appropriate and relevant. This not only facilitates building capacity of IWMI partners, but also enhances future sustainability of usage of research results and knowledge generation. At the local level, IWMI partners with NGOs and development oriented implementing organizations to reach a larger audience to be able to translate research results to on-the-ground situations. It is through them IWMI expects to have more impact on rural livelihoods. At the national level, most often national partners, governments and NGOs, often are in a better position to influence policy makers. Through partnerships with them, facts and key lessons from research could have more impact at policy level.

While IWMI ultimate goal is that its projects and programs will have a lasting and global impact on water and land management for the benefit of food production, livelihoods and nature. However, beyond the conceptual level, it is unrealistic to expect that impacts at this level could be easily measured or attributed. Thus, while maintaining a vision towards the broader spatial and temporal impacts of our projects and programs, IWMI has designed a typology outlining the intermediary impacts that the organization, together with its partners, can reasonably anticipate, track and measure. Some of the key areas where IWMI expects to have an impact include-

- Raised awareness of new research
- Application of new Knowledge
- Use of improved tools, technologies and techniques
- Contribution to improved policies/institutions
- Enhanced capacity
- Strengthened partnerships
- Improved livelihoods

Table 1 describes the impact typology with a generic set of indicators and measurement tools IWMI employs to identify impact of its research with its immediate boundary partners, which in majority of the case are the scientific community, the policy makers, the project implementers and the water users or a combination of these.

While at IWMI we continues to implement the framework of action and measure the impact of research using the impact typology through ex-post and concurrent evaluations, Impact Assessment Framework has been mainstreamed as a part of the Quality Management System and most of the IWMI projects now incorporate impact assessment as a part of the project design. Learning from the success and failures of past and ongoing projects is actively promoted at IWMI through knowledge sharing workshops, Friday seminars, Thematic Group meetings and online discussions, Annual Research meeting/ Knowledge Fairs, informal peer assist sessions, and is becoming a part of the Knowledge Sharing culture at IWMI.
Table 1: IWMI IMPACT TYPOLOGY

Ultimately, IWMI hopes that its projects and programs will have a lasting and global impact on water and land management for the benefit of food production, livelihoods and nature. Beyond the conceptual level, however, it is unrealistic to expect that impacts at this level could be easily measured or attributed. Thus, while maintaining a vision towards the broader spatial and temporal impacts of our projects and programs, we have designed a typology outlining the intermediary impacts that the institute, together with its partners, can reasonably anticipate, track and measure (IWMI Program Office documents).

<table>
<thead>
<tr>
<th>Expected Intermediary Impacts of IWMI’s Research Agenda</th>
<th>Vehicle to achieve impact</th>
<th>Sample Indicators</th>
<th>Sample Measurement Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raised Awareness of New Research</td>
<td>Scientific publications of IWMI research</td>
<td># of citations of IWMI publications</td>
<td>Bibliometric assessments</td>
</tr>
<tr>
<td></td>
<td>Publications in popular press, brochures videos, posters</td>
<td># of downloads / requests</td>
<td>Website statistics</td>
</tr>
<tr>
<td></td>
<td>Public availability of datasets</td>
<td># of requests for IWMI staff to actively participate in workshops, conferences, committees, forums</td>
<td>IWMI official project records</td>
</tr>
<tr>
<td></td>
<td>Public availability of literature reviews</td>
<td># of students supervised through IWMI research</td>
<td>IWMI capacity building program records</td>
</tr>
<tr>
<td></td>
<td>Synthesis of IWMI and non-IWMI research</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IWMI participation in conferences/committees/forums</td>
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<td></td>
<td>Advising of MSc/PhD students</td>
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<tr>
<td>Application of New Knowledge</td>
<td>Scientific publications of IWMI’s research (including methodologies and approaches)</td>
<td># of citations of IWMI publications</td>
<td>Bibliometric assessments</td>
</tr>
<tr>
<td></td>
<td>Collaboration with NARES/NGOs</td>
<td># of requests for information/data</td>
<td>IWMI official project records</td>
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<tr>
<td></td>
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<td>Evidence of application of research by int’l/national research, development, and extension systems (e.g., # of NARES reports drawing from IWMI research)</td>
<td>Interviews</td>
</tr>
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<td></td>
<td></td>
<td>incorporation into curricula</td>
<td>Questionnaires</td>
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<td></td>
<td></td>
<td></td>
<td>Observations</td>
</tr>
<tr>
<td>Employment of Improved Tools, Technologies, Techniques</td>
<td>Development and dissemination of new, user-friendly DSS, maps, models</td>
<td># of downloads / registration of and/or requests for IWMI tools</td>
<td>Website statistics</td>
</tr>
<tr>
<td></td>
<td>Development and/or dissemination of technical interventions / practices</td>
<td>Evidence of integration of tools into national research programs</td>
<td>Interviews</td>
</tr>
<tr>
<td></td>
<td>Related demonstrations / training</td>
<td>Evidence of usage by int’l/national research, development, and extension systems</td>
<td>Questionnaires</td>
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<td></td>
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<td>incorporation into curricula</td>
<td>Observations</td>
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<tr>
<td></td>
<td></td>
<td>change in practice / behavior</td>
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</tr>
</tbody>
</table>
| Employment of Improved Policies/Institutions | • Policy Briefings  
• IWMI participation in policy-related committees/forums  
• Policy Roundtables  
• Advisory meetings with policymakers and resource managers  
• Promotion of formal/informal institutional frameworks | • # of downloads (of Policy Briefing materials)  
• # of requests for information / advice  
• requests for participation in panels / forums  
• evidence that policy / institutional recommendations taken into consideration by relevant decision-making bodies (e.g., placed on policy agenda)  
• adoption of policy / institutional advice  
• creation and maintenance of institutions beyond project period  
• change in practice / behavior | • Website statistics  
• Observations  
• Interviews  
• Policy dialogue monitoring |
| --- | --- | --- | --- |
| Enhanced Capacity | • Project involvement (field staff, NARES partners, IWMI staff)  
• NARES/NGO Partnership Program  
• Visiting Scientist Program  
• Training (in-house/external)  
• Training publications/videos  
• PhD Scholarship Program  
• Postdoc Fellowship Program  
• Internships  
• Policy Roundtables | • # of beneficiaries of IWMI’s capacity building programs (by gender and nationality)  
• NARES partners play more active role in regional / int’l research and research networks  
• Personnel performance indicators (e.g., promotions) for both IWMI and partner staff  
• theses completed  
• Postdoc publication record  
• changed knowledge / perceptions / practices | • IWMI official project documents  
• Human resources data  
• IWMI capacity building program records  
• Pre/Post project/training evaluations  
• Questionnaire |
| Strengthened Partnerships | • Collaborative projects  
• Collaborative publications  
• NARES/NGO network development  
• National Consultative Meetings  
• Participation in editorial boards, steering committees, global/regional programs | • # of co-authored outputs  
• frequency of collaboration  
• level of shared financial commitment between IWMI and its partners  
• # of consultative meetings  
• # of national/regional/global networks involve in | • Bibliometric assessment  
• IWMI official project documents  
• Questionnaire  
• Interviews |
| Improved Livelihoods (within project location) | • Direct intervention  
• Partnership with implementing agency (e.g., through NARES/NGO Partnership Program) | • Adoption rates (by gender and socio-economic status)  
• changed perceptions / practices (by gender and socio-economic status)  
• Level of livelihood improvement, e.g., yields, income, health (by gender and socio-economic status) | • With/Without studies  
• Pre/Post project evaluations  
• Interviews  
• Observations  
• Official statistics |
Moving from Impact Assessment to Knowledge Sharing and Learning

