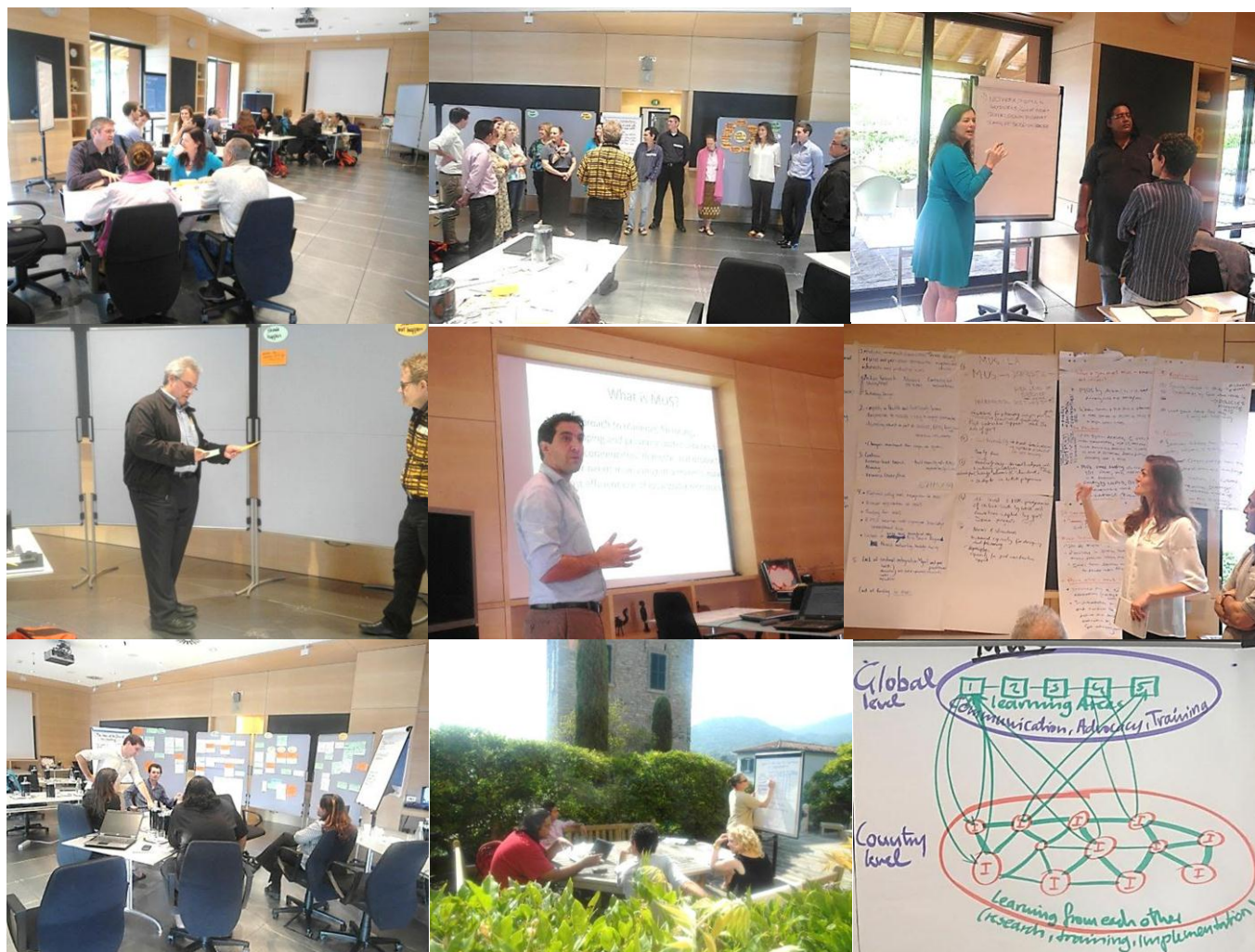# MUS Roundtable Workshop

Held at Bellagio Conference Center, Italy, September 3-7, 2012

WORKSHOP DOCUMENTATION

Workshop Facilitation and documentation: Jürgen Hagmann; and Joe Ramaru (PICOTEAM)

MUSgroup

PICO
Learning together for change

This report documents the MUS Roundtable Workshop Held at Bellagio Conference Center, Italy, September 3-7, 2012. This report is not a final synthesis, but tries to capture the workshop output in a non-interpreted way.

THIS DOCUMENTATION IS MEANT TO BE A REFERENCE DOCUMENT for all participants and is intended to provide details of what transpired. Almost all results of the working groups and plenary sessions are documented.

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Executive Summary

The Multiple-Use Services (MUS) group is a network of 12 core organizations and over 300 individuals working in the field of MUS. The group, which has been operating for eight years, is a platform for information sharing, learning, synthesis, and joint advocacy around MUS. It has achieved successes in innovation, pilot-testing and development of the MUS concept and evidence to support this approach, advocating for the approach among policy makers and practitioners and developing an exhaustive information repository with case studies, research reports and other material on MUS through its website, newsletters and annual meetings. With the interest in MUS growing, there is a need to further develop the strategies for impact of the group.

The MUS roundtable workshop held at Bellagio Conference Center, in Italy (during September 3-7, 2012) was organized by the MUS Group coordinator and secretariat and supported financially by The Rockefeller Foundation. The workshop was aimed at taking stock of the vast experiences in MUS over the past years in order to further develop the concept, practice and communication about the approach. Specific objectives of the workshop were:

1. To develop a common understanding and framework of MUS
2. To elaborate a common direction for MUS (indicators)
3. To come up with strategies for the MUS group to reach success in "moving MUS"
4. To come up with a roadmap for the way forward

The contextual understanding to the workshop was given through presentations that covered amongst others, background information and experiences on the application of the MUS approach; the concept of scaling up; and MUS barriers and opportunities for scaling the approach. In an effort to come to a common understanding about MUS, participants shared and analysed experiences from seven case studies on how they have applied and implemented this approach. Synthesis of these experiences formed a basis to develop the conceptual framework of MUS covering different aspects:

1. The fundamental goals of MUS - Why MUS?
   MUS happens in an unplanned way; taking a structured and planned service delivery approach that can:
   - Maximize return on investment through combined impact on health and livelihoods
   - Improve sustainability of water services by avoiding conflicts and damage through unplanned use
   - Leverage investments in a cost-effective manner
2. Uniqueness about MUS – the added value of MUS
   - The uniqueness of MUS is a combination of several factors: taking people's multiple water needs as a starting point; focus on sustainable services provision; and objective of having direct impact both on livelihoods and health
3. Elements of MUS – the differentiation of MUS from other approaches is on
   - Service delivery framework, much of which is similar in structure and substance to irrigation or WASH service frameworks
   - Participatory needs assessment; planning of services considering multiple needs, water sources, existing infrastructure, financial and institutional capacities; and clearly defined service levels (quantity, quality, reliability, accessibility, flexibility)
   - Additional requirements for: Management and operations (e.g priority setting around parameters of multiple-use); capacity of the service provider and the ones providing

technical support; financial frameworks (e.g. fee setting, cost recovery); and monitoring against the service delivery indicators

4. Barriers and challenges to scale - up MUS were identified in the areas of
   - Capacity to follow the approach, particularly at decentralised level
   - Institutionalization of MUS in government structures and programmes; funding; and regulatory framework
   - Incomplete evidence base; unclear messaging; and ad hoc advocacy

Participants used these challenges/ barriers to develop strategies by exploring the underlying causes, the successes if the challenges get addressed, critical learning questions, and concrete targets of the MUS group in the next 5 years.

Having developed a common understanding of MUS (functions), it was then necessary for the participants to deeply analyse and explore more about the MUS group (form) – "*form should follow function*". Participants analysed the future orientation of the MUS group by defining/ coming up with key elements elaborating on the following aspects:
   - The objectives of the MUS group: these were targets that the MUS group can realistically achieve in the next 5 years?
   - The way MUS members are presently organized: The Strength, Weaknesses, Opportunity and Threats (SWOT) tool was used to deepen participants understanding about the current setup of the MUS group
   - Individual benefits of MUS members. Participants looked at what will keep MUS members to be involved in MUS?

After reviewing the way the MUS group was organised in the past in the context of the new orientation by defining the objectives of the MUS group, participants elaborated on the strategies for the MUS group and its core members to reach this success. The strategies were developed around the following key areas:
   1. Modalities of operation for the MUS group
      - Global level: establish a full time secretariat for doing more advocacies about the MUS approach. The secretariat could also rotate to countries.
      - Country levels: get a focal person in the countries who will work in line with developed TORs.
      - Two options were proposed to operationalize the MUS group:
        o Option 1: Continue with the current modality , but then deal with conflict of interest between secretariat and the host
        o Option 2: Get an independent secretariat to avoid conflict of interest but that may be more expensive
      - Both the two options need a secretary and a chairperson
   2. Actor mapping and communication strategies
      - Focusing on global players (e.g Gender and Water Alliance); Regional Networks (e.g. New Partnership for Africa's Development,); and National Players (e.g. Planning Commission - India)

- MUS-Group can support individual partners for more effective advocacy by providing a). key messages explaining MUS; b) toolkit for developing national / sub-national strategies; and c) capacity on advocacy/communication
- New products that could be developed include generic PowerPoint presentations; 2-pager summarizing evidence; and translations of policy briefs and brochure to Spanish and French
- Improvements to existing products could be on better organization of the MUS Website, *must read* documents and *most popular* documents

3. Theory of change
- Theory of Change (TOC) is a model that informs the assumed relationships between the activities, outputs and outcomes that are being supported
- A process for developing a TOC include defining the working group; timelines; outputs (Vision of success, roadmap, change levers, results framework, and assumptions); and theory of action (ToA) for the MUS Group
- Resources to develop a TOC: Project Superwoman, ToC: A Practical Tool for Action, and Grant Craft.

4. Indicators for MUS and MUS group.
- Select relevant sectoral indicators (from health, WASH, irrigation, other productive uses)
- Consider service indicators for water supply(as relevant for each subsector of water)
- Include indicators for integration of MUS that will incorporate measure of how satisfied users are with the service provided and their perception on how their needs are met
- Consider indicators of value-added of MUS approach versus single sector approaches emphasizing cost-effectiveness and sustainability (infrastructure, environmental)

To map out immediate future actions of MUS and the MUS group, participants agreed on what would be done and reached consensus on those who will be responsible for the proposed actions and deadlines. The next steps (not in terms of priority) are shown in the Table below.

What	When	Who
1. Further development of Indicators	End of September	Ines, Ralph, Martine& Rochelle
2. Theory of Change development / packaging	15th November 2012	Barbara, Stef, Mary & John
3. Two pager on MUS (sum of evidence)	15th November 2012	Sarah, Sanna & Mary
4. Proposal for the mobilization of resources	6th November 2012	Stef
5. Elaborate institutional option & modalities of MUS group – decision process	6th November 2012	Stef, Barbara, & Core members
6. Actor mapping	End of September	Sarah, Robina, Barbara, Sharon & Audrey
7. Develop further learning agenda	End of September	Ralph, Shilp, Barbara, & Sanna
8. Taking stock of evidence base – TOR /format	20th October 2012	Secretariat, Stef, Ines & Ralph
9. Taking stock of tools, guidelines ….	20th October 2012	Stef
10. Finalise workplan	6th November 2012	Stef, Secretariat

Foreword by the workshop organizers

After a decade of innovating and starting to scale Multiple-use water Services (MUS), various gaps have surfaced that hinder the further uptake of MUS. As the highly diverse group of 'MUS champions', we lacked a common definition of MUS and shared understanding of what 'good MUS' is. There was no common vision of change. Strategies, or 'Theories of Change', for scaling MUS to achieve our vision were fragmentary. Moreover, within the MUS innovation landscape, the role and governance structure of the MUS Group, which is primarily based on voluntarism, remained unclear.

We highly appreciate how the Rockefeller Foundation provided the opportunity for a convening to address the gaps at the beautiful Bellagio Conference Center. This MUS Roundtable aimed to bring together the most updated experience with MUS conceptualization and implementation today. This renders the current report a unique global consensus on MUS and its future challenges for individual participants, for their institutions and for the MUS Group. Thanks to the rich outputs of intensive deliberations, the contents of this report and resulting workplan show a strong, new momentum.

We are especially grateful to Jürgen Hagmann and Joe Ramaru of PICOTEAM for their stimulating facilitation and documentation from the early planning phases till this impressive report. It fully met our high expectations.

The well-planned, warm, and tailor-made support by Nadia Gilardoni and colleagues of the Bellagio Conference Center made us truly feel at home and fully enjoy the exquisite venue and environment.

Last but not least, we express our heartfelt thanks to Cristina Rumbaitis del Rio, Robert Marten and John Thomas of the Rockefeller Foundation. John, your very helpful inputs into the preparations and Roundtable itself made a tangible difference. For over a year now, Cristina, Robert and colleagues, you rendered the Rockefeller Foundation a global pioneer in recognizing the potentials of people-driven ways to address the multi-dimensional, integrated and complex nature of real-life poverty, tapping into the water cycle's ecosystem from local to basin level. The Foundation's highly strategic support during the MUS Search in general and this MUS Roundtable in particular is significantly accelerating MUS uptake worldwide.

Barbara van Koppen Coordinator MUS Group

Stef Smits Secretary MUS Group

Foreword by the workshop facilitators

This workshop was indeed a challenging but also interesting one to facilitate. We hope we managed to help the MUS group to achieve the objective of the workshop and articulate clear processes toward further development of the concept and practice about MUS. For PICOTEAM, we took this workshop as a learning process. The workshop also enlightened us as we broadened our knowledge on issues of MUS approach and its operational modalities at global and country level.

We would like to thank all the participants for their active participation and dedication throughout the workshop. It was really interesting to note that despite the time limitation, key issues necessary for the operationalization of MUS approach were discussed and in certain instances, consensus reached on the way forward. Our special thanks goes to the process steering group, which spent some time in reflecting with us the daily proceedings as well as jointly planning with us the next day's process. Without their 'steering and ideas' it would have been difficult for us to navigate through the process and make the 'loose ends meet'. We would like to thank all the members of the synthesis group who volunteered to work late into the evenings so as to synthesize the outcomes of the table group discussions for further deliberations by the participants.

We would also like to thank the MUS group coordinator & secretariat, Barbara and Stef for inviting us and supporting us during the facilitation of the workshop. To the other lovely people (Nadia) who worked in the background to made this workshop a success, thank you! You have made our work very easy and more exciting.

We have really enjoyed working with you all and we wish you all the best as you get ready into the process of implementing the next steps you developed on MUS approach and MUS group.

Best Wishes,

Jürgen Hagmann and Joe Ramaru

ACRONYMS

ASALs	Arid and Semi-Arid Lands
CMP	Community Managed Projects
CPWF	Challenge Program on Water and Food
CRS	Catholic Relief Services
DFID	Department for International Development
DOI	Department of Irrigation
DWSS	Department of Water Supply and Sewerage
FAO	Food and Agriculture Organization of the United Nations
GDA	Global Development Alliance
HCS	Hararge Catholic Services
IDE	International Development Enterprises
IFAD	International Fund for Agricultural Development
IRC	International Water and Sanitation Centre
IWMI	International Water Management Institute
Lpcd	Litres Per Capita Per Day
MASSMUS	Mapping of Systems and Services for Multiple Uses
MDGs	Millennium Development Goals
MUS	Multiple Use Water Services
MWA	Millennium Water Alliance
NEPAD	New Partnership for Africa's Development
NGOs	Non – Governmental Organizations
NREGA	National Rural Empowerment Guarantee ACT
PICO Team	Institute for People Innovation and Change in Organizations
PRA	Participatory Rural Appraisal
PSG	Process Steering Group
RiPPLE	Research-Inspired Policy and Practice Learning in Ethiopia and the Nile region
RRA	Rapid Rural Appraisal
RVWRMP	Rural Village Water Resources Management Project
SEI	Stockholm Environment Institute
SWOT	Strength Weaknesses Opportunity and Threats
TOC	Theory of Change
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VDC	Village Development Committees
WASH	Water/Sanitation/Hygiene
WEDC	Water Engineering and Development Centre
WSP	Water Services Provider
WUMP	Water Use Master Plans

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1) OPENING AND SETTING THE SCENE

The session is designed to create an informal environment and encourage participant to freely interact before they start the workshop.

1.1 Opening and welcoming Remarks

Barbara van Koppen, the coordinator of MUS Group, welcomed all the participants and indicated that she is happy that they have accepted the invitation to come to the workshop. Thanking the Rockefeller Foundation for the support for this Roundtable, she observed the importance of long-term partnerships, for example with the participants of the CPWF MUS project some years ago. Recognizing that many things happened since these years, she is excited that these but also other and new participants are at the workshop to share what they have done.

She then introduced PICOTEAM members, Jürgen Hagmann and Joe Ramaru and asked them to take over the facilitation of the workshop.

1.2 Getting to Know Each Other

1.2.1 INTRODUCTION OF THE FACILITATION TEAM AND THEIR APPROACH

Jürgen Hagmann introduced himself as one of the PICOTEAM Southern Africa members based in South Africa. He gave the full meaning of PICOTEAM as "Institute for People Innovation and Change in Organizations". He indicated that PICOTEAM specializes on facilitation and coaching, change management and organizational development – with predominant focus on agriculture and innovation process. Jürgen added that he has been in South Africa for the past 10 years and now he has moved to Kenya, Nairobi. He started facilitating change processes at community level over 25 years ago, and then moved to a level of working with African Union in the last eight years. He introduced Joe Ramaru, who had come to the workshop to help with the facilitation and documentation of the workshop. He indicated that in 2004, when he met Stef and Barbara, the group was still struggling to articulate MUS and its processes. He was looking forward to those who have been involved in the implementation of MUS to take stock of what they have done and share their experiences.

Workshop Process Steering Group

Jürgen indicated that facilitators were not alone in designing the workshop process. He said that facilitators had some interactions with few of the participants to explore how the workshop could be co – managed through a committee called Process

Process Steering Group
A mechanism for co-management of the workshop by participants.
Tasks:
- To obtain feedback from the participants on the workshop process and content
- To plan with the facilitators the next day in the evening

Members:

- Barbara	- Mary
- Stef	- Deres
- Sarah	- Ines
- John	- Sanna

Steering Group (PSG). The PSG is constituted by a cross-section of participants and organizers and meets at the end of the day to review the process and progress and together plan for the following day.

After introducing the names of the initial five members of the PSG and the proposed three new members from the countries (see the Box), Jürgen urged the participants to give feedback to the PSG.

1.2.2 FACILITATION PRINCIPLES

Jürgen introduced to the participants some key facilitation principles that would ensure an atmosphere that allow free interaction by the participants and the facilitators. These principles are core values and some rules for table interaction:

The core values include:

Informality-(relaxed atmosphere with discipline): Jürgen urged participants to feel at home. It means the least possible hierarchy and formality. We don't need to use titles here in the workshop and people should be happy to be addressed by their first name. Informality also means that we are free to stand up when we feel tired and come back at agreed times after the breaks.

Inclusiveness: naturally, some people are more quiet than others. Jürgen promised that he will try to make everybody to contribute. He promised to give a priority to the quite ones if see that they have raised their hands. In fact, arrangements for the round tables were made so that participants could talk to each other and contribute their opinions.

Openness, transparency, accountability- Jürgen indicated that he hoped the potential donors in the meeting were not going to make people not to open up. Openness is a foundation if we have to make MUS to move. Jürgen encouraged everybody to put their issues about MUS on the table.

No defensiveness: It is not about defending what we do or what we have been doing, but about exploring the issues of MUS in depth. Don't be shy to share what has worked and what has not worked.

No Jargon-we are all used to our projects and the abbreviation we use. Let's use words and statements that create a common understanding and are easy to comprehend. We should all express ourselves in a language that others from different domains can easily understand.

Accepting reality: We should accept that we all have different experiences that will be shared during the workshop. As we discuss issues, let's accept reality and deal with it.

Pragmatism: a lot of things have been tried out and did not work because things have only been based on theory. We need to formulate and come up with practical ways of doing things. We need solutions that can work and to tackle issues that we do not know.

Constructive controversy: our aim in this workshop is to create a debate and let people come up with controversial ideas. That is why we have in this workshop facilitators and not a chairperson. Controversy is the real source of creativity and innovation.

Creativity-thinking out of the box- let us continue to assess what we have done in the past in order to see if there could be new thinking or new way of seeing things, which will be very useful in bringing new ideas. Challenge each other.

Honesty and Political incorrectness –People tend to be politically correct, especially when real sensitive issues are discussed. Let's call a spade a spade in the course of this workshop. People often sugar- coat things and put the real issues under the carpet. Bring out issues on the table and let's deal with them.

Remarks and clarifications
Comment

- On the core value of accepting reality, people should first explain what the realities are, before others could accept such realities. Let's bring realities and elaborate them in details rather than just generalise.

Rules for the interaction at tables are:

Jürgen indicated that the aim of the workshop was for everybody to contribute effectively, and that is why people were seated around the tables. He presented the rules that would enable interaction of participants at the tables.

- **Sit on a new table every half day with new people**. When you come back from each of the breaks, sit at a different table. When you don't like someone, you don't have to be a slave for four days. This will help you run away from a boring neighbour and help you find new people. At the end of this workshop, you would have talked to everybody in this room.
- **Think first individually** and make few notes of your points and ideas and then discuss. This will enrich the discussion and the output of the table group.
- **Encourage the quiet ones.** If someone is quite, ask him/her what they think. You will be surprised to find out that they have good ideas.
- **Only present once.** We don't want to create professional presenters. We don't have a lot of time here but we also want to hear the views of other people.
- **No speeches, be to the point**. Try to share your ideas and opinions in a maximum of 2 minutes
- **No computers during sessions**. You have travelled far to be here and have a face to face meeting. We need 100% of everybody and not 5% during the four days. You can open your computers and do your emails during the breaks.

1.3 **Introduction of Participants**

In order to create an atmosphere for free interaction, it was necessary for the participants to get to know each other beyond names and where they come from. To do so, Jürgen requested participants to sit at the tables with people whom they do not work with every day or do not know very well, and found out from each other who they are, what makes them tick and what excites them about MUS (see the details about the Task in the Box)

Participant's introduction

1. **Make sure that you sit on a table with people whom you don't know!**

2. **Find out from each other**
   a) Who you are and where your roots are?
   b) What makes you tick – where do you get your major energy from? And why?
   c) What excites you most with MUS – and why?
   (15 Minutes)

3. **Agree together** (3 cards per question)
   a) What I you would like to see happening here, is ….
   b) What should not happen here, is ………..
   (5 Minutes)

1.4 **Participants' composition and standpoints**

Who is present?

To get a feel of who is represented in the workshop and how this may have implications on the discussions, participants were asked to move and stand at a large open space in the room. They were then asked to group themselves according to different categories.

1. **Working in the countries:**
   - *Working in specific countries   : 7*
   - *Working globally   : 8*
   - *Not sure   : 2*

   Key: "lets us get the perspective from different countries, lets share what we do and what is happening about MUS."

2. **Categories of organisations)**
   - *Public organisations   : 1*
   - *Research organisations   :6*
   - Non – Governmental Organizations *(NGOs)*   :7
   - *Business   :3*

   Key: "Make sure that you mix in your table groups so that we get the different perspectives from the categories of the organizations that are here in this workshop."

3. **Experiences with MUS**
   - *More than 5 years   : 9*
   - *2 to 3 years   : 3*
   - *Less than 2 years   : 5*

> *Key: "Those with little experience with MUS should not feel out of place in this workshop. We need the experience of the veterans but we also need fresh ideas".*

4. **Working in the water sector**
   - *Water sector* : 15
   - *Not in the water sector* : 2

> *Key: "Let's keep in mind that MUS is broader than the water sector. So, we need other relevant perspective to make MUS move?"*

Standpoints on provocative statements

After getting to know who was represented in the workshop, Jürgen used some provocative statements as a means of initiating debate on some on issues related to MUS approach and its application. The statements were read one at a time, and each participant was asked to position him/herself (take a standpoint) in terms of whether she/he (fully agree; agree a bit, don't know; disagree a bit or completely disagree). This exercise was used to explore the diversity of opinions and to set the basis for open discussion throughout the entire workshop.

Statement 1: "Let's be honest, we are talking about MUS, but we are not clear what we really mean"?

Fully agree: Three (3) participants agreed with the statement citing the following reasons:

- We feel that within our team, we have a clear understanding of what MUS is. But when we talk to people from other organizations, we realize that there is a lot of confusion about the MUS approach.
- We have a well-structured manual of what MUS is, but we are not clear what makes MUS.
- Maybe those who are clear about MUS are those who were involved in the design of the project
- Some of us are here in this workshop to understand what MUS is all about.

Agree a bit: five (5) participants did not agree fully with the statement giving the following views

- We agree that we understand MUS, but we feel we are not clear enough.
- There are some core ideas emerging about MUS, but they are not clear to us.
- People are doing their own things according to their own understanding about MUS.
- MUS is changing because we are learning about it every day when we implement it.
- We say that we are moving from a single source to multiple – source, but is there a difference at community level? We need to clarify MUS by design and MUS by default.

Disagree completely: one (1) person disagreed with the statement arguing that

- We might be doing differently things, but we do have common elements that we are using to implement MUS
- The beauty is that we are applying these common elements of MUS in our countries and then come out with different results.

Disagree a bit: Six (6) participants did not agree fully with the statement giving the following views

- We have a number of MUS champions, and looking at the definition of MUS, I am afraid where they will fall. For example, where are the universities falling?
- The elements that we have for MUS need to be clarified.

In between or do not know: two (2) participants were indifferent presenting the following views

- It is the first time I attend MUS workshop, so I don't have an idea yet about the MUS approach.

Key: "There are some elements of MUS that need to be articulated. The starting point could be to agree on these common elements of MUS approach."

Statement 2: Integrating the two silos, productivity and domestic uses, it will only happen on the ground.

Disagree completely: six (6) participants were completely not in favor of the statement because

- Anything being implemented without policy integration will be impossible to scale out
- For MUS to happen at a scale, we need other levels (municipality, district, national) in addition to the community level
- In all the countries, water is being used for domestic and productive uses.

Fully agree: five (5) participants agreed fully with the statement citing the following reason:

- In Ethiopia, we are integrating domestic and productive uses at community level.
- In Nepal, it is easy to merge the domestic and productive uses, but difficult to integrate these uses at policy level.
- Governments have separate structures to provide services for domestic and productive uses.
- The donor community is putting a lot of energy at community level were these uses are easily merged.
- Communities have been merging the domestic and productive uses since time immemorial
- You can put four people from different departments in the same office for some years, but they will still not integrate what they do around water.
- It is not possible to integrate everything- where do we end?
- A country may have good policies, but still things may not move. A good example is South Africa.
- The problem with integration of MUS is not with the people, but with the silos that have been created.

Key:" In reality, the pull for integration of MUS should be at community level. But things should not just be left to the communities".

