Improving Sustainability of Impacts of Agricultural Water Management Interventions in Challenging Contexts

FACILITATOR MANUAL

Community Engagement in Small Scale Irrigation, River Diversion, and Reservoir Systems Training Curriculum



Based on the Community Engagement in AWM Training Curriculum by Bryan Bruns and Robert Yoder, December 2012







Acknowledgement

The materials were developed with support from IFAD, under the project Improving the Sustainability of Impacts of Agricultural Water Management Interventions in Challenging Contexts.

Support for preparing and printing the materials was provided by the network for Improved Management of Agriculture Water in East and Southern Africa (IMAWESA).

International Water Management Institute (IWMI). 2014. Community Engagement in Small Scale Irrigation, River Diversion, and Reservoir Systems Training Curriculum: facilitator manual. Manual prepared under the project "Improving Sustainability of Impacts of Agricultural Water Management Interventions in Challenging Contexts". Colombo, Sri Lanka: International Water Management Institute (IWMI). 29p. doi: 10.5337/2014.220

Table of Contents

Table of Contents	3
Introduction to the Course	5
Aims	5
Structure	5
Scope for Application	5
Site Selection	5
Preliminary Walkthrough	
Scope	
Participants	
Community Context	
Language & literacy	
Using the Facilitator Manual	
-	
Advance Preparation Course Materials Preparation	
•	
Case Study MaterialsRole Descriptions & Population Data	
Briefing Materials	
Project Cycle Diagram	
Administrative Paperwork	
Preparing the Participant Workbook	
Training Materials	
Materials	
Equipment	
Data	12
Course Overview	13
Course Content & Daily Preparation Activities	14
Module 1	14
At a glance	14
Module objective	14
Essential preparation	14
Methodology	
Options for delivery	
Module 2	16
At a glance	16
Module objective	16
Essential preparation	16
Methodology	16
Options for delivery	18
Module 3	19
At a glance	19
Module objective	19
Essential preparation	19
Methodology	19
Facilitator Manual	3

Options for delivery	20
Module 4	21
At a glance	
Module objective	
Essential preparation	21
Methodology	21
Options for delivery	22
Module 5	
At a glance	23
Module objective	23
Essential preparation	23
Methodology	23
Options for delivery	24
Learning outcomes	25
Module 1 – Participatory Methods	
Module 2 – Water System Walkthrough	
Module 3 – Planning and Process Tools	
Module 4 – Community Engagement	
Module 5 – Collaboration and Consolidation	
Notes on Course Design Elements	27
Bibliography	28



Introduction to the Course

Aims

The goal of this training course is to promote a process in which the community of water users plays a leading role in planning and implementing improvements in water services. The modules in the training curriculum provide a hands-on way of learning and strengthening skills. The modules can be adapted for use in a variety of contexts to extend the capacity of field workers to collaborate effectively with communities in developing appropriate, sustainable water service systems.

Structure

The course is written as a 5-module course and each module can be covered in one day. However it is essential to apply the course content within the context of the locality in the field and the commitments of the participants and trainees. The sequence of activities may need to be adjusted according to the location of the community, irrigation system, weather, and other factors. The schedule for each site should be adjusted to fit plans for travel to the field, accommodation, etc. Therefore it is recommended that the facilitators plan a detailed schedule for the delivery of the modules according to the context for the individual program. This may mean spreading the modules across a longer timescale, multiple visits, or breaking modules down into shorter training periods, for example half-day training sessions held in conjunction with monthly meetings as part of ongoing skill development for project staff.

In order to bring the course together, the series of activities that would normally be conducted in multiple visits over several weeks or months has been compressed into 5 consecutive one-day modules. A longer course may be preferable in order to allow substantially more time to work on the skills required for interviewing, participatory rapid appraisal, and participatory planning, particularly if the course is being applied as an initial training course for people with little previous experience of these skills. Prior to training, consider the current experience of the participants and identify where additional time may be required. You may wish to include gaps of one day or more between some of the modules to allow trainees to practice their new skills, or prepare for the next module through homework tasks.

To use the materials in a 'Train the trainer' model, the program would need to be slightly remodeled to include additional material on training methods and other topics, depending on the background and needs of the trainees, and this would require additional time.

Please note that Modules 1 and 5 are designed only for trainees, while the middle three modules are spent in the field working with community members. In tailoring the course to the application, you may wish to use the natural breaks between modules 1 & 2, and 4 & 5 for reflective or practice exercises or other preparation.

Scope for Application

Site Selection

The community activities should be carried out in a location where preparatory visits have confirmed that there is strong local interest, where at least 15 or more local stakeholders covering the diversity of major kinds of stakeholders, would be willing to work on developing ideas for potential improvements for at least four hours a day for three days. Ideally, this should be done in a community which has already requested aid and which will be eligible for project/program assistance. The training should be scheduled for a time when community members are not extremely busy with agricultural activities.

Preliminary Walkthrough

A preliminary walkthrough is essential and must be carried out in advance to confirm that there appears to be sufficient potential for development of small-scale irrigation. This visit should include a site assessment and canvassing for community volunteers to participate in the fieldwork modules. For the three days of community activities, it would be highly desirable if the trainees and trainers can stay in the community or nearby, and the facilitators should identify if this is possible during the preparatory visit.

Scope

Small-scale water resource systems are considered as systems, including, in accordance with local conditions and priorities:

- Small reservoirs (tanks/ponds with less than 1 million cubic meters of storage), river diversions, and canal irrigation networks
- Attention to multiple uses of water and the full range of water users, including irrigation by gravity or pumping (above or below the water source), gardening, domestic use, livestock, fisheries, materials for thatching, brickmaking, etc.
- Market linkages for irrigated crops, agricultural inputs, and financial services.

In this program, it is acknowledged that multiple institutions govern water use, including informal norms and customs, households and kinship, ethnicity, traditional authorities, local government, and religious institutions, so that water user organizations (groups, associations, committees, etc.) are part of a larger governance network composed of multiple institutions that is crafted and evolves to fit the context. Attention is paid to:

- Linked water resources, including additional storage structures (e.g. ponds), drainage, conjunctive management of surface and groundwater, and upstream/downstream relationships
- Watershed and land-use management, health and environmental impacts
- Considering gender, poverty, and social inclusion to promote equitable, pro-poor participation in planning, implementation, operation, maintenance, and sharing of benefits.