Institutionalizing the Impact Assessment Framework, IWMI has also taken into consideration the fact that traditional research approaches, focused on good publications by researchers and communication by extension agencies, often do not allow for either adequate knowledge sharing amongst researchers nor between researchers and end users. Even in widely practiced approaches today where researchers help write briefing notes or contribute to farmer field schools, the impact of these briefs on policy or end users is not always clear. Publishing is still necessary but no longer sufficient. The need is to make sharing and learning an integral and continuous part of doing research. Sharing of knowledge occurs not after, but during, the research process. Users participate in research; knowledge flows both ways. Researchers engage and communicate with users early in the research design and carry on interacting through the project.

Considering the above challenges and as a part of its broader Knowledge Center Initiative, IWMI has embarked on an institution wide project called ‘Knowledge Sharing (KS) in Research Pilot Project’, which is a part of the larger CGIAR Knowledge Sharing Project supported by the CGIAR ICT-KM Program. The goal is to improve the impact of agricultural research for development through Knowledge Sharing approaches (De Silva, Sanjini, 2005). The specific objective of the project is to promote a culture of knowledge sharing and learning within the research process by:

- Creating opportunities and spaces for the exchange of ideas and challenges related to KS in research
- Demonstrating the value of KS approaches through hands on experiences
- Nurturing the formation of a network of KS champions
- Developing a framework to introduce a culture of KS across research projects within the CG system

Knowledge Sharing in Research and Learning is considered at two distinct, but complimentary levels: **Knowledge Sharing among researchers**, to improve the research process itself; and **Knowledge Sharing between researchers and users** (policymakers, intermediaries and end-users), to increase the interaction between all stakeholders and most importantly increase the impact of research.

The following sections discuss case studies from two IWMI research projects, that incorporate the Impact Assessment Framework as well as different strategies for Knowledge Sharing and Learning to enhance the research impact. The research projects being discussed here are- “Smallholder Systems Innovation in Integrated Watershed Management in Sub-Saharan Africa (SSI)” which is implemented in South Africa and Tanzania; and “Models for Implementing Multiple-use Water Supply Systems for Enhanced Land and Water Productivity, Rural Livelihoods and Gender Equity (MUS)”, which is implemented in five international river basins in Central America, Africa and Asia.
Box 1. Knowledge Center Initiative at IWMI

IWMI envisions to be a Knowledge Center on water, food and environment by 2008. The approach chosen is to create a cross-institute coordination and synthesis effort that creates an inventory of all activities in IWMI needed to put the knowledge roles defined by the Strategic Plan 2004-08 into action: Knowledge Generation (KG), Knowledge Sharing (KS), Knowledge Brokerage (KB) and Knowledge Application (KA). Ultimately it is foreseen that IWMI would realize its knowledge center ambition by (Van der Bliek and Devlin, 2004):

- Having active communities of practice (CoPs) in place with IWMI researchers and peers from partner organizations contributing to knowledge generation and sharing.
- Actively sharing knowledge with partners and other stakeholders through the life of research projects through a two way process of interaction.
- Supporting a balanced capacity building program, sharing knowledge with present and future researchers.
- Having a strong knowledge sharing and learning culture in place.
- Making data and information available through easily accessible databases as global public goods, the library services, the internet and intranet. Thus contributing to further usage of such data and hence knowledge generation and in general wider use of the available data.
- Through strategic communication making information available in forms appropriate for clearly defined user groups, stimulating collaboration between organizations and individuals and advocating key messages e.g. by targeting policy makers.