Statement 3: "MUS is too complex, that is why it would not take off easily"?

Fully agree: one (1) participant agreed with the statement citing the following reasons:

- It is much easier to implement MUS at community level.
- Complexity is with the institutions and their silos. It is not easy to implement MUS while involving a lot of organizations. Joint implementation by different organizations is not something that will happen automatically, it will take a lot of work and drivers to make it realized.

Agree a bit: two (2) participants did not agree fully with the statement giving the following views.

- We agree to some extent that because MUS implementation is too complex, it will take time to take off.
- We are operating within our silos, and to change the way we do things will take a long time and will be a complex thing to do.
- We need the technical support in the communities to make MUS take off quickly

Disagree completely: seven (7) participants disagreed with the statement arguing that

- MUS is not complex, but there are a number of reasons why it is not taking off. Deeper analysis of the country projects should be done to find out the failure factors of MUS
- People live complex life anyway. Life itself is complex and changing behavior is difficult

In between or do not know: three (3) participants were indifferent presenting the following views.

- Some of us are here to learn more about MUS and its complexity
- Domestic and productive supply are the uses we are used to support communities, what makes it complex is when we have to integrate other uses.
- It depends on the framing of MUS. It is also about how we clarify what MUS is.
- MUS is our development approach, but we lack a basic frame for it. We need a sharper frame approach.

Key:" We have to dig deeper during this workshop and come up with common frame for MUS".

1.5 Participants' Expectations

As part of the introduction exercise, Jürgen requested participants (per table) to agree and write on cards "what should" and "should not happen". A representative from each table presented these cards in plenary.

What should happen?
- Develop the elevator pitch for "MUS"   - MUS definition   - Identify differentiated key messages for key audiences   - Clarify core messages and concepts   - What are the key challenges and issues to move "MUS"
- Stronger network / partnership for sharing, advocacy action   - Group can find a way to work together so that outcome is greater than sum of its parts
- Identify key metrics for "good MUS"   - Indicators to vet and start field testing
- An answer to ….how does defacto and real MUS by design look different on the ground   - Accept tension between diversity of MUS experiences (don't try to put around pegs in square holes)
Practical ideas to take home and apply at scale
What should NOT happen
- Don't get caught up in just theory or just practice/ implementation   "Blue sky thinking" – overly naïve expectation , policy/ changes- institutions   - Limited to / by existing thinking   - All talk with no follow-up   - Talking in circles   - Death by powerpoint – too much sitting   - Outcome disconnected from reality (theory vs practice)

1.6 Understanding the agenda and process

After participant's expectations, Jürgen presented the anticipated outputs of the workshop and the program overview as discussed and agreed upon by the process steering group in the previous day.

1.6.1 WORKSHOP OBJECTIVES

The MUS Roundtable aims to take stock of the vast experiences in MUS over the past years in order to further develop concept, practice and communication about MUS.

Specific objectives

1. To develop a common understanding and framework of MUS
2. To elaborate a common direction for MUS (indicators)
3. To come up with strategies for the MUS Group to reach success in "moving MUS"

4. To come up with a roadmap for the wayforward

Jürgen indicated that the PSG will further reflect on the expectation of the participants on a daily basis as part of the preparation for the next day. He flagged the issue of indicators as a specific point that will need deeper discussion to help get the direction of MUS.

1.6.2 WORKSHOP PROCESS FLOW

In an attempt to clarify how the different pieces of the workshop were connected (for example, how the link between the MUS group and MUS would be handled), Jürgen presented a workshop flow shown diagrammatically through a picture below. During the early days of the workshop, participants would focus on developing the conceptual framework of MUS, giving attention also to the goal and indicators of MUS as well as the strategies to make MUS work and reach a scale. The WHO, in this case MUS group, has to come later – "*form should follow function*".
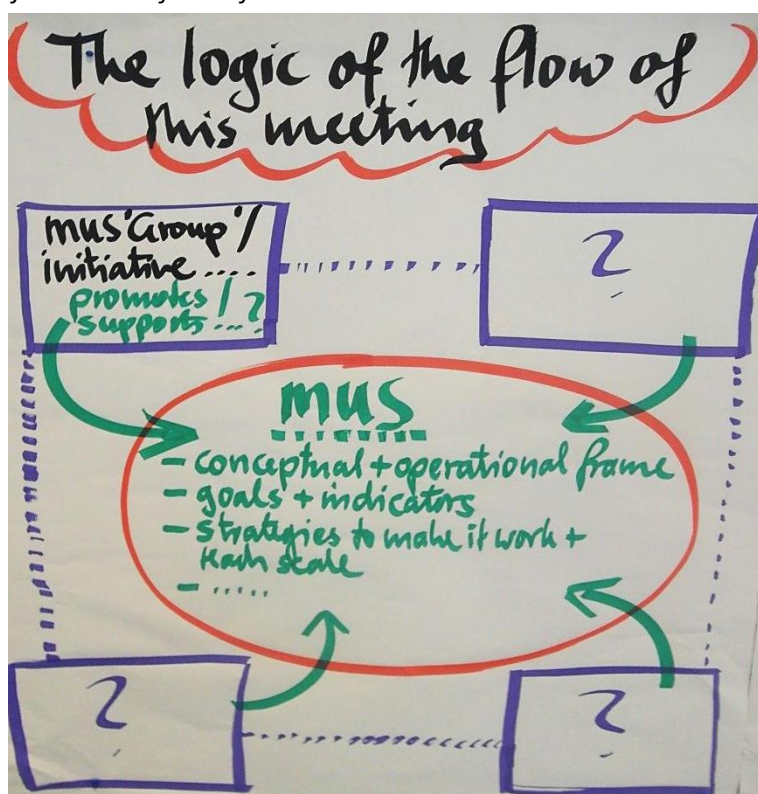
Once an understanding of "what is MUS" (functions), towards the end of the workshop, participants explored the WHO (the MUS group). The MUS group was the one that initiated the meeting for everybody at Bellagio. It was appropriate for participants to explore how the MUS group is organised and its modalities to operationalize the strategies that will make MUS work.

This framework for explaining the logic flow of the workshop may still be relevant to explain to future new members who will be part of MUS implementation to understand the relations between MUS functions and the operational support from the MUS group. Even during the workshop, it was found

that few people started with MUS. So, the framework was important also to bring on board new members so that they would not feel like passengers during the workshop.

1.6.3 PROGRAMME OVERVIEW

In concluding the introduction process, Jürgen presented the programme overview. He emphasized that the programme is flexible. It is only used to guide discussions and can be changed to fit the outcomes of the workshop sessions.

Sessions	Monday, 3rd September 2012	Tuesday, 4th September 2012	Wednesday, 5th September 2012	Thursday, 6th September 2012	Friday, 7th September 2012
Session 1 8:00-10.30	Arrival	Emerging conceptual framework	Strategies for MUS	Direction for MUS Group and Strategies continues	Departures
Session 2 11:00- 13.00	Opening and setting the scene	Success in MUS	Strategies for MUS continues	How to organise ourselves	Departures
Session 3 14:00- 15.30	Analysis of our MUS work	Goals and strategies	Direction for MUS Group and Strategies	Future of the MUS group and wayforward	
Session 4 16:00-17.30	Analysis of our MUS work continues	Goals and strategies continues	Direction for MUS Group and Strategies continues	Next steps Evaluation	
Evening Program		*Open session*	*Open session*		

Remarks and clarifications
Comments
- The analysis of the case studies will help us develop an emerging MUS framework
- Based on the discussion during the setting of the scene, it was clear that participants had different perspectives about MUS. The challenge will be how we would bring these different and interesting perspectives on board. Some research has been done about the existing weaknesses in the public sector to take MUS forward. We should also get some perspective on the side of the public sector from United States Agency for International Development (USAID).
- If we can quantify the benefits of moving from single use to multiple use, it will be easier for the policy makers to support MUS

Key:" You have seen during the differentiation exercise that the public sector is not well represented. During the discussion, change your role and put yourself in the shoes of those working in the public sector. Ask yourself, 'if I was in the public sector, how would I do things differently for MUS to work".

2) COMMON UNDERSTANDING OF MUS AND PROGRESS ON ITS IMPLEMENTATION

Barbara van Koppen presented an overview of the MUS covering background information and experiences on the application of the MUS approach.

2.1 Overview of MUS

Background to Multiple use water services (MUS)
MUS Group and partners Barbara van Koppen & Stef Smits

The local realities behind MUS
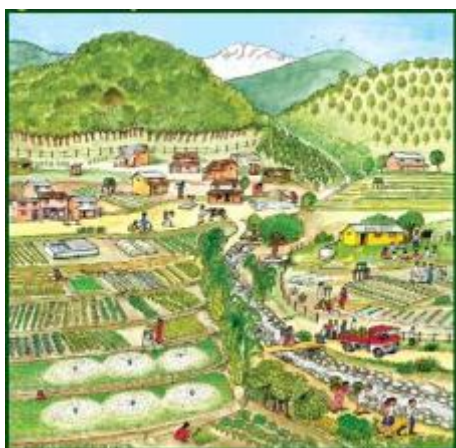
Rural and peri-urban communities construct multi-purpose water infrastructure

o   for **multiple livelihood benefits** and better **cost-recovery**

Communities use and re-use multiple sources for multiple uses

o   for resilient, efficient and sustainable water resource management

Communities turn single-use designed systems into de facto multiple use systems

o   may cause damage, as it is unplanned

What is MUS?

A water services approach that takes people's multiple water needs as starting point of planning infrastructure construction or rehabilitation and management.

So an approach for:

1. Designing multi-purpose infrastructure for cost-effective health, food security, income, labour-saving, etc.
2. Using and re-using multiple sources for resilient and sustainable management of the local water cycle
3. Facilitating community-driven planning for cost-effective and sustainable development

MUS in the water sector's landscape (adapted from: Pacific Institute)
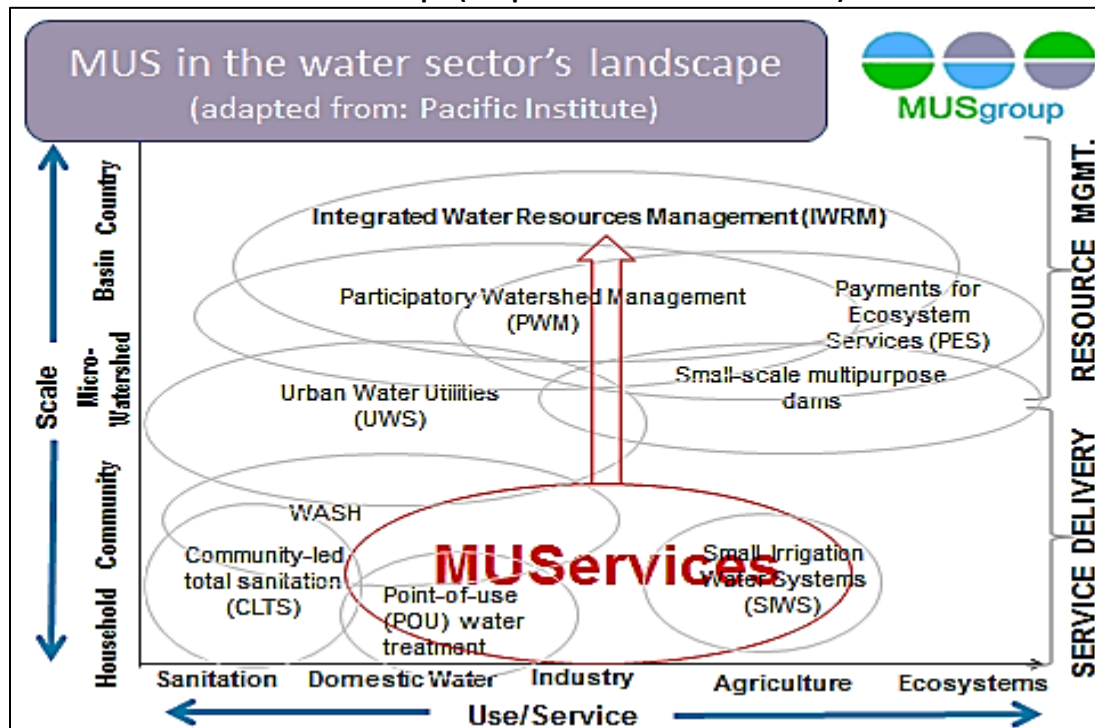
Past MUS innovation

Innovating MUS	Activities
Innovating MUS models, e.g., • domestic-plus • irrigation-plus • MUS by design	• MUS learning alliances with global MUS Group • Pilot testing for models • Synthesis, tools and guidelines
Scaling MUS in policy and large programs	• Advocacy, capacity building

Domestic Plus
- Priority for domestic water uses, at/near homesteads
- At least 5 Litres per capita per day (lpcd) safe for drinking; more water for productive uses

Climbing the water ladder
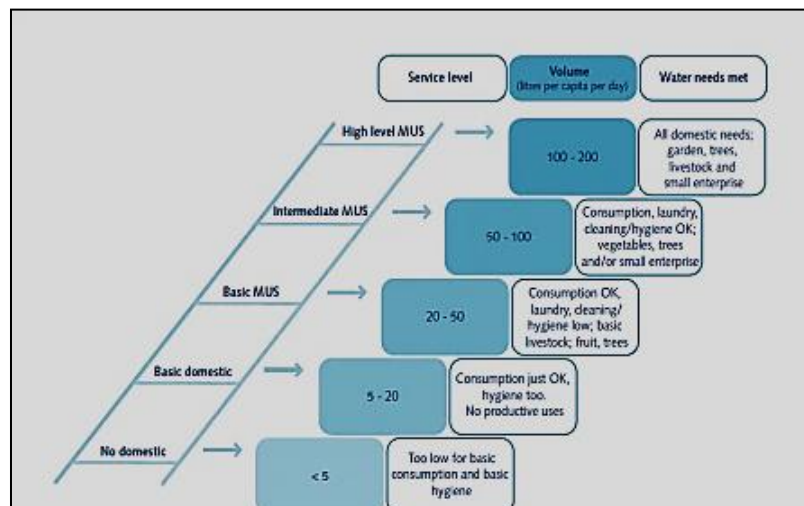
Renwick et al. 2007: Per Capita Income Benefits (by Incremental Service Levels)
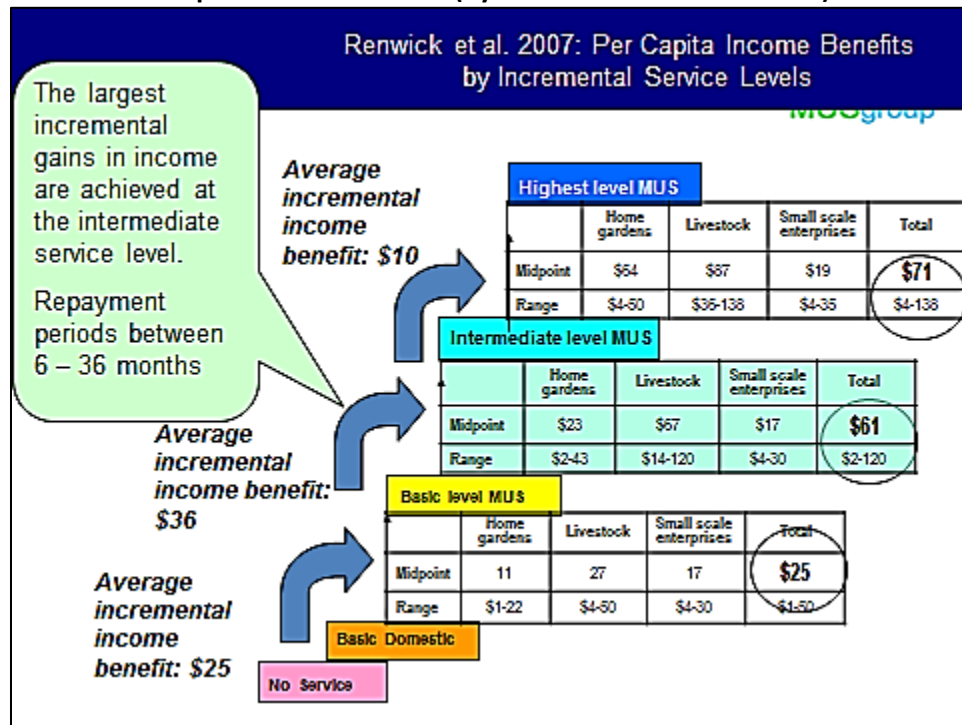
Irrigation Plus
- Priority for crops in fields
- Area-based IWRM, including add-ons (cattle ramps, washing steps), (bulk) municipal supplies, conjunctive surface/ groundwater sources

Example: FAO Mapping of Systems and Services for Multiple Uses (MASSMUS): methodology for management reforms of large canal irrigation schemes

MUS by design
- Participatory planning for informed infrastructure choice
- Building on age-old capitals and local opportunities & constraints
- Both within the water sector and as water component in participatory programs
- By implementing agents and/or local government

Example: India National Rural Employment Guarantee Act 55 million households ! Two-third of works are water assets

Thank you for your attention

Remarks and clarifications

Question: with regards to income benefits, what are the cost benefits in using MUS?

Response: more details on the cost benefits when using MUS can be found from the Gates Global scoping study that Mary will be sharing with the participants during one of the open sessions. From the findings of the study it emerged that the income generated through using MUS can enable repayment of initial and on-going costs for most service levels and technological options, thus making MUS more likely to be sustained

Question: we need to make sure that we have evidence to locate the claim that MUS is working. Do we have the evidence?

Response: there is evidence from the Gates study and other studies that MUS is working. We need to support this evidence with some examples and case studies to support our claims.

2.2 Analysis of the progress in implementing MUS

The presentation on the overview of the MUS provided the context to which the participants could share their experiences of how they implemented MUS in their respective countries. The analysis of MUS work was through a group work involving the case owner, the teaser and the additional participants, most of which have not been exposed to MUS before (for the details about the task, see the Box). Results of the table group work were presented to plenary and followed by some discussions.

Analysis of our MUS work

1. What is 'your' MUS: How do you operationalize MUS in practice and conceptually?
2. What do you find most exciting and promising in your MUS?
3. What next steps in your MUS are you envisaging in your next steps?
4. If all went well, what would you yourself have achieved within 5 years, at which scale?
5. Which 2 main obstacles would you have overcome by then?

→Group of 3: one from the case chosen, one "teaser" who probes tough questions, and one from other participants

→Visualize on flipchart (not more than 2 sheets) and put them up on the wall.

2.2.1 SCALING – UP COMMUNITY DRIVEN MUS THROUGH NREGA

NREGA stand for National Rural Empowerment Guarantee ACT

1. What is 'your' MUS: How do you operationalize MUS in practice and conceptually
    - Study looked at DeFacto Community Driven creation of MUS
2. What do you find most exciting and promising in your MUS?
    - Potential scale. In Rural India, there is 4.5 billion $ going into asset creation and maintenance
3. What next steps in your MUS are you envisaging in your next steps?
    - The next steps are unclear, but there is a possibility of:
      - o Of NREGA – MUS Network going into
        - ➢ Knowledge centre
        - ➢ Piloting and documenting the successes
        - ➢ Capacity building for village institutions and
        - ➢ NREGA administration (District level)
      - o Generic tools for
        - ➢ Planning and prioritization
        - ➢ Technical planning and implementation
4. If all went well, what would you yourself have achieved within 5 years, at which scale?
    - Network and piloting in two districts, government of India and donors showing support to the program based on the successes
5. Which 2 main obstacles would you have overcome by then
    - Convincing government and or donor to invest in software for MUS
    - Creating simple, highly adaptable toolkit and getting people to use it

Remarks and clarifications

Question: you say that the process of implementation was free for all, with government providing technical support and maintenance. Are you suggesting a more structured and supply driven approach to build and repair the infrastructure**?**

Response: on paper, the project is supposed to be demand – driven. But in some cases, the government is implementing the project through a supply – driven mode of operation.

Question: how do people organise themselves to apply for the job?

Response: they group themselves such that 7 – 8 people can be placed on a particular project.

Question: if you have 2000 projects, this is massive. Who plays the role of a catalytic agent?

Response: the process gets facilitated at local level through participatory planning where communities prioritise water. The plans are then screened and get supported by NREGA at administration level (District level). Of the 600 districts in India, we propose starting piloting the MUS-NREGA network in two districts.

Comments:
- When implementing MUS at a large scale, we may not be stuck with quantity but with quality.
- There is a survey done that shows that if assets are implemented properly, the returns are realized in less than a year.

2.2.2 WATER AND SANITATION PROGRAM (WSP) MUS STUDY

1. What is 'your' MUS: How do you operationalize MUS in practice and conceptually?
   - Extent of productive use of piped rural domestic water supplies
2. What do you find most exciting and promising in your MUS?
   - Capture as many water – using activities as possible (to what degree and which source is water being used for)
     - Sample frame design issues
     - Over million data points
   - Engagement in productive water – based activities similar across different types of piped systems and different levels of water consumption (so, why focus on volume)
     - Poses a problem of MUS by design
   - Extent of engagement varies among countries and among the regions in same countries
     - MUS high -Low definition for each country –
       - Like census data
       - High correction for livestock
       - Piped water
     - Local context matters
   - Extent of MUS is related to presence of other development programs
   - MUS is largely a phenomenon of middle wealth class – how to engage poorest to their benefit
3. What next steps in your MUS are you envisaging in your next steps?
   - Based on these results, layout new research agenda
4. If all went well, what would you yourself have achieved within 5 years, at which scale?
   - An evidence base that provide answers or suggestions for questions of interest
5. Which 2 main obstacles would you have overcome by then?
   - Funding for research at significant scale
   - Long term complex research is expensive
     - Can we afford to do this research at the sub – national scale required to provide actionable data

Remarks and clarifications

Question: how do you measure engagement of the community in productive and consumption water uses?

Response: we ask community members to mention anything they do with water, for example, on crop production. You then realise that the uses of water are context specific. The more you dig and probe to understand these uses at local level, the more you find that the process is complex.

Question: how much relevant is the study to influence policy in the three countries that were covered?

Response: we were doing the study for Water and Sanitation Program (WSP), World Bank, they have all the research outputs and data that they can use the results for anything, including policy influence.

Comments:

- MUS is complex to study, unlike single source systems. We need different types of studies from which we can learn a lot of more and open up new areas of research

2.2.3 WINROCK CASE STUDY

1. What is 'your' MUS: How do you operationalize MUS in practice and conceptually?
   - MUS is an approach with
     - o Clear principles, practices, conceptual and operational framework
     - o It is continuously evolving but with a solid foundation
     - o It is based on the implementation in seven countries where works is done on
       - ➢ Research
       - ➢ Advocacy (there is a 2 1/2 minutes video of practical experiences)
2. What do you find most exciting and promising in your MUS?
   - Beyond proof of concept
   - Solid basis, tested, still learning and evolving
   - Self-critical / reflexive
   - Huge learning process
- What next steps in your MUS are you envisaging?
  - Consolidation and reflection
  - Quality control
  - Lesson learnt
  - Visioning and strategizing
3. If all went well, what would you yourself have achieved within 5 years, at which scale?
   - Sustainable MUS
     - o Durable water services, health and livelihoods
     - o Money to pay for services
     - o Management capacity
     - o Supply chains
     - o Local and international levels
   - Training
   - Policy change that is conducive to MUS

Remarks and clarifications

Question: what kind of work have you done in using the MUS approach?

Response: most of the work we have done was based on domestic use plus and MUS by design.

Question: you say that you would want to see people in the next five years paying for services and having management capacity, but that will not be an easy thing to do.

Response: one of the things that we like about MUS is that it is an approach that is reflexive, and as such, we are prepared to learn. For us, sustainability is not only when people have the ability to generate income, but also when there are few conflicts in the communities. So, MUS would help us to address multi – dimensional issues related to the causes and effects of poverty in the communities

Question: what kind of technological support are you providing in the countries you are engaged with?

Response: The technological supports vary, but each technology is being chosen based on the reality on the ground and what people can afford. For example, we do gravity scheme in Tanzania, water harvesting in Rwanda, and hand pumps in Indian. In most of these countries, high cost technologies will not be sustainable.

Comments:

- We have the MUS approach which is still developing but the base is there. Our application of the MUS approach depends on the reality on the ground.
- In future, we want to do a trainer of trainer program on MUS

SIMPLIFYING MUS USING VIDEO DOCUMENTATION

Winrock shared a video to illustrate how they simply the concept of MUS to its beneficiaries and partners. The link to the video that was presented is:

http://www.youtube.com/watch?v=rT_yFKbpN_E&feature=plcp&noredirect=1

Remarks and clarifications
Comments:

- The video is a clear formulation of what we have been discussing since the start of this workshop
- It is simple and everybody can understand MUS well
- It shows what can be done with MUS
- In trying to illustrate the context, and showing the difference between the current and the new situation, it would be good if that difference can be shown by a simple table.
- It might be good also to show more of the single use approach rather that only show why we should use MUS
- The video could have been more convincing if we could have used life experiences rather than animations
- But, if you use life experiences, people in other contexts might think that those experiences do not apply to them
- Animations are related to people and open up their minds to creative solutions
- Winrock does have some videos that have life experiences and which are a bit longer

2.2.4 MUS ETHIOPIA

1. What is 'your' MUS: How do you operationalize MUS in practice and conceptually?
    a) **The concept**

This is a holistic approach to sustain water services for improved health and livelihood in rural and peri – urban areas. In summary, MUS is

- Holistic, multi – dimensional water service delivery
- Rural and peri – urban communities
- Domestic and productive uses
- Systems and services

MUS is operationalized through

- Action Research studies and M&E
- Advocacy LPSs flows
- Contracting out implementation
- Technology design

b) The practice
- MUS is being undertaken traditionally as indigenous knowledge
- Communities use water sources for various purposes: domestic use, animal watering, small-scale irrigation, etc.

c) Research-inspired Policy and Practice Learning in Ethiopia and the Nile region (RiPPLE's) work on promoting MUS:
- Conducted preliminary assessment on MUS experiences
- Facilitated the MUS group 2008 international symposium in A.A.
- Published working papers and briefing notes on MUS policy and practice and self – supply since 2008
- Construction of sand and subsurface dams for MUS in collaboration with International Water and Sanitation Centre (IRC), RAIN, Hararge Catholic Services (HCS) and AFD
- Facilitate meetings and discussions on MUS for the participation of researchers , academia and practitioners
- As entry point to MUS, encourage government and NGOs to deliver MUS for animal, agriculture and domestic uses (irrigation canals with cattle troughs, water points with washing basins and water troughs, backyard gardens around water points.

d) Types of MUS in Ethiopia
- Domestic plus: use of water for domestic and other purposes (livestock watering, sanitation and hygiene, smallscale irrigation….)
- Irrigation plus: use of the water for irrigation and livestock watering, domestic, sanitation and hygiene.

e) What makes MUS different from single uses
- A holistic approach that provides different benefits to communities
- A more economical and cheap system to construct than investments in single use
- Provide users with different benefits as opposed to single use systems
- It is a value added system that responds to different economic needs

f) RiPPLE's MUS implementation includes
- Conduct research on MUS benefits
- Identity key lessons learnt and advocating scaling up of MUS
- Linking MUS to improved food security
- Promoting and advocating MUS to influence policy and practice (through LPAs, Flows, ..)
- Capacity building (awareness creation, training …)

g) Technological design
- Implementers make designs for MUS services
- RiPPLE work with partners in studying
  - o Economic benefits and affordability
  - o Management aspects
  - o Contributions towards livelihood improvement
  - o Ownership of services by the community

- o Sustainability of services
- RiPPLE and its implementing partners (IRC, RAIN Foundation, AFD, HCS, UNICEF, ADCS, IWMI) work more on service provision

2. **What do you find most exciting and promising in your MUS?**
   - Provide multiple water services for meeting people needs: Impact in health and food security / income
   - Responsive to needs – easy to engage communities
   - More donors and practitioners are showing interest to fund and promote MUS for enhancing impact at community level:
     - o United Nations Children's Fund (UNICEF)
     - o Department for International Development (DFID)
     - o Dutch development Cooperation
     - o World Vision
     - o Catholic Relief Services (CRS)
     - o Water Aid
   - Cheaper investment than single - use system
   - Due to existing indigenous practices/ needs, it is easy to convince communities to practice and scale up

3. **What next steps in your MUS are you envisaging?**
   - There is a need to continue and disseminate
     - o Evidence based information and best practices on MUS.
     - o Advocacy: enhance work through policy and practice influencing through forums and event for scaling up
     - o Resource Centre / Hub: To serve as MUS knowledge management resource centre for policy makers and practitioners
     - o Build capacity with / in RIPPLE and implementers (government and NGOs) at different levels
     - o Get well organized for successful delivery of partnership programs (UNICEF, Dutch Development Cooperation, IRC/RAIN)

4. **If all went well, what would you yourself have achieved within 5 years, at which scale?**
   - The MUS agenda becomes a well-recognized strategy of service delivery at policy level
   - Broader application of MUS with many practitioners including MUS in their programs/ projects
   - Funding for MUS: Many donors are adequately convinced to support MUS
   - RIPPLE becomes well organized knowledge management hub (resource centre) for MUS
   - Succeed in using MUS throughout the Nile Basin Region through networking, knowledge sharing etc.

