

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

PARTICIPANT WORKBOOK

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

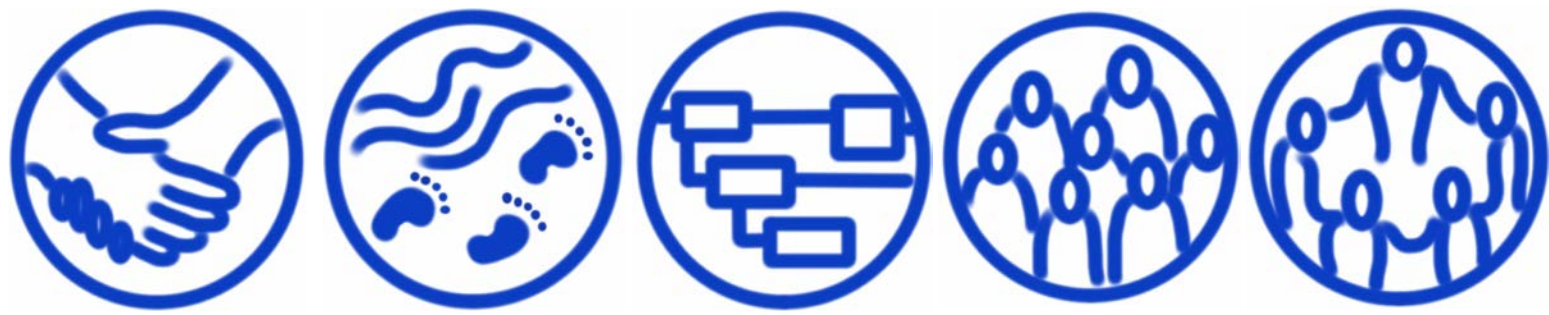


Based on the Community Engagement in AWM Training Curriculum
by Bryan Bruns and Robert Yoder, December 2012

International Water Management Institute (IWMI). 2014. *Community Engagement in Small Scale Irrigation, River Diversion, and Reservoir Systems Training Curriculum: Participant Workbook*. 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). 30p. doi: 10.5337/2014.222

Table of Contents

Table of Contents.....	2
Course Introduction.....	4
Overview of Course Sessions	5
Using Your Participant Workbook.....	6
Program Summary.....	7
Module Worksheets, Guidance & Case Study Materials	9
Overview of Participatory Methods	10
Appreciative Interview Question Guide	11
Stakeholder Analysis.....	12
Case Study Materials.....	13
District Authority Briefing & Community Introduction	14
System Walkthrough	15
Community Interviews.....	16
Analysis & Design Discussions	17
Task Group Topic Briefing.....	18
Layout	18
Infrastructure.....	18
Livelihood Calendar	19
Value Chain.....	19
Organization	20
Impacts.....	20
Governance	21
Local Population Data	22
Assuring Integrity and Quality in Construction – Techniques	23
Planning for Participation	24
Training Evaluation Form.....	25
Learning Outcomes	26
Module 1 – Participatory Methods.....	26
Module 2 – Water System Walkthrough.....	26
Module 3 – Planning and Process Tools	27
Module 4 – Community Engagement	27
Module 5 – Collaboration and Consolidation	27
Additional Resources	28
Bibliography.....	29



Course Introduction

This course provides 5 training modules for hands-on training to develop field-workers expertise in engaging communities, applied to small-scale irrigation schemes. It has been successfully tested in two countries, Nepal and Ghana, and the content is well supported by research.

It is essential that the community that uses the water plays a leading role in planning and implementing any improvements in water services. The modules in this training curriculum provide you with a hands-on way of learning and strengthening your skills. You can then apply your skills in a range of different contexts to work effectively with communities in developing appropriate, sustainable water service systems.

This course is suitable for local circumstances where water-users need to work together to manage shared water resources such as small reservoirs (less than 1 million cubic meters of storage) and canal networks, and where crop irrigation is an important use.

