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# Rural Water Supply and Sanitation Toolkit for Multisector Projects

Developed by:  
Rural Water Supply and Sanitation  
and  
Social Funds Thematic Groups



THE WORLD BANK





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# F O R E W O R D

In fiscal year 2003, the Rural Water Supply and Sanitation and Social Funds Thematic Groups jointly coordinated the design and launch of a web-based toolkit on rural water supply and sanitation (RWSS) for multisector projects. This was complemented by a mini-CD/brochure and a publication with some of the key guidelines and tools in English, Spanish, and French. The toolkit aimed at providing practical and user-friendly advice to task teams of social fund and community-driven development programs and clients in improving the quality and sustainability of RWSS investments.

In order to test for applicability and to confirm whether the toolkit was serving its desired objective, the two thematic groups decided to pilot the toolkit and apply it in the field. In the first phase, based on demand from multisector task teams, an RWSS specialist was sent to Benin to verify its operational relevance and identify areas for revision. In the second phase, three task team leaders of multisector projects (Indonesia KDP3, Comoros Services Support Project, and Egypt Social Fund) were requested to peer review the toolkit and provide advice on how to make it even more effective.

Based on the consolidated feedback from the four task team leaders, three broad areas were identified for further improvement: (a) sanitation and hygiene; (b) monitoring and evaluation (including impact evaluation); and (c) institutional issues. A Key Issues section was created to address these issues with more tools structured around the following areas: (a) policy and institutional framework; (b) sanitation and hygiene promotion; (c) project monitoring and evaluation; (d) impact evaluation; and other sections thought to be important and upcoming, such as (e) financing arrangements; and (f) scaling up. Although the web-based version is more comprehensive, **this publication contains additional tools for these topics in the annex section.**

Since its launch in December 2002, the web-based toolkit has received over 33,000 hits (of pages viewed) and demand has been expressed through the Water Help Desk for copies of the CD-ROM and publications in various languages. This initiative spurred interest in other sectors to produce similarly structured toolkits. The revisions to the toolkit in 2004 were coordinated by Parameswaran Iyer and David Warren and the content was provided by consultant Mariana Felicio.

Parameswaran Iyer  
*Co-chair, Rural Water Supply and Sanitation Thematic Group*

David S. Warren  
*Chair, Social Funds Thematic Group*

Mariana Felicio  
*E.T. consultant, Human Development Network*



## FOREWORD (FROM 2002 PUBLICATION)

**M**ultisector projects, including social funds, are increasingly being used as a mechanism for channeling funds to communities to help them undertake their own development activities. These new approaches often provide more efficient ways of delivering community-based investments, and can empower communities by allowing them to define their own priorities and to manage subproject implementation, including, in many cases, procurement, contracting, and funds administration. However, results also show that rural water supply and sanitation (RWSS) has consistently been one of the key challenges for many multisector projects in terms of achieving long-term sustainability, and ensuring the effective use of the improved services. With an estimated two-thirds of the World Bank's financing for RWSS investments taking place in the context of multisector investment programs, the stakes are high for making sure that the RWSS components of such programs are well designed.

The purpose of this document is to improve the quality and sustainability of RWSS investments financed under multisector community-based projects by providing task teams with guidelines and tools for designing, implementing, and monitoring and evaluating the RWSS components of these projects. The target audience includes Bank staff, government officials, consultants, and other practitioners who are involved in the preparation and implementation of community-driven development programs.

Under the umbrella of the Rural Water Supply and Sanitation and Social Funds Thematic Groups, this project was coordinated [in 2002] by Jennifer J. Sara (lead infrastructure specialist), Parameswaran Iyer (senior water and sanitation specialist, Water and Sanitation Program) and David S. Warren (senior social protection specialist). The content side was provided by consultants Robert Fishbein and Mariana Felicio, and the technical side was executed by Hywon Cha Kim and Zoe Elena Trohanis. Other members of the task team were François Munger and Christophe Prevost, while valuable comments were received from Alexander Bakalian, Samantha de Silva, Talib Esmail, Caroline van den Berg, Andrea Vermehren, Meike van Ginneken, Peter Roberts, and Cristina Malmberg Calvo.

This report was funded by the Bank-Netherlands Water Partnership, a facility that supports World Bank operations to increase delivery of water supply and sanitation services to the poor (for more information see <http://www.worldbank.org/watsan/bnwp>).

Jamal Saghir, Director  
*Water and Energy*

Robert Holzmann  
*Director, Social Protection*

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## **FOREWORD FROM 2002 PUBLICATION**

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# RWSS TOOLKIT FOR MULTISECTOR PROJECTS GUIDE

“If anything has been learnt in the almost 50 years of installing village water supply systems, it is that where there is no local participation in planning and decision making and no local commitment to operation and maintenance, including local financing, the system has a short life.”

*Arthur Okun*

# I N T R O D U C T I O N

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**M**ultisector projects, including social funds and community-driven development, are increasingly being used as a mechanism for channeling funds to communities to undertake development activities. These new approaches often provide efficient ways to deliver community-based investments, and can empower communities by allowing them to define their own priorities and to manage subproject implementation.

Rural water supply and sanitation (RWSS) is often a high development priority in communities and there are good examples of communities actively participating in the planning and implementation of RWSS subprojects. However, a persistent challenge is how to ensure the quality and sustainability of the services that these water and sanitation subprojects are designed to provide.

Decades of experience have produced a body of knowledge which can be useful and instructive in addressing these issues. This toolkit has been devised to help multisector task managers tap into this body of knowledge. The toolkit is divided into the following main sections:

- 1. Basic Principles in RWSS.** This section heightens awareness of sector-specific issues and highlights the basic principles of good RWSS practice.
- 2. Rapid Sector Assessment.** The first step in determining how to include RWSS components in a multisector project is a sector assessment. This provides a broad overview of the critical constraints and opportunities of RWSS service provision in the country, and is used to design the strategy for incorporating RWSS into the multisector project.
- 3. Sanitation and Hygiene Promotion.** This new section describes how sanitation and hygiene behavior changes can be achieved through promotion, and presents guidelines for designing sanitation and hygiene promotion components for rural communities.
- 4. RWSS in the Project Cycle.** An organizing framework is provided for implementing each stage of the subproject cycle as it relates to RWSS investments.
- 5. Resources.** This section provides terms of reference (TORs), checklists, and other tools in carrying out the rapid sector assessment and implementing RWSS through the project cycle, as well as bibliographic references of online documentation, useful links, and contact information.

The series of steps needed to incorporate an RWSS component into a multisector project are summarized on the next page.

# WHAT DO I NEED TO DO?

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## STEP 1

**What: Assess the country situation and define an RWSS strategy for the project.**

Undertake a rapid sector assessment of the policy and institutional environment, review proposed project objectives, and determine how RWSS can best be incorporated into the project.

**Who:** Internationally qualified consultant(s) in RWSS or a Bank technical staff member. Preference would be a team of consultants with a technical, social, and financial staff.

**Result:** Country sector snapshot, agreement on the basic approach to RWSS in the project, and input to project concept document, including input to logical framework.

## STEP 2

**What: Design RWSS project interventions, set up project rules, and elaborate operational manual.**

Develop an implementation strategy, define project activities, and spell out the rules under which RWSS subprojects will be funded.

**Who:** Government project office in coordination with sectoral agencies, with or without assistance of local consultant(s), with expertise in RWSS hardware and software issues.

**Result:** Definition of RWSS component and final draft of operational manual.

## STEP 3

**What: Review RWSS component during project appraisal.** Review and agree with government on the implementation strategy, component definition, and operations manual; finalize RWSS input to project appraisal document logical framework and project appraisal analyses (if applicable).

**Who:** Internationally qualified consultant in RWSS or a Bank technical staff as member of appraisal team.

**Result:** Project appraisal document.

## STEP 4

**What: Implement project and carry out regular monitoring and reporting.**

Oversee community-based evaluation; assess performance of completed subprojects and take corrective actions.

**Who:** Government project office and communities, with or without assistance of local consultant.

**Result:** Progress reports and evaluation reports.

## STEP 5

**What: Carry out implementation support and evaluation.**

Organize regular supervision missions and evaluate outcomes.

**Who:** Internationally qualified consultant in RWSS or a Bank technical staff member as part of Bank implementation support team.

**Result:** Aides-mémoires, evaluation reports.

## 1. BASIC PRINCIPLES IN RWSS

## 1.1 Key Characteristics of RWSS

**What is RWSS?** RWSS provides potable water to rural communities for domestic uses (for example, drinking, eating, cooking, bathing, and hygiene), and requires the supply of high-quality water on a continuous basis. In the developing world, families – especially women – spend a considerable amount of time trying to provide sufficient water for these uses. The potable water systems usually replace traditional sources of water, such as rivers and open wells, which are often contaminated and distant from the household. Improved rural water solutions include a range of technologies from protected wells equipped with manually operated handpumps to more complex gravity-flow or pumped piped water systems connected to houses or public standposts. The technical solution is very location specific and will depend on a range of characteristics such as community demand, affordability and willingness to pay, community size and household density, water resources and electricity availability, and topographical issues.

The **health benefits** of improved water and sanitation services derive mainly from the safe disposal of human excreta and the adoption of sustained and effective use of water for hygienic purposes. These objectives often need to be achieved through intensive community sensitization campaigns, based on the existing practices and beliefs of the population. Technical solutions for sanitation will depend very much on household preferences and will consider many factors, such as cultural and gender issues, traditional building materials, costs, water supply availability, environmental concerns, and the legal and policy environment.

