Regional Water Sector Programme
A SADC initiative funded by Danida

Guidelines for Local-Level INTEGRATED WATER RESOURCE MANAGEMENT

Based on experiences from the SADC IWRM Demonstration Projects in Malawi, Mozambique, Namibia, Swaziland and Zambia

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1. BACKGROUND AND PURPOSE OF THE GUIDELINES

1.1. Local-Level Integrated Water Resource Management

Since 2006, the SADC Regional Water Sector Programme, supported by Danida, has piloted Local-Level Integrated Water Resources Management (IWRM) through IWRM Demonstration Projects in five countries namely, Malawi, Mozambique, Namibia, Swaziland and Zambia. Community-based Water Resource Management and Multiple-Use Water Services (MUS) approaches have been used to implement IWRM at the local-level. The following guidelines are a practical step-by-step approach on how to apply IWRM principles at local level, based on the experiences in these projects[1].

Integrated Water Resource Management, as defined by the Global Water Partnership, is a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems' (Global Water Partnership Technical Advisory Committee 2000).

At national and basin level IWRM principles are used to integrate water demand from different sectors of society and to balance this with water availability and to coordinate up-stream with down-stream uses. This is done in a consultative process involving stakeholders from all sectors. At the local level IWRM is also linking water demand, water supply and water resources management in a sustainable way, involving communities in the decision-making process. The principles of IWRM applied at local-level require a participatory community-driven approach where all water uses and water sources are considered and prioritised by the communities. Vertical integration between national and local-level water management happens through the national planning processes, informed by these bottom-up planning processes.

The IWRM principles of water management at the lowest appropriate level and the participation of especially women in water management are central to local-level IWRM. The primary aim is to improve livelihoods of poor small-scale water users. As sustainable access to water for both domestic and productive uses is weakest among the poor, improvement in access to water through infrastructure development is often their priority. Local-level IWRM capacitates communities to manage their water resources in an environmentally sustainable manner and to co-design and implement water infrastructure development according to their own needs and priorities. The resulting ownership of infrastructure is the single most important condition for its financial, institutional and environmental sustainability. Thus, local-level IWRM integrates participatory water supply and water resource management for sustainable livelihood improvements.

[1] The guidelines are accompanied by a 'Lessons Learnt Document'. Country experiences are documented in five country reports. All are downloadable from www.sadcwater.com.

Local-level IWRM goes beyond conventional water supply projects and fully aligns with rural communities' own water resource management since time immemorial. Communities recognize the integrated nature of multiple water sources (rain, surface water, groundwater, wetlands) and people's concurrent multiple water needs, including drinking, sanitation, domestic uses, gardening, irrigated cropping, livestock watering, tree growing, crafts, food processing, small enterprises, fisheries, aquaculture, and ceremonial uses. However, conventional water projects tend to focus on one single use, either domestic uses, or sanitation, irrigation, cattle, or fisheries. Local-level IWRM integrates service delivery according to people's holistic needs and own priorities. Water systems are designed or rehabilitated for multiple uses.

This local-level IWRM or Multiple-use water Services (MUS) approach opens up important new opportunities to effectively improve multiple dimensions of wellbeing, in particular health, the alleviation of the domestic chores of water fetching, food production and income generation. Sustainable benefits from water are further augmented by integrating land use, water quality, health and hygiene education, agricultural extension or marketing in the interventions. Thus, water is used most effectively and sustainably to contribute directly and indirectly to all eight Millennium Development Goals (www.unmillenniumproject.org 2005).

1.2. Aim and Applicability of the Guidelines

These guidelines on 'how-to-do' local-level IWRM are written for local authority structures, i.e. the *local structures with the official mandate to coordinate service delivery to meet people's integrated needs*. In most countries, this is local and district government. In some areas, traditional authorities may formally fulfil that role. Elsewhere, traditional authorities still continue playing an important role in the sustainable management of land, water and other resources for the wellbeing of their communities and therefore represent a vital stakeholder.

Local-level IWRM requires an integrated and demand-driven development approach by local government, multi-sectoral government line agencies, Non-Governmental Organizations, Community-Based Organizations and private firms and contractors. Together, these service providers constitute the 'supportive environment' for local-level IWRM to improve the livelihoods of their constituencies. By forging sustainable horizontal and vertical relationships, communities are empowered to call upon service providers for funding and technical and institutional expertise, and to hold them accountable. In this way, local-level IWRM fully aligns with decentralization of decision-making and funding for development to accountable local structures across the world.