The course is designed for about 15 trainees at a time, and throughout the central 3 modules there is an emphasis on working alongside at least an equivalent number of participants representing the community. As a trainee you will be expected to collaborate with other participants in listening, collecting information, making decisions and solving problems. You will be required to bring your own expertise to the groups that you work within and appreciate and respect the expertise of others.

Overview of Course Sessions

Module 1

Course Introduction
Participatory Methods
Case Study Role Play



Module 2 - Fieldwork

District Authority Briefing
Community Meeting
System Walkthrough
Appreciative Interviews



Module 3 - Fieldwork

Participation in the Project Cycle
Design Discussions



Module 4 - Fieldwork

Design Integration
Community Consultation on Improvement Proposal



Module 5

Planning for Community Engagement
Training Assessment





Using Your Participant Workbook

Use this workbook to record anything that is useful to you during the process of the course. You can write and draw in it, and it is yours to keep for future use and reference. There is space to keep samples at the back of the binder.

If the exercises require worksheets or examples, you will find them in this workbook so that you can refer to them at any time. Each module has a simple round icon (above) which you can use to help find your way around.

The learning outcomes for the course are included in this workbook and you can use them to track your progress and evaluate your achievements.



Program Summary

Module 1

For trainees only

Session	Summary of activities
Course Welcome & Introduction	Review participants' experience, overview of the course, administrative formalities
Participatory Methods	Discussion and practice of participatory approaches and techniques
Case Study Exercise	Role-playing simulation on irrigation improvement issues and opportunities

Module 2

At field site, for trainees and community participants

Session	Summary of activities
District Authority Briefing	Courtesy call and orientation, following local protocols
Community Meeting	Explanation of the planned activities and formation of task groups
System Walkthrough	Observation of community conditions, collaboration and water management
Appreciative Interviews	Interviewing members of the local community

Module 3

At field site, for trainees and community participants

Session	Summary of activities
Participation in the Project Cycle (trainees only)	Considering the major stages in planning improvements
Design discussions	All participants analyze the current state and opportunities for improvement

Module 4

At field site, for trainees and community participants

Session	Summary of activities
Design Integration	Presentation of task group results and discussion
Community Consultation on Improvement Proposal	Presentation of draft ideas for system improvement and discussion

Module 5

For trainees only

Session	Summary of activities
Planning for Community Engagement	Reviewing the project cycle and suggesting ways to improve community engagement
Training Assessment	Suggestions for improvements to the training course
Closing Ceremony	Participants receive certificates for course completion



Module Worksheets, Guidance & Case Study Materials

The following pages include all the worksheets, group guidance and case study materials for your course. You can add your own notes, drawings and diagrams wherever you like.

Overview of Participatory Methods



An important feature of many of the methods listed is that they do not require or pre-suppose literacy

Method	Summary
Appreciative Inquiry (AI)	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
Building on Strengths	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
Charettes	Intensive time-bound final design workshop (often used by architects) which may involve the public
Community Organisation	Process whereby the community is mobilized and then acts in their shared self-interest
Future Search	Collaboration method for large groups to achieve specific future-related outputs, using self-managing sub-groups to work and reporting to the whole group
Institutional Analysis & Development	A focus on a systematic study of people's collective behavior, and the rules under which they operate
Interactive Design	Sketches, models, community consultation phases used in architecture & engineering to bring schemes 'to life'
Participatory Logframe Analysis (LFA)	A project design methodology that engages all key stakeholders and provides a systematic structure for identifying, planning and managing projects
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
PRA Transect Walk	Tool for describing and showing the location and distribution of resources, features, landscape, main land uses along a given transect
ZOPP (GOPP) Goal Orientated Project Planning	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

Appreciative Interview Question Guide



Community Collective Action

Introduction

Groups of people and communities often work together to improve their situation, whether building or improving things such as roads, paths, wells, markets, ponds, or canals; or organizing events and services, such as religious and customary celebrations, funeral societies, revolving credit groups, cooperating to buy agricultural inputs or sell products and so forth. This may be something that a community does on their own or with assistance from an outside organization. It may be something large, or small and simple such as a minor improvement to a well, simple bridge for a pathway, cleaning up streets and paths, etc. Such collective action is often done through people working together in ways they find fun and enjoy, as well as producing useful results.