Knowledge Center on Water, Food and Environment
Knowledge Generation – Knowledge Sharing – Knowledge Brokerage – Knowledge Application


The Smallholder Systems Innovation for Integrated Watershed Management Program (SSI) programme is an applied research initiative that started in January 2004, and is funded by the Swedish and Dutch governments through SIDA, WOTRO, DGIS and by UNESCO-IHE and IWMI. A multi disciplinary initiative aiming at improving the livelihood of rural communities in sub-Saharan Africa, the SSI programme aims to study the potential of indigenous and exogenous water system innovations in smallholder farms for improved land and water productivity. These innovations range from in situ practices such as deep tillage and zero tillage to infrastructural interventions such as underground storage tanks and small storage structures. SSI will investigate aspects such as adoption and adaptation of these innovations and the increases in production that result from them. The effects of these innovations on surrounding systems has often been neglected in previous research, but is highlighted
in the SSI programme. This includes the study of physical, ecological and social consequences downstream of sites implementing these innovations. A spatial analysis to identify appropriate sites for implementation of different innovations is also underway. The program also addresses institutional arrangements and set-up for facilitating adoption and adaptation of good practices.

The SSI research is carried out by eight PhD and two Post Doctoral fellows in two pilot catchments in Southern Africa, the Thukela in South Africa and the Pangani in Tanzania. The programme not only aims to achieve excellence in scientific research but also deliver results that are of practical use to development planners to improve the livelihoods of rural communities, and to disseminate the research findings across sub-Saharan Africa. Five research institutes are involved in the SSI programme: International Water Management Institute (IWMI), UNESCO-IHE, University of KwaZulu-Natal, Sokoine University of Agriculture and Stockholm University.

Program goals and outcomes
The overall development objective of the SSI program is to contribute with knowledge, planning tools and institutional capacity to enable a sustainable upgrading of rainfed agriculture through adaptation and adoption of water system innovations at watershed and river basin scale in drought prone tropical and subtropical agro-ecosystems. It intends to accomplish its objective by three distinct categories of outcomes, namely: (1) Knowledge generation and advancement of science; (2) Human capacity building in IWRM; and (3) Support to institutional, planning and policy development in IWRM. The program will achieve this by-

- Analyzing the hydrological, environmental and socio-economic consequences of up-scaling water system innovations in small-holder, predominantly rainfed agriculture at watershed scale,
- Developing methodologies and decision support tools for improved rainwater management and equitable sharing of water between upstream and downstream users and uses in nature and society,
- Translating knowledge on the links between intensification of agriculture through water system innovations, and its impacts on water, food and ecosystems at watershed and river basin scale, into useable tools for planning and policy,
- Contributing to human capacity building on integrated water resources management with specific focus on balancing water for food and nature, in Southern Africa through PhD, MSc training, and workshops.

It is implied that upgrading of rainfed agriculture will contribute to poverty alleviation and improvement of rural livelihoods. The focus of the programme on water productivity improvements and sustainable land use practices will provide development tools to balance the use of scarce freshwater resources between humans and nature, and assist in reducing land degradation in vulnerable savannah agro-ecosystems.

Establishing research impact through outreach and learning
The research thrust in the programme is applied and highly development oriented. To address the challenges of applied research in the context of water, food and the
environment, we designed an Outreach and Learning component within the SSI program.

The Outreach and Learning component addresses the three contemporary concerns when doing applied research - Firstly, how to ensure that the research is integrated – both between scientific disciplines, between stakeholders and scales – and driven by real needs on the ground. This requires a participatory action research approach, where learning and reflection forms an integral part of the research. Secondly, to ensure that the results of the research are fed into policy and development, not only in the locations of study, but also to other locations and stakeholder arenas. Thirdly, what is the approach to systematically share the knowledge and learn from initiatives, such as the SSI program? These knowledge domains-action research and learning, dissemination and knowledge bridging- form part of a knowledge sharing and learning continuum within the SSI program (Bhatt, 2004).

The SSI outreach contributes to improving the integrated research outputs, ensure that there is a continuous reflection on the relevance and demand for SSI knowledge outputs, and give SSI a channel to share knowledge and lessons and learn from other programs. The outreach and knowledge sharing within the SSI Program is coordinated by IWMI in partnership with two field-based organisations, viz. the Farmer Support Group (FSG) in South Africa, which is a designated SADC centre of excellence, and the Soil-Water Management research Group (SWMRG) in Tanzania, which has vast expertise in Participatory Action Research and Learning.