**RWSS services need to be managed and paid for.** Experience shows that community-based management solutions are the most appropriate, as long as the community organization is representative, accountable, and has the capacity to implement its tasks, and there is an adequate tariff and cost recovery mechanism in place to pay for the costs of supplying the service. It is essential for communities to make informed choices about the costs to be incurred, as the estimated tariff must take into account maintenance costs as well. Years of experience also show that community-based management committees need access to technical assistance on a continuous basis. This assistance can be provided by local government, a national sectoral agency, or the private sector.

The **institutional and policy framework** in which the multisector project operates, and the rules and procedures adopted during project implementation, are critical to the success and sustainability of community RWSS subprojects. It is important that the roles and responsibilities of stakeholders (primarily communities, the private sector, and the government) are clearly defined, within an appropriate legal framework of ownership and management. This should include, but not be limited to, an autonomous, community-elected water users association to operate the service, set tariffs and manage funds, and ensure continuity in the provision of service.

**Capacity building and training at a local level** are also highly linked to the project's success. Experience tells that for operations and maintenance to be long lasting, communities need to be trained before, during, and after facility construction, make choices based on all available options, and be given the opportunity to develop their capacity.

**Two fundamental characteristics of RWSS can be summarized as follows:**

≈ **First key characteristic: RWSS involves the provision of a continuous service, and this service requires management and generates costs.** Understanding this basic concept is fundamental to improving performance of RWSS subprojects. A reliable level of service that the communities can afford and for which they are willing to pay must be ensured.

≈ **Second key characteristic: Water is increasingly viewed as an economic as well as a social good.** This is reflected in the users' willingness to pay for the cost of the service. RWSS practitioners around the globe agree that this concept – referred to as the demand-responsive approach – is essential to successful water supply projects, because it establishes the basis for sustainable operations and maintenance and provides a framework for communities to make informed choices as to the level of service they desire and can afford.

## Other related characteristics include:

≈ **RWSS components have immediate and direct welfare consequences.** The failure or malfunction of RWSS systems has direct welfare consequences on the beneficiaries – they no longer have water for essential daily life. Thus, the social cost of poor operations and maintenance is high.

≈ **RWSS components are essentially interdisciplinary in nature.** Investments in water supply cannot achieve their full potential benefit, and ultimately their poverty reduction goals, without complementary efforts in hygiene and sanitation, environmental protection, and sustainable water consumption.

≈ **RWSS investments involve multiple alternatives for design and level of service.** Communities need to be aware of, and participate in, the choice of these alternatives, because it will have implications for the size of the investment and the cost of future operations and maintenance.

≈ **Adherence to quality standards is an essential ingredient for sustainable service delivery.** Quality work is necessary for ensuring long-lasting investments. Construction and equipment installation must therefore be carried out by trained professionals from the beginning.

≈ **Sanitation and hygiene aspects should be seen as distinct activities within RWSS.** In contrast to water supply, rural sanitation systems – entailing household latrines and drainage – do not generally lend themselves to a fee-for-service framework. They involve a strong *software aspect*, which focuses on *awareness and behavioral changes* that extend to the household level and recognize women as key actors, as well as on synergies with education and health projects.

≈ **RWSS includes hardware and software aspects.** Successful and sustainable RWSS projects include not only the infrastructure investment (for example, wells, pipes, pumps, and latrines), but also the software aspects of service management and promoting health and hygiene practices.

## 1.2 Definitions in RWSS: Demand-Responsive Approach and Willingness to Pay

Fundamental to RWSS jargon are two concepts, the demand-responsive approach and willingness to pay, both of which are interlinked.

Four overarching principles encompass the notion of the *demand-responsive approach*: (a) water should increasingly be managed as an economic as well as a social good; (b) management should be focused at the lowest appropriate level; (c) a holistic approach to the use of water resources should be employed; and (d) women should play a key role in the management of water.

The fundamental characteristics of the demand-responsive approach are:

### 1. Community members make informed choices about:

≈ Whether to participate in the project

≈ Technology and service-level options based on their willingness to pay for various levels of service (higher levels of service are more expensive)

≈ When and how their services are delivered

≈ How funds are managed and accounted for

≈ How their services are operated and maintained.

**2. Government plays a facilitative role,** setting clear national policies and strategies, encouraging broad stakeholder consultation, and facilitating capacity building and learning.

**3. An enabling environment is created** for the participation of a wide range of providers of goods, services, and technical assistance to communities, including the private sector and nongovernmental organizations (NGOs).

**4. An adequate flow of information is provided** to the community, and procedures are adopted for facilitating collective action decisions within the community and between the community and other actors.

If we understand that water is an *economic good*, it is also true that the poor are no different from anyone else in their *willingness to pay* for reliable water supply and sanitation services. In most countries people are already paying for water and sanitation services, either in time, labor, or money. Experience is also showing that, if asked, households are often willing to pay more for water and sanitation than the established rate.

Several methods are currently in use to quantify the willingness to pay at the subproject level:

≈ Determine what people are currently paying under similar and existing schemes (revealed preference surveys)

≈ Carry out household surveys, using such methods as the contingent valuation method

≈ Carry out focus group discussions on various service and payment options.

In assessing these alternatives, the multisector project should keep in mind that the whole point of the exercise is to facilitate informed choice on investment options and determine a fair basis for setting tariffs that will ensure sustainable operations. In this context, the key question is: *Does the established rate cover the real costs of offering the desired level of RWSS service, and are consumers willing to pay that amount?*

### **1.3 The Policy and Institutional Environment Matters!**

Reliability and sustainability of community-based RWSS services depend on a series of technical, financial, and management support networks, all of which operate within a policy and legal framework.

Understanding the nature, strengths, and weaknesses of this environment will help the task manager to design RWSS interventions that have the greatest chance of sustainable service delivery.

Good practice in RWSS has tended towards decentralized ownership and management of assets and service delivery. This approach dovetails well with the trend towards decentralization and community-driven development. The following summarizes the general distribution of roles among stakeholders at various levels:

**National agencies** (usually ministries or parastatal agencies) are increasingly acting as *adviser, facilitator, and trainer* to local governments and communities, who themselves are organizing procurement of RWSS equipment and services. In this revised role, national agencies also define and certify quality norms, procurement standards, and training programs for RWSS equipment and service suppliers.

**Local governments** (usually provincial, district, or similar administrative units) usually provide *support to communities* (such as villages or neighborhoods) in planning, procurement of equipment and services, and training. In some cases, local governments themselves may organize the procurement of equipment and services on behalf of multiple communities.

**Communities** (usually villages, small towns, or neighborhoods) should be the *owners* of the RWSS assets, with the responsibility for ensuring service provision and operations and maintenance. This includes procurement of the equipment and services, as well as setting and collection of user fees to ensure continuous financial self-sufficiency of service delivery and operations and maintenance.

**The private sector** (including equipment and spare parts suppliers, operations and maintenance providers, and NGOs) are contracted by the communities to provide a range of RWSS *support services*, which could include equipment and spare parts supply, operations and maintenance, organizational support, and training. These are done under accountable and transparent procurement procedures, and according to national standards and regulations.



## 1.4 Basic Principles

Below are 13 best practice design principles in RWSS to be used when assessing the country situation and designing the project interventions. Table 1 highlights these principles in relation to major thematic areas.

- 1.** Promote a demand-responsive approach whereby communities make informed choices regarding their participation, service level, and service delivery mechanisms.
- 2.** Promote institutional reform based on clear roles for key stakeholders whereby communities own their facilities, the private sector provides goods and services, and government facilitates the process.
- 3.** Ensure an appropriate legal framework for ownership and management.
- 4.** Implement RWSS projects within the context of broader community and local government development.
- 5.** Establish financial policies underpinning a demand-responsive approach whereby communities pay part of the capital cost in proportion to the cost of the facilities, and all operations and maintenance costs.
- 6.** Support formation of representative water users associations for planning, implementation, and management of community water supply facilities.
- 7.** Create a competitive environment for allowing communities to access a range of providers of goods and services for all aspects of the project cycle.
- 8.** Integrate water, sanitation, and hygiene education in RWSS projects.
- 9.** Promote user investment in sanitation through public awareness and hygiene education, and strengthen the private sector's ability to construct facilities.
- 10.** Ensure representative and informed participation of all stakeholders.
- 11.** Include clearly defined capacity building components that enable all stakeholders to play their roles and build partnerships.
- 12.** Set rules to target poor, unserved communities and vulnerable groups in these communities.
- 13.** Support community-based environmental management to improve living conditions and protect water resources.