Participatory planning processes are at the heart of this supportive environment. Most local structures at area or district level have some form of development planning. These guidelines are a planning tool for local structures for one 'loop' or cycle in the iterative process of planning, implementation and after-care of a water intervention. The guidelines operate at two levels: at area or district level and within a particular community. At area or district level, the support mobilized for a selected community should include after-care but also contribute to the wider supportive environment through which local-level IWRM can be applied in many more communities and widely scaled-up. Within a community, the guidelines concern one cycle of a participatory process of planning, implementing and maintaining water interventions. Repetition over-time can lead to village water development planning, which in turn informs the district development plans. Initially, a participatory planning and implementation process / cycle in a community may take some few years. However, time will decrease with growing experience.

Lastly, there are three conditions for applying these guidelines. With sufficient decentralization of decision-making on the allocation of financial, technical and institutional resources, local structures can usually meet these conditions. Otherwise, these conditions need to be negotiated gradually within government and the donor community.

- **the aim of improving livelihoods**, especially for the vulnerable members of the community, using water as a catalyst for development;
- **the ability to provide a range of potential appropriate technologies and interventions**, varying from individual technologies to small dams and reservoirs, and interventions to augment the benefits from water use.
- **funding and time** conditions of the specific project (or 'loop') that allow for a **participatory planning phase** during which communities can partake in the detailed project design and budgeting, and a phase in which selected activities are implemented.

The guidelines assume that the local authority has basic demographic, social and water resource availability information. If the information is not available it will be necessary to obtain it first. That process is outside the scope of these guidelines.

Small scale vegetable farming in Katuba, Zambia

2. STRUCTURE OF THE GUIDELINES AND OVERVIEW OF STEPS

The guidelines, which are summarized in Figure 1, consist of two parts. The first part concerns the creation of a sustainable supportive environment for local-level IWRM. This is the responsibility of the local authorities and the intermediate and national level tiers of their organizations, as well as of collaborating government line agencies, private service providers and NGOs and CBOs. This supportive environment should allow for implementing community-based water resource management. By fairly and efficiently allocating scarce human, financial, technical and institutional resources, more communities can be reached over-time. The steps are one) mobilizing support and two) selecting communities. These two steps and their components are discussed in Chapter 3.

Figure 1: Overview of responsibilities, phases and steps

<table>
<tr><th>Responsible Organization</th><th>Phases</th><th>Steps</th><th>Steps</th></tr>
<tr><td colspan="3">Creating a supportive environment</td><td rowspan="6">Continuous ‘Step’ Seven: Do participatory monitoring and evaluation and impact assessment for follow-up</td></tr>
<tr><td rowspan="2">Local authorities and support agencies</td><td rowspan="2">Initial</td><td>Step One: Mobilize support</td></tr>
<tr><td>Step Two: Select communities</td></tr>
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The second part of these guidelines concerns a particular community and the step-wise participatory process in that community. This consists of five steps: three) understanding the community and building capacity four) creating a vision and selecting activities five) compiling action plans, six) implementing the action plans, and seven) participatory monitoring and evaluation and impact assessment. The last ‘step’ is continuous. The steps concern one ‘loop’ or one cycle of improvements. Any next intervention can build on the improvements realized and the lessons learned. Thus, community-based water resource development and management becomes a continuous process, which can be oral or written as ‘village water development plans’.

Communities make the final choices about infrastructure interventions and its lay-out, management structures, own contributions in cash and/or kind, and measures to further enhance the benefits of water use. This is key for communities’ ownership and commitment for use and maintenance. The role of local structures is to facilitate this process and capacitate communities. Where water infrastructure is relatively expensive and technically complex, subsidization and intensive capacity building are warranted to enable communities to make the right choice. Facilitation is also needed to ensure that all community members are involved, including women, the poorer members, HIV/AIDS victims and other sick people, as well as youths, in particular those who are heads of households. Through carefully crafted processes, the marginalized members of the community are enabled to express their voices and participate in decision-making on an equal footing. These five steps and their components at community level are elaborated in chapter 4.