5. **Which 2 main obstacles would you have overcome by then**
   - Lack of sectoral integration by government and practitioners. WASH implementation framework could be useful in Health, education and Water as well as in Agriculture
   - Lack of funding for MUS

Remarks and clarifications

Question: what do you mean by lack funding for MUS?

Response: we have a situation where the Ministry of Energy and Water in the country want to increase the potential of agriculture by supporting the irrigation schemes, but do not want to fund MUS.

Comments:

- Presently, MUS activities are mostly in Ethiopia. But, RiPPLE would like to provide MUS services to the whole of the Nile Basin through collaboration with other stakeholders.

2.2.5 MUS LATIN AMERICA

1. **What is 'your' MUS: How do you operationalize MUS in practice and conceptually?**
   - Implementing MUS (domestic plus) leading to high level of services (100 to 200 lpcd)
   - Incremental costs of about 5% to 8%
   - Guidelines (specifically for domestic plus) for planning and pro – poor gender focus
   - Post construction support and the role of government

2. **What do you find most exciting and promising in your MUS?**
   - Sustainability
     - By avoiding breakages
   - Increase potential for cost recovery
   - Poverty focus
   - Scale
   - Relatively easy – no need to integrate with agricultural sector

3. **What next steps in your MUS are you envisaging?**
   - Finalising the guidelines
   - Advocate for change in norms and standards
   - Adopt in the WASH programme

4. **If all went well, what would you yourself have achieved within 5 years, at which scale?**
   - At least one MUS programme of certain scale by WASH institutionalized
   - Guidelines adopted by government
   - Demonstration projects

5. **Which 2 main obstacles would you have overcome by then**
   - Norms and standards
   - Technical capacity for designing and planning
   - Capacity for post construction

Remarks and clarifications

Question: where are some of your projects?

Response: We have integrated MUS activities on a small scale through domestic plus approaches in countries like Colombia. Honduras is one of the countries where we have assessed, planned, designed and applied the model to help communities with domestic water supply.

Question: how are you intending to overcome the obstacle of norms and standards as indicated in your presentation?

Response: already, in Honduras, the designed norms are to promote 30 gallons per day of domestic uses, and we hope that this will be a sustainable system. For us sustainability means having services that last forever: water resources that are available at the end of the project support, and communities having mechanisms to maintain the assets and repair them.

2.2.6 MUS NEPAL

1. **What is 'your' MUS: How do you operationalize MUS in practice and conceptually?**
   - MUS by design (45 lppd for drinking need and 500 lts/ households)
   - Water sources and pipelines and storage tanks + tap stands + MIT + MUS plot + high value crops
   - Energy + sanitation + cooperatives + community organizations
   - **In practice**
     - Water use master plans (WUMP) implemented in 47 VDC (village development committees)
     - 54193 PoP
     - 35 schools now
     - 210 system developed, 6 solar MUS under construction, USAID funded ICCA project by promising to install 15 MUS and small foundation funding for small MUS
     - MUS cross cutting elements in International Development Enterprises (IDE) Nepal, MUS approaches in all proposals
     - Funding by USAID, DFID and EU, Renewable World, Bilateral (Finland)
   - **In concept**
     - Integrating MUS with water shed planning and management

2. **What do you find most exciting and promising in your MUS?**
   - Use of micro irrigation technology
   - Developed in small pockets that enable access to inputs and markets
   - Small point sources are utilized to develop into MUS

3. **What next steps in your MUS are you envisaging?**
   - Implement MUS in climate change adaptation (and mitigation – energy option)
   - Institutionalize MUS – policy lobby and conduct workshops to deliver the findings of recent evaluation by sub – committee of government advisory committee

4. **If all went well, what would you yourself have achieved within 5 years, at which scale?**
   - Growing interest in MUS (Schemes and WUMPS)
   - Understanding by government
     - What is MUS
     - Policies knowledge on MUS
   - Local grant fund for MUS (only at local level)

5. **Which 2 main obstacles would you have overcome by then**
   - Separate policy for drinking water, irrigation and energy
   - Organizations have their own specialization and mandate
   - MUS must be included in Nepal water resource strategy (traditional mindset - up)

6. **How to overcome**
   - Local grant for MUS
   - Growing national consensus
   - Engineering carry out training
   - Learning Alliance

Remarks and clarifications

Question: can you say more about the services and support from other stakeholders?

Response: we work with local government and other likeminded organisations. We do more of social mobilisation. More than 50% of funding comes from government.

Question: how has the implementation of MUS by design affected the funding and the cost of operations?

Response: implementing MUS by design meant increased costs from constructing low cost gravity fed system and additional storage tanks. But, a small study done by IDE has shown that MUS increase the annual income by more than $200 per household. The increased incomes can payback the cost of MUS infrastructure within one year.

2.2.7 MUS FAO

1. **What is 'your' MUS: How do you operationalize MUS in practice and conceptually?**
   - Food and Agriculture Organization of the United Nations (FAO) uses MASSMUS as an approach / a methodology
     - Mapping systems and services for multiple uses in large scale irrigation systems

2. **What do you find most exciting and promising in your MUS?**
   - Eye opener for irrigation managers
   - Taking into account multiple water needs when modernizing large scale canal systems

3. **What next steps in your MUS are you envisaging?**
   - Regional/ national and global level capacity development of MASSMUS
   - Certification of irrigation experts in the use of MASSMUS
   - Field testing and finalization of gender module of MASSMUS
   - Test MASSMUS on innovative financing mechanisms for multiple water services

4. **If all went well, what would you yourself have achieved within 5 years, at which scale?**
   - Certified experts who could use and apply MASSMUS
   - Experts who could incorporate gender concerns into modernization of irrigation management

- MASSMUS application becomes a usual practice in significant of a large scale irrigation systems

5. **Which 2 main obstacles would you have overcome by then**
   - How to value benefits
   - How to optimize MUS system with multiple variables (efficiency of MUS system)
   - Management and institutionalization

Remarks and clarifications
Comments:

- During the World Water Forum held in March 2012, we presented MUS as an innovation framework for financing. This we hope will help the irrigation managers to maximize the returns of people where MUS is used.
- There are lot of dynamics involved when working with local people and different service providers around water service provision. For example, local people use water from the canals for domestic use, but they are not supposed to. Also, some local companies take water from the canals, purify the water and sell to the local communities.

2.3 Synthesis of MUS experiences

To further analyse the MUS experiences shared from seven case studies, Jürgen asked participants to discuss in their table groups and extract insights and observations that emerged during the presentations and discussions. More details about the task is illustrate in the Box.

Synthesis of MUS experiences

What are the 5 – 7 key emerging issues and lessons coming out of these experiences – and your own experiences – for the future of MUS implementation?

Please use cards

Report back by the groups

• Recent set of tools for planning infrastructure for multiple uses fit to context   • Tools and guides for each stage of the life cycle of services   • Different from multi – use services provision (irrigation, domestic and de – facto domestic plus)   • Need for methodology but need to open minds
• MUS is equal to multiple use services   • Services are: service level, are developed and agreed upon, service providers and life cycle of services

• Funding/fund flow .
      o "Pro – MUS" opportunities
      o Government and non – government
 • Can MUS be commercialized?

• Not big body of evidence (costs and benefits, the poorest of the poor)   • Better communication of incremental costs / benefits   • MUS is cheaper overall – examples and evidence   • Are we sufficiently capturing the evidence base from international MUS (do implementers have the

capacity and skills) • Is MUS targeted effectively? • What are the true costs of MUS? What should be included (transaction costs, for example acquitting engineers , hardware, software , post – construction support • Making the invisible visible
• Selling MUS in the context of "holistic" development • Holistic approach (entry point?)

• MUS principles and practices exists, but those would need champions
    o Observable needs (e.g. working extension)
    o To be in the position of influence
    o Operate across levels
• Who will be the MUS champion?- highly dependent on context
• Champions are not just one organization or one individuals

• Policies • Institutions • Mind sets
• Skills for service provision • Adaptive management capacity
• 74% of families have small productive activities
• Post construction support is not clear
• MUS has WASH indicators – MUS becomes WASH

Remarks and clarifications
Comments:

- We need to take into account the need of the people when designing and implementing MUS
- Solutions that we have to get are not the same
- What is the balance between instructing and letting people implement MUS the way they understand it
- We need to show the difference on cost / benefit and have in mind who is the target audience
- There are walls between Departments. It means that there are institutional issues that have to be addressed when working with MUS
- Issues of integration: it means that you cannot do domestic plus without engaging the irrigation sector. It also means that when you enter through irrigation plus, you need a different level of integration.

2.4 The concept of scale and scaling up of MUS

2.4.1 THE CONCEPT OF SCALING UP

Presentation made by Stef Smits

Scaling up

- Replication and increased impact of a certain type of intervention
  - More of the same, and thereby reaching more people
  - Sustainability of the services being delivered through the intervention
- Thus… sustainability is part of the definition of scaling up

Scale(s) of intervention

- Sustainability cannot be achieved at community level only
- Requires interventions at different institutional levels
  - National level – for change process in norms, standards and policies
  - Local government level – building capacity for planning and post-construction support
  - Service provider – establishing service providers and developing their capacity
  - Service delivery – the system in a village, town, command area that delivers the water
  - Catchment scale – to address water resources management issues
- MUS requires probably intervention at all these levels in order to be able to provide sustainable services

Economies of scale

- Particularly many support activities do not make sense if they only cover one system or village
- Economies of scale start playing out, when larger geographical areas are covered, particularly with support activities (supply chains, post-construction support, etc.)
- Allows then also for pooling resources with other projects and programmes
- Reinforces the need to work at different levels of scale

Achieving scale

- Need to work at the scale of larger geographical areas (district or command area)
- Therein, addressing the needs of service providers and services in that area
- But also addressing institutional change requirements at those higher levels of scale
- May require pooling and coordination with other actors

Remarks and clarifications
Comments:

- Sustainability is part of scaling up. But, to reach sustainability in the usage of MUS approach, we need interventions that touch different levels.
- In using MUS, we need a shift away from the "hardware" to 'software'. We need to build the capacity of the implementers and beneficiaries of MUS that would enhance the latter to reach the economy of scale- not capacities that only focus on technologies.

- It will be less costly for MUS implementation if the infrastructure is built from combining the contributions of resources from the different stakeholders.

2.4.2 MUS BARRIERS AND OPPORTUNITIES FOR SCALING MUS

Presentation made by Barbara van Koppen & Stef Smits

"If MUS is such a good idea, why doesn't it scale up more widely"?

Strategies for scaling MUS

Innovating MUS	Activities
- Innovating MUS models, e.g., - domestic-plus - irrigation-plus; productive-plus - MUS by design	- MUS learning alliances with global MUS Group - Pilot testing for models - Synthesis, tools, guidelines
Scaling MUS in policy and **large programs, with scaling partners**: - Domestic-plus >WASH - Irrigation/productive- plus >irrigation sector - MUS by design **water services** **participatory development, employment** **(water) resource programs e.g., 3 R, NRM**	- Awareness raising, advocacy, capacity building - Implementing and monitoring large-scale MUS programs, analysing barriers and solutions for scaling - Refined synthesis, tools and guidelines

Mandates/ financing earmarks - 1

a) Domestic-plus and irrigation-plus
- "Single-use design is already so complex, don't complicate more"
- Top-down priority setting and financing earmarks for single livelihood benefits through single uses
- Upward accountability
- More expensive design and planning

Mandates/ financing earmarks - 2

a) Domestic-plus
- "Providing domestic-plus services delays delivering basic services to the unserved"
- "Productive uses steal from domestic uses"
- "Waste of expensive treated water"

Mandates/financing earmark - 3

a) Irrigation-plus

- "I forbid drinking from my canals. If people fall sick, I will be held accountable. The WASH sector is responsible. "

Mandates/financing earmark - 4

a) Employment programs
   - Communities not in the driver's seat
   - Productive asset creation a secondary goal

Mandates/financing earmark - 5

a) Resource programs
   - Limited attention for services, institutional sustainability and equitable resource distribution
   - Communities not in the driver's seat

Capacity

All: domestic-plus, irrigation-plus, MUS by design in participatory development, employment, and resource programs

- Lack of facilitation skills for participatory planning in water development and management
- Lack of engineering capacity for participatory design of multi-purpose infrastructure and combining multiple sources

Conclusion: overcoming barriers

- Wide funding earmarks and mandates
- Building capacity for facilitating participatory planning and technical design for multipurpose infrastructure with multiple sources
- Targeting the marginalized, including women, in participatory planning
- Across the water sector: prioritizing domestic uses; ensuring 5 lpcd safe water in most appropriate way

Thank you for your attention
www.musgroup.net

Remarks and clarifications
Comments:

- We have people who don't have any alternative but to use irrigation water from the canal for domestic use, including for drinking. But, who should be responsible if people drink from the canal and get sick. If you make WASH sector to be responsible for the people to get clean water, you know they will get a good service. But if the problem of sanitation becomes everybody's responsibility, that will end up being nobody's responsibility – nothing will happen.
- Engineers are responsible for managing the water in the irrigation schemes, but they cannot be held responsible if people steal water from the canal and use it for drinking and later get sick.

3) EMERGING CONCEPTUAL FRAMEWORK OF MUS

3.1 Why MUS

Jürgen indicated that it was time participants step back and ask themselves, *Why MUS*? He said that the discussion about MUS has so far been in cycles and there was need for the participants to explore the value addition about MUS. Details about the task are illustrate in the Box.

Why MUS

What is it that we really want to achieve through MUS- what are the 3 fundamental goals we are aspiring in MUS?

(things which cannot be achieved through domestic or productive alone!"the value added of MUS')

Please use cards

Report back by the groups

Sustainable services
- Sustainable services   - Better performance   - Return on investment   - Better capacity   - Financial sustainability - better ability and willingness to pay related to productive use   - Based on real needs   - Higher level of services in quantity, on quality, and the service delivery indicators
Sustainable infrastructure
- Reduce risk of damage to infrastructure, conflict, breakdown related to unintended uses   - Cost – effectiveness, multipurpose infrastructure without damage   - More "busy" and professional users committee
Environment sustainability
- Environmental sustainability – water resource protection and management   - Sustainability efficiencies of local water cycles
- Sustainability: Services, water sources, livelihood, nutrition, resilience,   - Improve health and livelihoods and sustainable MUS
- Potential to meet needs of everyone but risk of reinforcing existing inequalities   - Community decides; – intra – inter equity   - Added values: communities age-old 5 capitals for multiple uses / sources   - Impact: alleviate burdens, health and income, livelihoods and poverty
Efficiencies of services, invest and related activities
Meet the people's needs: livelihood and nutrition needs
Leverage: bang for the buck (systems are sustainable and impact and product quality)

Remarks and clarifications
Comments:

- There is a bit of an overlap, but new things are coming out clearer
- The question is, how much of these do we have evidence for. The work that Ralph has presented added some evidence for the fundamentals
- For the big chunk of these fundamentals, we have evidence in the form of case studies
- This is good picture of what MUS could achieve
- The definition of MUS takes care of most of these goals
- For each of these benefits, you can see how the change takes place when using MUS in relation to domestic-plus and WASH for example.
- It is clear that the outcome of MUS is better livelihood of the local people, how we go there is through participation
- We have to be wary to unite people around the concepts
- If there is something to use to flag MUS, it has to be around the benefits (for example, improvement of livelihood)
- The outcomes of MUS get realized because the process is participatory
- From a general perspective, we have to make sure that basic needs are met first as a priority. That can be achieved if the process of designing MUS and its implementation is participatory and inclusive
- We need a set of arguments on where MUS is different from conventional approaches and what is good MUS
- We can get clarity of what we want to achieve with MUS if we can compare MUS to other approaches (for example, Irrigation plus and domestic plus)

Winrock's MUS implementation model
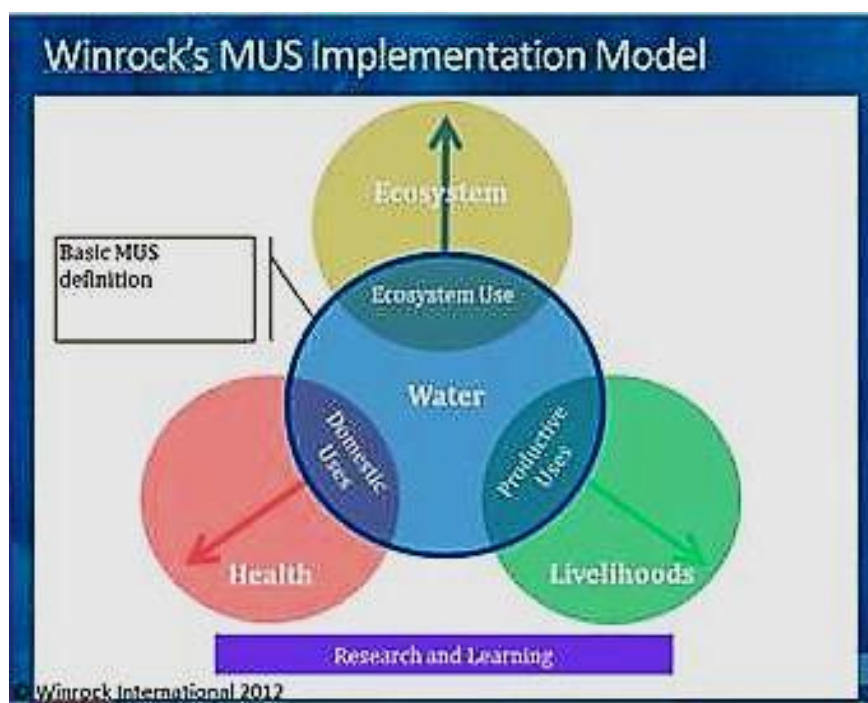
The Winrock's MUS implementation model shown above was presented by Mary Renwick as an input after an intensive discussion on the fundamental goals of MUS - "Why MUS?". She indicated that the conceptualization of the model was based on practical experience of implementing MUS in the communities together with the partners. She added that in deepening their understanding of MUS, they have tried to be reflective and continually questioned their work. The result has been their evolving conceptual and implementation models.

According to Mary, the basic definition of MUS encompasses domestic use, productive uses and ecosystem uses. In this way, the provision of water to the beneficiaries touches into the health (hygiene and nutrition) benefits. Provision of water also caters for livelihood initiatives (e.g. improve food security). She concluded that the ecosystem is important because as we provide some of the needs to the communities, we are limited by nature. In some of the areas where Winrock work with the communities, they look at issues such as reforestation.

Remarks and clarifications

Question: how do you practically provide water service and at the same time encompasses issues of health and ecosystem

Response: in Tanzania, we cover ecosystem, livelihood and health issues through established linkages with Care International. It all depends what the needs are. For some of the demands from the communities, we create partnership with other service providers.

Comments:

- It means that we need a more flexible funding to enable us to look at water and some elements of development when we use MUS
- You can have MUS, but if the approach is not applied to support other services in the communities, we don't go anywhere.
- In the world of sustainability, because ecosystem is one of the elements, this may be weak model. For strong sustainability, the ecosystem surrounds the whole system. Therefore, our interventions will be implemented within the ecosystem environment.
- It should not be about copying what Winrock is doing, but it should be about taking the ideas and see what they mean to other projects implementing MUS.

3.2 Uniqueness about MUS

From the goals of MUS developed from the group work and the follow-up discussion, it was not clear what makes MUS different. There was a need for the participants to go deeper and go to the specificity of MUS. Jürgen asked participants to come up with things that they thought were unique for MUS.

Unique about MUS

What is that you think is unique about MUS?- unique added value.

Please use cards

Report back by the groups:

- Recognizing people's multiple needs for water
- Priority for 'domestic uses'
- Seeking to meet them in a holistic and lasting way
- Multi – sectoral
- Water for basic domestic and basic productive uses for all
- Combination of
  - Need based
  - Water services
  - More potential for sustainability and equity
  - Higher impact on livelihood and health
- Sustainable indicators for multipurpose technology (domestic + livelihood + software management + Training ….) incorporating
  - Inputs
    - People water needs
    - Available needs
  - Outcomes
    - Health
    - Livelihoods
    - Nutrition
    - Income
    - Participation
    - Resilience

Comments:

- Many aspects of sustainability are linked to the governance of the local groups (Water Users Associations). If there is a strong local organizational capacity, then there is a potential for a sustainable service provision and infrastructure management.
- There is still a need for a synthesis group to work and polish the ideas from the groups and come up with what is unique about MUS. The synthesis group will put the inputs from the participants together and present to everybody.

3.3 Indicators for the success of MUS

A good implementation of MUS should be about getting a water provision system that work – this is an important stage after the design of the project. Jürgen asked participants in the table groups to think through indicators for the success of MUS (see the Box for the details about the task).

Quality in MUS

What are the quality criteria you would apply to assess the quality of MUS implementation.

(please differentiate the different levels/ elements of MUS to make the criteria concrete and specific)

Please use cards

Report back on the quality criteria for MUS

• Quality of water services (quality, quantity, reliability, location of source) • Outcome: users satisfaction • Provision of water services against agreed set of service indicators (quality indicator for users)
• Water resource sustainability • Assessing a range of available water resources and matching the needs • Enabling MUS services in water resource management
• Financial sustainability for cost effectiveness and L.C.C • Identify cost sharing mechanisms for all life – cycle costs
• Health related metric • Livelihood related metric • Maximizing opportunities to enhance health and livelihoods • Enable collaboration and seek synergies for the support of activities (e.g. extension services for planning and after) • Clear expectation on health and livelihoods entrepreneurship
• Process indicators inform technology choice (long term consensus for support) • Process indicators for genuine need assessment for high quality and inclusiveness • Responsive to people's needs • Participatory planning assessment and planning for multiple sources, multiple needs, different uses and groups, gender and social inclusion.
• Capacity of the community to support it • Adaptive capacity to respond to changing needs • Service providers that can deal with changing demands (conflicts, tariffs, etc.) • Capacity of local government for planning, implementing budgetary and post – construction support for MUS
• Build on good practice in WASH and for irrigation services
• Equity
• Supply chain
• Multi – year vision
• Build on good practice in WASH and for irrigation services
• Quality MUS is more creative

Levels of success (flip chart paper)

Basic level	Intermediate level	Higher level
• Assessment of all sources • Assessment of all users/ needs by participatory and inclusive planning • Design of hard and software as per inclusive planning • Service manager	• Cost – effectiveness • Productivity maximization leading to financial sustainability • Full recovery of operational and management costs • Conflict resolution	• Resource (water) and environmental sustainability • Full recovery of asset costs • Institutional sustainability • Define service delivery and monitoring of service delivery for different uses

	mechanisms • Infrastructure sustainable (not adapted by users)	

Remarks and clarifications
Comments:

- Some of the things need to be stripped away and others need to be added
- Some of the things if they are not there, then there is no MUS. For example, assessment of people's needs.
- Some people use MUS, but they don't work on environmental issues, as if resources are not threatened by their project work
- As an approach that enhances change, MUS is moving with time. Are our quality criteria capturing the fact that MUS is not a rigid approach?
- MUS provide us with an approach that helps us to adapt our implementation with time. We have to periodically come back to our vision of MUS and replan and adapt what we do.
- There are elements that we are aware of from the service delivery framework. We can use them to develop the framework of MUS.
- MUS is different to other approaches with respect to some key features: use of multiple resources, costs effectiveness and sustainability.
- We need to focus on equity and inclusiveness as a niche for MUS.
- We don't have to reinvent the wheel. We need to use what is already available and adapt it for MUS.
- We are not doing anything new. We are doing the same things, but doing them differently.
- We need to sell to people that the approach to implement MUS is not a rocket science

3.4 Barrier for MUS

Jürgen indicated that a lot of barriers came out when participants were presenting their analysis of MUS work from their case studies. But, during the PSG, some people felt that the table group analysis was shallow. He requested them to reflect on their experiences from implementing MUS and come up with barrier to the scaling up of MUS (see Box for full details about the task).

> **Barriers for MUS**
> What are the deeper underlying barriers to scale up and exploit these potential of MUS fully?
> Please come up with 3 major barriers, formulated as challenges: "how to ……….)
> →Go deep
> →Use cards please

Report by the groups, presented based HOW to ……

A: How to develop capacity for scaling up MUS at all levels?