**TABLE 1**  
**KEY DESIGN PRINCIPLES FOR COMMUNITY WATER AND  
SANITATION SERVICES**

Thematic Area	Problem Definition and Key Responses	Community Water and Sanitation (CWS) Strategy for Rural Areas and Small Towns
Policy Environment	<p>Limited political commitment, weak legal framework, and poor governance lead to unstable policy environment for sector. This results in underinvestment, undefined ownership, poor participation, weak regulation, and conflicting priorities.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>• Bank works only where policy reform is in place, or where there is a demonstrated commitment to it.</li> <li>• Government should clearly articulate and disseminate policies, regulations, and programs.</li> <li>• Role of stakeholders should be clearly defined.</li> <li>• Broad consultation in policy review should be promoted.</li> </ul>	<p><b>Promote a demand-responsive approach whereby communities make informed choices regarding their participation, service level, and service delivery mechanisms.</b> Communities decide:</p> <ul style="list-style-type: none"> <li>• Whether to participate in project.</li> <li>• Preferred level of service based on willingness to pay.</li> <li>• How services are planned, implemented, operated, and maintained.</li> <li>• How funds are managed and accounted for.</li> </ul> <p><b>Promote institutional reform based on clear roles for key stakeholders whereby communities own their facilities, the private sector provides goods and services, and government facilitates the process.</b></p> <ul style="list-style-type: none"> <li>• Community owns, manages, and helps finance services.</li> <li>• Government at all levels facilitates the process by encouraging stakeholder participation, setting policies and standards, and financing facilities.</li> <li>• Private sector and NGOs provide goods, services, and financing.</li> <li>• External support agencies: financing, technical assistance, policy coordination.</li> <li>• Civil society provides policy and implementation support.</li> </ul> <p><b>Ensure appropriate legal framework for ownership and management.</b></p> <ul style="list-style-type: none"> <li>• Ownership (water resources + assets).</li> <li>• Recognition and autonomy of community-elected water users associations to operate, set tariffs, manage funds, especially local government.</li> </ul> <p><b>Implement CWS projects within context of broader community and local government development.</b></p> <ul style="list-style-type: none"> <li>• Support decentralization reforms.</li> <li>• Recognize and promote cross-sectoral linkages (education, health, rural development, energy, etc.).</li> </ul>
Financing Options	<p>Demand for services is increasing but service expansion has been constrained by insufficient resource allocation from the public sector, inefficient investments in costly schemes, and a lack of capacity to mobilize resources from users, local government, private sector, and others.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>• Financial policy should link prices charged to costs of services. Users should pay more for higher levels of service.</li> <li>• Tariff policy is important and should be designed to ensure financial viability of each system.</li> <li>• Subsidies should only be transitional and targeted to communities on a one-time basis.</li> <li>• Balance capital investments with long-term operations and maintenance.</li> </ul>	<p><b>Establish financial policies that underpin a demand-responsive approach whereby communities pay part of the capital cost in proportion to the cost of the facilities, and all operations and maintenance costs.</b></p> <p>Promote increased capital cost recovery from users:</p> <ul style="list-style-type: none"> <li>• An up-front cash contribution based on their willingness to pay is required from users to demonstrate demand and develop community capacity to administer funds and tariffs.</li> <li>• Ensure 100% recovery of operations and maintenance costs.</li> <li>• Improve community-level financial management and resource mobilization, especially for major repairs/replacements and service expansion.</li> <li>• Set up robust financing mechanisms (public and private sector) and explore financial intermediation options (such as household credit for on-site sanitation) to increase internal resource mobilization.</li> <li>• Small towns may need specific assistance for tariff setting and financial management plan for service expansion and upgrading.</li> <li>• Provide detailed information on costs to allow informed choice, and seek to reduce investment costs through lower-cost options and more efficient delivery mechanisms</li> </ul>

Thematic Area	Problem Definition and Key Responses	Community Water and Sanitation (CWS) Strategy for Rural Areas and Small Towns
Service Delivery Options	<p>Government monopoly of service provision has resulted in lack of accountability and community ownership, poor management and sustainability, low-quality services, and weak development of private sector and alternative delivery options.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>Promote community ownership and management and support a range of delivery and management options based on service levels, population size, etc.</li> <li>Promote policies and institutional reforms that remove barriers to private sector participation and other support and management arrangements.</li> <li>Develop mechanisms for allowing users to make informed choices (social intermediation).</li> <li>Promote flexible standards that open up choice and support appropriate technologies and equipment standardization (where required for spare part network).</li> <li>Consider management and operation and maintenance issues as an integral element of the community planning and decision process.</li> </ul>	<p><b>Support formation of representative water users associations for planning, implementation, and management of community water supply facilities.</b></p> <p>Promote community contracting and transparency in all procurement:</p> <ul style="list-style-type: none"> <li>Recognize range of management options based on community size and technical and financial complexity, and consider the special needs of multicommunity regional systems and neighborhood options in small towns. The larger and more complex the system, the greater the need for professional operators.</li> <li>Ensure long-term support and technical assistance to community management (private and public sector support, associations of water users associations, etc.), appropriate technology, availability of spare parts in the local market, etc.</li> </ul> <p><b>Create competitive environment for allowing communities to access range of providers of goods and services for all aspects of the project cycle.</b></p> <ul style="list-style-type: none"> <li>Community organization and formation of representative water users associations, resource mobilization.</li> <li>Service planning: estimating costs, engineering designs, financing plans.</li> <li>Training of water users associations in financial management, contract administration, operations and maintenance.</li> <li>Community awareness raising, hygiene education, sanitation promotion.</li> <li>Contracting, procurement, and construction supervision.</li> <li>Long-term support to management, operation, maintenance.</li> <li>Small towns are institutionally, technically, and financially more complex than rural areas and require additional support and training.</li> </ul>
Hygiene and Sanitation	<p>Full economic and health impacts of improved CWS are often not achieved due to lack of attention to hygiene education and sanitation. Approaches to sanitation have focused mainly on technology aspects, rather than on behavior changes and creating a market (supply and demand) for sanitation facilities.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>Ensure that hygiene education and sanitation components are included in national policy dialogue and resources provided in CWS programs.</li> </ul>	<p><b>Integrate water, sanitation, and hygiene education in CWS projects.</b></p> <ul style="list-style-type: none"> <li>Hygiene education and sanitation need clear objectives, performance indicators, and monitoring and evaluation processes.</li> <li>Hygiene education should build on existing beliefs and community priorities, and seek to achieve effective and sustained use of improved water and sanitation services and hygiene practices.</li> <li>Schools and family units are both important in hygiene education and sanitation programs.</li> </ul> <p><b>Promote user investment in sanitation through public awareness and hygiene and sanitation education and strengthen the private sector's ability to construct facilities.</b></p> <ul style="list-style-type: none"> <li>Subsidy programs for sanitation are not sustainable; however, targeted subsidies may be appropriate to demonstrate approaches and stimulate demand.</li> <li>Include a wide range of technology options for waste water and excreta disposal and treatment.</li> <li>Interventions should supplement and be coordinated with national health programs.</li> </ul>
Participation and Gender	<p>Lack of community involvement, especially the involvement of women, has been the main reason for poor service sustainability. Traditional project design did not consider the required project rules and incentives to achieve full participation.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>Demand-responsive approach requires ample information flow, and processes for the community to make all investment decisions.</li> </ul>	<p><b>Ensure representative and informed participation of all stakeholders.</b></p> <ul style="list-style-type: none"> <li>Place the community at the forefront of decision making and management through appropriate project rules, incentives, and social intermediation.</li> <li>Ensure participation of women and minority groups.</li> <li>Promote exchanges (meetings, newsletters, e-mail, associations of water users associations).</li> <li>Facilitate stakeholder participation in policy formulation and program design/evaluation.</li> <li>Monitoring and evaluation should include participation of all stakeholder groups.</li> </ul>

Thematic Area	Problem Definition and Key Responses	Community Water and Sanitation (CWS) Strategy for Rural Areas and Small Towns
	<ul style="list-style-type: none"> <li>CWS programs should recognize women as primary users of water, hygiene educators, and managers, and involve women in sector development, treating men and women as equal partners.</li> </ul>	
Capacity-building	<p>Insufficient attention is paid to the appropriately targeted capacity building required to implement a demand-responsive approach, and there are also few incentives for local private sector and NGOs to participate in programs.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>Capacity building is central to Bank support in sector.</li> <li>Capacity building requires a commitment to long-term support.</li> <li>Projects must have realistic objectives consistent with local capacity and build in local knowledge.</li> <li>Demand-responsive approach recognizes the need to support community outreach, social intermediation, and training.</li> </ul>	<p><b>Include clearly defined capacity building components that enable all stakeholders to play their roles and build partnerships.</b></p> <ul style="list-style-type: none"> <li>Target training to communities, private sector, NGOs, local/regional/national government.</li> <li>Innovative tools and methodologies are required as well as a learning-by-doing approach.</li> <li>Community outreach, intermediation, and training are required before, during, and after facility construction.</li> <li>Selection of trainers and community development workers should be done in a cost-effective and competitive manner, with the community involved in the contracting process as appropriate.</li> <li>Capacity is most required in social intermediation skills and informing communities about choices.</li> <li>Training should be time-bound and output and impact oriented, with performance monitoring and targets to measure capacity and achieve goals.</li> <li>Develop opportunities for local stakeholders (private sector, local government, NGOs) to participate and build their capacity.</li> </ul>
Poverty and Access	<p>Majority of clients are the poor, and the poorest are outside the cash economy and politically weak; it is easier to provide services to the rich. Population is increasing, and there are decreased services and resources as well as lack of political commitment towards the poor.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>Design CWS programs to reach the poorer segments of the population.</li> <li>Expand range of technology and management options that are affordable to the poor.</li> </ul>	<p><b>Set rules to target poor, unserved communities and vulnerable groups in these communities.</b></p> <ul style="list-style-type: none"> <li>Develop baseline information, identify vulnerable groups, and monitor access of the poorer communities to project services.</li> <li>Expand range of technology options, building on existing resources in community.</li> <li>Ensure adequate flow of information to all eligible communities and ensure adequate social intermediation and participation by all groups, including women, the poor, and minorities.</li> <li>Recognize and build on informal safety nets within communities.</li> <li>Involve women and minority groups in community decisions and management.</li> </ul>
Environmental Management	<p>Improper excreta and solid waste disposal are increasingly a source of pollution and related disease. Growing demand for water coupled with high variability of supply contributes to increased competition for scarce water resources and degradation of resource.</p> <p><i>Response:</i></p> <ul style="list-style-type: none"> <li>Consider environmental aspects of CWS: water resources and waste management.</li> <li>Promote holistic view of integrated water resource management (IWRM) in designing CWS policies and programs.</li> </ul>	<p><b>Support community-based environmental management to improve living conditions and protect water resources.</b></p> <ul style="list-style-type: none"> <li>Consider source protection, conservation, education of water users as stewards of water resources, watershed management, and appropriate water resource allocation among competing sectors, etc.</li> <li>Promote waste management as an integral part of integrated water resource management.</li> <li>Support public awareness and community education programs on environmental protection and integrated water resource management.</li> <li>Rely on groundwater rather than surface water, which must be treated to protect water quality.</li> </ul>