The steps and their components in the guidelines are more or less chronological and not rigid at all. Every step has a value and purpose and none of these steps should be skipped. Some decisions are difficult to revise later. For example, once sites of new infrastructure have been selected, the potential beneficiaries have also largely been determined. However, for other issues, such as the technical feasibility assessment, it may well be necessary to go back to earlier steps once or twice or even more often to adjust the process because of unforeseen events and new information. Also, the different activities in one project are often staggered and in different phases. Early implementation of some smaller 'successes' can encourage in pursuing the planning process of a complex, longer-term activity.

Figure 2 shows the components of all steps, which are elaborated below.

Figure 2: Project steps in local-level IWRM

Step One: Mobilize support

- Strengthen existing development plans.
- Compile integrated support.
- Define targeting procedures.
- Establish horizontal, integrated service delivery structures.
- Ensure vertical national support.

Step Two: Select communities

- Develop selection criteria within time and funding frames.
- Communicate widely and test for compliance.
- Select.

Step Three: Understand the community and build capacity

- Build trusting relationships and communicate the project concept.
- Do contextual profiling.
- Train the community and select community mobilizers.

Step Four: Create a vision and select activities to fulfil it

- Do participatory situational diagnosis and problem analysis.
- Create a vision of new ways to manage water.
- Rank opportunities and needs.
- Select activities for implementation.

Step Five: Compile detailed action plans

- Create and train community structures.
- Specify actions, roles and budgets.
- Sign off.

Step Six: Implement the action plans

- Construct communal infrastructure and develop the capacity to operate and maintain it.
- Create management structures and develop their capacity.
- Implement the accompanying interventions and develop the capacity to maintain them.
- Ensure sustainability when exiting.
- Operate and maintain infrastructure and continue capacity development.

Continuous 'Step' Seven: Do participatory monitoring and evaluation, and livelihood impact assessment for follow-up

- Monitor planning, implementation and use.
- Monitor the impacts on livelihoods.
- Identify follow-up plans for community-based water resource management.

3. GUIDELINES FOR CREATING A SUPPORTIVE ENVIRONMENT FOR LOCAL-LEVEL IWRM

Step One: Mobilize support

- Strengthen existing development plans.
- Compile integrated support.
- Define targeting procedures.
- Establish horizontal, integrated service delivery structures.
- Ensure vertical national support.

Purpose of Step One

To mobilize support from line agencies, non-governmental organizations, community-based organizations and private service providers in such a way that it will result in integrated support packages and delivery structures to meet many communities' multiple needs for the development and management of water resources.

1. Strengthen existing development plans

a. Take existing **development plans** and implementation structures as the starting point, and ensure that all actions strengthen these plans and implementation structures both at area or district level and at community level.

b. Take existing oral and written information depositories as starting point and ensure that all actions contribute to this **institutional memory**.

2. Compile integrated support

a. Mobilize **facilitation skills, institutional support and capacity development skills** throughout the project, and afterwards, to help communities to articulate their genuine needs (avoiding wish-lists and a hand-out mentality), to plan and implement new activities, including mobilizing their own labour and cash, and to develop the communities' capacities to manage infrastructure through water committees.

b. Mobilize **financial support and capacity development skills** in two phases: first, for the planning process up to the action plan and, second, for plan implementation. Clarify budget ceilings and set procedures for accountable budget allocation and spending by all involved: local authority itself, internal community structures and support agencies at intermediate, national, and international levels. The initial budget breakdown will be provisional, and will be finalised after consultations with communities and technical specialists.

c. Mobilize **technical support and capacity development skills** to facilitate participatory technology choice, site selection and technical design, and sound training of designated community members in infrastructure construction, operation and maintenance, procurement of spare parts, spring protection, etc.

d. Mobilize **other support** (soil management, agronomic, marketing, health, sanitation, etc.) to render water use more beneficial and productive for livelihoods.

e. Mobilize expertise on **land tenure** to assist communities clarify this, and if possible and required to adjust the land tenure setup to enable water improvements.

f. **Align** these support elements, so that a flexible, integrated menu of options can be offered as a one-window-service. Integrated support packages constitute the overall, long-term supportive environment for all communities.

g. Define communities' **own cash, skills and labour contributions**, without excluding the more vulnerable segments of the community.

TIP

Productive uses of 'domestic' schemes bring important livelihood benefits but treating all water to achieve drinking water quality is expensive. As even treated water tends to be contaminated again before consumption, the domestic sector promotes point-of-use treatment of the 3-5 litres per capita per day for drinking and cooking. This solution reduces costs for water supplies for multiple uses.