The curriculum is designed so that it can be applied and adapted flexibly to fit local circumstances. The course is primarily designed for situations where collective action by water users is important in the management of shared surface water resources and irrigation is an important use. Application in other contexts, such as larger reservoirs, agency-managed irrigation systems, groundwater pumping without a shared surface water resource, or water resources with little or no irrigation should be based on analysis and adaptation to incorporate relevant issues and expertise.

Participants

The course has been designed to work well for about fifteen trainees, mainly social facilitators/mobilizers, engineers, technical staff and others working directly with communities, along with others involved in implementation. The course could be adapted for more trainees and other formats, including training of trainers, through appropriate use of breakout groups, additional facilitators, and multiple field sites.

Community participants should include all kinds of water users, pro-actively including diversity in terms of gender, age, wealth, ethnicity and other social factors, as well as informal and formal leaders, with at least as many community participants as trainees.

Trainers should include people with skills and experience in community engagement, participatory development, and water resources engineering. Depending on the situation and priorities, it may be important to include other expertise in the training or follow-up activities, such as agronomy, agricultural marketing (value chains), groundwater hydrology, fisheries, etc.

A key part of the trainees learning is to take part in the leadership of the modules themselves and to collaborate as part of a leadership team. Trainees are divided into small groups during the first session and thereafter a different team should be involved in the organization and logistics of each training module. The involvement will require the identification of a chair, note-taker and

timekeeper for each session, as well as activities such as setting out seating / space lay-out for sessions and assembling groups and allocating tasks. Trainee groups also lead the check-in / debrief session at the end of each module.

Frequently the training schedule requires the formation of small groups. The facilitators should take care to prepare in advance the criteria on which the groups are based. Generally speaking, it is recommended that groups are divided such that a blend of expertise and experience is brought to each exercise but in some cases it may be more appropriate to cluster together participants of similar background or experience. It is important that the trainers observe the dynamics of the groups in action and make any changes in the early stages if they are necessary to ensure the group is functional and inclusive.

Community Context

While this course should be useful where the main potential for participation is limited to having government listen better to citizens' views or involve citizens in some planning discussions, it is particularly intended for situations where there is the potential for extended collaboration, for example in problem-solving, partnership in joint decision-making), or even greater empowerment, (for example where communities have the authority and autonomy to organize their own development activities). Skills in listening, for carrying out interviews and discussions, form an important foundation for any kind of participation. Higher levels of engagement make it particularly important to also be able to facilitate inclusive processes and apply tools that assist analysis and consensus-building by communities, including support with appropriate technical and other advice.

In devising the curriculum it has been assumed that as part of the pre-course site assessment, a budget range (total cost or cost/hectare) has been set. This could be based on government or IFAD (the International Fund for Agricultural Development) project guidelines. It should also include guidelines or norms regarding community cost-sharing with outside investment. The facilitators will need to use some of the costs in preparing the course materials.

It has also been assumed that the user community will continue to be involved in the final design and implementation with authority to adjust the priority of activities or select alternative designs as cost information is finalized. The participation of stakeholders in the process is a fundamental feature of this training course and the requirements should be discussed during the pre-course site visit to ensure that they are agreed to the satisfaction of both the community stakeholders and the facilitators.

An essential element of the training is ensuring that community stakeholders are sufficiently represented. As part of a preliminary site visit it would be wise to invite volunteers from the community who would be prepared to be involved. The ideal stakeholder group would represent the following groups:

- Representatives of different parts of the command area and of a range of water uses
- Community members from potential irrigation expansion areas
- Community members meeting IFAD client criteria, including smallholders and the landless, poor, socially marginalized and vulnerable people
- Irrigation system leaders and other informal or formal leaders concerned with water.

Language & literacy

The training should be conducted in a language in which the trainees are capable and comfortable. The time required for translation makes it highly advantageous if most or all the trainers also speak that language. Breakout groups and field activities with community members may be in a local language or dialect. The training does not presume literacy, particularly for community members. It relies primarily on participatory rapid appraisal and similar techniques that emphasize verbal and visual activities, with written formats for summarizing key points, assuming each group will contain someone who can act as a recorder. It is vital that trainers working with translators or interpreters allow additional time for this in the training schedule.

Using the Facilitator Manual

This facilitator manual has been compiled as a step-by-step guide to delivering the program. First-time trainers for this course will benefit from reading the manual cover to cover, and will need to allocate a significant amount of time to preparing the materials prior to delivering the course.

The manual forms a complete guide to delivering the course. In practice it may be best to work with a wider team to facilitate effective course delivery. Facilitation activities include delivering the face-to-face training modules but these facilitators could be supported by a team who variously undertake the preliminary site visit, collect community data, set up meetings with the district authorities, organize hosting arrangements with the community and compile the Participant Workbook materials. Throughout the manual therefore, the word 'trainers' has been used to describe the facilitators who are delivering on-site teaching and leading the sessions.

During the course, the manual can be used as a reference for facilitators in reviewing the modules and preparing for the next stage of the course. It can be used in it's own right as a manual to deliver the course tailored to the context and participants, or in conjunction with the 'Session Cards' which provide a guick reference prompt and step-by-step running order for each session.

Modules throughout the Participant Workbook, the Session Cards and this manual are identified by a simple icon for ease of reference across resources.



Module 1 - Participatory Methods



Module 2 - Water System Walkthrough



Module 3 - Planning & Process Tools



Module 4 – Community Engagement



Module 5 - Collaboration and Consolidation

The cards, presentation, manual and workbook have been generated from the Community Engagement in Agricultural Water Management Training Curriculum by Bryan Bruns and Robert Yoder, December 2012. The photographs were taken during the pilot training courses which ran in Nepal and Ghana.

Advance Preparation

There are many sources of information on participation, facilitation, negotiation, and institutional aspects of water resources development and management, participatory rapid appraisal (PRA), appreciative inquiry, and other topics related to this curriculum. The bibliography at the back of the curriculum document includes references used in developing the curriculum, and some starting points for learning more about these topics. If you are unfamiliar with any of the areas you may benefit from reading up on them prior to commencing planning and delivery of the course.