## **2. RAPID SECTOR ASSESSMENT**

# THE RAPID SECTOR ASSESSMENT

**2.1 Why Is a Rapid Sector Assessment Important?** Carrying out a rapid sector assessment is important because it provides the project's task manager and team with crucial information about the country's commitment regarding the provision of water and sanitation services and the general strengths or weaknesses of the policy and institutional environment. This allows the team to evaluate, prior to intervention, whether the panorama is ripe for involvement, or if there is *first* a need for policy reform. Accomplishing a good rapid sector assessment can save many future headaches and help the team be better prepared for potential obstacles.

The first step in the rapid sector assessment is to get a *quick overview* of the country context by clarifying the nation's policy and strategy for providing RWSS services and understanding its ongoing programs and capacities. This will involve discussions with the responsible sector agency and stakeholders and review of existing strategy documents, master plans, implementation manuals, and reports.

Secondly, a determination is made of the extent to which sector reform is needed and (a) whether and how this reform should be addressed by the project; and (b) how other RWSS interventions should be addressed in the project.

The rapid sector assessment can be accomplished by examining the following subthemes: (a) national goals and strategy; (b) roles and responsibilities; (c) technology options; (d) finance and cost recovery; (e) legal issues; (f) ongoing programs; and (g) formulating a strategy.

**KEY TOOLS**  
The key tools for carrying out a rapid sector assessment are: TOR for Country Assessment for RWSS Component (Annex I); and Checklist for Rapid Sector Assessment, addressing the subthemes mentioned above (Annex II)

**TABLE 2**  
**SUMMARY: RAPID SECTOR ASSESSMENT – AVAILABLE DOCUMENTS**

Rapid Sector Assessment Phase	Key Document(s) Provided & Additional Online Resources
<i>General</i>	<b>Annex I:</b> TOR for Country Assessment for RWSS Component <b>Annex II:</b> Checklist for Rapid Sector Assessment <b>Online:</b> Sample reports
National Goals & Strategy	Use general documents
Roles & Responsibilities	Use general documents; see Annex X, Sample Bylaw
Technology Options	<b>Online:</b> Manuals – The Ethiopia Social Rehabilitation and Technical Design Manual, DFID Guidance Manual on Water and Sanitation Programmes, Lao PDR water supply and sanitation technology options documents, Peru technical manuals, and technology-related websites
Finance & Cost Recovery	<b>Online:</b> Guidelines on calculating tariffs, fiduciary management for community-driven development projects
Legal Issues	Use general documents
Ongoing Programs	Use general documents
Formulating a Strategy	<b>Online:</b> Sample reports

Below, information complementary to the TORs and checklist is provided for some of the subcategories.



## 2.2 Roles and Responsibilities

**The definition of roles and responsibilities in the sector** should be seen within the context of ongoing programs for decentralization and reforms in the urban water sector (for example, management of small town systems may be transferred from national utility to local governments). The sector assessment should summarize the strengths and weaknesses of the actors to assess their ability to play their respective roles in RWSS service provision, with a view towards compiling lessons learned for the project. In particular, the following stakeholders and the fulfillment of their roles should be examined:

≈ **National agency** and its ability to pursue a demand-responsive approach, and to regulate and promote quality standards

≈ **Local governments** and their capacity to support communities

≈ **Communities** and their ability to manage the procurement and oversight of equipment supply and operations and maintenance services

≈ **Local market of suppliers** of goods and services for design, construction, procurement, and spare parts

≈ **Local organizations** to provide support to communities in mobilization, subproject identification and preparation, engineering design, training of water committee members.

## 2.3 Technology Options

The relevant key issues to examine here include: (a) the extent to which communities have choices for RWSS service delivery; (b) how these options are framed and discussed with the communities (for example, are they fully understood? Do they cover operations and maintenance? Are gender aspects considered?); and (c) the extent to which technical norms and standards exist and are enforced within the country. Other important issues are:

≈ **Are there national RWSS standards? Are they appropriate? Are they sufficiently flexible and affordable to meet various community needs?** Examples of national standards include:

≈ Types of technology or service level for given populations within a given radius

≈ Technical specifications for various technology or service levels

≈ Minimum water quality standards for household use

≈ Environmental standards for siting of RWSS facilities.

The assessment should ascertain the extent to which these standards exist and who is responsible for enforcing them. Also, is there a cadre of sector professionals who are familiar with these standards and can provide quality services to the communities? If not, how can this be developed?

**Are communities provided with a list of standard technology options, with their advantages and disadvantages?** An example of the range of technical options might include:

≈ Improved shallow wells

≈ Boreholes equipped with handpumps

≈ Spring protection

≈ Mechanized boreholes connected to standpipes or household connections

≈ Surface water catchments linked to piped system

≈ Latrine improvements

≈ Small sewer networks.

**KEY TOOLS**  
The key tools for defining *roles and responsibilities* at a project level are: Sample Bylaw (Annex X); and online page on institutional issues under Key Issues section

**Do these options provide information on the investment costs and management implications for operations and maintenance, including annual costs and tariffs required to cover those costs?**

Communication of these options to communities highlights the need to think through the cost and management implications of their investment choices.

**Is water resource availability an issue in the country?** The project should be aware of any concerns related to water scarcity and its effect on the cost and sustainability of project investments.

## 2.4 Finance and Cost Recovery

RWSS subprojects often fail because inadequate attention is paid to finance and cost recovery issues. Therefore the following questions must be addressed:

**Is there a standard policy for subsidy across the country? Is the subsidy level fiscally sound and affordable? Is there a standard policy for local sharing of the investment cost that follows the principles of the demand-responsive approach (that is, cost-share level related to cost of service)?**

The project should strive to promote a consistent approach and financial policy within the country, at least at the regional level. It is also important to determine the extent to which the level of cost share relates to various levels of service. For example, does the percentage contribution and level of subsidy vary for hand-dug wells, deep wells, communal standpipes, or household connections?

**Is there a standard policy for recovery of operations and maintenance costs through tariffs?**

**How are these tariffs arrived at?** As with investment subsidies, the project should avoid conflicting with established tariff policies and practices, and should promote standard approaches. The key issues to examine are whether the tariffs:

- ≈ Are based on actual costs for rendering differing levels of service
- ≈ Include provision for equipment renewal
- ≈ Include a provision for annual tariff adjustments
- ≈ Allow for financing potential network expansion and upgrading.

**What are the software costs and how are they financed?** Does the government have a policy on the provision of software items, such as capacity building for the community, local governments, and the network of service providers, and promoting behavioral change for improved hygiene and sanitation? Often referred to as social intermediation, these crucial activities, which generally amount to about 25 percent of project costs, are often either not considered in the project costs or are add-ons.

**Is there any reliable information on RWSS costs?** The initial assessment should determine the extent to which data exist on unit costs of RWSS service investments, operations and maintenance costs, and other software project costs. These will provide a foundation for estimating project costs and developing the operational manual, as well as a baseline to be used for monitoring and evaluation.

### Words of Advice...

**Quantify all project costs.** Although all subprojects quantify hardware investment costs, they often do not fully account for the software costs necessary for ensuing sustainable service delivery. This includes such expenses as:

- ≈ Training and institution building for the community, local government, and other stakeholders
- ≈ Educational programs for environmental management, hygiene, and sanitation
- ≈ Project supervision, follow-up, and support.

Resources for such expenses should be reserved in the project, or generated through user fees at the subproject level.

**Ensure that local contributions to investment cost rise in proportion to the cost of the facilities.**

This is an essential element of the community's making a meaningful choice between service-level options.

KEY TOOLS  
The key tools for analyzing technology options are located online, and include: technical design manuals and papers from Ethiopia, Lao PDR, and Peru; and several links to websites with information specific to water supply and sanitation technology



Experience has shown that the arbitrary use of subsidies for all service levels leads to the use of inappropriately expensive facilities and creates expectations that cannot be replicated or effectively scaled up.

**For water supply, calibrate tariffs to cover all operations and maintenance, including equipment replacement and depreciation.** In the absence of good operations and maintenance cost information, most projects set an amount that reflects common practice, willingness to pay, and ability to pay for water. However, in the interest of providing sustainable service, the project should require that improved cost of service information be generated and used to establish cost-based tariffs in a transparent way. This information can then be used to establish a tariff policy that can be revised regularly by the service providers with the community.