3. Define targeting procedures

a. Design procedures and beneficiary selection criteria within communities to ensure that information and support resources will **reach the marginalized** members of the community by providing them time and space to articulate their needs and participate in community decision-making on an equal footing, and by avoiding capture of public resources by the political and other elite.

b. Mobilize **scoping and facilitation skills** to ensure that targeting procedures are implemented in a sensitive, consistent and 'firm but flexible' way.

c. Support the **women on the staff** of support agencies to underscore a consistent message on agencies' gender-sensitivity.

4. Establish horizontal, integrated service delivery structures

a. Establish **horizontal networks** (e.g., area-level committees) through which support agencies can sustainably collaborate in the area and deliver their services to communities.

b. **Train** governmental and non-governmental staff, and ensure harmonized, modest **compensation** for their efforts.

c. For each specific project, **procure** services and **clarify roles, responsibilities and accountability lines** of all support agencies, including financial accountability.

5. Ensure vertical national support

a. Establish **vertical coordination** (e.g., with a National or Basin Committee) so that national and international levels support intermediate levels to support communities. Support from higher levels should allow integration and be flexible, demand-driven and long-term.

b. Ensure **decentralization** of decision-making over fund allocation.

c. Ensure **monitoring** of the performance of intermediate-level players.

Negotiate that too strict national earmarks that specify funding for domestic uses only or for productive uses only, are loosened up so that new schemes or rehabilitations can be designed for multiple uses.

Basin management meeting in Omaruru, Namibia

Step Two: Select communities

- Develop selection criteria within time and funding frames.
- Communicate widely and test for compliance.
- Select.

Purpose of Step Two

To select communities for project implementation according to transparent criteria and to clearly communicate the project concept to them.

1. Develop selection criteria within time and funding frames

a. Specify the **selection criteria** according to local development plans and priorities and prevailing water problems and needs, with time and funding frames that strike a balance between equitable distribution of scarce development resources over-time on the one hand, and sufficient concentration of resources to have a tangible impact without excessive overhead costs on the other hand.

Selection criteria can include: strong water needs with good untapped opportunities, expression of needs, good performance in earlier development activities, ability to collaborate, effective development-oriented leadership, voluntary contributions, willingness to include the marginalized, consensus about sitting of new infrastructure, etc.

2. Communicate widely and test for compliance

a. **Communicate** the project concept and selection criteria clearly and widely in order to raise realistic expectations, including expectations about the requirement for own contributions.

b. **Test** whether communities comply with the selection criteria and genuinely endorse the project concepts, especially the concepts of inclusiveness and own contributions. If communities continuously fail to meet one or more criteria, support could be revisited or, in extreme cases, even withdrawn (even if this failure is only detected in Steps Three, Four or even Five).

3. Select

a. Transparently **rank** potential candidate communities according to the agreed criteria, and **select** the highest ranked.

b. **Communicate** the results of the selection to all those involved, including the communities that were not selected, and clarify future opportunities for the rejected communities.

4. GUIDELINES FOR FACILITATING LOCAL- LEVEL IWRM IN A COMMUNITY

Step Three: Understand the community and build capacity

- Build trusting relationships and communicate the project concept.
- Do contextual profiling.
- Train the community and select community mobilizers.

Purpose of Step Three

To create mutual understanding and trust so that everybody in the community understands and buys into the project concept, while local structures and support agencies fully understand local dynamics and liaise with community mobilizers for the next project steps.

1. Build trusting relationships and communicate the project concept

a. **Build trustful relationships** through traditional leaders, local government sub-structures at community level, resource persons, and local groups, in particular groups of poor people (e.g., self-help groups, formal and informal groups of women and for women, youth groups, and health initiatives).

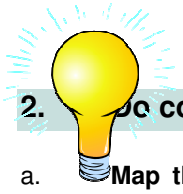
b. Further **discuss the implications of the project concept** in order to refine expectations of the support on offer and the conditions for support (livelihood improvements through better access to water for multiple uses; focus on vulnerable groups; participatory planning and implementation process; own contributions, budget ceiling and time frame).

TIP

Work with local government sub-structures and everybody else, and avoid being engulfed by smaller interest groups.

Focus on community needs instead of the needs of a few individuals.

Be careful how you communicate the project concept – to avoid misperceptions and effectively negotiate the people's own contributions.



2. Do contextual profiling

a. **Map the community** through a participatory rapid appraisal. The local structures should use various methods to do the mapping, such as interviews with key informants and focus groups, available reports and surveys.