Prior to the course it is essential that the facilitators have set up the key relationships to ensure delivery of the modules. This will require scheduling meetings with the community where the fieldwork modules will take place, and with the district authorities. The facilitators must carry out a preliminary site visit and walkthrough in advance of the course to confirm the suitability of the site and community. As the fieldwork modules are designed to be residential, identify whether there is scope to accommodate the trainees and trainers near or in the community for the duration of the visit. When scheduling the timing of the course, ensure that the fieldwork modules coincide with a period in the agricultural calendar where community members are available to participate in the proceedings. Ensure that you obtain basic population data for the local community.

In preparation for the course, the facilitators will need to source or produce a number of materials which will form the references for case study exercise. The process of creating these materials will support the facilitators in familiarizing with the course program and content. It is very important that the case study examples closely match the community locality as they are to be used to prepare the trainees for the fieldwork.

Course Materials Preparation

During the process of the course, trainees will produce 7 outputs that form the backdrop to implementing any new water intervention. It is essential that the trainers have made adequate preparation themselves in order to equip the participants to create these deliverables.

Case Study Materials

Choose a scheme matching the local context as closely as possible. The case study resources not only support the case study activity but also provide a sample for the trainees to use when creating their own outputs later in the course.

The following case study materials should be prepared, sourced or created by the facilitators in advance of the course and added to the Participant Workbook.

Sketch Map

A rough sketch map showing the major locations in the water resources system, including the full range of closely related water sources and uses. Show the locations of possible improvements.

Concept Drawings

Simple conceptual design drawings showing potential infrastructure construction or improvements and a rough guide of costs.

Livelihood Calendar

A calendar that shows the schedule of cropping of irrigated crops, and other water uses. Include important time periods e.g. harvest, food shortage, fisheries activities, labor migration, holidays etc.

Value Chain Chart

A value chain chart including sections on Suppliers/sources; Inputs (including knowledge and technical advice); Major crops or types of crops; Buyers and other users.

Organization Chart

Basic organization chart, showing the structure of local water management and links to related organizations.

Initial Impact Analysis

An impact analysis matrix / table that identifies the benefits and costs of changes to water management for different water users.

Summary of Rules

A record of rules about access to water and land, resource mobilization, etc.

For more information on preparing the case study resources, please see the Participant Workbook: Task Group Topic Briefing, which contains detailed instructions.

Role Descriptions & Population Data

In addition to the case study materials, facilitators should prepare a selection of roles for the roleplay exercise in Module One.

Use population data gleaned from the field site visit to create a population data profile. From this data, choose a range of roles that represents a typical cross-section of the community population for your case study. Ensure that you include female roles, poor, socially marginalized and vulnerable people, and other roles consistent with typical local conditions and IFAD/ government policy priorities.

You will need a role for each of the trainees.

For each role, create a card or sheet including the following information:

- Brief description and name
- Occupation and role in the community
- Family situation and background
- Priorities (may be personal ambitions or attitudes)
- A particular strength(s) that this person could offer to water resources development (skills, knowledge, experience, situation, etc. and how they have demonstrated these in a previous activity.

Keep the cards / sheets with your training materials to hand out on the day.

Briefing Materials

For the fieldwork modules, facilitators should prepare a short brochure describing the proposed scheme. This will be based on the preparatory visit to the site and should identify and describe local accomplishments in improving small-scale irrigation systems and ideas about how to work better with farmers. It should include a brief explanation of the planned activities and approach, including community participation and collaboration. Where there is agreed eligibility for program assistance this should be defined.

Project Cycle Diagram

As part of preparation, a flow chart or Gantt chart (timeline) identifying the major activities (steps) in the project cycle, from initial requests or identification through design, construction and operation and maintenance, should be located or prepared for distribution. This should be based on the preparatory visit the facilitators have made to the project site, so that it is specific to the program that trainees are involved in. If there is a decentralized, bottom-up, or demand-driven process for generating initial proposals/requests for projects, this should be included, along with any activities for assessment of feasibility. This may represent a generic or idealized process, different from what happens in practice. One of the topics during the training will be to discuss opportunities for improving participation in the context of practical constraints during implementation. A copy of the diagram should be included as a sample in the participant workbook.

Administrative Paperwork

Ensure that you have sufficient paperwork to administrate the course, which may include forms for travel or other reimbursements, booking information for any accommodation or travel, and a certificate of completion for each trainee.

Preparing the Participant Workbook

The Participant Workbook is the main paper-based tool that trainees will use to record and store their work during the course. They will take the workbook with them at completion of the course so that it can be used for reference and guidance in future work. Prepare a Participant Workbook for each trainee. A strong binder or weather-proof wallet should be used.

- 1. Print out the Participant Workbook in full for each trainee
- 2. Insert copies of the case-study materials
 - Sketch Map
 - Concept Drawings
 - Livelihood Calendar
 - Value Chain Chart
 - Organization Chart
 - Initial Impact Analysis
 - Summary of Rules
- 3. Insert any other materials prepared specifically for the course, in the appropriate module
 - Briefing Materials / Scheme Brochure
 - Project Cycle Diagram
 - Population data for site (by gender, age, agricultural production, etc.)
- 4. Include paper for maps, sketches and notes
 - plain paper
 - lined paper
 - graph/squared paper
- 5. Insert plastic wallets at the back of the Workbook to house any samples collected
- 6. If appropriate add other resources to create a participant pack
 - notebooks
 - index cards
 - pens
 - sticky notes
 - labels
 - USB flash drives with course materials stored on them

Training Materials

The following materials are used during the training schedule but alternatives may be appropriate in the local context. You should identify the methods and activities you plan to use and ensure that you have the relevant materials to hand.

Materials

- Flip charts (white and brown)
- Spare A4 size paper (plain, lined, graph)
- Drawing paper in different colors (white, brown, red, blue)
- Participant Workbooks
- Certificates of completion
- Spiral notepads large and thick size
- Index cards
- Sticky notes large size
- Board markers (blue, red, green, black)
- Ball pens
- Pencils
- Erasers
- Adhesive tape
- Stapler, larger size
- Stapler pins
- Temporary adhesive clay

Equipment

- Easel/Flip chart stand
- 30 meter measuring tape
- USB flash drives
- Nametags

Data

The training does not assume availability of topographic maps, satellite imagery, cellphones, digital cameras, global positioning satellite (GPS) equipment, computer-based geographic information systems (GIS), computers, projectors, or other electronic technology and data. The course facilitators should identify what is available and make appropriate use of it.