- How do you develop capacity for MUS at all levels: for example, community (articulate needs), village committee (concept, emerging needs), district and central
- Accelerate scaling up technical capacity to all districts (Coming – 15 years)
- Lack of capacity at all levels:

- - - o Single sector, operation and management is already an issue, MUS requires multiple skills, etc.
- Post construction support for service delivery
- Build adequate time for needs assessment into typical project cycle
- Skills for service provision
- Adaptive management capacity
- Recent set of tools for planning infrastructure for multiple uses fit to context
- Tools and guides for each stage of the life cycle of services
- Different from multi – use services provision (irrigation, domestic and de – facto domestic plus)
- Need for methodology but need to open minds
- MUS is equal to a multiple use services
- Service level are developed and agreed upon
- MUS targeted effectively?
- Making the invisible visible

B: How institutionalize MUS in government structures (from pilot to programs)

- Building the case of government: Rehab, sustainability, coverage and cost - benefit
- Ability of local government to match locally identified needs with sectoral planning
- Narrow institutional mandate (policies, standards) – single use focused, turf wars, resistance to change
- Single – sector, top down focus, lack of understanding of existing systems
- Infrastructure approach vs service delivery
- Coordinate among diverse actors with different agendas
- Funding/fund flow .
  - o "Pro – MUS" opportunities
  - o Government and non – government
- Can MUS be commercialized?
- MUS has WASH indicators – MUS becomes WASH
- Policies
- Institutions
- Mind sets
- Post construction support is not clear

C: How to influence decision makers? Incomplete evidence base and ad – hoc advocacy

How to raise awareness and advocate for MUS to influence key decision makers	How to develop the evidence of MUS benefits and operational modalities which work
- We don't have a good idea of what information is required to influence decision makers what MUS is worth trying (and not clear roadmap) - Lack of awareness of MUS - Afraid of failure - o If not in request for applications (RFA), implementers are afraid to propose it - o Decision makers afraid to try it since their mandate is single sector systems	- Lack of evidence for demonstration effect – lack of operational models - Position of uncertainty: cost – effectiveness, improved sustainability and equity - How do you assess the value of different uses of productive irrigation systems? So that irrigation users can be satisfied with provision of these uses. - Not big body of evidence (costs and benefits, the poorest of the poor)

• Gap at global level for small scale productive water user - no analog to WASH and Millennium Development Goals (MDGs) • Better communication of incremental costs / benefits • Selling MUS in the context of "holistic" development • Holistic approach (entry point?) • Convince funders to create more flexible funding streams to support MUS • Achieve economy of scale	• Are we sufficiently capturing the evidence base from international MUS (do implementers have the capacity and skills) • What is the true cost of MUS? What should be included (transaction costs, for example acquiring engineers , hardware, software , post – construction support • MUS is cheaper overall – examples and evidence • 74% of families have small productive activities

Remarks and clarifications

Comments:

- These barriers are not context specific. Those presented here are general. They are not applying for all the countries.
- Normally, knowledge intensive approaches, such as MUS are very slow. If we take a long time (say more than 10 years), to develop the capacity to implement a good MUS, people will jump off.
- There is a challenge of getting funding for using knowledge intensive approaches. Many funders want to reach beneficiaries within a short period of time, they don't have time to allow participatory processes such as need assessment.
- Institutional issues are important to define when implementing MUS. Normally in an organization, those policy makers who support knowledge intensive approaches like MUS do not stay long, as such the vigor with which the initiative started slows down.

3.5 Overall synthesis of MUS and its direction

The synthesis group composed of Sarah, Stef, Shilp, Ronald and Robina was asked to analyze and refine the table group outputs together. A presentation of the work done by the synthesis groups was made to all the participants and comments and inputs made during the discussions. The following is the corrected version of the synthesis work.

Why MUS?

- Because it happens anyway in an unplanned way; taking a structured and planned service delivery approach can:
  - Maximize return on investment through combined impact on health and livelihoods
  - Improve sustainability of water services:
    - ➢ Avoiding conflicts and damage through unplanned use
    - ➢ Potential to improve capacity and willingness to pay for the service
    - ➢ More efficient use of local water resources
  - Leverage investments in a cost-effective manner

What is MUS?

- An approach to planning, financing, developing and providing sustainable water services to meet people's domestic and productive water needs in an integrated manner, making most efficient use of water resources

What is unique about MUS?

Combination of:

- Taking people's multiple water needs as starting point
- Focus on sustainable services provision
- Objective of having direct impact both on livelihoods and health

Elements of MUS

- Service delivery framework, much of which is similar in structure and substance to irrigation or WASH service frameworks
- With the big differences lying in:
  - o Participatory and inclusive needs assessment
  - o Planning of services considering multiple needs, water sources, existing infrastructure, financial and institutional capacities
  - o Resulting in clearly defined service levels (quantity, quality, reliability, accessibility, flexibility)
- This then may mean additional or different requirements for:
  - o Management and operations: priority setting and conflict resolution around parameters of multiple-use
  - o Capacity of the service provider and the ones providing technical support: adaptive capacity
  - o Financial frameworks: fee setting, cost recovery, cost sharing; recognise differential water use
  - o Monitoring: against the service delivery indicators

Barriers and challenges to scaling up MUS

- Capacity to follow the approach, particularly at decentralised level (government and NGO staff, service providers, etc.)
- Enabling environment
  - o Institutionalization of MUS in government structures and programmes
  - o Funding
  - o Regulatory framework, incl norms and standards
- Influencing decision makers
  - o Incomplete evidence base
  - o Unclear messaging
  - o Ad hoc advocacy

Remarks and clarifications

Comments:

- The presentation from the synthesis group has a nice flow and captured the debated we had on the goal of MUS, the uniqueness about MUS, the indicators and barriers.
- It is important to articulate what we mean by service level.
- The group discussed whether 'service levels' was too focused on domestic water supply.
- We have to define the availability of water resources in an economic sense

4) TOWARDS THE DEVELOPMENT OF THE STRATEGIES FOR MUS

Based on the way the synthesis group reworked and clustered the challenges, Jürgen asked participants to go into three groups and develop strategies (following the task in the Box) to deal with the following challenges:

- How to develop capacity for scaling up MUS at all levels
- How to influence decision makers? Incomplete evidence base and ad – hoc advocacy
- How institutionalize MUS in government structures (from pilot to programs)

MUS - Dealing with the Challenges / Barriers

Please work on the challenge area you choose:

1. What are the real deeper underlying issues in this challenge area? (screen the cards and come up with a list of the key issues)
2. What are you aiming at / what do you want to achieve in an ideal world in dealing with this challenge? (How would success look like?)
3. What are then 3 most critical learning questions in this area you want to answer / find solutions together? (formulate: HOW TO………?)
4. HOW: what are good strategies and practices which can address these challenges effectively:
   a. What are promising strategies and guiding principles in dealing with this challenge?
   b. Which methods and tools have shown high potential in practice?
   c. Which cases seem to provide good demonstrations of successful practice / innovative solutions to learn from?
   d. What other ideas and alternative / new things could projects try out in order to find solutions?
5. After exploring this topic, what are now concrete TARGETS we as group can realistically achieve in the next 5 years? (products, impacts…)
6. Are there knowledge gaps, where you need expertise outside this group to help you 'break through'? If yes, what expertise / models / tools would you require? (also look at dissimilar experiences, completely different 'out of the box' ideas….)

BE SPECIFIC AND CONCRETE as much as possible!
Please choose a facilitator and visualize the discussions on flipcharts
Please nominate a rapporteur who writes a 2-3 page summary report for the documentation.
Please present the outcomes of your group in the plenary electronically in max 10 minutes

4.1 **Report by the groups**

4.1.1 CAPACITY GROUPS

Capacities at different levels
1. Global – Advocacy and Attitude change (covered by another group)
2. National (Country) – Advocacy and Attitude change (covered by another group)
3. Local (Implementation scale / service delivery scale)

Different types of capacities are needed in the different phases of implementing MUS
1. Assessment
2. Planning
3. Implementation
4. M&E
5. Dissemination

Two different groups involved in multiple use service delivery are:
- Users – Households, Village Communities
- Implementing Agencies – Government Line Departments / NGOs / Private Service Providers

	Assessment	Planning	Implementation / Service Provision	M&E	Adaptation	Dissemination
USERS						
Households	Articulation and Prioritization (1)					
Communities						
IMPLEMENTING AGENCIES						
Government Line Departments	Harnessing local knowledge; Technical capabilities for identification of multiple sources (1)		Service Delivery Approach (2)	Building the body of knowledge for scaling up (3)		
NGOs						
Pvt. Service Providers						

1. PRA/RRA tools exist; training on how to use them needed
2. Modular approach to indicators
3. Draft and vet MUS indicators of integration and value-addition (vis-à-vis single-sector projects) and the methodology of measurement. Population-Health-Environment indicators and similar lists from WASH and Irrigation can be used as a guideline.

1. **What are the real deeper underlying issues in this challenge area?**
   a. MUS is a new approach
   b. MUS is knowledge intensive therefore greater capacity needs
   c. MUS design has to be context specific for diverse applications
   d. Need for adaptations increases the capacity required

2. **What are you aiming at/what do you want to achieve in an ideal world in dealing with this challenge? What would success look like?**
   a. Capacity gaps do not exist anymore
   b. Documented body of literature exists
   c. Globally accepted / standard tools and toolkits emerge, in a modular and organic manner
   d. These tools are accessible and available in the public domain
   e. Trainers exist
   f. MUS approach recognized and integrated into mainstream curriculum (at different educational levels)

3. **What are the 3 most critical learning questions in this area you want to answer/find solutions together? (Formulate as a how to…)**
   Three critical capacity gaps in the six identified phases are identified:

   a. Assessment phase:
   Users are not able to articulate and prioritize their needs and implementing organizations are not able to harness local knowledge (e.g. on available sources).
   Technical capabilities for identification of multiple sources

   b. Implementation / Service Delivery approach
   Service delivery approach as such is still new. It is not yet fully implemented and tested in the domestic sector.

   c. M&E
   Building the body of knowledge for scaling up. Evidence is not only needed for lobby and advocacy work, but a knowledge base is also needed for developing training materials and curricula. Also agreed and generally accepted indicators and principles are needed.

4. **HOW: What are good strategies and practices which can address these challenges effectively? What methods and tools? What cases provide good example?**
   A lot of materials and tools already exist e.g. Participatory Rural Appraisal (PRA)/ Rapid Rural Appraisal (RRA); yet these might need to be adapted. Having materials or manuals is not enough; training <u>on how to use</u> them is also needed. There is an urgent need for good trainers and facilitators in the different countries.
   a. Service delivery approach is still under development like Triple S for WASH> perhaps good link can already been made to include MUS.
   b. Draft and vet MUS indicators of integration and value-addition (vis-à-vis single-sector projects) and the methodology of measurement. Population-Health-Environment indicators and similar lists from WASH and Irrigation can be used as a guideline; MASSMUS. Also the post MDG indicators that incorporate elements of service not just access > can all these be combined for MUS tools?

Adapt a modular approach to use the indicators. Have an agreed basic set of indicators and add context and project appropriate indicators (modules). Select and pick what you need.

5. **After exploring this topic, what are now concrete TARGETS we as a group can realistically achieve in the next 5 years?**

2012:
1. Familiarize ourselves with existing material and toolkits (MUS Group Guidelines Feb 2012; Pacific Institute Mar 2012); promote their use; identify gaps; and modify where required.
2. Draft and vet MUS indicators of integration and value-addition (vis-à-vis single-sector projects) and the methodology of measurement. Population-Health-Environment indicators and similar lists from WASH and Irrigation can be used as a guideline.

2013:
1. Packaging and synthesizing existing knowledge, data and evidence in a manner that is specifically targeted at: convincing policy makers; helping implementing agencies.
2. Good process documentation of existing pilots (fine line between prescriptive *How To* and generic / vague)

2017:
1. MUS becomes part of the mainstream / standard curriculum (at different levels academic / vocational).
2. MUS by Design Scaling achieved in 5 countries – Nepal, Ethiopia, Niger, Burkina Faso, Ghana (these are countries with good momentum and enabling environment for MUS).

Remarks and clarifications

Question: Are the five (5) countries for scaling up MUS the only ones your group is suggesting?

Response: These are the countries that are already doing some work on MUS and we thought that they could think of scaling up their work. Other countries that could be considered for scaling up could be Tanzania, Rwanda and India.

Comments:
- It will be good to have a small working group to take forward the inputs and suggestions of the group.

4.1.2 INSTITUTIONALIZATION

1. **What are the real deeper underlying issues in this challenge area?**
   The basic premise is that MUS needs to be institutionalized into government structures (line agencies and local governments) in order to scale MUS. Other entities (NGOs, projects, researchers) can innovate in MUS and apply it at pilot or project scale. But to go to scale, institutionalization in government is needed in most cases.

This is hampered by

- Mind sets. In some cases, senior government officials or other influential guru's are not well-disposed towards MUS. This may be caused by the fact that they haven't seen how it may look like in reality, or think it is too complex.
- Narrow institutional mandates. This refers to cases, where policies, norms and regulations do not allow MUS. We do not seek necessarily that policies and norms promote MUS, but at least they shouldn't prohibit it. But even when there are no formal policy or normative barriers, the practices may limit MUS. Scaling MUS through government requires some kind of programmatic

approach, so that government can deliver MUS services at scale ("the sausage machine") – that creates a tension with a basic premise of MUS, that builds on high quality participatory processes.

- Funding. This is closely related to the previous point and refers to funding earmarks particularly, where funding may only be used to provide a certain type of services. It can also refer to funding cycles which are too short to allow for the quality processes needed for MUS.

2. **What are you aiming at/what do you want to achieve in an ideal world in dealing with this challenge? What would success look like?**
If these barriers would be overcome, we would have

- Institutions make conscious effort to see and address multiple water needs & uses. This refers to a sector in which institutions have the awareness about MUS and its relevance to water services delivery.
- Principles and practices are institutionalized in policies, norms and standards of line agencies. This is the first hard barrier to overcome. Without this the following is impossible to reach.
- Scalable models that are applied at scale in a number of settings in a number of countries. Models refer to the combination of a clearly articulated concept and type of MUS, a typical design of a MUS system both of the hardware and the software, and a process guide that needs to be applied.

Though there is a chronological order in overcoming the barriers, most likely all three success areas need to be worked on at the same time, as these are typical long-term institutional change processes, and work on one success area will be closely related to another.

3. **What are the 3 most critical learning questions in this area you want to answer/find solutions together? (Formulate as a how to…)**
We recognize that most of the above implies a change process that largely takes place at country level, in the countries where we work, but should be supported by exchange of lessons between countries through global networks like the MUS Group. The specific of the change process will also differ between countries, though certain elements may be in common. Key learning questions, we therefore have as a group, are:

- How to articulate what institutionalizing MUS looks like in practice? How would the sector in a given country look like once MUS has been institutionalized?
- How to develop country-relevant strategies to identify barriers and how to overcome these? This refers to the process of developing a country change process, whereby one identifies the barriers, entry points to overcoming them, and a set of activities to start addressing them
- How to develop and codify MUS models and get common understanding of what models are? In order to move towards programmatic approaches to MUS, it is necessary to have models that are well articulated and probably even codified in the form of government planning cycles and guidelines. The question is how to develop those with government so that these can be adopted.
- How to develop policies that are facilitating the operationalizing of MUS? We often know what the limitations are in policies, but have less experience in formulating policies that are conducive to MUS.

4. **HOW: What are good strategies and practices which can address these challenges effectively? What methods and tools? What cases provide good example?**
An institutional change process can make use of methodologies and approaches that are used in any other institutional change process in the water sector. Below is a (non-exhaustive) menu of options to build upon:

- Invocacy. Refers to the identification of key individuals in target institutions and working closely with them to understand why they may or may not be well disposed to MUS and working with them to create conditions within their work environment for the adoption of MUS.
- Learning platforms. Many countries have established structures for learning that can be tapped into
- Partnerships with experts in institutional change. Many of the MUS members do not have institutional change in their mandate or expertise set. It may be useful to establish partnerships with an expert who does have that.
- Working group meetings. Many countries have formal working groups in the WASH or irrigation sector that regularly review policies and practices in these sub-sectors. These can be platforms to bring MUS forward.
- Working models and guidelines. This refers to the elaboration of well-articulated models and supporting materials (see above).
- Observable results. This can include pilot projects that officials can visit and see for themselves, but can also be documents that describe how to do MUS that are tangible.

5. **After exploring this topic, what are now concrete TARGETS we as a group can realistically achieve in the next 5 years?**
From this, the following types of targets have been identified. Probably, more similar types of targets can be formulated, particularly more specific ones for a number of countries where the Group has been mainly working

- In at least 3 countries, there have been changes in <u>policies, standards, norms and practices</u> so that these are more conducive to MUS
- In at least 5 countries working models have been <u>articulated and documented</u>
- In at least 7 countries, working models have been <u>applied</u> at scale
- MASSMUS has been integrated into the strategic <u>planning processes</u> for modernizing in at least three large irrigation schemes
- MASSMUS has been <u>further developed</u> into a methodology for small and medium scale irrigation schemes
- Pro-MUS <u>Water Use Master Plans (WUMPs)</u> applied in 200 VDCs (lowest tier of local government) in Nepal

The overall remark to this is that we need to better define what scale is. We know what it is not – it is not working in a few isolated communities.

6. **Are there knowledge gaps, where you need expertise outside this group to help you 'break through'? If yes, what expertise/models/tools would you require?**
There are some knowledge gaps in the Group:

- Participatory design

- Expertise on institutional change. We need outside experts who can provide us with:
  o General principles of institutional change process
  o Provide support in developing country strategies
  o Mentoring and peer review of our work

Remarks and clarifications

Question: what does at scale mean?

Response: at scale means that something is being done not at 100% of a country but also not at a pilot. The understanding of this concept could be different in different countries because of diversities and conditions. One initiative in India can be done in 20 pilots and that could be enough to the Indian people to call that at scale. You can also have 10 districts implementing an approach in different heterogeneous conditions and contexts.

Comments:

- Invocacy is a one on one interaction through a small meeting to bring someone on board about something
- We need to have a discussion of what we means by "at scale"
- Policy and institutional environments are the slowest moving variables. It takes long time to see these variables changing
- If you want to scale up, you need to work on the requirements for scaling up. Scaling up will not happen organically.
- It is not only the resources that are needed for scaling up. People need to have a vision for scaling up right at the start of their project (- from day one)
- One part of scaling up is for one partner to explain to another about what it is doing – scaling up on the side.
- One trigger for scaling up is exposure visits where you could invite farmers, private sector, NGOs and other stakeholders. In Tanzania, because of exposure visits, the private sector is now driving and lobbying for the support of MUS
- The exact process of institutionalisation is country specific. The most important thing to do is to document and share how the process was implemented
- Institutionalisation is very milky, but people in business know how to get their way out, even reaching to the highest decision makers. Connectivity and relationships that people develop would determine how successful an initiative or approach could be implemented and institutionalised.

4.1.3 HOW TO INFLUENCE DECISION MAKERS

1. **What are the real deeper underlying issues in this challenge area?**
   a. Lack of a clear understanding by those seeking to advocate MUS of the landscape of actors/influence map (and the incentives and risks of decision makers we need to target). We have some understanding of "whom" in a broad sense, but not necessarily individuals. Political economy analysis is needed.
   b. Lack of coordination or a coherent sense of a common movement (clear messaging, coordinated advocacy). Initiatives are tailored to organizations' interest. Those with a "stake" in MUS.
   c. Evidence is not packaged in a coherent way for targeted audiences (which is linked to not understanding incentives of key actors/influencers). We haven't synthesized what we don't know.

     i. Credibility issue –What qualifies as evidence for different actors? Are we really able to back up our claims?

    ii. Do we have sufficient evidence to convince the people we need to convince?

   iii. Do we have clarity within ourselves of key messages and for whom?

   iv. To what degree can we substantiate our claims – e.g., greater sustainability, etc.?

2. **What are you aiming at/what do you want to achieve in an ideal world in dealing with this challenge? What would success look like?**

   a. Have people who understand the approach and try to apply, and have constant/iterative feedback and improvement.

   b. See MUS included in the post-2015 indicators

   c. "The Ask"

     i. Funding (Donors and governments)

       1. Inclusion of MUS guidelines/core elements for rural and peri-urban domestic water and irrigation projects development and rehabilitation

       2. Flexible funding streams

         a. more funding available for MUS-by-design

         b. MUS-friendly project cycles/timeframes

    ii. Policy

       1. Required consideration of productive use in rural/peri-urban WASH projects

       2. Required consideration of other "non-crop" uses in irrigation development and rehabilitation/modernization.

       3. Funding for research and on-going monitoring

       4. Remove institutional/legislative barriers in MUS target countries

       5. Build capacity, skills to support a MUS approach (training programs, development of university curricula) in MUS target countries

3. **What are the 3 most critical learning questions in this area you want to answer/find solutions together? (Formulate as a how to…)**

   a. Mapping of actors/decision-making landscape; influence, entry points, incentives, risks – for each target actor

   b. Understanding our evidence base

     i. Take stock of what we have

    ii. Package evidence in compelling ways for our target actors

    iii. Identify the critical gaps for influencing decision-makers

    iv. Publicize strategic research agenda to fill these needs/gaps so that it is easy for researchers to contribute

   c. What is the best organizational structure for the MUS Group? How do those of us with a stake in MUS work most efficiently to achieve both broad goals and more specific ones? Benefits and costs of working as a group and of working separately

4. **HOW: What are good strategies and practices which can address these challenges effectively? What methods and tools? What cases provide good example?**

   a. Link MUS approach to existing "big" agendas (i.e. government targets and priorities or global development priorities: poverty reduction, climate change, sustainable development)

   b. Leverage existing learning platforms, communities of practice, forums, networks – particularly at country level (Deres's example)

   c. Cultivate champions

    d.   Encourage sharing success stories across MUS Group

    e.   Show & Tell – field visits for decision-makers

5. **After exploring this topic, what are now concrete TARGETS we as a group can realistically achieve in the next 5 years?**

    a.   Global level

        i.   Get MUS into post-2015 MDG/SDG (a need to understand this process better)

        ii.   Get a high-level commitment to MUS from 3 countries through Sanitation and Water for All and ICID (Next ICID meeting will be in Turkey in 2013)

        iii.   At least one major donor behind MUS in a significant way: funding made open and flexible to MUS

    b.   MUS Group

        i.   Group secures funding streams to strengthen the evidence base

        ii.   Group secures funding to support communication packaging

        iii.   Restructure evidence base to support MUS claims

6. **Are there knowledge gaps, where you need expertise outside this group to help you 'break through'? If yes, what expertise/models/tools would you require?**

    a.   Modalities of working together - Is there a new way for us to think about the MUS Group to help figure out how to accomplish these goals?

        i.   Strategic research agenda (opportunity for partnership). Creating awareness of the opportunity here.

    b.   Partners with strong advocacy capacity

    c.   Behavioral economics/psychology of decision-making

    d.   We have gap in ability to influence target actors

    e.   Ensure MUS Group members are engaged and benefitting from participation in the MUS Group and process

    f.   Rotation programs, secondments that transition people into positions of authority in areas that are broader and also providing some leadership training. Taking people with promise and turning them into champions by investing in them.

    g.   Dedicated innovation funds to try new ideas, being able to fail and not being shut down – having space for experimentation
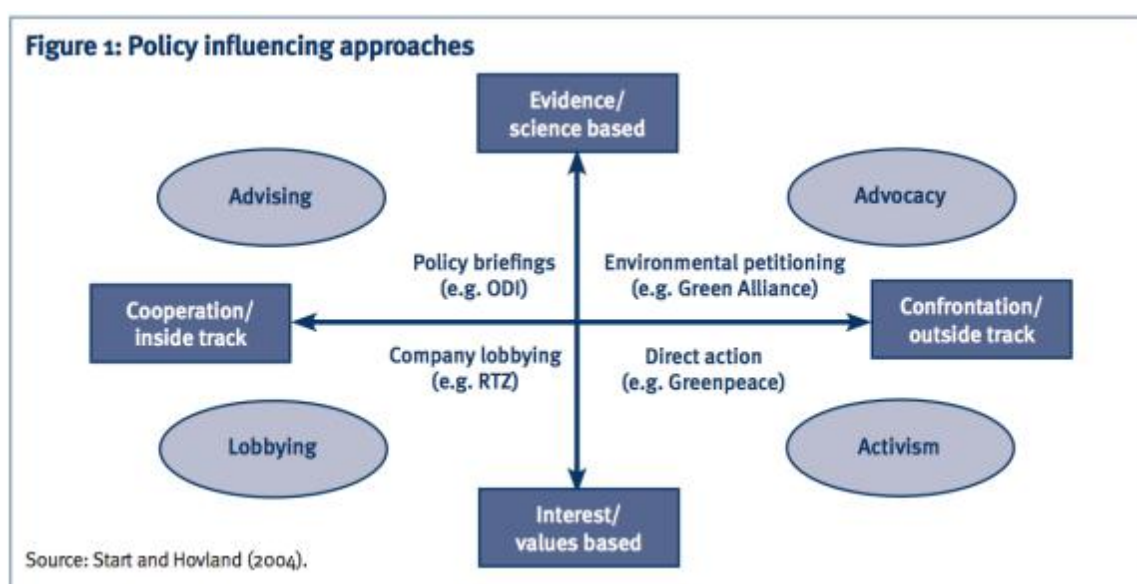

Figure 1: Policy influencing approaches

Source: Start and Hovland (2004).

Table 1: Typology of influencing activities

Type of influencing	Where? Through what channels?	How? By what means?
Evidence and advice	• National and international policy discourses/debates • Formal and informal meetings	• Research and analysis, 'good practice' • Evidence-based argument • Providing advisory support • Developing and piloting new policy approaches
Public campaigns and advocacy	• Public and political debates in developing countries • Public meetings, speeches, presentations • Television, newspapers, radio and other media	• Public communications and campaigns • 'Public education' • Messaging • Advocacy
Lobbying and negotiation	• Formal meetings • Semi-formal and informal channels • Membership and participation in boards and committees	• Face-to-face meetings and discussions • Relationships and trust • Direct incentives and diplomacy

Remarks and clarifications

Question: what is the level (global or country) at which you will do mapping of actors/decision-making landscape for the actors?

Response: we were thinking of doing the mapping exercise starting at global level and then taking the process to focus on few countries.

Question: going back to the model developed by Start and Hovland (2004) on policy influence approaches, where do we fit as a MUS group in relation to advocacy, advising, lobbying and activism?

Response: as the MUS network, we are more on the advocacy side of the model. However, as individuals, most of us are on the advisory side of the model. The mapping exercise could look at the actors who are doing the lobbying very well.