Questions

1. Describe a time when you were part of some activity by a group or community to build or improve some shared resource, perhaps a water resource or something else, or worked together to provide a shared service that made people better off.
 - a. What was the high point of this activity?
 - b. How did it make you feel?
 - c. What was your contribution?
 - d. In your view, what could be learned from that experience about how people could work together to improve irrigation and water resources in your community?
2. Imagine it is five years from now and a shared water resource had been successfully improved and managed through the community's efforts. Describe the results. Talk about what people did to make this possible.
3. *(If question 2 seems to be too hard to answer)*
Identify three major problems in this community. For each problem, suggest things the community could do using its own resources to help solve the problem. Ideas about government assistance may also be suggested, but for each problem, at one or things the community could do using its own resources should be identified.

Stakeholder Analysis



This is an extension of the appreciative interview exercise and could be carried out if time is available during module 1 or 2, or as homework. It can be done in groups or individually.

Steps

1. On cards, write the names of different kinds of stakeholders who might be affected, positively or negatively by improvements.
2. Note that one person may have multiple stakeholder roles, e.g. upstream irrigator, domestic water user.
3. Cluster cards according to similarity between different stakeholders.
4. For each type of stakeholder identify whether they are likely to benefit or suffer due to the kind of improvements discussed in the case study. Use on two or three plus marks depending on the expected impact.
5. Note that some stakeholders may have both positive and negative impacts.
6. If you are working with others, present your results in turn. Everybody should add their cards, followed by discussion.



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>

Case Study Materials



You will be working with your small group to role-play the planning and implementation of a new water system improvement scheme.

Case study resources in this workbook

Resource	Description
Introductory description	Introduction to the case study including a description of major local accomplishments in developing irrigation and multiple use water management, and one or two major design challenges
Role Descriptions	Roles to be played during the case study exercise
Sketch map	System features, problems, and opportunities
Prioritized list	This type of list would be produced through an irrigation system walkthrough and public consultation. It includes problems, opportunities, and proposed improvements which may be changes in operations and rules as well as infrastructure
Community livelihood calendar	Showing major crop cultivation activities and other important times, such as periods of food deficit, fisheries activities, migration, major holidays
Social network map	Venn diagram or other illustration of relevant local organizations and how close villagers feel to them
Rules	Summary of major existing rules-in-use, e.g. how people are supposed to behave in watering their crops and maintaining the system

District Authority Briefing & Community Introduction



This is the program summary describing the aims, purpose and scope of the project. It can be used as a basis for the introductory meetings with district and sub-district authorities and the local community.

System Walkthrough



Please ensure that you are suitably dressed for the weather and have appropriate footwear.

The walkthrough will take several hours. You should take the most convenient route to the main water source and from there follow a route that covers the major water uses e.g. irrigated fields and gardens, domestic water use, livestock, fisheries etc. Work with other members of your task group as you progress through the route.

Bring what you are able to from what you have. Your trainers will have additional equipment where possible.

- Notepaper, cards and pens
- Copy of topographic map of canal/supply and command area
- Area map (sketch map)
- Current local costs for building supplies
- Other equipment if available
 - GPS and camera / cellphone GPS and camera
 - 30 meter measuring tape
 - Calculator

It is important that you put your knowledge of participation and community engagement into practice during the walkthrough. Social organizers and other participants should act to:

- Ensure that all the stakeholders have a voice in the discussion
- Ensure that any technical terms are clearly explained and understood
- Ensure water users fully understand the relative merit and cost of different options.

During the walkthrough discuss and take note of relevant details under the following headings:

1. Primary water source
Upstream and downstream water uses and rights, flow (seasonal variation), water quality. How is the system managed now? Could it be operated and maintained better?
2. Potential improvements and their implications
Identify key locations for potential improvements. What would be the implications for changes in any aspect of the system, what are the alternatives, what are the potential costs and what cooperative partnerships would they need to succeed?
3. Other water sources
How might these be included in attempts to improve the system?
4. Past and present efforts to manage water
What do users want from the changes? How has co-operation with other systems been planned or problems resolved? What resources does the community have that can support the changes? How would the new system be maintained?