Course Overview

Each module is divided into sessions. At the end of each module, a check-in session is recommended to ensure that the training is meeting the needs of the trainees.

Module One Course Introduction

Participatory Methods

Case Study Role Play

Check-in

Module Two District Authority Briefing

Community Meeting

System Walkthrough

Appreciative Interviews

Check-in

Module Three Participation In The Project Cycle

Design Discussions

Check-in

Module Four Design Integration

of the trainees.

Community Consultation On Improvement Proposal

Check-in

Module Five Planning For Community Engagement

Training Assessment

Check-in

There is one major activity for each module, shown in bold. The schedule should be adjusted to fit factors including travel time, weather, availability of community members and previous experience



Course Content & Daily Preparation Activities

Module 1

At a glance

Module 1 begins with a welcome and introductions between trainees, and covers all administrative formalities. The trainees are grouped into teams for tasks and leadership roles. The course is introduced and an overview presented. The trainees learn about a range of participatory methods and practice through role-play using a case-study.



Module objective

Trainees will assess their own and each other's previous experience of community engagement and collaboration. They will become more confident with participatory methods through practicing listening and interactive (dialogue and interviewing) skills, using a simulation model similar to that which they will meet in the field visit.

Essential preparation

Equipment and materials required for this module:

- Sticky labels / nametags
- Pens & paper for trainees
- Large sheets of paper / flipcharts
- Colored markers
- Flip chart stand/easel
- Participant workbooks
- Forms needed for reimbursement and other administrative formalities
- Post-it notes

Materials created by the facilitators:

- Role cards
- Participatory Methods & Case Study Resources in the participant workbooks:
 - Overview of participatory methods
 - · Questions for appreciative interviews
 - Introductory description of the case study
 - Sketch map
 - Prioritized list of problems, opportunities, and proposed improvements
 - Community livelihood calendar
 - Social network map
 - Rules

Methodology

The whole of Module 1 is classroom-based. If running the course as a 5-day residential, travel to the field site should be included in the first day.

Including welcoming remarks from a senior official or local dignitary helps to set the scene for the field modules and gives weight to the collaborative process.

The primary activities of this module are practical trials of various participatory methods that will be used in future modules. The approach of starting by listening to and interacting with participants can be applied to most training, meetings and other activities, in contrast to the tendency toward one-way communications, and sets a precedent for interactions in the community.

Providing the participant workbook at the start confers responsibility and ownership and invites trainees to see the course as longer-lasting than the 5 modules. Trainers should emphasize that the workbook is for future reference and use, and encourage the trainees to record as much of the course as they wish to, through diagrams, notes, drawings and sample collection.

For information on PRA and related approaches to participatory learning and action, the IIED website is a good starting point: http://pubs.iied.org/search.php?s=PLA

During the case-study activity, if the trainees feel more information is needed, they should use their experience and judgment to decide what they think is most likely the situation, clarify any working assumptions they make, and note information which will need to be further checked.





Participants in Ghana and Nepal

Options for delivery

- If working with an interpreter, collaborate to prepare key course materials and flipcharts in the relevant language.
- There is a powerpoint slide deck available for Module 1 which can be customized by the facilitators to suit the context. This can be downloaded for use at: http://www.iwmi.org/Publications/Other/ppt/Community-Engagement-in-Small-Scale-Irrigation.pptx
- A natural break could be incorporated at the end of Module 1 to allow time for further practice in participatory rapid appraisal, appreciative interviewing and other methods.
- In a residential context, part of Session 2 may be delivered in the evening.
- Reflective exercises, preparation exercises or extension tasks might be included between Modules 1 and 2. These may be carried out as a group or individually.
 - Further practice of appreciative interviewing
 - Reflection on principles, benefits and drawbacks of appreciative inquiry
 - Bullet-point review of approaches to participatory methods
 - Stakeholder analysis for case-study roles (see Participant Workbook).
- Facilitators may use information from this session as a basis for planning coaching for task groups or any other assistance required to effectively applying participatory methods.
- The case study could also be used to help consultants, supervisory staff, and others to understand the community engagement approach.

Module 2

At a glance

This module is a physical walkthrough of the major steps in developing a project plan and gathering interest, support and engagement from the community. Trainees attend introductory and fact-finding meetings with local leaders and community stakeholders, and take part in a walk around the water system. They conduct appreciative interviews with members of the local community and pool all the information they have gathered.



Module objective

Trainees will participate in real-time community and district authority meetings using appreciative techniques to gain engagement from all parties. They will develop high-quality relationships with community participants by working collaboratively during the system walkthrough. They will gather information about the system, livelihood activities, infrastructure and water management. They will collect data about the community of water users and stories about local achievements in working together. They will commence discussions on a range of possible improvements to determine which are feasible. The information gathered will be used in the next module.

Essential preparation

The activities and logistics for the field visit modules must have been carefully planned in advance. The visit to the district authorities and the community meeting must be booked and confirmed in advance of the beginning of the course. The planned timing and route for the system walkthrough should also be agreed with the local community representatives during the preliminary visit.

Equipment and materials required for this module:

- 30 meter measuring tape
- Calculator
- Flipchart
- Colored markers

Equipment for trainees & participants to bring:

- Footwear suitable for walking in muddy or flooded areas
- Hats
- Umbrellas or ponchos if rain is likely

Additional optional but desirable equipment and materials:

• GPS and camera, including cellphone GPS and cameras

Materials created / prepared by the facilitators:

- Copies of short brochure describing the proposed scheme, based on the preparatory site visit
- System Walkthrough resources in the participant workbook:
 - Topographic map
 - Area map
 - Sketch paper / grid paper
 - Current unit cost rates for works materials
 - Appreciative interview question guide

Methodology

Module 2 is delivered in various field-based locations. All the activities are experiential, modeling participatory methods in action.