**When it comes to sanitation infrastructure, such as latrines, focus on creating demand and minimizing subsidies.** Unless the subproject funds can provide for everyone in the community, requesting up-front contributions may mean that the better off gain a higher subsidy or that the poorest are excluded. However, if these investments are part of a multisector project menu, then the following lessons ought to be considered:

- ≈ Subsidize only the most basic level of facility, leaving people to make improvements as they can afford them
- ≈ Ensure that the economic ranking of various choices remains the same based on the real costs (such that a more expensive option does not become more attractive than a less expensive option because of the subsidy)
- ≈ If funds are limited, consider subsidizing only the interventions that have the greatest health impact
- ≈ Find out what people are willing to pay
- ≈ Calculate the real cost of assisting the entire target population; is it affordable?

**Establish a common financing and cost recovery strategy.** The lack of such an agreement could lead to projects and programs undermining each other. The potential payoffs are great, in terms of generating and improving information available for future investments and service providers.

## 2.5 Legal Issues

The rapid assessment should review existing water legislation with a view towards identifying any potential constraints and facilitating legislation for the development of rural water supply systems. Of particular interest to multisector projects is the legal basis for water use rights, customary entitlements, standards for water quality, and the conditions which govern watersheds, groundwater, and protected areas. Without a clear definition of asset ownership, the responsibility for operations and maintenance can be ambiguous with respect to who does what. This state of affairs results in a steady deterioration of the physical assets and an erosion of the basic service the assets were designed to provide. The following questions therefore need to be addressed:

- ≈ What is the current law governing water resource ownership and use, and how is it applied?
- ≈ What is the current law concerning RWSS asset ownership?
- ≈ Is there a legal recognition of water boards, water user committees, or other entities promoted by the project?

## 2.6 Ongoing Programs

Once the basic policy, strategy, and institutional framework is clarified, a critical look should be taken at how all this is working. This can be done by means of a rapid analysis of the performance of ongoing RWSS programs and the capacity of the various stakeholders and actors to play their roles.

## 2.7 Formulating a Strategy

Depending on the results of the analysis of the country context, the rapid assessment would formulate a strategy for incorporating RWSS components into the multisector project.

This task should conclude with a clear definition of the next critical steps and responsibilities of the government's team in the preparation of the component. This would include, but not be limited to:

**KEY TOOLS**  
The key tools for *finance and cost recovery* are located online: guidelines on how to calculate tariffs specific to RWSS; fiduciary management for community-driven development project guidelines; community financing agreement; and extensive literature on the subject

- ≈ Contribution to project logical framework, and to technical, economic, environmental, and social analyses
- ≈ Preparation of project rules and covenants
- ≈ Preparation of operational manual and guidelines
- ≈ Development of project monitoring and supervision arrangements.

### 2.7.1 Sector Policy Reform

**Are the sector policy and institutional conditions favorable?** The assessment should gauge the nature and severity of policy and institutional constraints on, and opportunities for, providing and improving sustainable RWSS services. The situation may fall into one of three broad categories:

- ≈ **Unfavorable**, due, for example, to highly centralized, rigid, and supply-driven policies, with little attention to sustainable maintenance
- ≈ **Functional, but with a need for capacity building and reform** to ensure sustainability and improve current institutional frameworks and capacities
- ≈ **Fully functional**, such that the multisector project can readily link into ongoing programs and institutional frameworks.

**Is there a need for sector reform?** Clarification of the policy and institutional constraints and opportunities should indicate the extent to which additional policy reform and institutional strengthening should take place, either within the project, or in a separate sector-based project.

If the country's policy is considered 'unfavorable', that is, focused totally on centrally controlled, supply oriented provision of infrastructure, the project should seriously consider whether RWSS investments should be made at all. In such cases a sector-based reform package may be proposed and RWSS investments put on hold, pending these reforms. More commonly, however, RWSS policies will be moving in the right direction, but the support networks and institutional capacities are weak. In these cases, the strategy should be to concentrate on the most important weak points and propose ways in which such weaknesses can be addressed either with project funds, or as part of subproject costs.

The strategy should also include explicit monitoring and adjustment of the various measures such that, over time, capacity building and support mechanisms are continuously improved, even beyond the life of the subproject intervention.

**What is the approach to community development, training, and gender?** Depending on stakeholder capacities and progress towards decentralization, the strategy should propose an explicit approach for promoting community ownership and management of the RWSS assets, as well as ensuring that gender-related issues are addressed in the project. A simplified decision making framework, which capitalizes on the basic knowledge generated during the sector assessment, can assist the project team in addressing the above issues and narrowing down the options for defining the RWSS component (diagram 1).

### 2.8 Expected Outputs

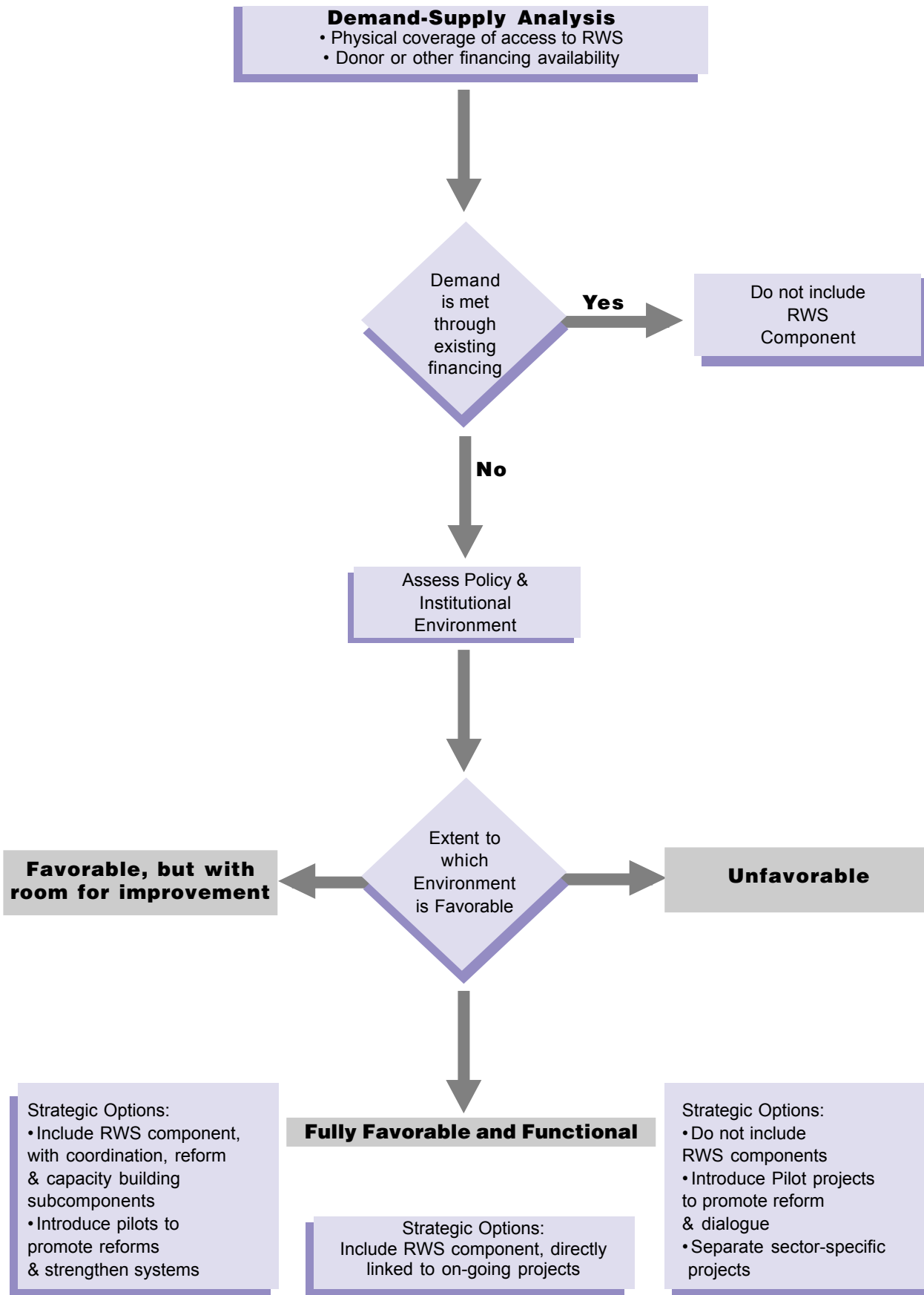
After reviewing this section and considering the questions posed, the expected output of the rapid sector assessment should be to (a) assess the demand for, and supply of, RWSS in the country; (b) assess the policy and institutional capacity to meet RWSS demand; (c) recommend a role for the project; and (d) formulate a strategy as to the next steps to take.

Once a rapid sector assessment is accomplished, you are ready to begin project preparation for designing the RWSS component in the project cycle.



**DIAGRAM 1**

**DECISION FRAMEWORK FOR DETERMINING ROLE OF RWS IN MULTISECTOR PROJECTS**





### **3. SANITATION AND HYGIENE PROMOTION**

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# SANITATION AND HYGIENE PROMOTION

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## 3.1 The Urgent Need for Promotion

The international community set the Millennium Development Goal to halve the number of people without access to adequate sanitation facilities by 2015, meaning that an additional 350,000 people will have to gain access to improved sanitation facilities every day between now and 2015.