Community Interviews



The purpose of the interviews is to learn about conditions in the community, and gather stories about successful collective action for irrigation and other activities. During the process you should identify the local capacity for collective action, learn what people feel makes it good and discover what they would like to make even better.

Instructions

Work in pairs. Allow about 30 minutes per interview. You should carry out at least two interviews each: one with a woman and one with a man, and with different kinds of stakeholders, e.g. head-end/tail-end; smallholder/larger landowner; different type of water user.

Interviews may be with specific individuals or with groups (informal or formal), and can be public or private. This should depend on the preference of your interviewees. In the public forum, after initial responses, others who are present should be welcomed to add comments and discuss.

Finding things people are enthusiastic about and enjoy talking about is a central goal of the Appreciative Inquiry Process. Problems should be noted, but the focus should be on successes, things people feel good about and would like more of. Emphasize the focus on local collective action and look for examples where the community has used its own resources and abilities to take action or solve a problem.

Good listening is central to interviewing. The goal is to hear and understand what people have to say.

Some points to keep in mind:

- When working in pairs, one person takes the lead in asking questions and the other person records both the question (if necessary) and summarizes the responses.
- The person recording should jot a note for his/her follow-on question, but should not interrupt the interviewer until finished.
- Often it is best to ask simple questions that set the stage and relax the respondent but that lead to specific issues the interview wants to understand.
- Phrase the question so that short answers are possible not a long list of issues and questions. Lead the respondent from one level to the next to get to the information of interest.
- As you listen, do not correct the respondent but instead ask further probing questions.
- It is often a good idea for the interviewer and recorder to periodically switch roles—especially if the pair has different backgrounds/disciplines.

Analysis & Design Discussions



Within your group, develop a visual tool to present the current situation and the changes you propose.

You will be allocated a topic from the list below. Your task is to produce the tool. In addition you must produce a short-list of what you see as the three to seven most important changes needed to achieve successful development of the water resources, or more productive, equitable and sustainable use of the water.

Your final summary should include overall changes and changes specifically relating to their topic. You will then be asked to present your tool and conclusions to the other participants.

Steps

1. Develop a tool to show the current situation.
2. As a group, list each major change on a card (1 change per card).
3. Take turns presenting your cards to one another and then group the cards into clusters and rank them according to importance.
4. Add the proposed changes to your tool.
5. Discuss the benefits and costs of each change and add a summary to the tool.
6. Discuss any changes that might be needed in governance arrangements to support and enable the improvements. Add a summary to the tool.
7. Plan how to present your tool back to the other participants.

Topics

Topic to consider	Tool to produce
Layout	System map
Infrastructure	Concept drawings for physical improvements
Livelihood Calendar	Schedule of cropping and other uses
Value Chain	Chart showing access to agricultural inputs and output markets
Organization	Chart showing key roles and WJO structure, relationships to other organizations
Impacts	Matrix identifying benefits and costs, including differences by gender, farm size and location, ethnicity, poverty, etc.
Governance	Rules about access to water and land, resource mobilization, etc.

Task Group Topic Briefing



Layout

Tool: Sketch Map

Brief: Prepare a simple **sketch map** of the system showing the locations of possible improvements.

Steps

1. Create a rough sketch map showing the major locations in the water resources system, including the full range of closely related water sources and uses.
2. Consider including: stream, reservoir, or other water sources, intake, outlets, locations that have required extra effort to build and maintain, major division points, fields particularly vulnerable to water shortage, flooding or other problems, areas with different cropping patterns, areas incorporated in the system at different times, locations used for livestock water, clothes washing, etc., areas under pump or recession irrigation, and potential expansion areas.
3. Include other important features, such as roads, paths, springs, forests, markets, etc.
4. Prepare a simple table, perhaps in a corner of the map, summarizing the area irrigated by season and other uses of water, and number of households that use water, by different types of uses.
5. Identify the location of potential improvements on the sketch map.
6. Discuss the available options and identify priorities.