This mapping should cover:

- history and trends over time, demography, wealth ranking, economy, land tenure, culture, ecology, social aspects, health, former interventions and networks;
- community organization and internal power structures, the strength of traditional leadership and other (potential) leaders;
- the available asset base and financing, technical and managerial skills within the community; and
- potential village mobilizers (see below).

b. Do a participatory **rapid water audit** to increase the joint understanding of existing water resources, technologies, multiple uses and users, and institutions (see the matrix under 'monitoring' in Step Seven on page 22). Focus groups can draw maps – different interest groups will draw different maps – of trends over time and recent innovations in the following:

- water resources and changes over-time;
- individual and communal infrastructure ownership, uses and users, and their links with land tenure;
- existing institutions for infrastructure operation and maintenance. This encompasses the structures and composition of water user groups, rules for operation and maintenance of – and own contributions to – communal infrastructure, reasons for the failure of any past projects, conflict resolution procedures, and the normative frameworks for prioritizing water use and pollution prevention;
- the inclusiveness of water access by gender and vulnerability (who does what, who benefits);
- possible water quality and upstream-downstream issues,
- with the help of engineers: possible technical interventions, and
- public, NGO, and private service providers and other stakeholders that (potentially) support the community's water management.

TIP

Take time and be sensitive. Visit water points when finding out about a community and its water management.

If dynamics are discovered that could hamper project implementation within the time and funding conditions, selection process and criteria can still be revisited and support to some communities be put on hold.

3. Train the community and select community mobilizers

"Community mobilizers" liaise directly between the community and local structures and facilitate participatory planning and implementation. They are not directly part of the core political and leadership structures, but can collaborate well with them. The leadership approves their selection. If project resources are too limited or the situation allows, the lowest-level representatives of local authorities can carry out this task.

a. Select and train credible **community mobilizers** and representatives according to agreed criteria, and prepare them for the visioning process.

   Selection criteria can include: trustworthiness, willingness to take the initiative, being hard-working, reliable and respected by all parties, having leadership qualities and integrity, time availability and gender balance.

b. Together with the constituencies, select genuine **representatives** of the various interest groups, in particular the more marginalized, and ensure feedback loops to the respective constituencies.

c. **Train** community mobilizers to facilitate villages for community-based water resource management and understand potential technical solutions.

d. **Train and prepare** each of the interest groups and their representatives for the visioning process and ensure they come with mandated proposals for prioritizing activities.

e. Start **linking** communities with the horizontal, integrated service delivery structures of Step One, in particular on possible technical solutions.

Water resource map, hand drawn by the community in Namwala, Zambia

Step Four: Create a vision and select activities to fulfil it

- Do participatory situational diagnosis and problem analysis.
- Create a vision of new ways to manage water.
- Rank opportunities and needs.

Purpose of Step Four

To create a common understanding of what can and cannot be achieved within the time and budget limitations and whose livelihoods will be improved how.

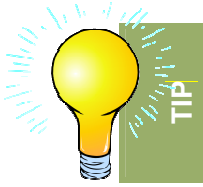
1. Do participatory situational diagnosis and problem analysis

a. In plenary meeting(s)[2], compile an agreed community-wide **water audit** of all existing water resources, technologies, uses and users (by gender/poverty, etc.) and ownership and management institutions (see the matrix under 'monitoring' in Step Seven on page 22).

b. Articulate social and cultural **values and norms** related to water management (e.g., priority water uses and users, pollution prevention, upstream-downstream issues).

c. Identify and thoroughly analyze **problems and water needs** by site and community group.

d. Train people on the range of possible technical solutions by site and community group.



It is important that all relevant support agencies participate in the visioning process and give timely information about infrastructure costs, bills of quantities and timelines for the construction of communal infrastructure.

2. Create a vision of new ways to manage water

a. In interest group meeting(s) that feed into the plenary meeting(s), create a **vision** on the medium-term aspirations of community-based water resource management and its accompanying interventions (e.g., hygiene training, market links).

[2] Plenary = full, complete; a plenary meeting is a meeting of all members/stakeholders.

b. In interest group meeting(s) that feed into the plenary meeting(s), identify the short-term technical and institutional **high-quality solutions** that can be self-initiated or supported by the project.

c. Jointly identify **internal resources**: local existing management rules and institutions, local skills and crafts.

d. Jointly identify and solicit **external resources**: public and private water service providers, expertise and contacts.

e. Identify required land **tenure changes** that will benefit the poor.