**Strengthening participatory research within the SSI programme**

As a first step, the SSI program embarked on efforts to build the capacity of the SSI research team on Participatory Action Research (PAR) and application of participatory approaches in the life cycle of the project. One brief orientation workshop was organized for the SSI team in December 2004 at Pietermaritzburg, South Africa to build a common understanding on principles of PAR. It was also used as a planning exercise to plan much-detailed hands on training on PAR for the SSI research team. Following this an intensive training course was organized in Moshi, Tanzania, where the team spent four days learning about and practicing application of PAR principles and methodologies. The team used the principles of outcome mapping to develop a common vision and mission for what they want to achieve at the end of the program. Following this the team identified their immediate boundary partners and the different outcome challenges they would face in the process. These were identified at three different levels, namely- (1) stakeholder level; (2) the internal systems and processes needed for achieving goals identified at stakeholder level; and (3) opportunities for learning and growth for the team to effectively realize the identified outcomes.

The team then identified their progress markers/milestones that would help them monitor their progress towards the identified outcomes and worked on individual and team strategies to finalize individual and team responsibilities in achieving the outcomes. The team is now implementing their work plans for 2005 and will meet in January 2006 to review the progress towards the outcomes and share experiences they have had in implementing participatory action research in the field. The SSI program has now identified their key boundary partners/stakeholders at local, basin and policy
levels and through SSI outreach partners in Tanzania and South Africa are working on their meaningful engagement in the SSI research.

**Framework for KS and learning**

Knowledge Sharing (KS) within the SSI program happens at multiple levels (Figure 4). First, within the SSI research team itself as it consists of eight PhD students and two Post Doctoral Fellows, who come from different Universities and countries. Second, between the two SSI research basins in South Africa and Tanzania. Thirdly, this happens among the SSI research products and its stakeholder groups at farm, watershed, basin and policy levels and finally with the global scientific community and other global programs on water food and environment.

SSI has adopted the Action Research Framework for Knowledge Sharing and Learning where planning, action, reflection and learning are continuous parts of a learning spiral at all levels (Figure 5). It has developed strategies to share the lessons learnt from action research in the SSI program within projects and across basins, with Sida-supported and other initiatives in Southern Africa, and other similar projects contributing to the global agenda on water, food and the environment.

SSI also collaborates with Global Knowledge sharing Initiatives like the Comprehensive Assessment on Water Management in Agriculture, the Challenge Programme on Water for Food, the HELP programme of UNESCO and the Ecosystem Millennium Assessment. The purpose is not only share SSI research outputs but also gain from research and knowledge produced elsewhere.
**KS within the SSI program**
SSI organizes an annual scientific workshop every year where everyone presents their progress, constraints, results and papers. These workshops serve as stimulating vehicles for constructive discussions, KS and learning. With the inclusion of the outreach component within the SSI program, the frequency of these KS workshops is planned to be twice a year from 2006. Another positive factor that encourages KS within the SSI team is the fact that researchers are encouraged to exchange information and produce joint publications. This creates a lot of positive energy within the team. In addition, it provides opportunities for learning from the results of the experiments because everybody is working in the same sites. In addition, team meetings during occasional international conferences provide such KS and learning opportunities.

Being geographically dispersed, the SSI program extensively makes use of its website for KS. It is planned that the research team publishes all its data, information and knowledge on the website for ease of sharing knowledge, initially, within the program. In addition, SSI has a well-established Community of Practice (CoP) consisting of the SSI research team which regularly communicates and exchanges ideas of common interests. This CoP facilitates the exchange of experience; stimulate creative thinking and knowledge generation within the SSI. The program has plans to extend the CoP’s beyond the SSI program in future.

**KS beyond the SSI program**
In order to share knowledge from the program, SSI will develop appropriate ‘Knowledge Sharing Products’ (KSPs) for stakeholders at different levels for increasing the awareness level on the issue, to stimulating creative thinking and facilitate the up-take of SSI research outputs.

Owing to the nature of the program where PhD students come and go from the field, the SSI program works very closely with its outreach partners, the farmer Support Group (FSG) in Thukela basin, South Africa and the Soil and Water Management Research Group (SWMRG) in Pangani basin, Tanzania. These organizations not only provide support to the researchers during their fieldwork, but also ensure continuous sharing of knowledge in the two basins. The program is also exploring further partnerships with other relevant organizations and networks (e.g. SEARNET, RELMA, PROLINNOVA), to further increase the outreach of SSI research outcomes.

The Knowledge Sharing and learning vehicles that SSI use/plans to use- at various levels- during the life of the project, include-

**Field level**
Farmer Field Schools, Farmer Field days, Demonstration plots, Field Trainings and workshops, Farmer Feed-back meetings, Exchange visits, producing brochures, posters, leaflets, and information dissemination through program partners through their communication tools and networks, etc.

**District/watershed Level**
Promoting local multi-stakeholder Dialogues, regular newsletters, material support in form of toolkits and guidelines to organizations involved in district and level planning and implementation, sharing results as they come.
National and Policy level
National level policy Dialogues, Policy Briefs, Research reports and Synthesis documents, Articles in national, regional and international magazines, etc.

Scientific Community level
Scientific publications, Research reports, Synthesis documents, Capacity building material for post-graduate education and courses on IWRM, Participation in scientific conferences, workshops, etc.