Numerous studies have shown that, taken alone, physical improvements to quantity and quality of drinking water supply have only limited effects on public health. The most significant improvements result from *behavioral changes* that prevent pathogens reaching the immediate human environment, such as sanitary disposal of faeces, handwashing after defecation and before touching food, and keeping drinking water free from faecal contamination.<sup>1</sup>

In light of this knowledge, RWSS components should include an explicit framework for *community-level facilitation and adult learning* focused on (a) clarifying hygiene- and sanitation-related problems; (b) providing input into technical investment options; and (c) setting measurable objectives and indicators for hygiene behaviors.

## 3.2 Some Definitions

**Sanitation.** “Interventions to reduce people’s exposure to diseases by providing a clean environment in which to live; with measures to break the cycle of disease. This usually includes disposing of or hygienic management of human and animal excreta, refuse and wastewater, the control of disease vectors and the provision of washing facilities for personal and domestic hygiene. Sanitation involves both behaviours and facilities which work together to form a hygienic environment.”

**Promotion.** “To raise or advance a cause, raise the profile and status of the cause, further the growth and expansion of the cause and to further its popularity. In the public health sense of the word, it also involves providing the enabling mechanisms to others so that they may take up the cause armed with effective tools.”<sup>2</sup>

While *hygiene promotion* is about the communication of behavioral practices that are directly related to health, such messages are not usually the ones that lead people to the decision to have and use (or not have or use) a latrine. Other factors are more likely to sell the concept of sanitation, such as privacy, convenience, and status, even aesthetics. This demands a holistic approach to promotional activity.

## 3.3 Promotion Guidelines

Some guidelines for designing hygiene promotion and sanitation components in rural communities include:<sup>3</sup>

### Prepare the Ground

- ≈ Carry out high-quality baseline surveys at start-up.
- ≈ Recognize that in very poor rural communities latrine programs may not be demand-driven, though water programs are. Demand may have to be created.
- ≈ Base program design, and speed of implementation, on in-depth knowledge of reasons for low demand (beliefs, practices, economic constraints, priorities, and other reservations).

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<sup>1</sup> Van Wijk, C. and Tineke, M. 1995. *Motivating Better Hygiene Behavior: Importance for Public Health and Mechanisms for Change*. UNICEF, New York.

<sup>2</sup> Simpson-Hebert, M. and Wood, S. 1998. *Sanitation Promotion: WSSCC Working Group on Promotion of Sanitation*. WHO, Geneva.

<sup>3</sup> Adapted from: World Bank. 2002. *State-of-the-Art Hygiene and Sanitation Promotion Component Design of Large-Scale Rural Water Supply and Sanitation Programs: Inception Report*.

## **Mobilize Available Human Resources**

- ≈ Identify the constraints on national, provincial, and local government in terms of availability of personnel and costs. Draw local leaders and residents interested in promoting sanitation and hygiene into the community education process, while supporting the roles of local-level personnel in program activities.
- ≈ Make every effort to include all village-level stakeholders and sector officials, with particular emphasis on women, in program operation.
- ≈ Build capacity within local communities to support ongoing outreach to households.
- ≈ Engage interested residents, particularly younger female residents, as hygiene promoters in their own villages, beginning with qualitative, baseline, and monitoring studies and continuing through implementation. Wherever possible, hire these promoters to work with similar residents in expansion areas.

## **Create Linkages to Build Initial Capacity**

- ≈ Ensure that sanitation promotion and hygiene education begin in community and schools at the same time.
- ≈ Establish capacity before asking for change, for example, by ensuring that appropriate latrines are available in schools at the same time as hygiene education is initiated. Where improvements in water supply are required to implement appropriate hygiene, make sure that these improvements are made at the same time as latrines are installed.

## **Establish Practicable Cost and Payment Options**

- ≈ Recognize that insistence on household payment covering all costs for latrines may mean, in very poor communities, that few latrines are actually built. Undertake careful calibration of household contribution such that enough is charged to give a sense of ownership, while ensuring that latrines remain affordable to the population.
- ≈ Time intervention carefully, for example, by scheduling campaigns to begin just before the agricultural season ends and families have some money which could be invested in sanitation.

## **Scale Up Realistically and Flexibly**

- ≈ Create demonstration programs in small areas and make every effort to ensure the success of these programs before attempting to expand to adjacent areas.
- ≈ View demonstration programs as a form of action research, adapting the approach and technology as information and experience increase.
- ≈ As demonstration projects achieve targets, disseminate descriptions of the process which is under way, and support sector officials at national level to visit project areas.
- ≈ Take into account cultural differences between regions of the country when expanding sanitation promotion and hygiene education into new areas.

## **3.4 Resources Available on the Web-Based Toolkit**

- ≈ Terms of Reference for Hygiene Specialist (see Annex IX)
- ≈ A Manual on Communication for Water Supply and Environmental Sanitation Programmes: [http://www.unicef.org/wes/com\\_e.pdf](http://www.unicef.org/wes/com_e.pdf)
- ≈ A Manual on Hygiene Promotion: <http://www.unicef.org/wes/hman.pdf>

≈ A Manual on School Sanitation and Hygiene: [http://www.unicef.org/wes/sch\\_e.pdf](http://www.unicef.org/wes/sch_e.pdf)

≈ A Sanitation Handbook: [http://www.unicef.org/wes/san\\_e.pdf](http://www.unicef.org/wes/san_e.pdf)

≈ Unit 4: Linking Water, Health, Sanitation and Environmental Protection, Operation and Maintenance of Rural Water Supply and Sanitation Systems – A Training Package for Managers and Planners:  
[http://www.who.int/water\\_sanitation\\_health/hygiene/om/omruralsystems/en/](http://www.who.int/water_sanitation_health/hygiene/om/omruralsystems/en/)





## 4. RWSS IN THE PROJECT CYCLE

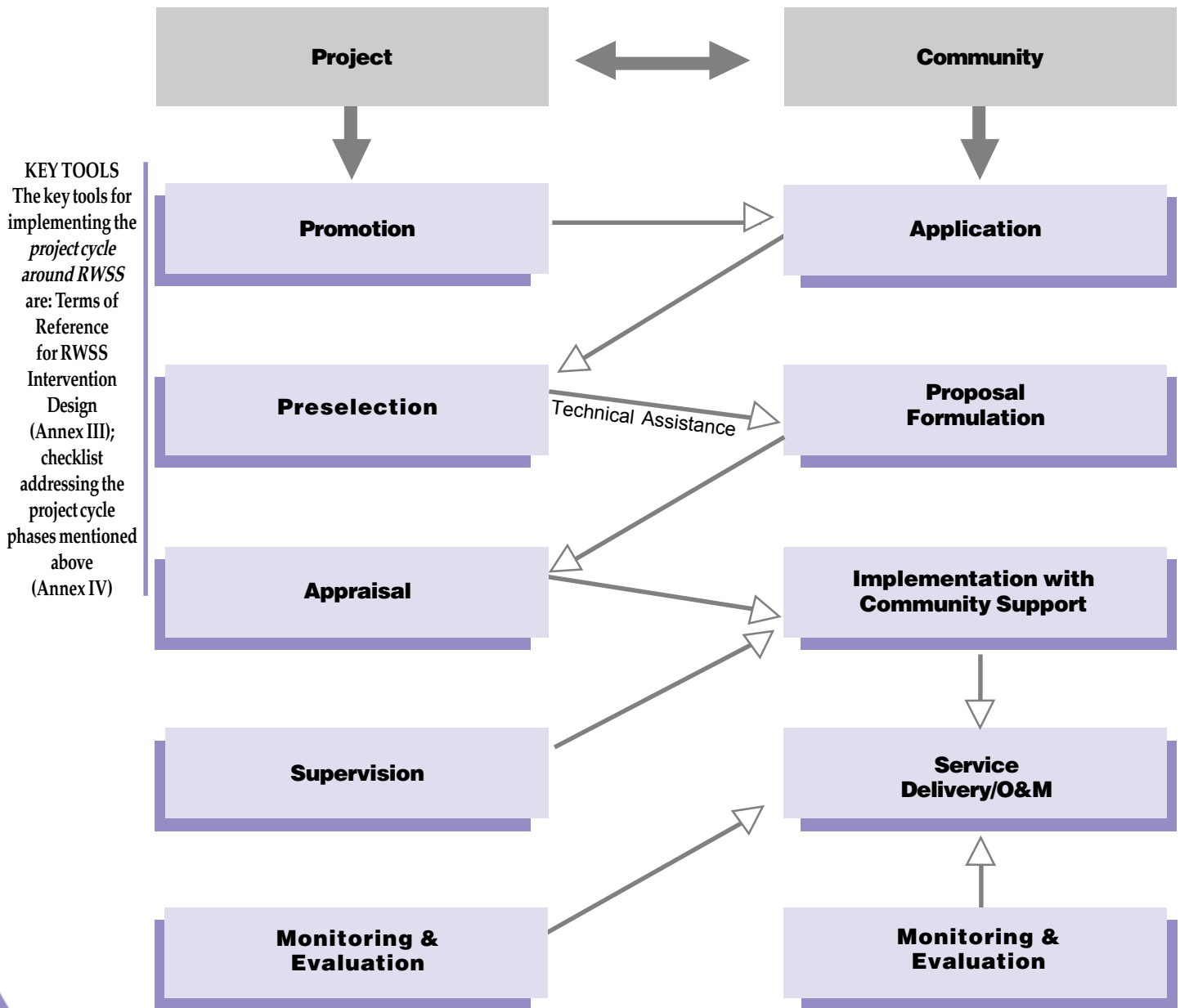
# RWSS IN THE PROJECT CYCLE

## 4.1 The Project Cycle

The project cycle may be viewed as an interactive process between the project and the community, with supporting roles being played by the private sector, NGOs, and other stakeholders (diagram 2). Depending on the country, the project may be understood to be an implementing agency such as a social fund or local government.