Asking for the meetings in advance shows respect and good intentions. In some cases it may be useful to have a separate meeting with village leaders before the community meeting. The meetings help identify ways to enhance cooperation, learn from local experience, and build a basis for support from local authorities and other stakeholders later on.

A local leader should formally open the community meeting, to further emphasize community ownership of the scheme.

Make very clear that the activities of modules 2-4 should contribute to developing a better proposal for improvements, which the community can then pursue further, but that there is no guarantee of future funding. Hosting the training is not in any way a commitment for future assistance, but the training activities will enable project implementers to learn how to better involve community participation in projects. The community should benefit from developing a better set of ideas about improvements, which can be included in their plans and proposals, but there is no guarantee that funding will be available.

The groups formed for discussion and tasks will be operational for topical discussions during the walkthrough, collaborative information-gathering, analysis, draft design and evaluation of proposals. They are structured as partnerships between a small team of trainees and an equal or greater number of community participants. The groups will need to identify a member to take each of the following roles:

- Moderator
- Note-taker
- Timekeeper
- Reporter

Take care to ensure that any specific questions and suggestions community members have concerning any activities are identified. If questions and suggestions from community members focus primarily on infrastructure construction, then it will be important to explain the need for a systematic approach to looking at how operation and maintenance are organized, how rules are made and applied, and related issues such as agricultural marketing.

The walkthrough activity has several important purposes:

- To gather information that will inform all the project tools the trainees will develop in the next module
- To develop a shared understanding of the complex array of local needs, for the existing water system and any future possible changes. The following areas must be taken into account:
 - Ownership, water rights and allocation for use (irrigation and other uses e.g. domestic)
 - Water flow, origin, diversions (up- and down-stream), irrigation, seasonal and agricultural disruptions
 - System governance, rules in use, records and roles of the users
 - Resources available or accessible for any construction, maintenance or upkeep
 - Water storage systems (e.g. reservoirs) and other water sources (e.g. wells)
- To discuss on-site the potential improvements and their practical implementation with community participants fully integrated in the conversation.

To ensure community stakeholder ownership of the concepts for potential improvements, trainees should invite community participants to describe their past and present efforts and their hopes for change. For example, at the water intake discuss upstream and downstream diversion of water by others, how cooperation with other systems is planned or conflicts resolved. Trainees should act to ensure that all the stakeholders have a voice in the discussion, advocating for them to make certain there is a clear and simple explanation of technical terms and that the water users fully understand the relative merit and cost of alternative options.

All major potential infrastructure changes should have a rough cost estimate for materials and labor worked out on-site to support the process of deciding between alternatives. Alternatives may be different designs or materials, changes in cooperation, trade-offs between initial investment and ongoing servicing costs. It may be useful to suggest that before ranking the list of solutions that the stakeholders consider placing them in additional categories, such as:

- Essential activities for an expanded system but requires material / skill outside the community
- Activities which make the system easier to operate and maintain
- Activities they can achieve using their own labor, skills, tools, and local materials

Maintain an emphasis on local collective action, community interest and local capacity for action. It will be particularly valuable to highlight common themes in what people feel is successful collective action and what they would like to enhance.





Community discussions in Ghana and Nepal

Options for delivery

- If a sub-district level of government plays an important role, it would be important to also meet with them, together, or separately using the same format.
- The actual timing will need to be adjusted to the schedules of those involved.
- Depending on schedule, group size and other factors, the community interviews (session 4 of this module) could begin before or after the initial community meeting and walkthrough and could continue on into the next module.
- The walkthrough can begin immediately after the community meeting or after a meal break, depending on time, distance, and logistics.
- Trainee groups may benefit from using the evening of a residential course to review and organize the information they have gathered during the day.
- Larger trainee groups could divide to complete the walkthrough and community interviews concurrently, then meet for information exchange afterwards.
- Consider the use of recording equipment for illiterate participants to undertake and later review interviews.
- If working with an interpreter, collaborate to prepare key course materials in the relevant language.
- Ensure that all task groups have the necessary linguistic capacity to understand each other.
 This may involve combining groups to ensure members can communicate in a shared language or interpret between members in the group.

Module 3

At a glance

In Module 3 the main steps for planning and implementing a project are identified and opportunities for community participation highlighted. Trainees and community participants use information from Module 2 to generate 7 key project tools. They analyze their work and present constructive suggestions for modifications.



Module objective

Trainees will lead collaborative task groups to systematically plan implementation of government-supported improvements in agriculture and water resources. They will assess stakeholder roles and identify opportunities for improved community engagement. They will prepare key project tools based on the information they collected in Module 2, and constructively evaluate each others work. The project tools will be used in Module 3.

Essential preparation

Equipment and materials required for this module:

- Large sheets of paper / flipcharts
- Large index cards or A5 sheets of paper
- Small colored cards
- Markers in several colors
- Tape or temporary adhesive

Materials created / prepared by the facilitators:

- Gantt chart
- Analysis and design resources in the participant workbook:
 - · Group task briefs
 - Secondary data on village population, by gender, agricultural production, etc.

Methodology

Module 3 is delivered in a central location in the field. A large room or meeting area would be suitable. Ideally the area would have walls where charts and materials can be displayed.

The primary participants in the first session are trainees but if members of the community wish to observe or participate this should be encouraged. In Session 2, the community participants in the task teams are required. It is likely to be beneficial if they continue in the task teams of Module 2. Trainees should be reminded to continue to practice the participatory skills they have learned.

Many of the topics that arise during this module will have been discussed as part of the initial interviews, community meeting, walkthrough, and other activities. The purpose of Module 3 is to formalize the information gathering and systematically ensure that all areas are covered.

Information gathered is to be sifted and presented as visual tools in 7 specific formats so it is important that the participants are encouraged to pool the information they collected and bring their own expertise to the whole group. Collaboration between groups should be encouraged in generating the presentation materials. Note that one group may cover more than one topic, for example one group looking at both the agricultural schedule and value chains. Allocate tasks to groups carefully to ensure that the tasks are achievable.

It is important to acknowledge that there may be substantial differences between the ideal process, for example as outlined in project plans, and how things happen in practice, due to various constraints and other factors. The discussion should focus on practical opportunities for making changes, maintaining emphasis on things community members feel should and could be changed.