Infrastructure

Tool: Concept Drawings

Brief: Prepare simple **conceptual design drawings** showing potential infrastructure construction or improvements, in easily understood form.

Steps

1. Discuss the possible changes in infrastructure (and related water allocation and distribution) in more depth, either on location in the field or back in the community, or both.
2. Create simple drawings to show the possible infrastructure construction or improvements, including the alternatives for any cases where multiple options seem to need to be considered.
3. If possible, add rough estimates of costs, e.g. using standard rates or examples from previous experience.

Livelihood Calendar

Tool: Livelihood Calendar

Brief: Prepare a **livelihood calendar** showing the schedule of cropping of irrigated crops, and other water uses.

Steps

1. Discuss the agricultural cycle, current cropping patterns and potential changes.
2. Create a **livelihood calendar** showing the current schedule. It should show the months of the year across the top and the activities (major agricultural events, other activities) below.
3. Identify a good starting point in the local agricultural cycle, e.g. before the wet season.
4. Ensure that the calendar includes important times such as periods of harvest, food shortage, fisheries activities, labor outmigration, major holidays etc.
5. Highlight the activities and times that are most critical for small reservoir or canal system development, e.g. in terms of labor availability, need to adjust irrigation schedules, etc.
6. Using a different color, add the possible changes in the type and timing for irrigated crops.
7. Include the possible changes in timing for other water uses.

Value Chain

Tool: Value Chain Chart

Brief: Prepare a **value chain chart** with four sections from left to right showing:

1. Suppliers/sources,
2. Inputs (including knowledge and technical advice),
3. Major crops or types of crops (e.g. Vegetables, and
4. Buyers and other users (including home use, local exchange, gifts, etc.)

Steps

1. Discuss the inputs needed to produce crops and how crops are currently sold or used (including home consumption, local exchange, gifts, etc.)
2. Identify which links would be most beneficial for farmers if they could be improved.
3. Draw links between suppliers, inputs, crops and markets/uses. It may be helpful to use different colors for different crops, or separate charts for different crops.
4. Discuss which links would be most beneficial for farmers if they could be improved, and highlight them.

Organization

Tool: Organization Chart

Brief: Prepare an **organization chart**, showing the structure of local water management and links to related organizations, both current and after any proposed changes.

Steps

1. Discuss the individuals and organizations that have major roles related to irrigation and water resources management.
2. Identify the current local institutions responsible for regulating water use and related activities, and any local relationships with various organizations, including government units, NGOs, and others.
3. Identify who currently does what tasks related to controlling access to water, operating and maintaining water resources, mobilizing resources, enforcing rules, resolving conflicts, etc.
4. On the chart, show formal organizations, e.g. water user associations, as well as customary and informal institutions.
5. Identify organizations, agency offices, projects, etc., that are relevant to the community, particularly in relation to irrigation development and water management.
6. Write names or abbreviations on cards, and discuss how close they are to the community, in terms of ease of communication and access, frequency of interaction, etc.
7. With tape on back of cards, position cards as nearer to or more distant from the community.
8. Add the information from the cards to the chart, to show all the organizations and their relationships with each other and with the community.

Impacts

Tool: Initial Impact Analysis

Brief: Prepare a matrix / table that identifies the benefits and costs of changes to water management for different water users.

Steps

1. The goal of this tool is to review how the project may affect people differently, including differences between women and men, those who are wealthier or poorer, nearer and farther away from the water resource, and those belonging to different social groups. The objective is to find ways to prevent problems and improve equity in sharing benefits.
2. Using a two-column format, in the left hand column, identify different activities related to water use.
3. If data is available from village records or other sources, prepare a simple table summarizing the number of households who currently use water for different purposes, and estimated total numbers of men and women. If women are active in farming, then they should be included in the count of agricultural water users. All domestic users, male and female, old and young, should be included in the estimate.
4. If information is available dividing the population by age, also prepare a table summarizing this. If watering livestock is a major use, estimate the number of livestock, including seasonal use and use by those who do not live full time in the area.