3. Rank opportunities and needs

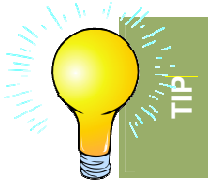
a. In interest group meeting(s) that feed into the plenary meeting(s), **define the criteria for prioritization, in particular of livelihood benefits and the significant number of beneficiaries**, including women and other vulnerable groups as beneficiaries, and also including their priorities, e.g., for domestic and small-scale productive water uses, and values and norms regarding water.

b. **Rank** short-term activities to be supported by the project and encourage the community's commitment to making its own contributions.

c. **Align** communities' priority aspirations with available budget and other support.

4. Select activities for implementation

a. **Select** activities to implement and agree on how to address any proposed activities outside that scope (postponing, finding other support agencies).



In the final decision-making on activities to implement, ensure that the normally voiceless and marginalized groups can express their own criteria and ranking. This requires preparing them well.

Visioning workshop in Lavumisa, Swaziland

Step Five: Compile detailed action plans

- Create and train community structures.
- Specify actions, roles and budgets.
- Sign off.

Purpose of Step Five

To operationalize agreed activities into time-bound action plans, and to tender and formalize collaborations with selected support agencies.

1. Create and train community structures

a. **Identify the community structures required** for implementation and operation and maintenance of infrastructure and accompanying interventions, both for the project as a whole and for the various activities:

- designing structure: composition of membership, committees and leadership;
- defining internal tasks and roles and responsibilities and external long-term relationships with service providers;
- setting and enforcing rules, rights and obligations, conflict resolution, cost recovery, prevention of wastage and pollution, etc.

b. Agree on **(s)election procedures** (with criteria like trustworthiness, taking the initiative and being hard-working, reliable and respected by all parties, and having leadership qualities, the skills required for the job, integrity, time availability, and gender balance).

c. Elect or otherwise **establish** the **community structures** in charge of overall project implementation and of specific activities, all with clear accountability lines to their constituencies.

d. Build the capacity of community structures for cost analysis (e.g., bills of quantities), budgeting, and transparent accountancy.

2. Specify actions, roles and budgets

a. Link community structures through local government with service providers, NGOs, etc., and start to invite tenders and **procure** services.

b. For each activity, elaborate **detailed action plans** which encompass:

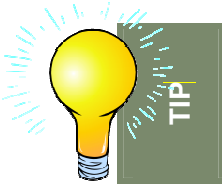
- details of the roles and responsibilities of each service provider (technical designs, budgets, implementation timeframes, payment schedule, allowances, post-construction guarantees, monitoring, penalties in case of non-performance, etc.);
- an inclusive procedure to select the site;

- the own contributions that the community commits to make;
- land tenure issues;
- the future ownership of new infrastructure and its management;
- procedures for adapting plans, including the community structures that are mandated to make such changes; and
- conflict resolution procedures, e.g., if commitments by any party are not honoured.

3. Sign off

a. Establish and sign **contracts** between community structures, local government and service providers, specifying the roles and responsibilities of, and commitments by, all parties, including a clause on breach of contract.

b. Define a **monitoring framework** for signed-off contracts and envisaged livelihoods impacts.



Technical feasibility studies and costings take time and usually require expert inputs. Keep communities closely involved in these processes to strengthen ownership and avoid mistrust.

Community building irrigation canal in Dzimphutsi, Malawi

Step Six: Implement the action plans

- Construct infrastructure and develop the capacity to operate and maintain it.
- Create management structures and develop their capacity.
- Implement the accompanying interventions and develop the capacity to maintain them.
- Ensure sustainability when exiting.
- Operate and maintain infrastructure and continue capacity development.

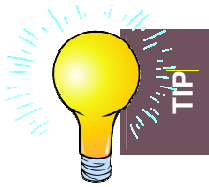
Purpose of Step Six

To implement the agreed action plans and adjust them as needed in a transparent manner, while building capacity for sustainable infrastructure operation and maintenance and their accompanying activities.

1. Construct communal infrastructure and develop the capacity to construct, operate and maintain it

a. Implement the agreed action plan on **infrastructure construction** and adjust the plan where needed, with clear explanations to and consultations with constituencies.

b. **Develop the capacity** of the responsible community members to participate in or monitor construction, operation and maintenance of the infrastructure, especially through 'learning by doing' while implementation takes place.