DIAGRAM 2

### PROJECT/COMMUNITY INTERACTIVE ROLES DURING THE PROJECT CYCLE



Using the subproject cycle as a framework, this section provides (a) guidance on why each stage is important to RWSS; (b) guidance on what can be expected from each partner throughout the project cycle; and (c) references to the resource section and the web-based toolkit for tools for achieving these tasks.

**TABLE 3**  
**SUMMARY: RWSS IN THE PROJECT CYCLE –**  
**AVAILABLE DOCUMENTS**

Subproject Cycle Phase	Key Document(s) Provided	Additional Resources Online
<i>General</i>	<b>Annex III:</b> Sample TOR for RWSS Intervention Design <b>Annex IV:</b> Checklist for RWSS Subproject Component Design	Surf through Resources section online to find: TORs, checklists, project appraisal documents, manuals, procurement guidelines, sample contracts, audits, and monitoring, and more
Promotion		<ul style="list-style-type: none"> <li>• Community promotion guidelines</li> <li>• UNICEF Manual on Communication for Water Supply and Environmental Sanitation</li> </ul>
Application	<b>Annex V:</b> List of Documents Required during Project Preparation	<ul style="list-style-type: none"> <li>• Community project request form</li> <li>• Project sample forms</li> <li>• Application/action by community guidelines</li> <li>• Guidelines for designing a water and sanitation committee</li> </ul>
Preselection		<ul style="list-style-type: none"> <li>• Standard score sheets</li> <li>• Preselection criteria</li> </ul>
Proposal Formulation	<b>Annex V:</b> List of Documents Required during Project Preparation	<ul style="list-style-type: none"> <li>• Community project request form</li> <li>• Guidelines on calculating tariffs</li> <li>• Procurement and financial procedures manual for use of community-based organizations</li> <li>• Hygiene and sanitation literature</li> <li>• Sample TOR for programmatic environmental assessments</li> <li>• Community mobilization and planning guidelines</li> </ul>
Appraisal	<b>Annex V:</b> List of Documents Required during Project Preparation	<ul style="list-style-type: none"> <li>• Subproject appraisal checklist</li> <li>• Ex-ante evaluation tool (based on FHIS – Honduras Project)</li> <li>• Community Subproject agreement between the implementing agency and communities (example from Ethiopia)</li> </ul>
Implementation Support	<b>Annex VI:</b> Project Operational Manual Index <b>Annex VII:</b> Service-Based Performance Indicators of RWSS	<ul style="list-style-type: none"> <li>• Training resources (manuals on water, sanitation, and hygiene promotion)</li> <li>• Community-based contracting sample projects</li> <li>• Community-based contracting literature</li> <li>• Flow of funds scheme</li> <li>• Procurement section contains: memoranda of understanding (MOUs), agreements, applications, contracts, and useful links</li> </ul>
Operations and Maintenance	<b>Annex VII:</b> Service-Based Performance Indicators of RWSS	<ul style="list-style-type: none"> <li>• User cost sharing rules</li> <li>• Operations and maintenance task schedule sample (from India)</li> <li>• Guidelines on tariff determination</li> <li>• Operations and maintenance training package for managers and planners (from WHO)</li> </ul>
Monitoring and Evaluation	<b>Annex XI:</b> Checklist for RWSS Project Monitoring and Evaluation Indicators	<ul style="list-style-type: none"> <li>• Sample TORs for monitoring and evaluation</li> <li>• Participatory evaluation guidance</li> <li>• Ex-post evaluation tool, sample impact studies</li> </ul>

## KEY TOOLS

The key tools for promotion located online: community promotion guidelines; and UNICEF Manual on Communication for Water Supply and Environmental Sanitation

## 4.2 Promotion

**Why:** The promotion phase is the first critical opportunity for the subproject to engage communities in (a) deciding whether or not they want a project; and (b) defining their development priorities, one of which may include RWSS. If RWSS is chosen, this is an occasion for communicating the demand-responsive approach and explaining the project rules.

**What:** Options for RWSS investments should link into the multisector project's initial information campaign, which will allow the community to evaluate and decide what type of project best meets its needs. Approaches such as integrated rural accessibility planning may be useful in assisting communities to identify their priorities. If a water project is chosen, the message should be that RWSS is a separate service that must abide by certain basic principles (look at Basic Principles in RWSS section). These principles may be transmitted in an RWSS brochure or flier, which would spell out the basic approach, rules, and procedures under which RWSS investments may be made. Key themes would include:

- ≈ The concept of water as an economic good that requires management and comes at a cost
- ≈ Informed choices on the technical options and implications for management and cost
- ≈ The community's responsibility for continuous management and finance of operations and maintenance
- ≈ Cost recovery rules and tariffs to ensure sustainable service delivery
- ≈ Community organization, management, and contracting arrangements
- ≈ Minimum technical standards and quality
- ≈ Asset ownership, roles, and responsibilities
- ≈ Environmental, hygiene, and sanitation aspects
- ≈ Application and proposal formulation requirements.

**Who:** Projects often engage promoters familiar with community facilitation, who can be trained to discuss these issues with prospective communities, perhaps supported by radio and other media campaigns.

## 4.3 Application

**Why:** The completion of an application form is the first expression of demand. Successful RWSS projects have found it useful to allocate within the subproject cycle a time period during which communities:

- ≈ Confirm RWSS as a development priority
- ≈ Assimilate the basic principles and requirements for RWSS investment, transmitted during the promotion phase
- ≈ Establish an appropriate organizational structure to oversee the maintenance of the systems and service provision
- ≈ Start revenue mobilization
- ≈ Apply for assistance under the project.

**What:** Communities would meet to confirm their interest in the project in general and in RWSS investments in particular. If RWSS is selected, the meeting will discuss the information received and identify the assistance required to enable the communities to acquire their own water supply and sanitation facilities. Topics of discussion would include:

- ≈ Selection of spokespersons

## KEY TOOLS

The key tools include List of Documents Required during Project Preparation (Annex V), and online resources: community project request form; project sample forms; application/action by community guidelines; and guidelines for designing a water and sanitation committee

- ≈ Participation of all community members
- ≈ Analysis of information contained in the flier and application form
- ≈ Community interest and form of involvement in the project
- ≈ How the community will raise funds for investment and operations and maintenance
- ≈ Who could assist the community to understand and prepare to receive project assistance
- ≈ Technological options.

Based on these meetings, the interested communities would fill in application forms for:

- ≈ The whole project in general
- ≈ An application specific to RWSS.

The community would also open a bank account, with a specified minimum deposit.

**Who:** The community may organize these meetings itself, or recruit technical and facilitation assistance to complete these initial steps. The project, through district-level technical staff, may participate in, or observe, the community-level meetings.

#### 4.4 Preselection

**Why:** The preselection process enables the project to (a) screen communities for RWSS investments based on need, commitment, and capability; (b) get an initial assessment of investment and annual budget requirements; and (c) avoid disappointing communities by reducing the number of full-blown proposals that are prepared.

**What:** The project will organize a subcommittee responsible for reviewing applications. The applications will be ranked on standard score sheets according to preselection criteria. The project will preselect a limited number of communities, based on financial and staffing capacity.

**Who:** The project, in collaboration with technical agency and local government.

#### 4.5 Proposal Formulation

**Why:** Experience has shown that successful RWSS projects require a committed up-front investment in order to establish durable community organizational arrangements. This is because an RWSS subproject has distinct requirements, insomuch as it:

- ≈ Depends on a limited natural resource, water, which is also an economic good, and therefore requires consumers to pay for the service
- ≈ Requires consultation and coordination among community members, local governments, investors, development workers, engineers, and other stakeholders
- ≈ Lends itself to alternative technical design and levels of service with varying cost and management implications
- ≈ Requires an inter-sectoral and integrated approach, including engineering, the environment, health, and education
- ≈ Needs a maintenance system that is (a) intensive; (b) managed by the community; (c) supported by additional technical assistance; (d) able to provide spare parts; and (e) backed by a reliable system of financial and administrative management.

#### KEY TOOLS

The key tools include List of Documents Required during Project Preparation (Annex V) and online resources: community project request form; project sample forms; application/action by community guidelines; and guidelines for designing a water and sanitation committee

#### KEY TOOLS

Include online resources: standard score sheets; and preselection criteria

KEY TOOLS  
The key tools include List of Documents Required during Project Preparation (Annex V) and additional online resources such as: community project request form; guidelines on calculating tariffs; procurement and financial procedures manual for use of community-based organizations; hygiene and sanitation literature and training methodology; sample environmental TORs; community mobilization and planning guidelines

Technical assistance can help the community address these sector-specific requirements in their proposals, through:

- ≈ Analyzing the existing situation as regards hygiene, water and sanitation, environmental issues, and baseline information; and determining effective demand for sanitation facilities
- ≈ Choosing service-level options for water and sanitation services
- ≈ Determining the capital cost and the level and mobilization of community contributions
- ≈ Formulating a facilities management plan for operations and maintenance and method of organization
- ≈ Establishing a financial management plan and a tariff plan to finance the facilities management plan
- ≈ Preparing a hygiene and sanitation promotion campaign and linking to sanitation investments
- ≈ Identifying and addressing potential environmental and social safeguard concerns
- ≈ Identifying responsibilities and ongoing training requirements, including organization and training of the water and sanitation committee.