5. Discuss how potential changes in irrigation, or in management of the water source (e.g. reservoir) would affect women and men, including likely impacts on labor, income, health, participation in decisions, and other aspects of their lives. Cover both positive and negative impacts.
6. Formulate recommendations for ensuring equitable sharing of project benefits. In the right-hand column of the table, summarize likely social differences in impacts, and suggested measures to avoid problems and improve equity, in a few words for each impact.
7. It may be useful to distinguish different subgroups, e.g. head and tail areas, or existing irrigators and those in expansion areas. It may also be useful to rate the impacts from highly positive (++) to highly negative (--) including types of impacts that may be both highly positive and negative.

Governance

Tool: Summary of Rules

Brief: Summarise and record current rules about access to water and land, resource mobilization, etc.

Steps

1. The purpose of reviewing rules that affect water use is to ensure that the system will be sustained with equitable sharing. In particular, attention should be paid to making changes that provide as many benefits as possible, especially to those who are poorer.
2. Discuss current rules (which may be customary or informal) about who can use water, who takes part in operating and maintaining the system, how benefits and costs are shared, how decisions are made, and how compliance with rules is monitored and enforced and conflicts resolved, with particular attention to perceived problems and opportunities for making things better.
3. Use a two-column table to summarize the main current rules on the left, and the proposed changes on the right.
4. Identify key points where participants feel rules should be adjusted, or their application improved, or would benefit from being expressed in writing.
5. Keep the process simple by concentrating on the main changes in rules that may be needed to achieve local aspirations. Do not try to list all customary or formal rules that might apply.
6. Highlight changes where there seems to be a consensus on a preferred option.
7. Identify issues where there is not yet a clear consensus, and plan how further discussion can be carried out.



A timeline could also 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.

Local Population Data

This data will help you to ensure that your designs and proposals are suitable to the site community.



Assuring Integrity and Quality in Construction – Techniques



- Making financial information public
 - Signboards with information on project costs
 - Bidding documents and contracts available, at offices and on web
 - Open accounts, available for inspection
- Assure proper procurement, including public disclosure, timely payments to contractors, etc., to reduce pressures for compromising construction quality
- Training on proper construction
 - Quality of materials
 - Measuring quantities
 - Compaction
 - Concrete mixing, slump tests, etc.
- Involving users in implementing and supervising construction, based on their knowledge and interest in effective, long-lasting works
- Construction supervision
 - Ensure supervisors have knowledge and skills
 - Adequate compensation and transport
 - Oversight
- Local social audit committee, independent of implementers
- Grievance procedures
 - Affirm right of anyone to report complaints and ask questions
 - Clarify who to contact, including contractor's representative, construction supervisor, and other implementing agency contacts
 - Requirements for documenting complaints and responses, with time limits and public disclosure
- Acceptance procedures
 - Include user representatives in acceptance of works
 - Publicize contractor responsibilities during guarantee period
 - Enforce contractor responsibilities
- Corruption = Monopoly + Discretion – Accountability (Klitgaard)

Planning for Participation



Use the flow chart or timeline (Gantt Chart) created in Module 3. In your small group, review and modify the chart.

Steps

1. In discussion, review the series of activities involved in the implementation of water resources development.
2. Modify the timeline/flow chart created in Module 3, or prepare a new one, to ensure that it includes all major activities from the earliest steps to continuing operation, maintenance, monitoring, and evaluation, by the community and by any other organizations.
3. Highlight those steps where there are opportunities to improve community engagement and success in system development.
4. Using a different marker, highlight any changes revising rules, higher level approval, etc.
5. Use a two-column format, cards or other methods to summarize specific recommendations for how participation and success in system development could be improved.
6. For any changes that require higher level approval, formulate written recommendations to be sent to the relevant decision makers.
7. You will need to report your main recommendations to the wider group for discussion.