If adjustments are required, inform communities extensively to avoid suspicion that a support agency or community member is 'eating the money'.

2. Create management structures and develop their capacity

a. Implement the agreed action plan for the **creation of management structures** and adjust the plan where needed, with clear explanations to constituencies.

b. **Develop the capacity** of the management structures (e.g., accountancy, cost recovery, technical operation and maintenance and repair, spare parts management, leadership, conflict resolution, and linking with service providers).

This capacity building should start during the construction phase, but it is a process that takes years, as people have to get used to the ways in which the water resources and infrastructure 'behave'. With growing experience, management tends to improve.

3. Implement the accompanying interventions and develop the capacity to maintain them

a. **Implement the agreed action plan** for accompanying interventions and adjust it where needed, with clear explanations to constituencies.

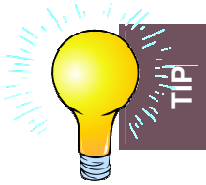
b. **Develop the capacity** for implementing the accompanying interventions.

4. Ensure sustainability after exiting

a. **Mark** the finalization of construction and hand over **responsibility** to the community for the use, operation and maintenance of the infrastructure. The handover should incorporate legal documents specifying assets, and the allocation of any remaining materials.

There should be a celebration to mark the handover.

b. Confirm the agreed roles and responsibilities of communities, local government as custodian, and service providers for guarantees and **'after-care'**.



Support agencies can exit transparently and responsibly through a formal handover document for signing by all parties.

5. Operate and maintain infrastructure and continue capacity development

a. Ensure that the community put the infrastructure into sustainable use.

b. Continue capacity development according to the needs arising from the communities' 'learning-by-doing' (e.g., accountancy, cost recovery, technical operation and maintenance and repair, spare parts management, leadership, conflict resolution, and linking with service providers).

Drilling boreholes in Ndonga village, Mozambique

Continuous 'Step' Seven: Do participatory monitoring and evaluation, and livelihood impact assessment for follow-up

- Monitor planning, implementation and use.
- Monitor the impacts on livelihoods.
- Identify follow-up plans for community-based water resource management.

Purpose of Step Seven

Embedded in local structures' monitoring systems, to continuously track and reflect on the processes followed by communities for adjustments during the project and for follow-up activities after the project.

1. Monitor planning, implementation and use

a. Continuously **track and reflect** on the processes of making and implementing action plans during the project, and the proper working of infrastructure and institutional arrangements after the project concludes.

b. Where needed, **adjust plans** and implementation during the project, and ensure that the infrastructure works after the project concludes, drawing up procedures for the communities to report problems, to mobilize their own contributions, and to call upon local structures.

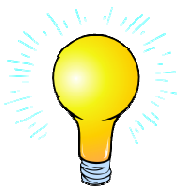
2. Monitor the impacts on livelihoods

a. Assess the beneficiaries and the impacts of the project on their livelihoods.

TIP

The following matrix links water and livelihoods. The number of users and their gender and vulnerability status indicates the beneficiaries and how they use water beneficially.

This matrix can be made by communities and support agencies (a) before the project, as a base line; (b) as a plan during the visioning process, for transparent articulation of beneficiaries and their benefits as a key criterion in prioritization; and (c) after the project, to assess the factual impacts on livelihoods and to develop follow-up activities.



WATER SOURCES	TECHNOLOGIES (Number/sites)	NUMBER OF BENEFICIARIES by gender and vulnerability status – use	MANAGEMENT (committees, rules on operation and maintenance/tariffs, enforcement)
Surface streams	Direct use	70 poor women - domestic 20 poor men - cattle	No management, no problem
	1 dam	10 less poor men - irrigation 5 less poor women - irrigation 5 less poor men - cattle (dry season)	No committee, no maintenance, severe degradation
	3 fishponds	5 less poor men	Committee, protection against theft
	1 irrigation scheme	20 poor and 5 less poor men – irrigation	Committee, less functional, no cost recovery
Groundwater	5 shallow wells	30 poor women	No management, silting and pollution
	3 boreholes	25 less poor women – community garden	Committees, two with good cost recovery; one not functional, with broken pump
Rain	Rooftop water harvesting	15 households - multiple uses	Household-managed

3. Identify follow-up plans for community-based water resource management

a. For the community and local structures, identify follow-up activities for community-based water resource management and integrate those in the village and district (water) development plan.

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