Task group discussions in Ghana

Options for delivery

- If trainees are already familiar with project planning or there is a need to shorten the session, create a Gantt Chart (timeline of activities) or flow chart as a starting point, or write large cards with the major phases for them to put in order.
- Task groups can work with pens & paper but for some tasks e.g. sketch map physical materials may be preferable e.g. found items such as stones, sticks, clay, string, beans, beads, fabric, leaves, to create a miniature model of the system.
- Some of the tasks may be started during Module 2 and continued during or after the system walkthrough, e.g. after the most critical areas have been observed and there seems to be a relatively clear idea of potential and options to be considered. Time during Module 3 would then be used to reflect changes or new ideas, or develop specific action points.
- Discussions marked as plenary may be done in smaller groups, including a range of stakeholders, carrying out the discussion in a public place accessible to whoever is interested.
- Trainees may benefit from retrospectively applying a project phase structure to projects they have previously been involved with as a reflective or homework exercise. They could identify where participatory methods were used and where they would have been most effective.
- If working with an interpreter, collaborate to prepare key course materials in the relevant language.
- Ensure that all task groups have the necessary linguistic capacity to understand each other.
 This may involve combining groups to ensure members can communicate in a shared language or interpret between members in the group.

Module 4

At a glance

Module 4 models the refining process of project consultation. Trainees and community participants present and receive feedback on their proposals for change, first from one another and then from the wider community of stakeholders. They use a collaborative method to integrate agreed changes to the plans.



Module objective

Trainees will work with each other and community participants to present the tools they have produced. They will constructively critique their own and each other's work and modify their proposals for change based on discussion and consensus. They will host a community consultation in which they will present the revised tools to the community and receive feedback. They will use this to support the community in developing an action plan.

Essential preparation

Equipment and materials required for this module:

- Large sheets of paper / flipcharts
- Easels / flipchart stands
- Colored markers
- Tape
- Paper (A4 or A5 or large cards/post-its)
- Pens/pencils for notes and comments

Methodology

During the group discussions, encourage a focus on the links and inter-dependencies between different changes to support the generation of realistic proposals. For example, plans for construction must include consideration of quality assurance and financial management, including specific topics such as proper concrete composition and construction, earthworks, procurement, bookkeeping, publicizing financial information, and audit.

The primary output from the design integration is a list of action points for system improvements. This should be produced as a list of action points where there is agreement and a sub-list of points for which consensus has yet to be achieved. For the second list, it will be beneficial to have participants identify what additional information, study or discussion would be required.

Local leadership related to irrigation and other water uses should have become apparent during earlier activities, and participation in the meeting should be arranged to include representation of those using water for irrigation, domestic use, livestock, and other uses, as well as village leaders, traditional authorities, or informal and formal leaders.

Taking account of the level of literacy of the community, the informal discussions between community stakeholders and task teams at the beginning of the consultation meeting are as – or more – important than the process of adding written comments to the tools. Task team members should support any community member who cannot write to record their feedback.

Groups can be formed by participant choice, random selection e.g. 'counting off', or by deliberate diversification e.g. field location, type of water use etc.

Depending on the issues, a series of subsequent meetings may be needed to develop adequate understanding and consensus. If consensus still seems difficult or impossible, then a vote, e.g. by a general assembly of a water users association may be necessary. A vote or other formal decision may also be needed to authorize those who would be the local signatories for an

agreement about assistance for irrigation improvement, including suitable representation of domestic water users and any new water users.

The process of modifying proposals on the basis of consultation feedback is followed twice – once with the trainees and once with the wider community. It should be stressed that to achieve community ownership the community consensus holds the veto, and it is they who will be responsible for taking forward the actions. Where there is no consensus, the community should be encouraged to identify what additional information, study or discussion would be required to come to an agreement.

It should be made very clear that the proposal does not guarantee any commitment for future assistance; it is just a proposal, which would need to be pursued by the community. In closing the meeting, it may be helpful for someone senior from government to again state that there is no commitment at this point, and confirm what the community could do to further pursue the proposal.





Group discussions and plenary in Nepal

Options for delivery

- A reflective exercise or extension task for trainees could be to address the list of points for which consensus has yet to be achieved, and either individually or collaboratively identify what additional information, study or discussion might be necessary to achieve agreement.
- After further discussion in the community meeting, a task force would be responsible for further development of the action plan, including additional consultation, and more detailed plans for specific topics. The trainees may be able to support the formation of the task force.
- In addition to or instead of the sketch map prepared in Module 3, a miniature physical model of the system, showing the location of proposed changes, could be prepared as a tool for facilitating discussion of action plans.
- A timeline which parallels the Gantt chart could be prepared, showing the roles of the community and service providers, step-by-step in the sequence of activities for planning, implementation, and subsequent operation and maintenance.
- An evening workshop or extension task for trainees would be the preparation of a report
 containing the key points, diagrams, and other outputs on potential irrigation improvements,
 with copies provided to the community and local authorities. If this is impossible within the
 duration of the 5 modules it might be set as a post-course assessment activity.

Module 5

At a glance

This final module provides a formal opportunity for reflection and assimilation of learning. Trainees review the project cycle and suggest specific ways to improve community engagement and success in small irrigation and reservoir development. They identify specific follow-up actions that they can take themselves and actions they can recommend. They reflect on the training as a whole and make constructive suggestions for change. The module finishes with a closing ceremony.

Module objective

Trainees will reflect individually and collaboratively on their learning and offer feedback demonstrating their knowledge. They will constructively critique the course. They will identify specific actions or changes to implement in their own work.

Essential preparation

Equipment and materials required for this module:

- Large sheets of paper / flipcharts
- Large index cards or A5 sheets of paper
- Small colored cards
- Colored markers
- Tape or temporary adhesive

Materials created / prepared by the facilitators:

- Model Gantt chart / timeline / flowchart in the participant workbook
- Trainers may wish to prepare the feedback collection charts in advance
- Course completion certificates
- Any take-away items e.g. USB flash drives with electronic copies of materials, photographs from the course etc

Methodology

Module 5 is delivered in a classroom format but may be delivered in a location in the field if appropriate.