Comments:

- What the groups presented covered actors, evidence and MUS group.
- We think that they have reached a stage where we have developed a common terminology. For example, we think that people know what is domestic plus, irrigation plus and MUS by design.
- Working as a group adds value. As individuals, we have pieces of what we have and we could make MUS to work if we work together. We know of organizations that establish small working groups / committee to take up certain tasks that they need to know more of or go deeper. The working groups could align and network with other organizations (private sector and NGOs) in line with the task they will be executing. These working groups could dissolve when the task is accomplished. MUS could establish such working groups that could also organize conferences periodically (say every 3 years) to share our experiences about how we implement MUS.
- For the researchers to understand and study change processes that would emerge as a result of implementing the MUS approach, they need to be part of the project design and be in field before the implementation of initiatives start. Being part of the process when everything about the project start will help researchers to follow the changes from the start and also compare evidence of change with what happened in the past and during MUS implementation.
- Using the model developed by Start and Hovland (2004) on policy influence approaches, MUS group could think of coming up different activities in the different cornerstones of influencing policy: advising, lobbying, activism and advocacy.

- Alternatively, MUS group could develop its strategies of trying to influence decision makers around the existing poverty reduction strategies in different countries. This could be an easy way and an entry point for MUS to get a political will on what it is intending to do in the countries where the approach is applied.
- Experience from elsewhere is that middle management could be a barrier for influencing change and decision making processes. In South Africa, where a participatory approach was used to reorientate service delivery for the benefit of the majority of smallholders, the middle managers acted as what was called a "clay layer", making it impossible for the frontline extension officers to implement change processes at community level. This happened until strategies had to be put in place to take them on board about the approach that was being implemented by their staff and on how they could effectively be involved in supporting change processes at community level and also get recognition for their contribution.

4.2 Summary of group reports

Jürgen asked the participants to reflects on the three presentations and give their opinions. This is their analysis of their observation across the presentations:

- We have to be realistic about what we can do with MUS. From what we have discussed already, it shows that there is still a lot of work to be done on MUS: how are we going to gather evidence for MUS, what is our level of engagement in MUS, what are our responsibilities to make MUS work?
- Each organization should do an introspection and clearly indicate what it will do to support MUS
- It is important to look at the Theory of Change (TOC). It will help the MUS group to think about the vision, what are the intended outcomes and how the pieces can be connected.
- For the global MUS group to learn together, they need to define the learning agenda. The learning agenda has the potential to help people benefit constructively to each other experiences and bring them close together.
- We need to synthesise all the targets and the learning questions presented by the different groups. The agreement should be such that each group would nominate one person and the synthesis group would then put the learning questions and targets from the group work together.

4.3 Synthesis of the learning questions and gaps for MUS

4.3.1 LEARNING QUESTIONS

a) How to articulate what institutionalizing MUS looks like, what is it really IN PRACTICE?
b) How to develop & codify MUS models & get common understanding of what models are?
c) How to develop policies that facilitate operationalizing MUS?
d) How to develop country-relevant strategies to identify barriers & how to overcome these?
e) How to influence relevant decision-making processes? What is the decision-making landscape for scaling up MUS at international and national levels? What are the entry points, incentives, risks – for each target actor?

f) How to package our evidence in a way that is compelling for our audiences? What are the key evidence gaps and how do we fill them?

g) What is the best organizational structure for the MUS Group? How do those of us with a stake in MUS work most effectively to achieve both broad goals and more specific ones? What is the added value of working together (to mobilise funds, advocate, and build the evidence base)?

h) How do implementing organizations harness local knowledge (e.g. on available water sources) and facilitate users in articulating and prioritizing their needs in the assessment phase? How to build technical capabilities for identification of multiple sources?

i) How to support the service delivery approach for multiple use services, when it's not yet fully implemented and tested in the domestic sector?

j) How do we develop agreed and generally accepted indicators and principles for MUS?

k) How do we track MUS systems beyond project budgets – 5, 10 years out?

l) How to identify and address capacity development needs at different levels?

Remarks and clarifications

Comments:

- There is a need of further clustering of the learning questions into sub – questions. Once clustered, the questions would be good for learning and also for the analysis of the MUS approach.
- We are defining the agenda for learning. We will later on define the responsibility for the operationalization of the learning.
- The learning questions do not show how we could develop the capacity for the implementation of MUS. They do not address the issue of how we could address the capacity of managers to understand and implement MUS.

4.3.2 LINKING LEARNING AT DIFFERENT LEVELS

We have to make sure that there is a good connection between the MUS group and the people who are working on the ground (refer to the graphical diagram below- linking learners at different levels). The MUS group at global level distills experiences across the different leaning areas. The MUS group has to systematize the learning agenda, process the experiences and take the lessons down to the country levels. We want a situation where the MUS group work with people on the ground and help them to get solutions for themselves. We want to establish learning groups that are self-drive, self – learning, and in charge of the agenda of the discussions.
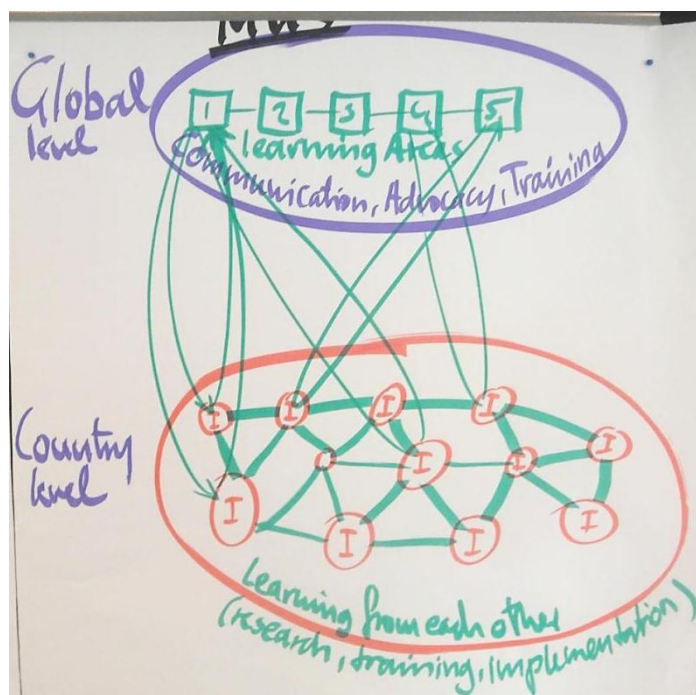
There is a need to enhance dialogue and learning between the global level and the country level. Also, this dialogue should also be encouraged between the MUS group members themselves as well as among the practitioners at country level who are innovating on a continuous base. But, there are few challenges we have to sort out as MUS group members. Many of the group members are getting funds from the donors, so disclosing everything may make some of the members vulnerable. But, if we believe that together we can achieve things and make the cake much bigger, then collaboration will be beneficial for all the MUS group members.

4.3.3 MUS GAPS

- Participatory design
- Expertise on **institutional change** process needed:
  - General principles
  - Country strategies
  - Mentoring, peer review
- Behavioral economics/psychology of decision-making
- Modalities of working together - Is there a new way for us to think about the MUS Group to help figure out how to accomplish these goals?
  - Strategic research agenda (opportunity for partnership). Creating awareness of the opportunity here.
- Partners with strong advocacy capacity
- Ensure MUS Group members are engaged and benefitting from participation in the MUS Group and process
- Rotation programs, secondments that transition people into positions of authority in areas that are broader and also providing some leadership training. Taking people with promise and turning them into champions by investing in them.

- Dedicated innovation funds to try new ideas, being able to fail and not being shut down – having space for experimentation
- A lot of materials and tools already exist e.g. PRA/RRA; yet these might need to be adapted. Having materials or manuals is not enough, training on how to use these is also needed. There is an urgent need for good trainers and facilitators in the different countries.
- Service delivery approach is still under development like Triple S for WASH> perhaps good link can already been made to include MUS.
- Draft and vet MUS indicators of integration and value-addition (vis-à-vis single-sector projects) and the methodology of measurement. Population-Health-Environment indicators and similar lists from WASH and Irrigation can be used as a guideline; MASSMUS. Also the post MDG indicators that incorporate elements of service not just access > can all these be combined for MUS tools?
- Adapt a modular approach to use the indicators. Have an agreed basic set of indicators and ad context and project appropriate indicators (modules). See pick what you need.

5) COMMON UNDERSTANDING OF THE MUS GROUP AND INTENDED STRATEGIES

5.1 Defining objectives of the MUS group

As part of the group work, participants worked on the strategies to deal with the Challenges / Barriers of MUS (see section 4 of this report). After exploring the task, participants developed concrete TARGETS that the MUS group can realistically achieve in the next 5 years? (products, impacts…). These were later analyzed and worked on by synthesis group.

1. **SHORT- TO MEDIUM-TERM (18 MONTHS)**
   a) Evidence base
      - Take an inventory of existing evidence base on MUS claims and tools and material to support adoption at different levels
      - Identify gaps and develop research agenda and find funding to fill gaps
      - Document existing pilots
      - Develop and test indicators for MUS
      - Develop regularly updated database tracking MUS systems
      - Document working models to operationalise MUS

   b) Advocacy/Communication
      - Promote use of existing tools
      - Package and synthesize existing knowledge, data and evidence in a manner that is specifically targeted at: convincing policy makers; helping implementing agencies.

2. **LONG-TERM (5 YEARS)**
   a) Implementation & mainstreaming targets
      - MUS scaling achieved in 5 countries
      - Changes in policies, standards, norms and practices conducive to MUS in 3 countries

- MASSMUS has been integrated into the strategic planning processes for modernizing in at least 3 large irrigation schemes
b) Capacity-development/training
  - MUS becomes a part of the mainstream / standard curricula in 3 universities
c) Advocacy targets
  - Get MUS into post-2015 MDG/SDG (a need to understand this process better)
  - Get a high-level commitment to MUS from 3 countries through Sanitation and Water for All and ICID (Next ICID meeting will be in Turkey in 2013)
  - At least one major donor behind MUS in a significant way: funding made open and flexible to MUS

Specific organisation targets
- MASSMUS has been <u>further developed</u> into a methodology for small and medium scale irrigation schemes
- Pro-MUS <u>Water Use Master Plans (WUMPs)</u> applied in 200 VDCs (lowest tier of local government) in Nepal

Remarks and clarifications
Comments:
- Some countries are policy driven. You have to use existing policies as a starting point for intervention. In other countries, you could start with the practical experiences and work toward the development of the policy
- Because MUS enhance a continuous change where is it applied, it would be good to track changes at all time. But, to do this well, we need to come up with clear indicators.
- Tracking the changes that emerge as a result of implementing MUS will not only be to the advantage of MUS groups, but is also important for the communities and service providers
- It will be difficult to monitor the effect of MUS if the M&E systems of the countries are weak. For examples, in one impact study, it was found that the hand pumps that have been broken were still part of the statistics (they were not taken out of the asset register).
- For us to show that MUS is working and will contribute to a sustainable provision of water at community level, we need a strong M&E systems. The best way to make M&E systematic, is to make it part of the government monitoring system.
- It will be important to follow-up with those who are using MUS in the countries and make sure that they include our indicators in their M& E system.
- Case studies should not be taken as working models, but as examples of how working models are being applied
- Our description of the working model (single use or multiple uses) in a country should visualization (with different colours) before and after the intervention. This visualization should be in the form of a systematized case study showing how the MUS was applied in different context (it should show the description of a processes towards reaching our targets for MUS)
- The targets do not reflect on capacity building and tools needed to implement MUS. For example, how do we systematically implement MUS with the support of the policy makers? We need to have a set of toolkits, guidelines, and pockets guide developed to help policy makers to take decisions.
- We also need a set of tools that can we use to test MUS in different contexts at community level. For example, when you see a video, it creates awareness on MUS and opens up your mind.

It is then up to you how to develop next steps to take MUS forward in your own contexts based on the awareness created.

- These targets are like broader objectives of MUS group. They could be important inputs for the development of the communication strategy.

5.2 SWOT analysis of the MUS group

Jürgen indicated that now that the participants have defined the objective of the MUS groups, it could be fit to analyse how the group is organized. The Strength, Weaknesses, Opportunity and Threats (SWOT) tool was used to deepen participants understanding about the MUS group using the task defined in details in the Box.

SWOT of the MUS – the way we are presently organized

a. What are the 5 mayor strengths?
b. What are the 5 major weaknesses?
c. What are the 5 major, concrete opportunities for the group?
d. What are the 5 major threats for the group?
→Please use cards

5.2.1 REPORT BY THE GROUPS

STRENGTH

• Centralized knowledge hub • The scale of relevance of MUS • MUS group has a lot of expertise on MUS • Pool of knowledge • "know" – recognize by the existing audience
• Diverse and influential membership • Neutral space • Participants are multi – sectoral (WASH, Irrigation, etc.)and interdisciplinary • Breadth of geographic and operational experience • Key MUS players on board / involved • Diverse groups – researchers, implementing organizations - geographical spread
• MUS group highly committed to MUS IDEA + has maintained energy/ enthusiasm (for 10 years)
• Has been able to advocate with certain degree of success
• Grounded in reality
• Some evidence synthesized
• Have been able to do a lot with limited budget/ resources

WEAKNESSES

• What and who is the MUS group? • Lack of clarity of roles and accounting policies • Unclear benefits of participation to different members • Attendance: full buy in from members

• Unclear mandate, roles and responsibility, governance structure • Low risk – low reward (barrier to effective coalition) • Lack of commitment – accountability/ responsibility
• No clear objectives and targets • Unclear goal of group
• No regular core funding • Lack of dedicated time/ human resource / funding for group among members
• Sometimes difficult to understand each other (jargon, perspective vs areas of interest) • Lack of shared definition, terminology and indicators
• Synthesize and disseminate information • Reach to influence key actors to extent needed
• Lack of networks to connect to
• Highlight resources are not clearly visible
• Little rotation of leadership
• Different people coming in from "core group"
• Engage in strategic planning

OPPORTUNITIES

• Growing recognition of the relevance of MUS • Growing interest in MUS • Emerging agenda around sustainability, service provision, climate change, health and decentralization • SDG's, RIOs
• Synthesis of tools, guidelines, models in common format • Setting critical research and publication agenda
• Possibility to establish national groups and meetings • More effective structure
• Bringing MUS practitioners into groups • Membership / marketing and joining • Other networks: RWSV, Water forum, etc.
• Focus on efficient dissemination mechanisms for developed tools guidelines, etc. • Information sharing / cross learning
• Rise in need for technical support
• New funding
• Communication and advocacy
• Marrying research and implementation organizations

THREATS

• WASH dominate even though undergrads   • Competition   • Many different "competing" approaches, unclear links and differentiation
• Unclear incentives for participation   • Diverging agenda of group method   • Don't address weaknesses – expecting "new results" with old mode of making   • Weaknesses not addressed and decreasing participation
• Being overly prescriptive   • Quality vs scale trade off   • Failure to define clearly quality control
• Over selling of MUS, for which it is complex to build on evidence base   • Ambitious agenda- expecting new results with old mode of working   • Supporting activities do not materialise – results in underperforming MUS
• Logistical differences to meet in person
• Not being able to fulfill commitments (lack of time)

Remarks and clarifications

Comments:
- The strength is in the diversity of the MUS membership. If we need to have a common interest, we have to get a way of dealing with our diversity.
- SWOT analysis tells us that the MUS groups still has a lot of work to do
- MUS is a platform for formal and informal sharing and learning.
- MUS is an informal structure allowing people to come in and go.
- People need more structured approach where there are clear roles. If people work together on a specific task, they will work well as a team if they have defined their roles and responsibilities.
- It is one thing to have rules for engagement and another thing to have a fixed structure. As MUS group, we need to agree on who will do what, what will be deadlines, otherwise, everything we discuss during this workshop will be useless.
- The rules will be important once MUS group start handling money for the implementation of grants. But there is a risk for MUS to become a program and be an implementing organization. This is because, MUS is currently being housed by IRC, it might start to compete with the host organization.
- If the MUS group develop a program and start handing grants, we may have to have an independent secretariat to avoid having a conflict of interest with IRC who may be interested in the same kind of learning agendas.
- It is not advisable to give funds to an organization which is a member of the network. It is better to get an independent organization that will manage the funds and make sure that the learning process happens. You can then have a process management advisory team as a secretariat
- We should see MUS like an association. But we are more worried about the targets that we have developed for MUS, which look like those of a program.
- MUS is a sharing network that has reached a stage where the demand for its support is increasing. The challenge is how MUS will cater for the increased support.

- One way to have commitment from the MUS members is to agree on a contribution, say 500$ per year. But, we risk collapsing as a group if we will not agree on how to manage the money from the contributions
- We need to stop relying more on volunteerism if we want to see MUS moving. We may have to get few people (2 – 3 people) do a certain task and pay them as an incentive for their hard work and for them to come up with quality outputs.
- The different organizations doing MUS could contribute a bit of the resources for different tasks (for example, research, impact study …etc.) to complement each other. In this way, every MUS group member will feel that they have a contribution to make MUS work, and they will all share the successes. But, there could also be areas of interest between the members which may need joint proposal writing to get funding.
- How do we get commitment from members who do MUS work, but don't necessarily get funding for MUS initiative?
- Let's have some flexibility such that some people engage in joint learning initiatives at country level, and then make it a point that we integrate the lessons at a global level
- For the MUS group members interested in joint learning, the targets will guide them on what they would achieve if they work together. The learning questions will guide them to define their boundaries of joint learning and sharing.
- If the MUS group is seen as a promoter of MUS, it will have a specific credibility. If the group members want to do more of advocacy of MUS, they it will a different credibility. We are still in the learning process and we should not be seen as overselling MUS. We should go into more advisory and advocacy role for MUS. In fact, MUS should have more of a centralized advocacy role.

5.2.2 SWOT IMPLICATIONS

Summary that Jürgen had put together on the flip chart while participants were discussing.

1. Cross road: from "loose" to more organized and structure
2. Demand is increasing
3. Not an implementing organization
4. Need for clear roles and engagement
5. Advocacy, advising, rather than activism and lobbying
6. Flexibility for smaller groups working on complementarity
7. Independent process management

5.3 Individual benefits by the MUS members

During the discussion after the SWOT analysis participants touched on different issues related to their commitment to MUS. Others called for members involved in certain task to be paid, instead of volunteerism. Linked to this discussion, Jürgen asked the participants to reflect on their benefit from MUS (see the task in the Box)

Individual benefits of MUS members

What will be your individual benefits in MUS. What will keep you involved in MUS?

→Please use cards

Report by groups

- In job profile: ensure that by 2016, MUS is recognized as an alternative service delivery model for rural water
- Knowledge sharing
- Catalytic effect
- Access to information on MUS project that would welcome an independent impact evaluation
- Research ideas and information and methodologies
- Advocating our work for funding projects
- Information/ sharing knowledge sharing. Partnership and networking
- To build and remain network – contact with organizations that can bring expertise we don't have ourselves. Share our jointly developed proposals and /or activities.- to take MUS up in our activities
- Sharing experience and learning from others. Gathering evidence that MUS is better than mono service
- Leverage the evidence base of members to build / strengthen case for MUS projects.
- Catalyzing greater health and livelihood impact for poor livelihood participants through strategic investment
- A solid body of evidence about the strength and weaknesses of MUS to support USAID programming to contribute to better development outcomes
- Connected to innovation and testing. Networking with others, learning and sharing
- Participation and visibility of MUS group a win – win situation
- To share first hand experiences and lessons learnt in Rural Village Water Resources Management Project (RVWRMP) at the same time (for global evidence base)
- Inviting/ comments / funding for further improvements and collaboration
- Potential is to work together in an effective collaborative way to mainstream MUS and achieve impact on the lives of the poor and scale (and have some fun in the process)

Remarks and clarifications
Comments:
- Majority of the benefits are on knowledge sharing
- Our major attraction to MUS is to share what we do and get a critical review
- We see a lot of leveraging for MUS and getting more work.
- MUS is great, but how do we open up and work together and make this approach move? We should look for common grounds and source funds to enable us to work together
- How far as group do we have to go into advocacy? Some of us are not here for advocacy, because we have too much demand from our work which we cannot fulfill

5.4 How MUS group can best deliver on desired goals

Having defined the objectives MUS and MUS group, analysed the MUS group and explored the individual benefits of the MUS members, Jürgen asked participants to form four groups to elaborate on strategies for the MUS Group and its core members to reach their success. The strategies were developed around the following key areas: modalities of operation for the MUS group; actor mapping and communication strategies; theory of change; and indicators for MUS group

5.4.1 MODALITIES OF OPERATION FOR THE MUS GROUP

> **Group 1: Modalities of operation for the MUS group**
> 1. when operationalizing the functions of the group, what needs to be done:
>   a. At global level and by whom?
>   b. At country level and by whom?
>   Around
>   i. Learning, systematization around the learning agenda
>   ii. Advocacy
>   iii. Capacity development
>   iv. Research/ monitoring / tracking
> 2. What kind of partnerships is required to be effective in each of these areas?
> 3. What mechanisms and incentives are required to make this work?
> →Please use cards

Report by the group

1. Global level: there is a proposal for a full time secretariat for doing more advocacies about the MUS approach. The secretariat could also rotate to countries.
   a. Knowledge sharing through visual presence at 40 000 USD
   b. Synthesis at a proposed budget of 50 000 USD. There is a need to
      - identifying the products
      - identify the funds
      - identify the authors
   c. Advocacy activities to be done at the proposed budget of 20 000 USD: There is a need to plan with the members and the secretariat
2. Country levels: there is a need to get a focal person (who works for 20days per year) in the countries who will work according to developed TORs. The focal person will be from one of the MUS members including the USA. The focal person will need budget of 20 000 USD/ country and be responsible for:
   a. Knowledge sharing
   b. Establishing country working groups that will involve universities, government and NGOs
   c. Synthesis of the experiences
   d. Advocacy
   e. Research of projects and programs
   f. Impact studies of projects and programs

The total budget proposed for this will be 250 000 USD for over 4 to 5 years

Two options are being proposed to operationalize the MUS group:

1. Option 1: Continue with the current modality , but we will have to deal with
   a. Conflict of interest between secretariat and the host
   b. Host may need to withdraw from bids etc.
   c. Maybe most relevant for country focal persons

2. Option 2: Get an independent secretariat
   a. Avoid conflict of interest
   b. May be more expensive
   c. "Heavy" - 100 000USD per year or more
   d. Needs clear TORs

Both the two options need a secretary and a chairperson. The required budget for option 1 will be from 70 000 to 250 000 USD   for option 2.

Remarks and clarifications
Question:

Comments:
- Option 1 of having the secretariat hosted by one of the members is less costly and practical
- With only six (6) core members out of the 12, no decision on the two proposed modalities for the operationalization of MUS can be taken. Of the core members of the MUS group, a number ss not been attending meetings for the past few years.
- There is a need to establish a working group that will elaborate on the modalities for the MUS group
- The inputs from this workshop, including the suggestions from the working group will be shared with all the core members, after which a skype meeting will be called to take a decision on the preferred modalities for the operationalization of MUS.
- At country level, the suggested costs are based on six countries that may have a local focal person.
- It is important that we don't have to continue with volunteerism for the tasks of MUS to be accomplished effectively. Things that we want to do have to be resourced and people will have to be held accountable for the funds that they receive to implement MUS tasks.
- The costs we are proposing are not difficult to get if we can build our proposals into a larger implementation program (say, an existing 10 million infrastructural project)
- We need the Theory of Change to help us layout options, analyse the costs that are involved and price out activities that we need to implement
- We could also develop good proposals for country and global learning and approach donors such as International Fund for Agricultural Development (IFAD). Again, the Theory of Change could help us analyse and get a big picture on what is already done at country and global level
- IFAD is relevant to send proposals for our work because they have a big water component. They currently want to reach out to 80 million people, and this could be an opportunity for MUS group to show how we could contribute in enhancing water provision services to the communities.
- There is a need for Action Research to be part of the proposed program in the 5 countries. We will need Action Research to help us improve how the projects will be implemented.

- There will also be a need for impact studies whose results would feed into what country working groups will be doing. The impact studies will have to be done by the MUS groups (by contracting a service provider) to show comparison in the implementation of MUS by different countries
- For the impact studies, we are looking at a budget of 1.5 million USD in all the countries. Proposal to do impact studies are easily funded if we could involve in-country academic institutions
- On the research side, it is important for MUS group to open up opportunities for more studies to be done though the support of academic institutions. To develop very good indictors, we could be looking for PhD level of studies, the challenge is how we can introduce academic components and fund PhD studies to support our MUS work. On the other hand, we should be cautious that PhD level of study can give us a lot of indicators which may not be applicable to the practitioners.
- We need to do some analysis on how we are organized, what we are gaining and what we are losing, what works, and what does not work.
- We need to beef up the presence of the MUS network in the countries such that much of the work on advocacy happens in the countries implementing MUS
- The MUS at global level could help the country teams to find solutions by creating a better learning for the project to perform better

5.4.2 ACTOR MAPPING AND COMMUNICATION STRATEGIES

Group 2. Actor mapping and communication strategy

1. Who are the major actors in the MUS landscape and other actors?
2. How are they relating to each other?
3. What are the major foci and strength and network of influence?
4. What does that mean for a communication strategy for the MUS group?

→Choose a facilitator

1- 2 page summary please

Report by the group:

1. **Actors**
   a. **Global Players**
      - UNICEF, HELVETAS, GWP, Gender and Water Alliance
      - ODA Agencies, Foundations, Multi-lateral agencies
      - Private sector – CocaCola

   b. **Regional Networks / Bodies (channels for engagement)**
      - AMCOW, UNECA, African Union, New Partnership for Africa's Development (NEPAD), CEPAL (Economic and Social Commission for Latin America), Network on Water Resources for Central America, Economic Commissions
   c. **National Players**

- Donor Advisory Groups (Ethiopia, Nepal) on WASH, Agriculture.
- Planning Commission (India)
- Ministries of Water Resources, Drinking Water and Sanitation, Health, Agriculture, Rural Development and Finance
- Line Agencies
- NGOs

2. **Challenges faced by local partners in Advocacy?**
   - Access to key actors: No walk-in
   - Identifying and cultivating Champions
   - Finding the right Hook (USP, Story Angle) and Bait (Evidence) for the particular audience
   - Moving from Research to Actionable Knowledge to Action Items
   - Reaching actors at multiple levels – especially middle-level bureaucrats resistant to change
   - Instability (and high turnover) in political as well as bureaucratic actors

3. **How can the MUS-Group support individual partners for more effective advocacy?**
   - Provide Key Messages explaining MUS and its Added Value
   - Toolkit / Tools / Processes for developing national / sub-national strategies
   - Training / Capacity building on Advocacy/Communication
   - Synthesized and packaged evidence and evidence-based messages on key impacts
   - Facilitating participation in Global water events (WWF, SWW, Rio etc.) – provides an opportunity to network and engage target audiences
   - Local partners take lead in facilitating participation of other MUS group members in national / regional events

4. **New products**
   - Generic PowerPoint presentations / pitch deck
   - 2-pager summarizing evidence
   - Translations of policy briefs, brochure, guidelines (Spanish, French)

5. **Existing products used**
   - Website
   - Guidelines, briefs – use for practitioners
   - Book – use for researchers, students
   - Newsletter - forward

6. **Improvements to existing products**
   - Better organization of the MUS Website
   - MUST READ documents
   - MOST POPULAR documents

7. **Issues**
   - Clarifying how the MUS Group Partners share MUS products
   - Branding and co-branding

Remarks and clarifications
Comments:

- To do Actor Mapping, we first have to establish people who are going to use the results of the exercise
- Doing the Actor Mapping will be good for all those involved in MUS. Sarah will get the inputs from those who are operating at Global level for the Actor Mapping exercise
- After the official closure of the workshop, those who are working at global level will meet Sarah and discuss how they will do the Actor Mapping exercise
- We need a 2 pager about what we know already about MUS. It will help us to demonstrate to the others the potential of MUS.