By end of 2006, when initial results from the SSI research start coming up, the program intends to extensively use the local, national and international media for sharing SSI research outcomes and promoting awareness. In addition, the SSI researchers will participate and share generated knowledge in national, regional and international meetings and conferences; and other stakeholder and scientific forums.

Expected outcomes of Knowledge Sharing and learning in SSI
It is expected that Outreach and Knowledge Sharing in SSI program will contribute in a big way in enhancing the impact of the SSI research at local, basin and policy levels. It will strengthen the delivery of relevant and appropriate integrated research outputs from the SSI programme. It will further improve the replicability of SSI research outputs in other similar multi-disciplinary action research programs. It is expected that the knowledge (methods, tools, guidelines, papers, etc.) generated from SSI research will be widely used by development and policy initiatives on integrated water resource management. As the program focus is Southern Africa, most of the Knowledge products (policy briefs, fact sheets, and training materials) will target mid to senior level water managers in Southern Africa. In addition, the program intends to synthesize the learning and develop capacity-building materials for use in post-graduate education and short courses on IWRM. Finally, the lessons learnt from SSI research will be shared and recognized as a key contribution to the global water, food and environment agenda.

Case study 2: “Models for Implementing Multiple Use water Systems for Enhanced Land and Water Productivity, Rural Livelihoods and Gender Equity” (MUS)

The project Multiple-Use Systems (MUS) was created in response to a call for research proposals by the CGIAR-Challenge Program for Water and Food (CPWF, 2005). It is a joint action research programme, focusing on models for implementing multiple-use systems for enhanced land and water productivity, rural livelihoods and gender equity (known as the MUS project in short). The project is funded by the Challenge Programme on Water and Food (CPWF) and other donors, with partners providing matched funding.

The overall goal of MUS-project is to 'enhance land and water productivity, improve rural livelihoods and promote gender equity' (MUS, 2005). MUS does this through promotion of multiple-use systems, in particular by designing, testing and promoting models, guidelines and tools for the upgrading of existing systems to systems where sources, users and users are effectively integrated. It has two key objectives:
1. **Capacity building**: To engage, inform, prepare and strengthen the capacity of project partners and of other participants of Learning Alliances, including professionals and policy makers from the domestic and productive water sectors in NGOs, government, financing institutions, private sector, and development organizations, to jointly promote a 100-fold wider implementation of multiple-use water supply systems after this project.

2. **New knowledge**: To generate new knowledge and synthesize existing knowledge into innovative models, guidelines, and tools that can be used to produce quantifiable positive impacts on the food security, income, work load, health and well-being of the poor, particularly of women and children, HIV/AIDS victims and child headed households.

MUS project aims to meet its goals by combining action research with capacity building, however knowledge sharing within and beyond the project becomes a key criterion for the projects success. The action research will focus on developing and testing the mentioned models, guidelines and tools. Knowledge sharing will help in its application and bringing in the desired change in the attitudes, beliefs, perceptions, practices and policy environment.

The project does research in eight countries in five major river basins: Bolivia and Colombia in the Andes, Ethiopia in the Nile basin, India and Nepal in the Indus/Ganges basin, Thailand in the Mekong basin and South Africa and Zimbabwe in the Limpopo basin. By working in so many countries, the project aims to learn from different types of situation, allowing partners from participating countries to learn from each other’s experiences.

MUS has a wide range of expertise, skills and contacts in science and in rural development. At the moment, it has seven lead partners (The International Development Enterprise (IDE), USA, the International Water and Sanitation Research Centre (IRC, Netherlands, The International Water Management Institute (IWMI), Khon Kaen University (Thailand), Mekelle University (Ethiopia), the Natural Resources Institute (NRI), and the Unité Mixte Recherche Eau (CEMAGREF), and has a growing list of associated partners.

**MUS conceptual framework**

To operationalize the concept of 'multiple use systems', the MUS project conceived a framework based on experiences and insights of all partners (Boelee et al., 2004) and using the Learning Wheel by method (Hagmann, 2005) defined its ‘cornerstones’, i.e. elements that must be in place in order to have a full multiple use system, be it at the end user, the district or the national level. The project identified 11 cornerstones that must be in place in order to realize a full multiple use system and services (Boelee et al., 2004). For each cornerstone, MUS will establish the base line information at each site. Research and implementation actions are derived from these cornerstones, some of which do apply and can be realized for all sites. The framework also allows integration of the results into the bigger picture. The framework will guide the iterative process of action, reflection and joint re-planning, and help to integrate conceptual development, planning and knowledge management (Van Koppen et al., 2005)
Learning Alliances for up-scaling and promoting multiple use systems

The MUS project works to engage, inform and strengthen the capacity of project partners and professionals from the domestic and productive water sectors with the aim of scaling up more integrated approaches to water services at local level. Action research and capacity building are carried out in learning alliances of stakeholders working together on the issue of multiple-use water services and related initiatives.