This exercise 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.

Training Evaluation Form



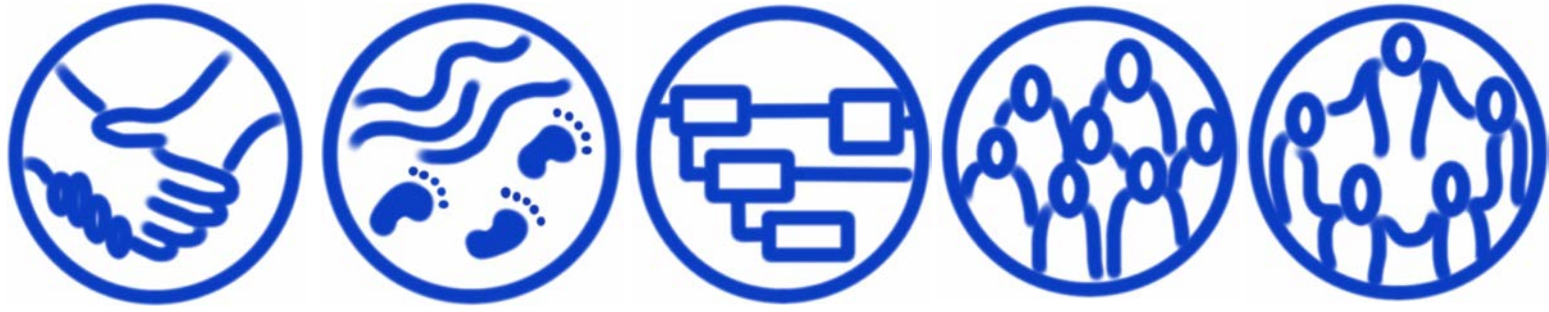
Please answer as fully as you can so that we can revise and improve the course for future cohorts.

1. What did you like best about the course?

2. What did you like least about the course?

3. What are your suggestions?

Please return this form to your trainer(s) before you leave. Thank you for your feedback.



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

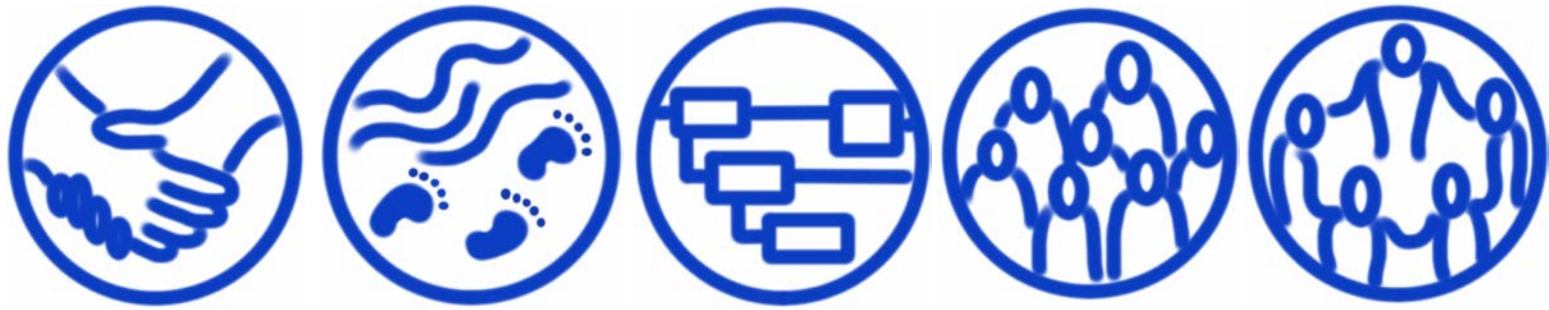
Participants will be able to:

- 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



Additional Resources

In this section you will find notepaper for writing, drawing, maps and graphs. Please use the wallets for samples, action cards and USB drives. There is also a wallet for your Certificate at the end of the course.



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 Public Participation). 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