5.4.3 THEORY OF CHANGE

Group3: Theory of change :

1. Taking the goals of MUS, the targets of the MUS group and the criteria / indicators,
   what is the theory of change of the MUS group?

→Facilitator

2- 3 page summary

Report by the group: Theory of change for the MUS group

1. **Theory of Change**
   a. **What is a theory of change?**
   "Lying behind every program or initiative there is a theory of change – the **model that informs the assumed relationships between the activities, outputs and outcomes** that are being supported."
   b. **And why is it important?**
   "Articulating the theory of change surfaces the assumptions and the underlying model of change that the organization or team are implicitly applying."
   -Verulam Associates TOC note to RF's ACCCRN team

2. **Why do we need a theory of change?**
   "If you don't know where you're going, any road will take you there." -Alice
   In other words, without a theory of change the MUS Group is vulnerable to wander aimlessly.

3. **Potential process for develop a TOC**
   a. Who will work together? We need a working group. Names please!
   b. Set timeline
   c. Outputs
      i. **Vision of success** – where do you want to go? What is the end goal for MUS?
      ii. **Theory of change –** what is the roadmap? Visualize**!**
         - **Strategy/change levers** – what actions and activities can we undertake to make change happen?

- **Results framework –** how do you know you're on the right path?
- **Assumptions** – what are the causal relationships?

iii. **Theory of action for the MUS Group –** what role does the MUS group think it can have in affecting the overall theory of change for MUS?

4. **Purely illustrative example**
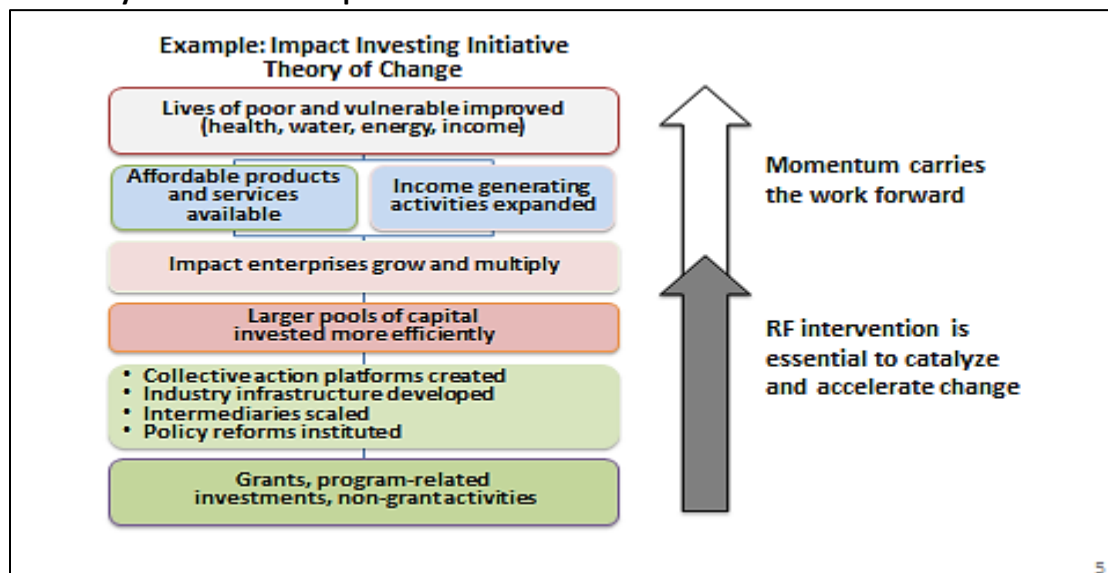
5. **Resources to develop a Theory of Change:**
   1. *Project Superwoman* - ActKnowledge and the Aspen Institute Roundtable on Community Change have a website called theoryofchange.org. The link that is useful to look at is http://www.theoryofchange.org/process/overview.html. Project Superwoman is one of their examples. The process described emphasizes starting with setting a goal, working on assumptions and then backward mapping results and interventions.
   2. *ToC A Practical Tool for Action* - Theory of Change: A practical tool for action, results, learning prepared by Organizational Research Services. This document has some good examples of the types of changes that a program might want to achieve
   3. *GrantCraft* - GrantCraft's Brief Guide on Theory of Change is specifically focused on grant makers, and hence has some useful perspective on concepts and process.
   4. *APA ToC* - An example from a regional advocacy program that was coincidentally on the go by RF ten years ago. This illustrates what a theory of change might look like—both the logic model and the assumptions (in the narrative). Structure was an important consideration for this group as it is a membership organization but it is usually not included in the ToC.

6. "Straw man" TOC for MUS

VISION OF SUCCESS	**Sustainable and equitable improvements in health and livelihoods for poor households through improved access to water for domestic and productive uses**
INITIATIVE OUTCOME	New funding streams, policies and regulations institute MUS principles and practices into planning, design, finance and implementation, resulting in widespread expansion.

INTER MEDIATE OUTCOMES

1. Articulated Demand for MUS	2. Policy and funding environment conducive to MUS	3. Capacity to plan, coordinate and sustain MUS	4. MUS Expansion, deepening of experience & scaling up

OUTPUTS

Global Thought Leaders Engagement	National MUS Champions engagement	Donor & Nat'l Guidelines & Tools	Trainings of donors, policymakers & implementers	Scaling Partnerships	Funding Ready MUS Projects
Advocacy Campaign Plan	Global MUS Advisory Board	Policy & Economic Research Analyses	Outcomes and Impact Research Analyses	Direct and on-line training materials	National MUS platforms convened

ACTIONS

Action Research & Learning	Cross-learning Technical Assistance	Communications - Knowledge Mgmt	Replication
Training, Tools Methods	Resource Brokering	MUS Advisory Board	Advocacy	Implementation	Partnerships

CHANGE LEVELS

Building capacity through research, cross-learning and tools	Supporting champions to increase funding, partnerships and momentum for MUS	Promoting MUS models to accelerate learning and advance the case for MUS adoption

Remarks and clarifications

Question: on the Theory of Change for Winrock International about MUS, how much still need to be done?

Response: our existing Theory of Change is not only about MUS. But, a lot of what we have done in this workshop fit very well to our Theory of Change and we could add many of the inputs

Question: how does the Theory of Change differ from the logframe that we are used to?

Response: it is more like a logframe, but with the Theory of Change, you outline your assumptions a lot more. The assumptions in the logframe and result framework are very shallow

Comments:

- Theory of Change helps us to know where we want to go and how to go there. It also helps us to understand what we can do as a group and how other partners could fit.
- For a project to work, everyone involved in it should understand the system, know where to go and ask themselves at all times the question, "*SO WHAT*"
- When you do a Theory of Change, you have to think through a list of assumptions. For examples, Winrock International has assumption for their Theory of Change covered in seven (7) pages.
- By making assumptions explicit, it sharpen people's thinking and helps them know why they are succeeding or failing.
- Doing the Theory of Change is a time intensive exercise
- Theory of Change should have been done before we came to this workshop
- One has to continuously adjust the Theory of Change during the implementation of the project
- There is a need of a small group of people to develop the Theory of Change for MUS

5.4.4 INDICATORS FOR MUS GROUP

> **Group 4: Critical indicators of success**
>
> 1. What are the most critical indicators for success of MUS and performance of the MUS group we can practically use?
>
> →Facilitator
>
> 2- 3 page summary

Report by the group: Indicators for MUS

1. Select relevant sectoral indicators (from health, WASH, irrigation, other productive uses, environment, energy, climate change/resilience, food security)
   - Starting with single sector indicators, the value added is that more sectors are addressed.
   - Select 1 to 3 sectoral indicators for each sector (health, WASH, productive, environment, energy)
   - MUS value added is to be able to report on more than one sector
2. Service indicators for water supply (as relevant for each subsector of water) - Quantity, quality, reliability, accessibility, equity, flexibility etc.
3. Indicators for integration of MUS
   - (measure how satisfied users are with the service provided)
   - User satisfaction: perception that multiple needs are met
   - User's satisfaction with service level/process? (within the limit of resources availability > awareness of potential.
   Note: there is a ceiling for domestic use, while productive use might go up

4. Indicators of value-added of MUS approach versus single sector approaches.
   - Cost-effectiveness: challenge that there is not good information available to compare with. E.g. good cost information is also lacking in WASH sector.
   - Sustainability: - infrastructure
     - o Environmental
     - o Financial
     - o Management

Remarks and clarifications

Comments:
- We can measure the perceived satisfaction of people about the water services. Instead of measuring users' satisfaction with the water services, we should measure users' satisfaction with the integration of water services. The results from such as assessment could be used for people to know more about MUS and its benefits.
- In Kenya, a PhD student developed a standard for the measurement of ownership. The standard measurement tool has 5 -6 questions and the student's work in the use of this tool was published in the World Development Journal.
- By using the frame presented here, we can develop individual sub – indicators

6) NEXT STEPS

In order to agree on the next immediate steps after this MUS meeting, the facilitator asked the participants in plenary to define what need to be done. The actions (not in terms of priority) are shown in the Table below.

What	When	Who
11. Indicators: develop further	End of September	Ines, Ralph, Martine& Rochelle
12. TOC development / packaging	15th November 2012	Barbara, Stef, Mary & John
13. Two pager on MUS (sum of evidence)	15th November 2012	Sarah, Sanna & Mary
14. Resource mobilization: Proposal	6th November 2012	Stef
15. Elaborate institutional option & modalities of MUS group – decision process	6th November 2012	Stef, Barbara, & Core members
16. Actor mapping	End of September	Sarah, Robina, Barbara, Sharon & Audrey
17. Develop further learning agenda	End of September	Ralph, Shilp, Barbara, & Sanna
18. Taking stock of evidence base – TOR /format	20th October 2012	Secretariat. Stef, Ines & Ralph;
19. Taking stock of tools, guidelines ….	20th October 2012	Stef
20. Finalise workplan	6th November 2012	Stef, Secretariat

7) EVALUATION OF THE WORKSHOP

What I/ we liked in this meeting ……….

- Group work; and the opportunity to interact with everyone / changing groups
- Opportunity for exchange and interaction
- Structured groups work provided an opportunity for the participants to contribute their experiences and strength
- Good facilitation
- Nice group work
- Work done by the synthesis group – to maintain continuity
- Overall flow of how it went… collective thought processes
- Flow of sessions was good (process conducive to meeting agenda)
- The fact that there were also new members
- Equal participation
- Everybody was engaged
- Diverse background of the participants
- Convergence and clarity on key concepts – much more than what we had in the past
- Honesty and openness during the discussions and interactions; therefore we were able to dig in deeper
- All tumbling in same places
- Tried to go deeper
- Fully dedicated note taker
- Opportunity for people to contribute their strength
- Venue was good and comfortable for the workshop

What I/ we did not like in this meeting is …….

- Too much theory not grounded enough in practical implementation
- More other core members should have been here
- Decision of MUS group modality could not be made
- Inputs expected towards communication strategy: not all of them got answered; would have helped if more core members were around
- Core group not fully engaged from beginning / unclear agenda
- Lack of clarity around how committed this group is and how to take things forward is frustrating – still a chicken and egg situation
- Planning but working (though hopefully leading to work)
- Not sure if we are we committed to sticking to the targets we discussed; are they of the group or of the partners?
- There is still a lot of things that are is still unclear – this means that there is still a lot of work to be done
- Not a lot of time outside the room
- Order of activities and efficiencies done on Thursday could have been done at the beginning of the meeting "what group gives me"
- Unclear agenda

- More adaptive structure (too much stuff in one day)
- Missed opportunity for the participants to work together on MUS related work and partnership
- The pre- conference work was not useful for this workshop

The key message, I/we take home from here is ……..

- Better understanding of MUS approach
- How MUS is different from WASH
- We are a global group
- We are on the right track and are in a position to mainstream MUS in Nepal and offer the experience to the global group
- As a member, we should internally discuss our expectations and what we are willing to invest in the MUS group
- MUS group is at the crossroads:
  - Either continue to muddle through
  - Revamp to a higher level
- Focus and scope of work needs to be much more at the country-level; while the thinking earlier was more at the global level. This has important implications for the future of the global group and the MUS secretariat
- Closer to MUS indicator than thought
- The key for advocacy is evidence base
- MUS need a lot more research to substantiate what we are doing
- Collaboration is challenging but important

8) CLOSING REMARKS

Remarks by Jürgen

"This has not been an easy workshop. Moreover, you are also not an easy group to manage. Well, on the positive side of it, I found you to be a pleasant group that likes talking about your experiences. I did not want to stop you, because you were really deeply involved about certain topics of the meeting. When I see where you are as opposed to 2007, you have made a huge leap. The question from me is how do you put all this inputs together and make the MUS cake clear. I feel that you still have to figure out the niche. Your agenda is big enough to attract funding. But I see that you are still happy in small things – now that the ingredients are there, I hope that you will push MUS to a higher level. I enjoyed working with you as a group. I also enjoyed the venue, and for that I would like to thank Nadia for the efficiency on the logistics. Lastly, PICOTEAM is also part of MUS. In South Africa, we will be implementing MUS project together with IWMI and a local NGO. About the workshop documents, you should be able to get it toward the end of next week.

Thank you very much.

Remarks by Stef

"I would have liked Barbara to be the one giving the closing remarks, but unfortunately she is caught up in family issues. On behalf of Barbara, I would like to thank you for coming to this meeting. We were challenged in the meeting in Washington that we should be clear on the MUS concept. From the inputs

of this meeting you have witnessed that we still struggled a bit on the MUS concept. We have a huge agenda in front of us and we need everybody's strength and contribution to face this ambitious challenge. From the secretariat side, we will try to put everything together to address this challenge and we will need your support and commitment. We promise that we will work on the workplan and the actions listed on the next steps".

Thank you.

9) ANNEXES

9.1 Open space discussion

During the open space sessions, participants shared their experiences providing opportunity for participants to be exposed to some practical things that have worked in different contexts of applying MUS. The open space being an opportunity for learning, and was organize as follows:

The presentation on the topic below could not materialise as panned, but a link to the report is provided for further reading.

9.1.1 GATES GLOBAL SCOPING STUDY

The full report can be obtained from the following link:

http://www.winrockwater.org/docs/Final%20Report%20Multiple%20Use%20Water%20Services%20Final%20report%20feb%2008.pdf

9.2 Summary (2- pages) of MUS projects

9.2.1 COMMUNICATIONS ACTIVITIES OF THE MUS GROUP IN A CHANGING LANDSCAPE

Barbara van Koppen and Stef Smits

Introduction: the changing landscape of MUS and the MUS Group

The MUS Group was established in 2003. As stated on the website, it aims at improved delivery of multiple use water services (MUS) as a better way to use water for poverty reduction, gender equity and peri-urban and rural development. To this end, the MUS Group facilitates information sharing, supports original research and documentation, and promotes implementation and learning across the water sectors.

The group seeks to achieve this goal through two main routes: first, the facilitation of communication, sharing and exchange among members about their own MUS activities, so members can learn from each other's practices and concepts. Second, using the same (or similar) material, the MUS Group entailed external communication or 'outreach' for information and advocacy towards other, essentially stakeholders considered of relevance to scale up the MUS approach.

In the early 2000s, the MUS Group encompassed a few pioneering organizations working on a limited number of research projects, either as individual organizations but more often as consortiums of various members. Examples are the MUS Project (funded by the CPWF), a market potential assessment of MUS for the BMGF and a study on local water resources management, supported by SADC/DANIDA, RiPPLE Ethiopia and the development of guidelines for MUS in large-scale irrigation (MASSMUS). These projects were largely focused at research on de facto MUS and piloting of planned MUS. They were linked closely to the MUS Group, as they were driven by core partners, using the Group primarily as platform for exchange and learning, alongside advocacy for the MUS

approach at global events. The main areas of interest in this early stage are what are now called the domestic-plus and irrigation-plus approach.

By 2012, the landscape on MUS has changed considerably. Some organizations have institutionalized MUS and implement it at a larger scale (or finance implementation). Examples are various implementation projects of Winrock (funded by USAID), the Rural Village Water Resource Management Project Nepal and the work by UNICEF Ethiopia. Also, research into MUS is still ongoing, but more geared towards the scaling potential. For example, Rockefeller Foundation undertook a MUS Search with 'old' (Winrock, IRC, IWMI) and 'new' partners (e.g. Pacific Institute) on this. While some of those MUS projects are linked to the MUS Group, and regularly report on them, others may have benefitted to at least some degree from early advocacy but now go their own way.

With increased uptake of the MUS approach, the external communication role of the MUS Group is changing, from advocacy for the MUS approach, the focus now shifts towards advocacy about the MUS approach, or in other words; from advocating for why MUS is relevant to advocating how MUS can best be implemented and scaled up.

With this uptake, also other groups of stakeholders have been engaged with. . Interest in the IWRM community for MUS as bottom-up IWRM is also growing. This audience includes partners in ad hoc activities since 2003, e.g. at the World Water Forums (at WWF4: GWP; WWF5: INWEPF; at WWF6: French ICID branch and Texas University, with formal commitments on MUS to be reported at the next WWF7; Stockholm 2012: World Vision). Some may, and some may not want to become member of the MUS Group in its current form.

Lastly, there are more and more community-driven development programs, in which communities factually prioritize the creation of water assets, so implicitly adopt some form of a multiple use, multiple source approach. Those programs are not familiar with the notion of MUS, although better support on water asset creation is likely to improve the water component. Similarly, programs that take water (and land) resource as entry point could potentially also benefit from people's planning for their integrated resource management.

The MUS Group's internal exchange and external 'outreach' as partially reflected in its governance structure

Exchange and mutual learning is at the heart of the MUS Group. In practice, the Group centred around values: innovating MUS on the ground for livelihood impact, enthusiasm for MUS scaling, horizontal partnerships, openness, and dynamic and strategic 'going with the flow'.

The two goals of internal sharing and external outreach and advocacy also shaped the formalization of membership and governance structure of MUS Group. Governance structures have always been 'light', flexible, and open, aiming at expanding membership and information provision about MUS. Since 2006, these have been captured in a set of governance guidelines, updated in 2009.

There are two types of formal membership, each with huge variation in engagement. First, there are 12 core members,[1] who are also the main target group of internal communication. They are the ones

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[1] The Challenge Program on Water and Food (CPWF), Cinara, the Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD), the International Water Management Institute (IWMI), IRC

most actively engaged in sharing their work, and learning from each other on MUS. Most members are individuals within institutes who have the theme of MUS in their portfolio and as such have some dedicated time available for the Group. Others have had to negotiate with colleagues and superiors to support core membership. As a result, engagement of core member varied, and sometimes completely disappeared when the active person left. Some core partners have been continuously actively involved with MUS projects, whereas others do not necessarily organizations with strong MUS activities at the moment – but this can change in the future. Not all organizations with a strong MUS portfolio are core member.

Core members commit to host annual meetings (for example in the last years, these were: FAO, RAIN, IFAD and Winrock). Further, core members elect (or just nominate the only available candidates, as happened up till now) the two executives of the MUS Group: the secretary, now Stef Smits, and the coordinator (now Barbara van Koppen). The secretariat receives support for basic tasks from IRC. The coordinator is supported by her organization, IWMI. The core members are regularly informed and asked for advice and approval, both by email and during the business discussions during the half-yearly meetings. For the Rockefeller Foundation grant to the MUS group via IRC, a small committee out of the core members was formed for further accountability. Thus, the core members essentially function as a governing board vis-à-vis the two executives.

Most contributions by core members in terms of professional staff time and travel costs are voluntary, i.e. members dedicate their own time and travel costs to attend meetings or events. Since around 2008, the MUS Group has been able to attract some funding (around 30.000 US$/year) to cover more substantial time dedication for the secretariat, as well as costs of travels and publications.

The second type of members consists of the 423 members on the list serve. They receive the newsletter and are invited for the bi-annual meetings and other activities, such as presentations in international forums. The list serve was built from participant lists from events (meetings and events like Stockholm or Water Forum sessions) as well as from people who actively requested to be on the mailing list. These members are basically just passive recipients of information, sometimes not even knowing who is behind the email address. With time, there is probably only a partial overlap between those on the list-serve and those (still or newly) interested in MUS.

With further growth of the MUS Group as an institution, accountability and trust could be further enshrined and formalized by constituting a formal board consisting of core members and representatives of organizations that provide funding for MUS Group activities. Such growth largely depends on the outcomes of the MUS Roundtable and then financing possibilities.

Communication channels

Currently, the MUS Group has six main communication channels, which are elaborated below, each with the strength and weaknesses that we as secretary and coordinator have observed or received feed-back upon.

International Water and Sanitation Centre, the Overseas Development Institute (ODI), Plan International, PumpAid, RAIN Foundation, Stockholm Environment Institute (SEI), the Water Engineering and Development Centre (WEDC), and Winrock International.

1. **Website** www.musgroup.net (open to anybody). The website was built using the same software that IRC uses for all its websites (eZ Publish) and has experienced relatively few changes in its structure since it was established in 2003. The website presently is mainly a collection of virtually all global documentation on MUS, as systematically collected by the secretary, coordinator and members. In addition, it provides short news items and some information about the MUS Group, such as its structure and proceedings of its meetings and events. The documentation section has an estimated over 200 case studies, reports and conference papers on MUS. In addition, there is a similar number of Power Points available. The documents have largely been ordered in a geographic manner, though not consistently throughout.

Strengths:
- a unique and probably almost exhaustive depository of MUS documentation
- The main channel for all new MUS projects to publicize their results. Members regularly send their latest documents to be uploaded there, or provide links
- Relatively easy to maintain, as the secretary is familiar with eZ-Publish.

Weaknesses:
- In spite of the potential to analyse web statistics, this is not done regularly, and hence we have no idea about its current use. A quick check shows that over the last year, there have been on average between 400 and 700 visits per month.
- As it was built over many years, there are many inconsistencies in terminology, which has evolved over time. Even a definition of MUS is lacking and there are 3 different ways of describing what the MUS Group is and does
- Difficult to search for anybody, and certainly for newcomers, as the case studies are not presented in a searchable database form, nor using key words and tags consistently
- There is no differentiation in the quality of the documents. To a user it is not clear what the key documents to read are, and what just any case study
- Very basic look and feel

Potential:
- a user-friendly attractive website, as main function and face of the MUS Group and appealing channel for members to disseminate their findings.
- easily searchable database of MUS documents
2. **Newsletter** (for the core members and list-serve, and others on demand). The newsletter is issued 3 - 4 times per year, compiled by the secretary and coordinator. It usually consists of the publications issued in the last months as well as news items about upcoming or past events and meetings. It is prepared as Word/PDF file and then manually sent around to the list serve, using Google Groups.

Strengths:
- A cost-effective, continuous, concise update of most, if not all that is going on about MUS in the world.
- It is a simple channel for members to publish their projects and results.
- Easy to manage and prepare an issue

Weakness:
- It has a very basic format and look and feel.
- Only the executives provide input, or source it from members.
- There is hardly any reaction, so there is little idea whether it is read at all.
- Technical problems with the Google Groups list serve

Potential:
- Integration with mailing lists of members?
- More active contributions and inputs by others
- Provide also ad hoc emails for announcements of important events and not wait until the next newsletter is issued

3. **Emailings** (For the core members). The coordinator and secretary send regular emails to the core-group about for example financing opportunities, e.g. technical exchange (as supported by FAO in 2007-9, and requests for expertise on MUS by individual organizations (e.g. IFAD in 2012), as well as joint activities and governance related issue.

Strengths:
- Vital for regular exchange, also for transparency in financing opportunities.
- Rapid response

Weaknesses:
- Excludes others list serve members who may be interested in the announcements

Potentials:
- use more frequently to a well-selected list

4. **MUS Group meetings**: for core members and other interested members, and often also staff of the host organization and others. (The upcoming MUS Group Roundtable is for the first time a meeting on invitation only, and on purpose includes others than core members). These meetings include regular half-yearly 2-day MUS Group meetings, two international symposia (2003, 2008) and issue specific workshops (e.g. one on cost-benefit analysis, held in 2010). The meetings include presentations and discussions on content around a specific predefined sub-theme, for which speakers and contributions are sourced from among the membership. In the last year, these have also been used to work towards specific outputs, e.g. implementation guidelines. In addition, the meetings usually have half a day dedicated to MUS Group governance and joint activities.

Strengths:
- high-quality presentations of ongoing work and discussions
- leading to extending membership of host organization and others/more geographic areas
- key mechanism for internal MUS Group accountability.

Weaknesses:
- Costly and therefore important to have financial support for southern partners.
- Often a mix of new and old members, resulting in non-level playing fields and certain repetition
- Not always possible to follow up towards consolidated outputs, beyond proceedings of the meeting

Potentials:
- Continue
- Decentralise the meetings to different regions and countries

5. **MUS Group publications** for both internal exchange and outreach. Examples include the implementation guidelines, report on costs and benefits of MUS and brochures. So far, only very few publications have been made as truly MUS Group publications. Most publications are the ones made by the members themselves.

Strengths:
- Synthesis and consolidation of lessons learnt across organizations and projects
- More collaborative work pulling all expertise together
- Indirect channel for MUS Group members to publish their project results
- Important inputs for the website.

Weaknesses:
- In some cases, it takes long to come to publications as so many organisations are involved
- Most publications will remain publications of specific organizations

*Potential*s:
- to expand to policy briefs, synthesis reports that follow-up on more detailed aspects of the guidelines and original research reports commissioned by/for the MUS Group that explore innovative topics
- An expansion of own products would require a more formalized procedure for merit-based allocation of resources among core members and members, e.g. through a formal board.
- Synthesis of various existing university and training curriculums on MUS.

6. **Presentations in international forums.** For both internal exchange and outreach. This refers both to the organisation of sessions in such fora as well as giving presentations in those. Some sessions and presentations at international fora (WWF5, 6; Stockholm seminar) were organized in the name of the MUS Group. Other presentations at conferences, e.g. ICID, RWSN, etc, were made by the individual members.

Strengths:
- panels with strategic partners
- channel for members to disseminate their projects and results
- visibility of MUS (and MUS Group)
- Potential to expand membership, e.g. as witnessed in the build up to the WWF5 in Istanbul and WWF6 in Marseille.
- Critical for feedback on advocacy from larger audience.

Weaknesses:
- usually once-off events, with little directly visible follow-up by panel members or target audiences
- Time and resource intensive

Potential:
- Important to continue.