A Learning Alliance is a structured platform of a range of partners in a particular geographic area with different concerns (those of the various end users) and capabilities (implementation, regulation, policy and legislation, research, learning, documentation and dissemination). It breaks down barriers to sharing of information and creates a means for negotiation, and thus speeds up the process of identification, adaptation, and uptake of new innovations. Working together in implementation and research within an alliance of practitioners, researchers, policy makers and activists will lead to greater impact and more potential to go to scale through development of (i) capacity of Learning Alliance members, (ii) ownership of the concepts and process, and (iii) locally appropriate innovations.
One of the most important elements of a successful Learning Alliance is a shared understanding of the problem to be solved and a set of common objectives. All organizations participating in a Learning Alliance should have a vested interest in dealing with a specific issue and in the innovation to overcome it. The first step of establishing a Learning Alliance is therefore scoping and defining the area of intervention, and identifying the stakeholders to be involved in it.

Learning Alliances are always context specific. Hard rules about who should be involved and in what manner cannot be formulated. It may depend on the specific topic of work, organizations available and interested, resources available, etc. The key points are to have a common vision as to what the objectives of the alliance are, and to include stakeholders from implementation, policy, regulation, learning and dissemination backgrounds. Deciding who is to be involved in a Learning Alliance is critical to the immediate success of sharing the results of action research, and to the likelihood of successful scaling-up. The choice should be based on a thorough process of stakeholder analysis and a clear view of the role that partners will take in further uptake and scaling-up.

Table 2: Example of matrix for mapping stakeholders for a Multiple Use Systems Learning Alliance (Moriarty, et. al. 2005)

<table>
<thead>
<tr>
<th>Category</th>
<th>Stakeholder</th>
<th>Role in Learning Alliance</th>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation / policy making</td>
<td>Ministry of Water</td>
<td>Review norms and standards</td>
<td>Capacity to scale up</td>
<td>Politicised</td>
</tr>
<tr>
<td></td>
<td>Ministry of Agr.</td>
<td>Create enabling policies</td>
<td>Capacity to scale up</td>
<td>Politicised</td>
</tr>
<tr>
<td>Innovation</td>
<td>National/local University</td>
<td>Research on new methodology</td>
<td>Strong in content</td>
<td>Often isolated; academic</td>
</tr>
<tr>
<td></td>
<td>Government Research</td>
<td>Research on adoption, impact</td>
<td>Access to sites</td>
<td>Under resourced</td>
</tr>
<tr>
<td>Planning</td>
<td>Local government</td>
<td>Adopt MUS approach in planning</td>
<td>Capacity to adopt and support uptake</td>
<td>Politicised, under-staffed</td>
</tr>
<tr>
<td>Implementation</td>
<td>Dept. for Domestic Water</td>
<td>Scale up implementation through Big reach; continuous presence</td>
<td>Institutions to be involved in it.</td>
<td>Politicised, under-staffed</td>
</tr>
<tr>
<td></td>
<td>Private sector actors</td>
<td>Scale up implementation through Sustainable, flexibility</td>
<td>Institutions to be involved in it.</td>
<td>Unaccountable; profit oriented</td>
</tr>
<tr>
<td></td>
<td>International NGO</td>
<td>Scale up implementation through Strong capacity</td>
<td>Institutions to be involved in it.</td>
<td>No long term continuity</td>
</tr>
</tbody>
</table>
Ownership and 
understanding 
of MUS and its 
impacts among 
national level 
stakeholders

Table 3. Knowledge Sharing in MUS

Effective communication and knowledge sharing between members of the Learning Alliance is crucial. Key elements include: identifying and understanding different perspectives, constant checking that there is still common understanding, sharing results and experiences horizontally and vertically, shared experimentation and learning within the boundaries of existing or realistically attainable institutions and policies. The methods used for communication draw on approaches from a range of disciplines: adult education and capacity building, action research, process documentation, dissemination and sharing, and process facilitation.

While, action research within MUS project focuses on developing and testing the mentioned models, guidelines and tools; Knowledge Sharing will help in its application and bringing in the desired change in the attitudes, beliefs, perceptions, practices and policy environment.

A Learning Alliance follows a structured yet flexible and re-iterative path to progress. Table 3 present a draft of the main and generic ‘steps’ needed in the process of establishing and working with a Learning Alliance at the National level and at the District level. They guide the processes of establishing Learning Alliances at different levels, but clearly should not be followed mechanically. The processes to promote Learning Alliances needs to be dynamic, flexible, and responsive to the actual situation and gradually improving. The ‘steps’ in the tables are like markers or way points on a journey that may start from several different points and follow several different routes, but in which most of these markers will have to be visited at least once. For example, in the beginning the activities may be initiated at the national level and then go to the local level. But it is equally valid to start at the district or at community level if an implementing partner is already involved in work there. What is important is that, wherever we start, we end up with a proper alliance that carries within it the necessary elements to allow for fast scaling-up (Penning de Vries, et.al., 2005).
### A. Learning Alliance at National Level