The Gantt chart used may be the model chart prepared before the course or any subsequent iteration generated or modified by the participants. It should be further modified in the session if this has not been done in previous Modules. If this activity has already been completed, invite participants to make any final changes during the first session of Module 5, emphasizing the relationship between community engagement and successful planning.

Specific recommendations for changes that would require revising rules, higher-level approval, etc. should be noted and formulated as written recommendations to be sent to the relevant decision makers. These can be provided to the community task force for delivery, or sent to the district authorities or community leaders as part of a letter of thanks for their participation.

By using trainees' own ideas and experiences, particularly those from the course, to identify specific ways in which community engagement in water resources development can be improved, it is easier to emphasize the transition from application to the course model to application in the trainees' own work.

Keep the training evaluation session simple, and make it easy for people to give feedback by showing genuine interest in learning about trainees' views and improving future training. Trainers may want to ask for clarification or discuss specific points. If so, they should start by summarizing

and appreciating what they understand to be the feedback, and emphasize constructive ways to respond.

Trainers should prepare a summary of key points from the feedback and discuss ways of responding. This could be done using a two-column format with the second column summarizing ways to respond.

Training Evaluation Summary

Trainee comments: Summary of key points	Ways to respond





Participants completing the course in Nepal and Ghana

Options for delivery

- There is a powerpoint slide deck available for Module 5 which can be customized by the facilitators to suit the context.
- The exercises in Module 5 Sessions 1 & 3 could also be used at the end of a year, or beginning of a year to review experience and identify opportunities for improvement, either within a particular team or by a group including the full range of stakeholders.
- The approach for receiving feedback modeled in Session 2 can be used for evaluating training sessions and courses, and can also be used when specific activities are carried out with communities.
- Representatives of sponsoring organizations and projects may be invited to attend the final session.
- Follow-up meetings may be scheduled to report the training course results, and to discuss ways of implementing ideas from the course.

Learning outcomes

Module 1 – Participatory Methods

Participants will be able to:

- objectively review participatory methods and techniques, and identify which methods to apply in communities
- interview local stakeholders proficiently using appreciative techniques

Participants will be able to:

- describe the challenges associated with the participatory design of water resources improvement
- recognise different stakeholder perspectives
- identify appropriate tools and use them confidently
- summarise their analysis and recommendations and explain the key points for a system improvement plan

Module 2 – Water System Walkthrough

Participants will be able to:

- prepare and facilitate a community introduction session
- prepare for a system walkthrough
- organise and brief small task groups

Participants will be able to:

- recognise and debate issues such as current and future water use with community water users and task groups
- describe 'location specific needs' from a users' perspective and from the perspective of those providing technical advice
- summarise and explain issues such as ownership, water rights and allocation, rules in use and roles of users
- identify and gather appropriate information to support the development of options for improving water systems
- produce concepts or give examples of cost-effective designs to improve water service delivery

Participants will be able to:

- use appreciative interview techniques to assess the local capacity for collective action, and gather specific stories about 'local collective action for irrigation' from community stakeholders
- document stories about local collective action for irrigation and other activities
- identify and summarise the common themes relating to successful collective action

Module 3 – Planning and Process Tools

Participants will be able to:

- describe in sequence the steps involved in planning and implementing a project
- collaboratively develop a comprehensive sequence of activities, from initial proposal stage through to implementation and ongoing maintenance
- evaluate the level of community participation in each step
- recognise opportunities for improving community participation at each step

Participants will be able to:

- recognise, describe and analyse factors that affect water resources development
- work collaboratively with community stakeholders to develop and prioritise options, and identify constraints
- use cost-benefit analysis to evaluate options for improvements

Module 4 – Community Engagement

Participants will be able to:

- clearly and concisely present the results of collaborative work to a group of colleagues
- work collaboratively with different group members in order to evaluate a range of changes or options for improvements
- accurately integrate agreed changes into a new proposal
- · modify an original proposal by accurately integrating agreed changes

Participants will be able to:

- clearly and concisely present the results of collaborative work to a local community
- debate proposed improvements with a local community and wider stakeholder group
- facilitate (or broker) a shared understanding of the proposed improvements
- recognise and record points of agreement (for example about responsibilities), and points needing further discussion and debate
- facilitate (or broker) the development of an agreed action plan for a community

Module 5 - Collaboration and Consolidation

Participants will be able to:

- identify opportunities and suggest activities for improving community engagement in water resources development
- critically reflect on their own experience and give examples of what they have learned from the course
- identify and outline practical ways in which community engagement in the development of small-scale reservoir and canal systems can be improved, and offer specific recommendations that will increase the likelihood success

Participants will be able to:

- design and facilitate an appreciative and reflective feedback session
- evaluate a training course, and objectively describe what worked well and what could be improved
- elicit constructive suggestions for change from a group of workshop participants

Participants will be able to:

- identify, describe and prioritise specific follow up actions to be implemented in their own work
- offer specific recommendations on how participation in projects and programs could be improved

Notes on Course Design Elements

Approaches & techniques (Sources)	Notes
System Walkthrough Philippines, Nepal, Sri Lanka	The walkthrough is modeled on a PRA Transect Walk, a tool for describing and showing the location and distribution of resources, features, landscape, main land uses along a given transect
Community organizer Community development	Known as a community facilitator, institutional organizer, social mobilizer, etc., these individuals mobilize the community to act in their shared self-interest
Interactive design Architecture, engineering	Sketches and models are frequently used in community consultation phases in architecture & engineering to bring schemes 'to life'. Charrettes are intensive time-bound final design workshop (often used by architects) which may involve the public
Stakeholders together Future Search	This collaboration method for large groups to achieve specific future-related outputs, is used throughout the classroom-based meetings as self-managing sub-groups work together and report to the whole group
Visual and verbal Participatory Rapid Appraisal (PRA)	Also known as Participatory Rural Appraisal, an approach that aims to incorporate the knowledge and opinions of rural people in the planning and management of development projects and programs. Literacy is not required
Crafting rules Institutional Analysis & Development	In this curriculum, farmers are seen as institutional artisans, and design principles as questions. Institutional Analysis draws focus to a systematic study of people's collective behavior, and the rules under which they operate, in order to recognize existing rules and shape new rules
Building on strengths Appreciative Inquiry (AI)	Approach empowering people to take control of their own lives in meaningful and sustainable ways, focusing on what is working, feasible and sustainable to identify the existing resources available to effect change
Self-managing groups Future Search etc.	A moderator, recorder, reporter and timekeeper for each of the sub-groups and frequent plenary feedback are practical aspects of this method
Discover, Dream, Design, Deliver/destiny sequence Appreciative Inquiry	Using a strengths-based approach to problem-solving, focusing on appreciation, valuing the best, building on what works, using the 4 processes 'Discover, Dream, Design, Destiny' in sequence reframes the community perception of their own role in development
Issue cards and clustering ZOPP (Goal-Oriented Project Planning) Participatory Logframe Analysis	ZOPP (Zielorientierte Projektplanung) is a systematic structure for project planning and management developed through workshops with stakeholders. The process generates a structured planning matrix known as a logical project framework which highlights links between inputs, activities and results Participatory Logframe Analysis is a project design methodology that engages all key stakeholders and provides a systematic structure for identifying, planning and managing projects