Messages
As mentioned before, the content of the communications has evolved over the years. Roughly, the following phases can be identified:
- **2003-2007**: Recognizing MUS. In this first phase, the messaging was targeted at getting audiences aware of the importance to recognise MUS as a de facto practice. Many of the messages were captured in the Johannesburg Statement, a statement developed after a first symposium on this topic, held in Johannesburg in 2003.

- **2008-2010:** Impacts and costs and benefits of domestic-plus and irrigation-plus approaches. In this phase, the 'domestic-plus' and 'irrigation-plus' approaches crystallized. Focus was on highlighting the costs and benefits of these approaches and the impact this could have. This was strongly corroborated by a study led by Winrock for the BMGF, the results of the MUS project and the Symposium on MUS, held in Addis Ababa in 2008. The community-based MUS approach also started being piloted. However, no consistent set of messages was developed to capture these developments. At the same time, the MUS Group was engaged with different constituencies, including professionals working on issues like IWRM and ecosystem services, which was not clearly captured in adjusted messages either.

- **2010-2012**: how to do and scale up MUS. As more and more organisations got experience in applying MUS from different entry points and in different sub-sectors, different evidence-based models crystallized further. Moreover, MUS started being applied in larger projects. Further, the rise of general participatory projects led to community-driven water projects, which sometimes naturally became multiple use and multiple source projects. Also, the demand for information on how to do MUS grew. The MUS Group has responded to this with various pieces of work on how to do MUS, e.g. through guidelines, training materials, video and the further conceptualization of different MUS models by entry points. However, the implications of adopting a MUS approach differ for different target audiences, within and across entry points. No differentiated messages have been developed yet.

9.2.2 THE EMERGENCE OF HOLISTIC, COMMUNITY-DRIVEN MUS

Barbara van Koppen

MUS is an exciting journey in which new perspectives keep opening up. After one decade the pieces of the puzzle start coming together. When we started the eight-country CPWF MUS action research in 2004, John Butterworth coined the words domestic-plus and irrigation-plus. We defined MUS more broadly as a planning and design approach this takes people's multiple water needs as the starting point of planning. At that time, we had very little idea of how to go beyond these two approaches into something new with even less sectoral boundaries. Then Bob Yoder observed how Indian village leaders cleverly combined the fragmented subsequent 'water projects' into meaningful incremental development and management of their local water cycle to meet multiple needs. Private designers in Cochabamba also had this broader village-level view. The South Africa case study started with a community-level diagnosis and needs assessment as first step of local government planning. The Ethiopian CRS project in the Adi Daero watershed project was also an example of holistic design at community scale without any a priory priority. In the project's final book, we coined the term 'community-scale MUS' (or community-based/ or –driven MUS) to capture such village-level projects according to people's priorities.

Parallel to the CPWF MUS project, IWMI and partners held a symposium on 'African Water Laws: plural legal frameworks for rural water management' in 2005. This symposium and later book and new studies on informal and formal water rights in Africa analysed informal (or indigenous or community-based) water governance for self-supply, which governs most water investments and uses of most rural and peri-urban Africans. Further, the Danish Institute for International Studies launched a comparative study on 'Conflict and cooperation in local water governance'. This also focused on local water arrangements embedded in power relations and social hierarchies (including those generated by top-down designed water projects).

Also during those years, Danida supported the Southern Africa Development Community in piloting so-called participatory IWRM Demonstration projects in Malawi, Mozambique, Namibia, Swaziland and Zambia. It was not easy to convince Danida that IWRM should include water services in poor rural areas and not only the management of the resource per se. However, in the end, the commitment to genuinely participatory approaches of the project managers and our growing knowledge on the existence of community-scale informal water arrangements rendered this project an excellent opportunity to pilot-test 'holistic community-driven MUS'. We collaborated to at least some extent with local governments. They complained how they are hardly involved in infrastructure during the planning and construction phase. Nevertheless, they have to address the problems as soon as the projects are gone. And we learned about the resource-intensity of participatory planning, the pitfalls of distant implementing agents (wanting to spend the budget, more than to facilitate inclusive planning and technology choice) and powerful village leaders. One negotiated hard on behalf of 'the' community for an electric pump with pump house near a river, with the electricity lines still at 6 km distance – 'everything else is like giving stones when we ask for bread'. Villagers certainly have ideas on how they want to develop and manage their multiple water sources for multiple uses.

Within the water sector in the meantime, other organizations had pioneered much more on community-scale MUS, in particular Winrock International and the Village Water Resource Management Project with its Water Use Master Plan approach in Nepal – already since the 1990s!

Thus, community-scale MUS is emerging and becoming more robust. In fact, the term 'community-based' may be confused with what are called 'community-based' (in the sense of community-managed) water supply or irrigation schemes, which are typically single-use design. Perhaps it is better to talk about 'holistic MUS' to indicate such community-scale participatory approaches in which people define their priority water interventions, anchoring services in holistic local water cycle of uses and re-uses of multiple sources.

The Guidelines of the MUS Group, supported by IFAD and SDC, capture the essence of participatory planning. Further implementation experiences by various institutions will soon allow synthesizing the solutions to the real-life problems of implementing the guidelines at village level: cost-effective but inclusive planning processes and tools, informed technology choice, transparent project management and accountancy, implementation, participatory monitoring, cost-benefit analysis, livelihood impacts, etc. Holistic MUS will become a more robust model, ready for advocacy and further capacity building.

Within the water sector, more water donors may adopt and finance holistic MUS. The domestic-plus or irrigation-plus modalities may both widen up into holistic MUS at, at least, some scale. The intervention approaches that take the water resources as entry point may also gradually adopt MUS for a strengthened people's and institutional side. However, vested institutions will not easily change their sectoral single-use approaches, beyond some minor adaptations. The tipping point for especially holistic MUS is unlikely to be triggered from within the water sector.

Perhaps the most important finding of last year's Rockefeller MUS Scoping Studies in India, Nepal, Ghana, Tanzania and Ethiopia, is that the tipping point for holistic MUS is already triggered at massive scales outside the water sector. The past five – six years have seen ground-breaking new

development approaches. India's National Rural Employment Guarantee Act is the world's champion. It guarantees 100 days paid labor per year. Two-thirds of the assets created appear to be for water and drought proofing, and most often (no surprise:) for multiple uses and managing multiple sources. Unlike NGOs' claim that they are the most effective in community mobilization, NREGA shows that local government can do a cheaper but still effective job. There are many more employment generation schemes (or employment components within development programs; the distinction can be blurred). Here too, communities should be enabled to prioritize on how to use the available labor, this would often include water asset creation. Second, the Community-Driven Development approaches of Worldbank (and increasingly of other donor agencies) entail a similar potential to become a tipping point. In these approaches, professionals should recognize that potential and ensure holistic MUS. Decentralization of general fund allocation to local government is a third major opportunity for holistic MUS nation-wide at short, medium and longer-term. Lastly, once water and broader natural resource management and the various ecosystem services approaches are were allowed to be led by local people's interests and institutions, further scaling pathways for holistic MUS are opening up. The deepening analysis of communities' own water arrangements will become the basis of service delivery.

9.2.3 MUS AT IRC

Areas of focus

MUS is one of the core thematic areas of work of IRC. Its business plan explicitly mentions IRC's commitment to promote MUS so that a MUS-based approach will be routinely included in rural water supply programmes. That then also provides the main of focus of IRC in the field of MUS: domestic-plus, because of IRC's background in the WASH sector. In order to achieve that goal, IRC approaches MUS from a number of angles:

- Sustainable service provision. The overall focus of IRC in the WASH sector is on sustainable service provision. An area of research is the relation between the extent of MUS and sustainability. In this, we try to get answers to questions like: do systems that allow for MUS provide more sustainable services? Or, is a certain level of good performance necessary for MUS to start off? What is the interrelation between the two? Having more evidence on the relation between MUS and sustainability, would help in advocating for a MUS approach in rural water supply.
- Higher levels of service. Higher levels of service (i.e. higher than basic water supply norms in most countries) are an important precondition for MUS. Without more and more reliable water, the extent of multiple-uses will remain limited. IRC is doing research in various countries into actual service levels (e.g. in WASHCost and Triple-S) and looking at the implications of going for higher levels of service, for example in terms of (incremental) life-cycle costs.
- Facilitating the scaling of MUS (domestic-plus) in a selected number of countries. As IRC works in a limited number of countries, we commit to directly facilitating scaling up of MUS in those selected countries only. This is done through pilot projects with partners, dialogues with stakeholders, documentation of case studies and guideline development. Examples include Ethiopia, Honduras and Burkina Faso (to be started).

An ongoing challenge in this is to further integrate the conceptual frameworks for WASH and MUS and to articulate this clearly to external audiences.

Apart from domestic-plus approaches, an area of research is self-supply. Particularly in Ethiopia some research on this has been done and there is an interest to take this forward. The other MUS entry points (irrigation-plus and community-based MUS) have received some attention by IRC, but do not form our primary focus.

In addition to this work, mainly at country level, IRC also tries to promote MUS at global level, through synthesis studies and through its membership of the MUS Group. As this has been described at length in the separate note on the MUS Group, that will not be elaborated here.

Past, present and future projects

IRC has been involved amongst others in the following MUS projects:

- MUS Project, funded by the Challenge Program on Water and Food. In this project, IRC did research on MUS together with partners in Bolivia, Colombia, South Africa and Zimbabwe, and played a role in global synthesis and dissemination.
- RiPPLE Ethiopia. Amongst others, this included research on costs and benefits of MUS
- Assessing state of knowledge on MUS. Contributed to the global literature review
- Scoping study on MUS for the Rockefeller Foundation. IRC carried out the scoping in Ethiopia and Ghana and contributed to the one in India. In addition, supported the synthesis
- Piloting MUS in Honduras. This consisted of supporting FHIS in documenting case of de facto MUS and the development of guidelines for the piloting
- ZimWASH. As part of this large infrastructure project, guidelines for applying a livelihoods based approach to rural water supply were developed and applied, in Zimbabwe
- WASHCost and Triple-S. Though these project do not explicitly focus on MUS, they generated lots of data on higher levels of service
- Burkina Faso – to be confirmed, a piloting project on MUS

Communication and dissemination

Currently, nearly all communication and dissemination activities on MUS by IRC are done via the channels of the MUS Group. Though IRC has dedicated pages to MUS on its own website, these are outdated. It only contains links to more detailed information on the MUS webpages. News items on MUS are in first instance posted via the MUS Group website and newsletter. Selected items are also disseminated through the e-Source, the broader newsletter that IRC publishes.

Outputs from research projects are in first instance disseminated through the dedicated channels (webpages, newsletters, etc.) of those projects, but then mirrored also on the MUS Group webpages.

Capacity and resources

IRC assigns around 20 days per year from its core funds for work on MUS. This is mainly to support the MUS Group secretariat. All other MUS related activities are funded on a project basis, as are the additional time spent by IRC on the MUS Group secretariat. Although this differs from year to year, total staff time dedicated to work on MUS, amounts to some 150 days/year.

IRC has 4 staff members with in-depth experience on MUS, as well as a larger pool of staff who are conversant with the topic and are able to apply it in their work and own thematic areas.

9.2.4 MILLENNIUM WATER ALLIANCE (MWA)

Integrating MUS into MWA Programs

MWA is a permanent coalition of U.S. based NGOs in the WASH sector formed in 2004 to improve collaboration and improve the impact by working together: disseminating lessons learned, encouraging the adoption of best practices across organizations, and sensibly and strategically sharing responsibilities and resources. MWA itself is not an implementing organization – it is a coordinating body that provides strategic direction and management – to multi-partner WASH programs in rural Kenya, Ethiopia, Guatemala, Nicaragua, El Salvador and Honduras.

Over the past several years, MWA has integrated MUS activities into its programs on a relatively small scale, primarily through domestic plus approaches. On the ground, this has meant that all partners in MWA programs in Ethiopia and Kenya, for example, build cattle troughs and public wash basins around water points, ensure that water and livestock points are properly fenced and separated. At the same time, through these WASH programs, MWA members work with community members, water management committees, schools, and local community groups to plant kitchen gardens, tree nurseries, construct greenhouses for vegetable production, build aquaculture ponds, utilize drip irrigation schemes, and engage in other small-scale approaches to use water to generate income.

In the past 12-18 months, MWA is more deliberately linking WASH program designs with complementary livelihoods and food security activities – implementing MUS is critical to our achieving cross-sectoral impacts in these areas. From a strategic planning point of view, MUS is an important element in the strengthening and expansion of our existing WASH programs. MWA is actively including the MUS approach in all new proposals and seeking to expand funding to do more MUS in current programs.

MWA has worked closely with IRC to understand the MUS framework and shift from incorporating MUS activities after water schemes are built to incorporate MUS planning at the catchment level at the outset programs. In addition to IRC, MWA is partnering with a number of other Dutch organizations including Aqua for All, the Rain Foundation, and Acacia Water to support our implementing partners in operationalizing MUS on the ground.

MWA has engaged in significant outreach to donors over the past year to generate interest in funding programs that include MUS, stressing the economic development and sustainability impacts that can accrue when sufficient water is available (coupled with reliable service delivery) for productive as well as domestic uses.

In July 2011, MWA approached TCCAF through GETF to provide $1.3 million in add-on funding to MWA's 3-year, $13 million CNHF funded program. The TCCAF funding, which was approved in early 2012, will be used to specifically to increase MUS in areas where CNHF funding is covering access to drinking water, sanitation and hygiene, among other goals.

In July 2012, in partnership with Aqua for All, the Rain Foundation, Acacia Water, and Akvo, MWA submitted a $9 million Global Development Alliance (GDA) proposal to implement the MUS and 3-R approaches at scale in the arid and semi-arid (ASALs) land of Kenya. The 3-year program, if approved, is expected to reach at least 100,000 rural Kenyans with integrated access to WASH and

sets a target that 50% of all intervention communities will construct MUS systems and 30% of all schemes will utilize 3-R technologies.

Another innovation (new to MWA programs at least) in the Kenya GDA program is the inclusion of a 6-month planning phase with communities, local government and other stakeholders to map the hydrogeological resources at the catchment/basin level, design long-term strategic plans to maximize water for MUS, and construct separate water sources for domestic and productive uses to increase sustainability of drinking water schemes and decrease conflict over resources. The program includes indicators designed to measure the impact of implement MUS vs. domestic only schemes.

MUS also features prominently in MWA's response to USAID recently released RFA Kenya Arid Land Disaster Risk Reduction – WASH Program.
Another area of interest that MWA is pilot-testing with members through coordinated programs is self-supply. In Ethiopia, MWA worked with the Water 4 Foundation to pilot-test it low-cost manual drilling technology.

Capacity Building
Given the strategic direction our programs are taking, MWA is incorporating training for US and field staff in the MUS approach. MWAs Director of Programs has become active in the MUS Working Group over the past 18 months, attending the meeting held in January and recruiting MWA members (CRS and WV) to attend and share their experiences as well. The relationship that has been formed with Dutch knowledge partners has also been critical to our ability to incorporate MUS into our programming.

MWA is also organizing trainings and learning events to prepare field staff to integrate MUS at a higher level in MWA programs and throughout their own programs. A 3-day LCCA workshop conducted by IRC was held in May 2012 in Addis Ababa for the 5 international partners (CARE, CRS, WaterAid, WV and Living Water) and 6 local partners of the Millennium Water Program – Ethiopia (MWA-P) to introduce them to the concept and to brainstorm ways to begin applying the LCCA step-by-step at the field level. 38 field staff attended – the training generated a lot of interest and enthusiasm and each of the NGOs that attended are preparing action plans to pilot test LCCA. A follow-up discussion of the LCCA was held at the most recent Program Management Group meeting in Hawassa as well as a presentation on MUS in Ethiopia given by RiPPLE.

9.2.5 MUS DEVELOPMENT IN ETHIOPIA

1. **MUS Experiences to date**
The CPWF MUS Project
Developments relating to multiple use water services in Ethiopia are listed below:
- Ethiopia was one of the focus countries for the Multiple Use Services (CPWF-MUS) project hosted by the Challenge Program on Water and Food (www.musgroup.net/page/836) from 2004-2009 where the International Water Management Institute undertook studies with NGOs implementing MUS systems in Dire Dawa (HCS) and Tigray (ADSC) providing documentation of approaches and benefits. Ethiopia was selected for the study owing to the active engagement of several organizations with MUS issues, mainly NGOs and research centers, but also explicit recognition of the approach in policy.
- The MUS group – an international network – held its 2nd international symposium in

Addis Ababa in 2008 where several Ethiopian and international case studies were also presented.

- In 2009, multiple use systems were explicitly mentioned as an alternative service delivery strategy in the guiding WASH sector policy, the Universal Access Plan (MoWR, 2009).
- RiPPLE has published several working papers and briefing notes on the policy and practice of multiple use water services and self-supply since 2008 (www.rippleethiopia.org).

Some of the existing experiences and MUS champions in Ethiopia include:

- Local farmers who have constructed their own water wells and rainwater harvesting systems and use these primarily for productive, also for cattle and household use, and for sanitation & health purposes. The Ministry of Agriculture has promoted this, but not in integration with other ministries. Families have also received technical and financial support from government and non-governmental organizations (particularly the rope pump).
- NGOs such as IDE, PLAN and the Hararghe Catholic Secretariat (HCS) have systematically given attention to MUS in their programming. HCS, AFD, RiPPLE and the RAIN Foundation, have initiated a number of successful projects including sand and sub-surface dams for multiple uses in water scarce areas in Eastern and Southern Ethiopia mostly.
- Some development partners (e.g. UNICEF, Dutch Government, Finnish Government, WHO) are now becoming interested for a combination of reasons including community based nutrition, food security, water safety and income generation.
- Research programmes and institutes (notably RiPPLE and IWMI) have participated in international MUS group meetings and pilot projects including MUS focused learning alliance in eastern Ethiopia. They have been involved in case studies and sharing experiences with the government and NGOs and have contributed to getting MUS into programming in some cases.
- The international NGO Catholic Relief Services (CRS) had already started supporting community-scale MUS projects, implemented by its partners, but no research on MUS had been done in Ethiopia prior to the CPWF-MUS project.

RiPPLE Research on Costs and Benefits

A RIPPLE study (Adank et al., 2008) set out to describe examples of domestic-plus and irrigation-plus interventions and to determine the related costs and benefits and ncome diversification. The study focused on two communities: Ido Jalala and Ifa Daba, in Gorogutu Woreda, East Hararghe Zone, Oromia Region, Ethiopia. In both cases, the incremental B/C ratio is higher for the upgrade to MUS than for the step towards single use water services. This shows that indeed high incremental benefits can be obtained with relatively small incremental costs when a single use system is upgraded to cater for multiple uses. Enabling multiple uses of water by providing multiple use water services results in high benefits, as shown by this study.

2. Emerging MUS Modalities
Community Managed (WASH) Projects and MUS

The new approach to rural WASH, which is known as Community Managed Projects (CMP), is essentially an innovation in financing. The unique and innovative feature of the approach is that funds for investment in new schemes are transferred to communities via a micro-finance institution rather than the woreda. The community water and sanitation committee gets involved earlier in scheme development and although significant support is provided, communities effectively build the schemes themselves doing the hiring of artisans and procuring of services required. The approach has generally focused on low level technologies such as hand dug wells and spring protection.

Integrating WASH, Multiple Use Services and Community Based Nutrition for Improved Food Security and Reproductive and Sexual Health' project

The most ambitious initiative to scale up an explicit MUS-by-design modality is the project on Integrating WASH, Multiple Use Services and Community Based Nutrition for Improved Food Security and Reproductive and Sexual Health led by UNICEF. It aims to construct community managed water schemes in 30 woredas where MUS will be promoted through an integrated approach including activities at household self-supply, community and institutional levels (schools and health centers), including 60 school-managed market gardens to demonstrate the benefits of MUS to surrounding communities.

The project's purpose is "to improve access to and use of sustainable, multiple use of water supply systems, appropriate, safe sanitation, and strengthen hygiene practices, integrating these inputs with a community-based nutrition package in order to reduce stunting and contribute to improved food security and women's reproductive health". One of the specific objectives is to "demonstrate and promote MUS for both enhanced food production and economic empowerment within the same communities and schools.

Self-supply and MUS

The emerging Self Supply Acceleration Program (SSAP) has high potential to support MUS scaling up. This programme is government-led, with a mandated working group (led by MoWE and including UNICEF, IRC, COWASH and RiPPLE) are working on self-supply. A project proposal has been designed to supply WaSH service for 150,000 rural populations by constructing 3,000 new water schemes and 3000 sanitation facilities (developed by the users) in five Regional States of the country (Southern People's, Nations and Nationalities, Oromia, Amhara, Tigray and Benishangul Gumuz) with good ground water potentials.

The schemes will be fitted with low cost technologies mainly with Rope and Washer-pump, believed to be cost effective, reliable and sustainable as compared to other water pumping technologies. The community will contribute 50% of schemes development costs; and local technicians and artisans will overtake the design, construction and, operation and maintenance of the schemes by offering adequate theoretical and practical training for them. Therefore, this project proposal has been designed to increase access to water supply for the rural areas of the country by scaling up self supply with low cost technologies such as rope and washer-pump and manual well drilling equipment in areas which have good ground water potentials, producing high value crops and voluntarily to contribute necessary fund and labor for the construction of their schemes.

9.2.6 MUS AT CINARA-COLOMBIA

1. Experiences to date

Since many years ago, Cinara has been working in multiple uses as we have had problems in some projects where agriculture is developed using the water that comes from the water supply system. Cinara works mainly in water supply for human consumption. Many case studies were developed by students and new studies were made under the MUS project. We found out the main limitation to scale up MUS is the existing regulation in the Water Sector. The technical regulation specifies that basic consumption is less than the one needed for poor people in the rural area to produce their own food and the rural consumption was even decreased by the law. In the institutional framework, there was a Ministry of Environment, Housing and Territorial Development where the Water Sector for

human consumption was located. The Ministry was divided one year ago and this Sector was sent to the new Ministry of Housing, Cities and Territory. All people who participated in the activities around MUS were changed and it has been impossible for us to establish contact with the new people in charge of the Sector.

2. Scape up

MUS was incorporated at Cinara level and at the provincial level. The plan for rural water supply in the Department of Valle del Cauca included basic consumption, both for human and gardens in rural settlements.

We feel that problems related to disasters have distracted the attention of the country with respect to the problems related to the Water Sector for human consumption. Also, in Cinara, the people in the MUS team began PhD studies (Isabel Dominguez in England and Silvia Corrales in Bogota). Because there are no new projects on MUS, they are doing their research in other water issues. Several proposals have been presented to the national institution of science and technology but no one has been approved because the government´s priority is industry and mining.

1. MUS AT USAID

Several things have recently led USAID to put more focus on integration within the water sector and among the water sector and other development sectors. First, USAID's Water Strategy that is currently under development encourages the analysis of sectoral programs to identify opportunities to integrate, and MUS is one of the most promising ways to operationalize this integration. Secondly, the Horn of Africa and now the Sahel food crises have also caused units within the agency, both in DC and in the field, to explore ways to work across multiple objectives, with livelihoods, food security and health as equally important focus areas, and again, MUS has been targeted as a promising approach.

Recent USAID activities have focused on three areas:

1. A World Bank /USAID Memorandum of Understanding in the water sector was signed in 2011, and the WASH working group under that MOU selected MUS as a key mutual theme of interest. The objective is to increase learning and knowledge sharing about the most effective MUS approaches, introduce and encourage adoption of MUS approaches within each organization, and scale up implementation of MUS programs in field programs. . USAID is working with Winrock International to develop both a webinar and distance learning module to explain the concept of MUS and present successful examples of its application. In 2012-2013 efforts will include a series of meetings with technical leaders and a webinar for key audiences in the World Bank (e.g., WSS Sector Manager Meeting, WSP, WRM/Ag sector managers) and at USAID (e.g, with the food security initiative) to both raise awareness about MUS and verify operational interest. These introductory sessions will be followed by a global webinar series and other learning events, country/region specific webinars and South-South study tours to show decision makers and/or project implementers what MUS looks like. For this phase, the project will seek to collaborate with the Rockefeller Foundation and the Global MUS Working Group.

2. MUS into key internal training events for USAID headquarters and field staff, including the Water/Sanitation/Hygiene (WASH) training, Environment and Natural Resources Management training, and Water and Food Security training. We have also reached out to our colleagues in the Bureau of Food Security to provide brown-bag lunch presentations to deepen the

understanding and collaboration within USAID/Washington. USAID is particularly interested in expanding knowledge and application of "irrigation +" models of MUS that take advantage of increased funding in the agriculture sector and can also provide potable water.

3. USAID has ongoing MUS projects in Nepal, Niger, Tanzania, Madagascar, and Rwanda, and is initiating new programs in Burkina Faso and Mali. Other USAID Missions in Africa have also expressed interest in the concept.

Among the challenges USAID is facing to scale up MUS internally in our own programming include:

- Most of USAID's implementing partners (NGOs or contractors) do not have capacity or experience in applying a MUS methodology in a systematic, intentional, and rigorous way.
- Narrow USAID earmarks and other funding restrictions require that Missions find creative ways to pool diverse "types" of resources (e.g., WASH, agriculture, and environment funds).
- Because of available funding types for water programming, dominated by dedicated domestic WASH funds, most USAID MUS programming to date has been limited to "Domestic Plus" approaches
- At this time, there is limited awareness and knowledge on the part of USAID agriculture technical staff about MUS, and limited interested in using agriculture funding to incorporate domestic services within "Irrigation Plus" systems

9.2.7 RAIN FOUNDATION ACTIVITIES ON MUS

When RAIN foundation started in 2003 it focused on providing drinking water to people without other means of access. First implementation consisted of the construction of household tanks, with as target to provide 3 lpcd for drinking water to bridge the dry spell.

However during the development of the programme RAIN broadened its scope and added components for other uses like sanitation, hygiene and watering of livestock. By now RAIN has shifted its focus to also provide water for food security and energy.

RAIN, together with its partners, strongly advocate MUS and water buffer management (by the 3R - recharge, retention and reuse- approach). Both MUS and 3R are cross-cutting themes in all our lobby, advocacy, capacity building and implementation activities. These two approaches are interlinked as they are about taking a landscape approach to develop multiple sources for the benefit of multiple uses.

Still there are still several questions to be answered in how to but these approaches best in practice by partners. Questions to be answered are how the projects should be implemented, which components should be put in place as well as having proof of effectiveness.

Activities on the ground

Currently RAIN runs several pilots in Nepal, Burkina Faso and Ethiopia to draw lessons from to come to successful RWH for MUS. First outputs and lessons learned from these pilots are expected in the course of 2012 and 2013.

Nepal

The first project with BSP-Nepal (SNVs Biogas support programme), focused on promoting rainwater harvesting to operate biogas plants in water scarce areas of Nepal. However, BSP-Nepal soon realized that rainwater can be put to other uses as well. In 2011 BSP-Nepal, with the support of RAIN started a pilot on the construction of MUS infrastructure consisting of RWH tank, plastic-lined pond, clay-cement pond, toilet, biogas system and drip irrigation. First results are promising.