<table>
<thead>
<tr>
<th>Step</th>
<th>Objective</th>
<th>Activities</th>
<th>Who initiates</th>
<th>Tools</th>
<th>Outputs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Scoping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.assertFalse().</td>
</tr>
<tr>
<td></td>
<td>Come to an agreement as to the boundaries of the issue</td>
<td>Discussion within partnership</td>
<td>Any of the potential LA partners; often an NGO</td>
<td>Discussion</td>
<td>Short (1-2 page) description of issue for use with stakeholders in steps 2 and 3</td>
<td>• Discussions at district level normally start from innovative work that people may want to scale up.</td>
</tr>
<tr>
<td>Step 2: Mapping stakeholders</td>
<td>Know who is somehow engaged with the issue defined earlier</td>
<td>Initial stakeholder mapping exercise (likely to be repeated in next step)</td>
<td>Any of the potential LA partners; often an NGO</td>
<td>• Functional matrix</td>
<td>An initial list of likely stakeholders who may be approached to join the national LA</td>
<td>• Different types of functions are to be represented.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• RAAKS tools (Rapid Appraisal Agricultural Knowledge Systems)</td>
<td></td>
<td>Normally, one targets the line ministries and national organisations from whom the district organisations depend.</td>
</tr>
<tr>
<td>Step 3: Creating interest in a national LA, and formalizing it</td>
<td>Reach agreement on the common objective</td>
<td>Stakeholder workshop; Institutional SWOT; Meetings with key stakeholders; Make TOR LA explicit</td>
<td>Any of the potential LA partners; often an NGO</td>
<td>• Strength of weaknesses, opportunities, threat analysis</td>
<td>Terms of reference (TOR) for the LA</td>
<td>• Initial contacts can take place before the workshop.</td>
</tr>
<tr>
<td></td>
<td>Consolidate commitments</td>
<td></td>
<td></td>
<td>• Sector scan of tools</td>
<td></td>
<td>• Good facilitation will be essential, particularly when there are blockages or good opportunities to take innovations forward.</td>
</tr>
<tr>
<td></td>
<td>Review the m.u.s. cornerstones</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• It may be necessary to create a National Steering Committee with its own secretariat.</td>
</tr>
<tr>
<td></td>
<td>Identify roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Criteria may include: commitment of organisations in district, presence of representatives of national stakeholders in district, ongoing initiatives, etc.</td>
</tr>
<tr>
<td>Step 4: Planning and design</td>
<td>Scoping of national process finalised</td>
<td>LA lead by one or more champion(s) among its members</td>
<td></td>
<td>Project cycle management tools</td>
<td>Work plan for the LA: clear plans for planning, design of interventions, implementation, monitoring and evaluation</td>
<td>• The criteria for institutional linkages are crucial.</td>
</tr>
<tr>
<td></td>
<td>Agreed structure and scope of learning and implementation process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Activities and results are diverse among sites and countries. Communication vertical and horizontal, as well as between MUS project members in other countries, is crucial.</td>
</tr>
<tr>
<td>Step 5a: First year: Identify pilots</td>
<td>Pilot areas agreed; roles and tasks partners defined</td>
<td>In district level discussions with stakeholders ascertain interest, suitability</td>
<td>LA lead by one or more champion(s) among its members</td>
<td>Stakeholder mapping</td>
<td>Reports on • Institutional readiness • Water resource assessment • experiences elsewhere</td>
<td>• For each step roles and responsibilities need to be defined between the member organisations.</td>
</tr>
<tr>
<td>Step 5b: Later on: Carrying out activities in pilots</td>
<td>Get a larger part of the missing m.u.s. cornerstones in place</td>
<td>Field work, lobby, information campaign, discussion sessions</td>
<td>LA lead by one or more champion(s) among its members</td>
<td>Resource assessment</td>
<td>Progress reports on improving the cornerstones</td>
<td>• Some activities, especially around policy development, may not have proper project cycles. Interactions with the LA-workplan are still needed.</td>
</tr>
</tbody>
</table>

### B. Learning Alliance at District Level

<table>
<thead>
<tr>
<th>Step</th>
<th>Objective</th>
<th>Activities</th>
<th>Who initiates</th>
<th>Tools</th>
<th>Outputs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Scoping</td>
<td>Agree on the boundaries of the issue</td>
<td>Discussion within partnership</td>
<td>Any of the potential LA partners; often an NGO</td>
<td>Discussion</td>
<td>Short (1-2 page) description of issue for use with stakeholders in steps 2 and 3</td>
<td>Discussions start from innovative work that people may want to scale up.</td>
</tr>
<tr>
<td>Step 2: Mapping stakeholders</td>
<td>Know who is somehow engaged</td>
<td>Initial stakeholder mapping exercise</td>
<td>Any of the potential LA partners; often an NGO</td>
<td>Functional matrix</td>
<td>An initial list of stakeholders who may be approached to join the district LA</td>
<td>Different types of functions (water users, water providers) are to be represented.</td>
</tr>
<tr>
<td>Step 3: Set up District LA</td>
<td>Establish a District LA</td>
<td></td>
<td>Any of the potential LA partners; often an NGO</td>
<td>Workshop</td>
<td></td>
<td>The criteria may include: geographical conditions, ongoing initiatives, presence of stakeholders in the village, etc.</td>
</tr>
</tbody>
</table>
### Table: Learning Alliances and Planning Cycle

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 4</strong> Planning and Project cycle at district level</td>
<td>Structure the learning and implementation process</td>
<td>Interaction between the District and the National LA (possibly with pilot villages)</td>
</tr>
</tbody>
</table>

- LA lead by one or more champion(s) among its members
- Frameworks for planning, design of interventions, implementation, monitoring and evaluation
- Pilot villages can take part, so that Steps 3 and 4 coincide.
- For each step roles and responsibilities need to be defined between the member organisations
- Ensure that new planning and implementation approaches tailor as closely as possible with existing ones – and that where changes are necessary these are designed and are acceptable at both district and national level.