Bibliography

There are many sources of information on participation, facilitation, negotiation, and institutional aspects of water resources development and management, participatory rapid appraisal (PRA), appreciative inquiry, and other topics related to this curriculum. This bibliography includes references used in developing the curriculum, and some starting points for learning more about these topics.

- Adebo, S. 2011. *Training Manual on Participatory Rural Appraisal*. http://www.myfirecommunity.net/discussionimages/NPost8220Attach1.pdf.
- Alinsky, S. D. 1989. Rules for Radicals: A Practical Primer for Realistic Radicals. Vintage.
- Arnstein, S. R. 1969. "A Ladder of Citizen Participation." *Journal of the American Institute of Planners* 35: 216.
- Bruns, Bryan. 1993. "Promoting Participation in Irrigation: Reflections on Experience in Southeast Asia." *World Development* 21 (11 (November): 1837–1849.
- Bruns, Bryan, and Ruth Meinzen-Dick, eds. 2000. Negotiating Water Rights. New Delhi: Vistaar.
- Bruns, Bryan. 2003. Water Tenure Reform: Developing an Extended Ladder of Participation. Presented at Politics of the Commons: Articulating Development and Strengthening Local Practices. Chiang Mai, Thailand.
- Chambers, R. 1994. "Participatory Rural Appraisal (PRA): Analysis of Experience." *World Development* 22 (9): 1253–1268.
- Cleaver, Frances. 2012. Development Through Bricolage: Rethinking Institutions for Natural Resource Management. 1st ed. Routledge.
- Cooperrider, D. L., and D. K. Whitney. 2005. *Appreciative Inquiry: A Positive Revolution in Change*. Berrett-Koehler Publishers. see http://appreciativeinquiry.case.edu/info/contact.cfm
- John Corbett. 2009. Good Practices in Participatory Mapping: A Review Prepared for the International Fund for Agricultural Development. IFAD. http://www.ifad.org/pub/map/PM_web.pdf.
- IAP2 (International Association for PublicParticipation). 2007. "IAP2 Spectrum of Public Participation." http://www.iap2.org/associations/4748/files/IAP2%20Spectrum_vertical.pdf
- IDEO. "Human-Centered Design Toolkit." http://www.ideo.com/work/human-centered-design-toolkit/.
- IIED, International Institute for Environment and Development. "Participatory Learning and Action." http://pubs.iied.org/search.php?s=PLA.
- IWMI. "Agricultural Water Management Solutions." http://awm-solutions.iwmi.org/home-page.aspx
- Klitgaard, Robert. 1988. Controlling Corruption. Berkeley: University of California Press.
- Korten, Frances F, and Robert Y. Siy. 1988. *Transforming a Bureaucracy: The Experience of the Philippine National Irrigation Administration*. West Hartford, Connecticut: Kumarian.

- Manor, S., S. Patamatamkul, and M. Olin. 1990. "Role of Social Organizers in Assisting Farmer-managed Irrigation Systems." http://agris.fao.org/agris-search/search/display.do?f=2010/QL/QL1001.xml;QL2010000839.
- Marc Andeini, Tonya Schuetz, and Larry Harrington. "Small Reservoirs Toolkit." http://www.smallreservoirs.org/full/toolkit/index.htm
- Meinzen-Dick, Ruth. "Beyond Panaceas in Water Institutions PNAS." http://www.pnas.org/content/104/39/15200.full.pdf+html.
- Odell, Mac. Appreciative Planning and Action : Mission Statement. http://www.macodell.com/page-Appreciative-Planning
- Ostrom, Elinor, Marco A. Janssen, and John M. Anderies. 2007. "Introduction: Going Beyond Panaceas." *Proceedings of the National Academy of Sciences* 104 (39): 15176–15178. doi:10.1073/pnas.0701886104. http://www.pnas.org/content/104/39/15176.abstract.
- Ostrom, Vincent. 1999. "Polycentricity." In *Polycentricity and Local Public Economies*, ed. M. D McGinnis. Ann Arbor: University of Michigan Press.
- Stephens, T. 2010. "Manual on Small Earth Dams. A Guide to Siting, Design & Construction (FAO Irrigation & Drainage Paper N 64)." *Recherche* 67: 02. http://www.lavoisier.fr/livre/notice.asp?id=63AWROAXAKLOWN
- Uphoff, Norman. 1991. Learning from Gal Oya: Possibilities for Participatory Development and Post-Newtonian Social Science. Ithaca, NY: Cornell University Press.
- Weisbord, M. R., and S. Janoff. 2000. Future Search: An Action Guide to Finding Common Ground in Organizations and Communities. Berrett-Koehler Publishers.
- Whitney, D., A. Trosten-Bloom, and D. Cooperrider. 2010. *The Power of Appreciative Inquiry: A Practical Guide to Positive Change*. Berrett-Koehler.
- Yoder, Robert. 1994. *Designing Irrigation Structures for Mountain Environments: A Handbook of Experience*. Colombo, Sri Lanka: International Irrigation Management Institute.
- Yoder, Robert. 1994. Locally managed irrigation system: Essential tasks and implications for assistance, management transfer and turnover programs. Colombo, Sri Lanka: International Water Management Institute. http://publications.iwmi.org/pdf/H 11888.pdf