In 2011 Helvetas implemented RWH using a RWH plus approach at household and school level. These systems serve both domestic and small-scale productive purposes such as micro irrigation in kitchen garden, cattle feeding as well as source improvement of existing water sources.

Burkina Faso

In Burkina Faso a pilot is started linked to the SNV biogas program. In order to produce biogas water is need (which was not taken into account in certain intervention areas), which can be provided through roof water harvesting. With local implementing partner AFRA a pilot is started to construct 10 above ground tanks of 14m3 and 5 subsurface/underground tanks 15m3. Precondition for households to be selected is access to water for domestic use to prevent completion between water for domestic use and water for the biogas. 2 different sites are selected and 2 different tanks will be provided. The above ground tanks will collect high quality water, suitable for human consumption while the surface runoff tanks will collect water of lesser quality.

Ethiopia

In 2007 RAIN started a pilot with sanddams in Southern Ethiopia. First focus was to create an improved source for domestic use to bride the dry spell. The sanddams are able to capture and store large volumes of water in the riverbed that will be extracted by a pump next to the dam. After the success of the dams in the South other RAIN partners also started constructing sanddams.

One of these implementing partners, HCS, has build up a lot of experience on MUS and the construction of sanddams, however never designed sanddams for MUS. Past activities consisted of upgrading existing RWH schemes towards multiple use by adding components.

Currently RAIN is in a pilot project together with IRC, RiPPLE and HCS to study the cost/benefits of RWH for MUS. This project consists of the construction of three demo-sites for RWH for MUS as well as extensive studies on costs/benefits of matured sites.

9.2.8 MULTIPLE-USE WATER SERVICES (MUS) – NEPAL COUNTRY PAPER

Sanna-Leena Rautanen, Team Leader, Rural Village Water Resources Management Project (RVWRMP), Nepal-Finland Cooperation, *sannaleenar@gmail.com*

Raj Kumar G.C., Engineering and Water Resource Program Coordinator, International Development Enterprises (IDE) Nepal: *rajgc20@gmail.com* /rkgc@idenepal.org

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MUS Progress in Nepal:

- IDE Nepal works on technology-driven MUS by design. 210 systems have been installed benefiting over 35,000 people, and six Solar MUS are currently under construction in collaboration with Renewable World.
- RVWRMP works through the Water Use Master Plan (WUMP) that clearly recognizes the need for a multiple sources for multiple uses. Currently, 35 schemes with different combinations of services are benefiting 54,193 people.2 These include 21 micro-hydro schemes, which provide limited irrigation services as conventional irrigation canals are typically used for energy purposes. Others involve drinking water, improved water mills and non-conventional irrigation applications.
- MUS have been gradually replacing traditional water supply systems. Increasing attention is being given to building the capacity of NGO partners to increase interest in MUS.
- Water Use Master Plan reviews in 2011/12 involving 47 VDCs paid attention to 'missed MUS', talking about MUS and sanitation as leading themes to bring onto the agenda.
- The very first MUS in RVWRMP, a model case, provides a small community of 84 people with a gravity flow water supply, small hydro system (peltric set), and irrigation (combining both conventional and non-conventional hill irrigation). The per capita cost was EUR 321. Since then, the other applications have been ranging from EUR 30 per capita cost for gravity flow water supply with conventional irrigation to EUR 150 for essentially the same with peltric set (very small amount of hydro energy). The per capita costs are the lowest in those applications in which a large number of people benefits from micro-hydro.
- 'MUS by design' versus 'MUS by default' is currently a topic of discussion in Nepal.
- IDE's experiences have shown that utilizing low cost methods to construct gravity fed MUS costs about $100 per household in cash and in kind. IDE impact surveys have shown that MUS increase the annual income by more than $200 per household. The increased incomes can payback the cost of MUS infrastructure within one year.

System Sustainability:

- Functionality and low quality of the existing water supply systems and services remain major challenges.
- Water scarcity due to changing winter rains compromises sustainability and sanitation efforts.
- Such problems in the drinking water supply and sanitation sector are often related to improper on-going management. This is mainly due to a scarcity of functional water users' groups, which also lack institutional support due to a fragmented water sector. IDE also sees the importance of business like management of MUS systems including provision of a paid employee to operate and maintain the system.
- We argue that MUS is a relevant approach to overcome these challenges due to multiple-benefits and increased ability to address operation, maintenance and at least minor repairs.
- The increased returns provide incentives for communities to protect water sources, watersheds, and for and environmental protection. MUS represent an important climate change adaptation tool.

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2 Schemes in preparatory phase do not have population figures available. 8.8.12 there were two micro-hydro schemes in the preparatory phase; likely to include irrigation as well.

- Sustainability may continue to be compromised due to the lack of an institutional home. Small water user groups (under 1,000 people) already suffer from lack of support in post-construction phase and O&M. User Committees, which operate a multi-sector system, could expect even more challenges.

Impact of MUS:

- IDE impact reports have shown that MUS offer real opportunities to increase smallholder returns through agriculture by enabling smallholders to produce high-value crops during the off-season, increasing productivity, and making optimal use of available water resources.
- RVWRMP has demonstrated that micro-hydro, irrigation and water mills have positive impacts on the livelihood of the rural poor. For example, diversified agricultural practices have improved nutritional status of women and children.
- MUS greatly decrease the workload of women carrying water, more than compensating for the increased work of cultivating high-value crops. MUS also improve access to better quality water, improving hygiene, decreasing diarrhea and diseases and improving nutrition through increased consumption of vegetables.
- Full returns to MUS are only achieved when farmers are well linked to input supply systems and local agricultural collection centers and when efficient micro-irrigation is used.

Technical Option for Climate Change Adaptation:

- MUS, as a tool for IWRM, encompasses small-scale water resources. These are scattered around the hills of Nepal, which are important hydrological units normally left out of water resources planning and design. These are most relevant for the poor communities.
- MUS with micro irrigation greatly improve water use efficiency compared to traditional systems, such as earthen channels, which results in high water losses.
- A need exists to thoroughly understand the practical implications of various technical combinations and the opportunities that they can offer; e.g. tapping subsidies in the energy sector.

MUS Institutionalization:

- The scale-up of the MUS approach has challenges as traditional drinking water and irrigation investments and policies have been done separately. Department of Irrigation (DOI) involves only irrigation, Department of Water Supply and Sewerage (DWSS) only WASH, etc. RVWRMP has many DWSS schemes that can be classified as MUS but that are not 'labeled' as such.
- At the local and national levels, MUS-friendly policy should support scaling pathways centered around "MUS learning alliance, networking and advocacy" at the local and national level to effect on MUS friendly policy (meaning that the government should have a clear mandate on MUS funding and development).
- MUS should be introduced into academic water resources engineering curricula. Projects and programs such as RVWRMP and IDE could offer internships/On-The-Job-Training/other student positions targeting those interested in researching or 'just' working with MUS.

Advocacy and Communications:

- In 2008, MUS has formally been included by the government as one of the investment opportunities for local government funds (in the guidelines for local development grants) across the country (result of MUS partners taken learning alliance approach). Recently a government team has given a highly positive review of the iDE MUS program. However, existing government policies have not addressed multiple water needs in integrated ways.
- IDE with support from USAID, DFID, EU, Renewable World and foundations has developed institutional support through a high-level committee chaired by the Secretary of Agriculture which includes the Department of Irrigation and other relevant agencies. RVWRMP is working through Ministry for Federal Affairs and Local Development and each District Development Committee.
- Knowledge transfer through well documented case studies and publications.
- RVWRMP advocacy and communication is focused on the district and community levels, but has also targeted several national and international events.

Conclusion:

- According to a growing national consensus, rural water supply systems should be designed for multiple uses. This approach is more cost effective, better addressed water planning issues, and will be crucial for climate change adaptation.
- Community-based MUS adds value to provide incentives to uplift voluntary community management into professionally managed systems that provide multiple and tangible services. However, lack of institutional recognition for the organization promoting MUS is a barrier, and uniting and working through a MUS group at the country level provides an opportunity to come up with a single voice.
- Substantial work remains to develop local capacity and policies to scale-up MUS.
- MUS to be recognized in Nepal's water resource strategy and included also in the WASH strategies.

9.2.9 MULTIPLE USE WATER SERVICES FOR THE POOR: A ROCKEFELLER FOUNDATION SEARCH

About the Rockefeller Foundation

The Rockefeller Foundation's mission to promote the well---being of people throughout the world has remained unchanged since its founding in 1913. Today, that mission is applied in an era of rapid globalization. Our vision is that this century will be one in which globalization's benefits are more widely shared and its challenges are more easily weathered.

To realize this vision, the Foundation seeks to achieve two fundamental goals in our work. First, we seek to build resilience that enhances individual, community and institutional capacity to survive, adapt, and grow in the face of acute crises and chronic stresses. Second, we seek to promote growth with equity in which the poor and vulnerable have more access to opportunities that improve their lives. In order to achieve these goals, the Foundation constructs its work into time---bound initiatives that have defined objectives and strategies for impact. These initiatives address challenges that lie either within or at the intersections of five issue areas: basic survival safeguards, global health,

environment and climate change, urbanization, and social and economic security. For more information, please visit our web site.

Multiple Use Water Services for the Poor
The Rockefeller Foundation conducted a Search, an early exploratory and learning stage in our initiative development model, from March 2011 to March 2012 to focus on understanding the barriers that limit the scaling of MUS, their comparative importance, and possible approaches to overcoming challenges and supporting opportunities for scaling in order to help the MUS community develop a theory of change to scale the MUS approach. The Search was designed to address the following questions:

1) **How could the MUS model be made more robust?** How could the MUS model be made more relevant and robust to a variety of water resource environments, policy frameworks and legal systems, formal and informal water governance systems, peri-‐‑urban and rural environments and a range of local cultural contexts? What are some viable prototypes that might enable scaling across a range of conditions?

2) **How could MUS be scaled?** What are important preconditions and dimensions of scalability? How could technical and environmental constraints, policy barriers, financing gaps, and implementation silos and capacity barriers be addressed to expand diffusion of MUS approaches? How could more relevant actors be brought into this field?

3) **What is the potential for impact?** Where and how could a significant impact be achieved? What are viable pathways for improving the lives of poor and vulnerable people through MUS interventions? In order to pursue these questions the Rockefeller Foundation is working with a select number of partners, who will conduct scoping studies, convene experts, produce case study and policy analysis, and develop and document conceptual models. Results will be presented at the Foundation in November 2011, and will be made publically available shortly thereafter.

Specific work undertaken during the Search included:
- The development of operational models and training tools by Winrock International and IDEO.org
- An assessment of the robustness of the MUS model by the Pacific Institute
- A five-‐‑country study conducted assessing opportunities and barriers to scaling MUS by the International Water Management Institute and the International Water and Sanitation Centre (IRC)
- An expert convening hosted by the Johns Hopkins University Global Water Center
- The development of strategic advocacy and communications tools for the MUS Group

9.2.10   WINROCK INTERNATIONAL AND MUS

MUS is the sole focus of Winrock's Water Innovation Program, established as an endowment-seeded effort in 2005 to explore important areas of interest that have grassroots relevance and the potential for substantial impact on the lives of the poor. Since 2005, Winrock's MUS work has grown substantially, with programs in East and West Africa and South Asia and a dedicated global team of approximately 50 full-time staff currently working on MUS as well as a number of local partners. We have a wide range of experience and expertise in MUS ranging from research to direct

implementation to capacity building and advocacy. For example, Winrock is currently (or has recently) implemented MUS projects in Tanzania, Rwanda, Niger, Burkina Faso, Mali, Nepal and India that will ultimately provide MUS for approximately 250,000 people by the end of the project with funding from USAID and Coca Cola. Working in collaboration with a range of partners, we've led an extensive study on the costs, benefits and poverty impacts of MUS. We also developed innovative advocacy and capacity building materials, including an animated video, a guide to MUS, and a 3-day training course. Through this work we've tried to be deeply reflective, continually questioning our work, to learn and refine our understanding of MUS. These learnings are reflected in our continually evolving conceptual and implementation models and activities. A brief overview of some of our work may be helpful here.

Multiple Uses of Water Services for the Poor: Assessment of the State of Knowledge and Potential Market Size (Gates Foundation: 2007). In 2007, Winrock, in collaboration IRC and IWMI, completed a systematic cost-benefit assessment of single- verses multiple-use water services and their potential applicability in South Asia and sub-Saharan Africa for The Bill and Melinda Gates Foundation (see study at www.winrockwater.org).

Niger West Africa Water Initiative II Multiple -Use Services (USAID: 2008-2009). Under this project, Winrock built on its earlier work related to low-cost technologies and livelihood investments in Niger to actively promote Multiple-Use Water Services (MUS) within the WAWI partnership. Through this project we: 1) Identified the most promising options and areas for implementing MUS in Niger for household and community-based water systems; 2) Developed practical working models for implementing the most promising MUS options; and 3) Prepared a detailed implementation plan for MUS in Niger, including targeted areas, interventions, and expected results.

Water for Health and Wealth: Niger Multiple-Use Water Services (GETF and USAID, WAWI: 2008-2010). Building on the above, Winrock implemented a MUS project benefiting 13,500 people. The project focused on improving health through improved access to safe drinking water coupled with hygiene education and increased annual incomes from productive water use activities focusing on horticulture and aquaculture. Project activities supported access to water services for domestic and productive uses using low-cost water technologies and services in shallow groundwater areas. To optimize health benefits from improved access to safe drinking water, the project worked directly with communities to increase awareness and capacity to assess the causes and consequences of poor hygiene practices.

Nepal Smallholder Irrigation Market Initiative, SIMI (USAID: 2003-2009). Through SIMI, Winrock, IDE and its implementing partners increased access to improved water for domestic and productive activities for over 50 communities. The project placed extensive efforts on supporting converting season gardens around the homestead into high-value horticultural production. By combining improved access to water (supported by micro-drip irrigation technology) and work along the entire value chain (ranging from improved access to inputs, agricultural extension, and assistance with output marketing), household incomes increased on average $250/year as a result of the project.

Nepal Education for Income Generation (EIG), (USAID, 2009-2013). Under the EIG project, Winrock and its partners are implementing MUS to increase income and improve health. Under this project, focal points of the literacy program included high value horticulture, hygiene and nutrition.

India Water for Health and Wealth: Multiple Use Water Services (Coca-Cola Foundation: 2009-11). Under this program, Winrock worked to achieve environmentally and financially sustainable and

equitable improvements in health, income, and food security for poor rural smallholders, and to identify financial, implementation and institutional best practices for wide-scale replication. The project provided reliable access to water for domestic and productive activities to 3 rural smallholder communities targeting 1,050 households (5,250 people) through innovative upgrades and improved governance and management of existing domestic and irrigation water systems while also improving the health, nutrition, food security and social empowerment of target disadvantaged households, especially women.

Tanzania Integrated Water Sanitation and Hygiene Project (iWASH), (USAID, 2010-2013). Under the iWASH project, Winrock is providing access to MUS to 85,000 people. Increased access to water for domestic and productive uses is coupled with supporting livelihood and health programs. Livelihoods activities focus on high-value horticulture and livestock. Health activities (undertaken by Care) focus on hygiene education and sanitation marketing. In addition, we've worked to build the private sector provision of water-related products with a focus on low-cost, locally manufactured rope and treadle pumps, water filters, and drip irrigation kits.

Rwanda Integrated Water, Sanitation and Hygiene Project (RIWSP), (USAID, 2011-2016). Under the RIWSP project, Winrock is providing access to MUS for 80,000 people. Increased access to water for domestic and productive is ensured by focused on interventions at the catchment, community and household level. Improved water access will be combined with a range of supporting livelihood and health-related activities.

West Africa Water, Sanitation and Hygiene Project (Wa-WASH) (USAID, 2012-2016). Under Wa-WASH, Winrock is working in Niger and Burkina Faso to provide access to MUS for 32,000 people. Increased access to water will be coupled with supporting health and livelihoods program. Health-related supporting activities will focus on hygiene education with an emphasis on hand washing. Livelihoods related activities will focus on high-value horticultural production. In Mali, we will develop a strategic plan for MUS, including the most promising options for MUS. Across all 3 countries, building on earlier work, we will support the local private sector in low-cost, water-related technologies, including: pumps (rope and treadle), drilling, and small reticulated systems.

Accelerating Multiple-Use Water Services for the Poor (Rockefeller Foundation). In 2012, as part of the Rockefeller Foundation learning Initiative on MUS, Winrock undertook 3 pieces of work: 1) developing operational working models for MUS in collaboration with IDEO.org, resulting in "Guide to Multiple-Use Water Services"; 2) identifying the most promising options for scaling-up up MUS, and: 3) developing a strategic plan for accelerating scale-up of MUS. In addition to the planned work, Winrock also developed a 2 ½ minute animated advocacy, entitled "keeping the water flowing", which explains MUS in a simple and compelling way and a 3-day MUS training program. With additional funds from the Rockefeller Innovation Kitchen award, the training materials have been translated into French. To date, we've training more than 150 implementers, policy makers and local government in the US, Rwanda, Tanzania and Burkina Faso.

External Recognition for MUS work. Winrock's highly innovative and effective MUS work has been recognized by USAID and US State Department. In 2010, Winrock's MUS work won the Interaction/IFAD Innovation award as part of their Best Practice and Innovation Initiative focused on agricultural and rural livelihoods (http://www.interaction.org/bpi-round-2). In 2011, Winrock won the Rockefeller Foundation Innovation Kitchen award for their capacity to nurture innovation; the Water Innovation Program was "poster child" for the award. Beyond implementation and research

activities, Winrock has also been on the forefront of MUS advocacy and policy. In 2006, Winrock received a Clinton Global Initiative award for MUS and was the driving force behind successful introduction of MUS into the U.S. Paul Simon Water for the Poor legislation.

About Winrock. Winrock International is a non-profit organization that works with people around the world to increase economic opportunity, develop human capacity, sustain natural resources, and protect the environment, matching innovative approaches with the unique needs of its development partners. By linking local individuals and communities with new ideas and technology, Winrock seeks to increase long-term productivity, equity, and responsible resource management to benefit the poor and disadvantaged. The organization is currently implementing its mission through more than 125 projects in over 40 countries worldwide. This extensive project portfolio has generated many lessons learned for Winrock during more than 30 years of international project implementation. Winrock has substantial expertise in implementing integrated water-related programs that increase income, food security and health for the rural poor and generate tangible environmental benefits.

9.2.11 COMMUNICATION ON THE ACTIVITIES OF THE STANFORD-VT-OXFORD RESEARCH TEAM

Ralph P. Hall, Virginia Tech

Context

In 2008, faculty and students at Stanford University (Co-PI, Jennifer Davis), Virginia Tech (Co-PI, Ralph Hall), and the University of Oxford (Co-PI, Robert Hope) began work on a multi-country study on the productive use of domestic piped water. This study was funded by the Water and Sanitation Program (WSP), World Bank, to collect in-depth quantitative and qualitative data to evaluate the perceived benefits of rural "domestic plus" or "defacto domestic plus" systems. These benefits included the premise that these systems can better meet rural households' water needs, generate sufficient household income to cover incremental water delivery costs for providing greater quantities of water, and contribute to poverty reduction and other social goals such as enhancing gender equality. More specifically, the Stanford-VT-Oxford team designed the study around the following core research questions:

1. To what extent and under what conditions does productive use of domestic piped water occur?
2. What are the incremental costs of, and expected income generated by, upgrading the piped systems to productive use capacity?
3. What evidence exists regarding the financial/technical sustainability of piped water systems used for income-generating activities?
4. Who benefits when piped water supply systems are used for productive purposes?

The study used a cross-sectional research design and focused on rural communities in Colombia, Senegal, and Kenya. Within each country, a purposive sampling strategy was used to select around 50 communities with piped water systems (147 systems were studied in total). The sample was designed to capture some variation in the extent of household-based productive activities being undertaken in the communities, such that 'similar' communities with different levels of productive activity could be compared. The data collection instruments included household surveys; an engineering assessment of installed infrastructure; interviews with community leaders, water committees, and water system operators; and focus groups with women (and men in Colombia). This

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rich dataset has enabled the research team to identify associations between the extent of productive use and cost recovery, sustainability, and household well-being, using both qualitative and quantitative data.

Interesting Findings

One of the most interesting observations across all three countries is the similarity that exists in the percentage of households engaged in water-based productive activities (see the figures in Appendix A).1 For example, in all three countries, between 71% and 75% of all households interviewed were engaged in one or more productive activities that used any water source. Further, between 54% and 61% of households used piped water to support their activities and between 34% to 43% of households generated an income from their piped-water-based activities. When considering productive activities supported by any water source, between 51% and 55% of households reported generating an income from their activities. Given the variation that exists in the types of piped water systems studied these findings imply a very similar pattern of engagement in piped-water-based productive activities in the three countries studied.

However, this pattern needs to be interpreted carefully, since the amount of water used, the types of activities undertaken, and the amount of income generated from productive activities varies significantly (between countries and between different regions within countries). For example, median water use per capita in Colombia was 5-6 times that of the African households. This high level of piped water consumption can be attributed to the fact that virtually all of the households interviewed in Colombia had access to a private tap. In contrast, around one third of households in Senegal and Kenya had a comparable level of service. In these countries, far more households relied on public taps or a neighbor's tap. These meta-level data highlight the fact that while there may be a consistent pattern for household engagement in piped-water-related productive activities, the quantity of water used for these activities is dependent on the level of water access and availability. With regards to Senegal and Kenya, households use a median of 23 and 31 LPCD, respectively. Thus, households in these countries are using the minimum quantity of water required for domestic use (i.e., 20 LPCD) for a wide range of livelihood-related activities. This finding reinforces the MUS argument that households repurpose and use water as required and do not follow the pattern of use designated by system designers or by regulation. The Kenya data also revealed that households using low quantities of water were able to create relatively high levels of income from their productive activities. Thus, factors such as system reliability/performance may be just as important as water quantity for encouraging households to invest in the productive use of domestic water.

An analysis of the differences between piped water systems supporting high vs. low levels of productive activity revealed a broad range of factors associated with the productive use of piped water (Appendix B). The variation in these factors across countries points to the important role that the local context plays in shaping which factors are important correlates of productive activity. It also means that there may be no 'silver bullet' for scaling up MUS, and more tailored approaches are necessary.

The results from the sustainability analyses position the productive use of water as one of several important factors associated with greater levels of water system technical and financial performance. For example, in Senegal, there is a clear association between high levels of piped-water-based productive activity and greater technical performance of systems. However, the direction of the association is not clear. Do higher levels of productive activity result in better technical performance, or does better technical performance create a climate where households are willing to invest in

productive activities? More research is needed to answer this question. In Senegal, non-technical post construction support, the capacity of water committees and system operators, and community engagement in the water system planning process were also associated with greater levels of technical performance. In Kenya, expanding the focus beyond water to consider community access to energy, credit, and communication (i.e., roads and mobile phones), was necessary to understand system sustainability and other development outcomes of interest. These results point towards a sequencing approach, whereby MUS becomes one of several system-level investments targeted at promoting rural development.

Additional research is needed to determine if there is a specific ordering of investments that maximize rural development objectives, and where MUS falls in this sequence.

With regards to the incremental cost-benefit analyses, where system enhancements to increase the water flow for productive use were needed and feasible – primarily in Senegal and Kenya – the repayment period for these investments fell in the range of one to two years, respectively. However, whether or not the additional productive income included in the analyses will be realized is linked to broader factors such as the availability of credit and resources such as land, and the willingness of households to pay for the additional water

Over the next several months, the Stanford-VT-Oxford team plans to develop a series of academic papers that explore the important findings at the country level and across all three countries. The research team is also continuing its study of the productive use of domestic water by including an MUS dimension in several new research projects studying water and sanitation interventions.

9.3 List of participants

Mr. Deres Abdulkadir Executive Director Research inspired Policy & Practice Learning in Ethiopia (RiPPLE) Exec. Director's OfficeAddis Ababa 14 , 5842, Ethiopiaderes_ak2004@yahoo.com	**Ms. Rochelle Rainey** Senior Advisor, Environmental HealthUSAID Global Health BureauWashington DC , 20523, United Statesrrainey@usaid.gov
Mr. Rafael Callejas Executive Director Millennium Water Alliance Washington , DC , 20006, United Statesrafael.callejas@mwawater.org	**Ms. Sarah Carriger** Amsterdam , 1073LL, Netherlands sarah.carriger@waterwrites.com
Ms. Sanna-Leena Rautenen Chief Technical Adviser (Team Leader) Rural Village Water Resources Management Project Tampere , 33230, Finland sannaleenar.2@gmail.com	**Mr. Raj Kumar G.C.** IDE Nepal Engineering Bakhundole, Lalitpur , Po Box2674, Nepal rkgc@idenepal.org
Ms. Mary Renwick Director/Senior Program Officer Winrock International Water Innovation Program Pittsburgh pa , 15208, United States mrenwick@winrock.org	**Mr. Ralph Hall** Assistant Professor Virgina Tech School of Public and International Affairs, Urban Affairs and Planning Blacksburg VA , 24060, United States rphall@vt.edu
Ms. Ines Restrepo Associate Professor Universidad del Valle Instituto Cinara Cali Valle del Cauca , 1111, Colombia ines.restrepo@correounivalle.edu.co	**Ms. Martine Jeths** Programme Officer RAIN Foundation Amsterdam , 1013 NJ, Netherlands jeths@rainfoundation.org
Mr. Stef Smits Senior Programme Officer IRC Den Haag , 2508 EH, Netherlands smits@irc.nl	**Ms. Sarah Lee** Winrock International Enterprise and Agriculture Group Arlington VA , 22202, United States slee@winrock.org
Mr. Roland Jacques Tapia Winrock International Talence , 33400, France rolandtapia@yahoo.fr	**Mr. John Thomas** Fellow The Rockefeller Foundation New York NY , 10028, United States jthomas@rockfound.org
Ms. Barbara van Koppen Principal Researcher International Water Management Institute Silverton Gauteng , 0127, South Africa b.vankoppen@cgiar.org	**Mr. Shilp Verma** Independent Consultant Self-Employed Anand Gujarat , 388001, India shilpv@gmail.com

Ms. Robina Wahaj Irrigation Officer Food and Agriculture Organization of the UN Land and Water rome , 00153, Italy robina.wahaj@fao.org	

Facilitators from PICOTEAM

Dr. Jurgen Hagmann Teamleader Picoteam (Global) 488 Dwyka street; Erasmuskloof; 0048 Tel: +27/83/5364501 or +254/722/256525 jurgen.hagmann@picoteam.org	**Dr. Johannes Ramaru** Team Leader Picoteam Southern Africa Polokwane Limpopo , 0699, South Africa Joe.ramaru@picoteam.org

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