<table>
<thead>
<tr>
<th>Step 5a: Identify pilot villages</th>
<th>Identify potential pilot villages/communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have pilots as members of LA</td>
<td>LA lead by one or more champion(s) among its members</td>
</tr>
</tbody>
</table>

- Pilot sites identified with reports on readiness and the five capitals
- A ‘champion’ for m.u.s. in the district or village is very helpful.

<table>
<thead>
<tr>
<th>Step 5b: Later on: Carrying out activities in pilots</th>
<th>Get a larger part of the missing m.u.s. cornerstones in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field work, lobby, information campaigns, discussion sessions</td>
<td>LA lead by one or more champion(s) among its members</td>
</tr>
</tbody>
</table>

- As relevant to the cornerstone
- Progress reports on improving the cornerstones
- Actual activities and results may be quite diverse among sites and countries. Communication vertical and horizontal is crucial.

The MUS project expects that Learning Alliances will allow 100-fold up-scaling after the MUS-project because with LA’s a many more and a much wider range of people will be reached than project partners could without them, and because the concept of multiple use systems will be owned by the members and authorities rather than brought by an external driver. If MUS succeeds in creating LA’s with their own champions, chances are much improved for sustainability and hence for impact.

The MUS project will, based on the experiences over the coming years, further elaborate on the principles and practices to promote Learning Alliances at various levels, analyze them to distil the generic features, and summarize these in the form of field-tested guidelines, with references to references, background materials, case studies from different basins, process documentation of success and failures, lessons learned, etc.

**Action Research on multiple use systems**

The second objective of MUS is to gain new knowledge with respect to multiple use systems and its water services. Research on multiple use systems and services is needed since the benefits and cost under various conditions are not fully worked out, and hard scientific proof of the value of the concept, required before donors will be convinced to support major activities in up-scaling, has not yet been given. Research is also needed to prepare and evaluate guidelines. The MUS project, envisages two sets of guidelines: one for implementers of multiple use systems for end users, and one for development of Learning Alliances.

Extensive debates about participatory approaches have shown the importance of involving stakeholders in the analysis of development problems and in the design of possible solutions for communities. This will help to identify the relevant aspects of the problems, create ownership of these problems and the solution, and build the
required *skills and capacities* to tackle similar future problems and manage the solution in a sustainable manner.

The MUS conceptual framework (Box 2) guides Action Research in many ways:

- As a tool for common understanding and vision. It helps to learn together and to recognise the complexity and get a grasp of how to handle it. In particular it leads to a solid research framework that all partners can contribute to without going back to the research leader too often.
- As a frame to identify new activities. In setting up new activities, the context can be analysed together with the main stakeholders and the main areas of interventions of the projects can be defined on the basis of the joint analysis.
- As a frame to monitor and evaluate on-going activities in basins in a strategic way. Basin teams can use the frame to reflect on their intervention and analyse the state of the art for each cornerstone. This helps them to reach a common perspective on where they are, what they consider success and what the knowledge and design gaps are in their existing intervention in an iterative way.
- As a knowledge management tool. The lessons and experiences and methodologies / tools used to enhance each of these cornerstones can be collected, synthesized across programmes and put back into the framework. This way, the frame will build up and enhance a rigorous and systematic learning in institutions / networks. Increasing operational knowledge from different actors on how to manage successful m.u.s. can be integrated in the common frame.

While MUS project, unwinds itself in its research basins, it will extensively use Action Research to evaluate multiple use systems and learn how to implement them effectively, and how it starts to use a Learning Alliance approach for significantly outscaling and upscaling of integrated systems for multiple use of water. It has little facts to share at the moment, however process documentation to acquire them has been initiated in five river basins.

**Conclusion**

We recognize that implementing an impact assessment program is a multi-staged and multi-dimensional process that will involve both qualitative as well as quantitative analysis, not only of the evaluation findings but also of the process of establishing impact at IWMI. Specific procedures for impact assessment have been laid out in IWMI’s Quality Management System (QMS), and we have already started taking small but concrete steps toward better monitoring and evaluating the direct impact of research projects. Projects are increasingly utilizing the impact typology to establish their impact plans at the project design stage itself. Projects are field-testing the suggested impact typology on an ongoing basis and engage in discussions with the impact assessment core group in the institute. Three pilot ex-post impact assessment studies were commissioned and the initial results are coming in and will be available soon.

Knowledge sharing and learning culture in IWMI is blooming and is widely promoted institution wide. Opportunities and spaces are being widely explored for the exchange of ideas and challenges related to KS in research. Learning from the success and failures of past and ongoing projects is actively promoted at IWMI through knowledge sharing workshops, Friday seminars, Thematic Group meetings and online
discussions, Annual Research meeting/ Knowledge Fairs, informal peer assist sessions, and is becoming a part of the Knowledge Sharing culture at IWMI. KS champions in the organization are being identified and nurtured in the organization. Identified set of pilot projects are taking up process documentation of the KS process to establish the impact KS approaches have in establishing the impact of research on the ground.

The pace with which impact and learning culture is growing within IWMI, we firmly believe we will constantly learn and grow and make significant progress in establishment of a meaningful and effective impact assessment program at IWMI and will soon have valuable lessons to share.

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