**What:** Pre-selected communities will prepare subproject proposals, according to standard guidelines and templates laid out in the operational manual.

**Who:** Prior to preparation, the communities would receive technical assistance to help them make decisions and complete their proposal request. Technical assistance would be recruited and paid for by the project from among consultants or NGOs, or by hiring a qualified individual in the community. Such personnel would act as facilitators for the community and the water and sanitation committee.

#### 4.6 Appraisal

**Why:** A sector-specific appraisal format is necessary to assess effective RWSS demand and verify technical, social, and economic feasibility and sustainability

**What:** Subproject appraisal is undertaken with a standard appraisal checklist designed to verify and confirm community commitment and capacity to ensure sustainable service delivery. Once projects are selected, a community subproject agreement or MOU is signed by the community and the project. This is also signed, if appropriate, by local government and by sector-based or other implementing agencies.

**Who:** The project would identify an appraisal team for RWSS applications, in conjunction with technical implementing agencies and local government authorities as appropriate.

#### 4.7 Implementation with Community Support

**Why:** Intensive community-level assistance and training is required at this stage to reinforce ownership, promote health and hygiene benefits, and establish a sound foundation for sustainable service delivery and operations and maintenance. Many lessons have been learned regarding community-based contracting of RWSS services. Two major issues stand out:

≈ **Adapt contracting mode to fit service-level option.** This can range from simple, witnessed agreements to formal performance-based service and supplier contracts

≈ **Ensure adequate skills and tools to administer contracts.** 'Short and sharp' training modules can explain to water and sanitation committee members what is required in terms of expertise and skills.

**What:** All civil works should be accompanied by community development activities. The operations manual should lay out:

≈ The types of investments eligible under the project

≈ Procurement of goods, services, and works, including rules, procedures, and responsibilities for bidding, selection, and supervision

≈ Flow of funds during the investment period

≈ Construction, which involves supervision of contractors and certification of works.

Three types of arrangements may be envisioned:

≈ The community manages the funds by themselves

≈ The community hires a qualified individual or firm and is responsible for supervising them

≈ The project or local government does the hiring on behalf of the community.

At the same time, each subproject budget should include the provision of technical assistance for training in such vital areas as community organization, health and hygiene education, service delivery management, and operations and maintenance.

**Who:** The communities should be involved at all stages of subproject implementation, construction, and community development activities. Technical assistance would be recruited to ensure the community development aspects.

## 4.8 Operations and Maintenance

**Why:** Lack of effective operations and maintenance is the most common problem of RWSS components. To address this problem, operations and maintenance training should begin during the implementation phase, and focus on the community's capacity to ensure reliable and sustainable service delivery.

**What:** Four major elements are emerging in good practice RWSS projects:

**1. Operations and maintenance and facilities management plans.** Operations and maintenance plans should not only list maintenance tasks, but also provide a detailed task schedule focused on preventative maintenance and specifying responsibilities. The project operations manual can provide guidance or models for such schedules, relying on, for example, color-coded cards and other management techniques for regular maintenance and monitoring.

**2. Cost recovery and tariff structures.** The key to achieving sustainable service delivery is an effective system for user payments. Methods for RWSS tariff calculation have been developed that can be adapted to operations and maintenance budgets on an annual and multiyear basis, as well as covering financial needs for future system expansion or equipment replacement.

**3. Community-level training for operations and maintenance.** Numerous methodologies have been developed for community-level training in RWSS services. An excellent source can be found in *Operation and Maintenance of Rural Water and Sanitation Systems – A Training Package for Managers and Planners* (WHO).

**4. Performance-based service contracts.** This relatively new approach aims to remunerate a contractor for providing a service at a predefined quality standard, rather than pay the contractor based on time, works, or materials. In its simplest form it could involve paying a village operator a flat monthly fee to cover scheduled routine and periodic maintenance, with incentives for improved service and penalties for a reduction in the service standard. As systems increase in complexity, the use of service contracts, leases, management contracts, or concessions may be appropriate.

**Who:** Operations and maintenance responsibility starts with the management committees chosen by, and accountable to, the community. Backstopping services, however, need to be planned for, by some mix of the private sector and technical government services.

### KEY TOOLS

The key tools include Project Operational Manual Index Sample (Annex VI), Service-Based Performance Indicators for RWSS (Annex VII), and online tools: training resources and manuals; community-based contracting sample projects; community-based contracting literature; flow of funds scheme; various agreements, applications, MOUs, contracts, and useful links

### KEY TOOLS

The key tools include Service-Based Performance Indicators for RWSS (Annex VII), and online: user cost-sharing rules; operations and maintenance task schedule sample; tariff determination guidelines; and operations and maintenance training package for managers and planners

## 4.9 Monitoring and Evaluation

**Monitoring** focuses on whether a project is being implemented as designed, providing timely information for ensuring that progress, quality, and effect of processes and procedures is maintained. Process **evaluation** examines how the project operates and addresses problems in service delivery.

Measuring and monitoring *sanitation and hygiene interventions* is distinct from that of water supply. Under the Global Public-Private Partnership for Handwashing with Soap, a global monitoring and evaluation framework is being developed to measure sanitation and hygiene impacts. The model contains two components to measure impacts: (a) behavior change; and (b) health impact.

**Why:** Effective monitoring and evaluation systems should be viewed as tools for helping stakeholders at various levels focus on achieving sustainable service delivery.

*Community-level* information systems will encourage ownership, transparency, and accountability in the investment phase, as well as promote a longer-term commitment to the monitoring of operations and maintenance.

At the *government level*, as the multisector project is set up to launch sector-based investments rather than to provide long-term sector support, the government project unit needs to have a monitoring tool to ensure that:

≈ RWSS investments are carried out as planned and of acceptable quality

≈ Sustainability and management issues are addressed after the initial investment (through the community-based systems noted above)

≈ Sector-based support networks are in place and functioning.

At the *project level*, information is needed to assess the project's contribution to poverty reduction goals and the poverty reduction strategy paper (PRSP).

**What:** As noted in the terms of reference, input, output, and outcome indicators for RWSS would be developed in conjunction with the stakeholders and be linked to the project's logical framework as well as to the PRSP development goals and indicators.

The operations manual would specify approaches, procedures, and responsibilities for two broad types of interlocking activities:

### 1. Subproject performance monitoring

≈ **Community-level participatory monitoring and assessments.** As part of the software support, the subproject should assist communities to develop their own simple information systems to document and monitor progress and performance of project implementation and post-investment service provision. A wide range of tools and methods that can be adapted to project circumstances has been developed along these lines.

≈ **Government-level subproject performance monitoring.** In addition to the standard investment progress and completion reports, it is recommended that the subproject cycle include *post-investment subproject assessment*, at intervals of, for example, six months or one year following completion of the investment. To this end, post-investment evaluation tools for each subproject can also provide the basic data for aggregating, analyzing, and reporting project results in the government's regular progress reports, as well as providing basic information on the project's contribution to poverty reduction objectives.

### 2. Project performance and impact evaluation

This encompasses the periodic assessment of overall project performance and its causal links with poverty reduction and other project objectives. Within the context of the multisector project, these would aim to meet the following milestones:

≈ Midterm review

KEY TOOLS  
The key tools include Outline Terms of Reference for Project Supervision Missions (Annex VIII); Checklist for RWSS Project Monitoring and Evaluation Indicators (Annex XI); Water Supply, Sanitation, and Health Impact Evaluation Indicators (Annex XII); and online: sample TORs for monitoring and evaluation; participatory evaluation literature; ex-post evaluation tool; and sample impact studies



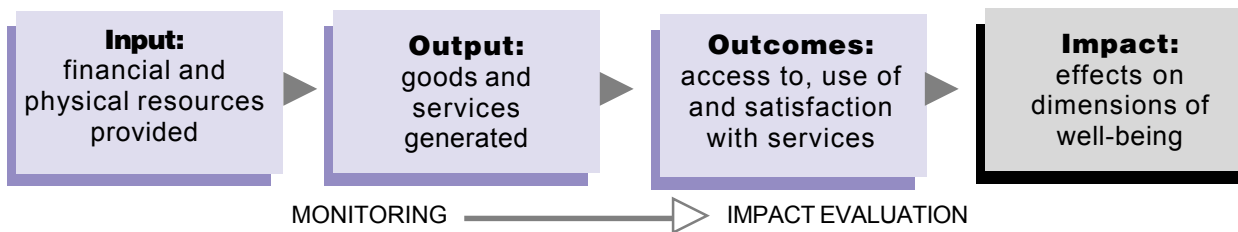
≈ Implementation completion report

≈ Specific reviews and focused impact studies.

Impact evaluations are the result of a process involving input, outputs, and outcomes, and are essential to understanding how effective projects have been in attaining their expected outcomes and whether these have been sustainable or not (diagram 3).

**DIAGRAM 3**

**FROM MONITORING TO IMPACT EVALUATION**



**Who:** As part of the community development activities, technical assistance and training would be provided to the community in the establishment of simple community-based information systems, focused on service-level performance indicators.

The next section only presents a few of the many key tools currently available online by visiting <http://www.worldbank.org/rwsstoolkit/index.htm>.

In addition to those provided here, you will find:

**TORs:** Sample TOR templates that can be adapted to a specific project for both a rapid sector assessment and for designing the RWSS component of a multisector project.

**Checklists:** Practical tools to facilitate the tasks spelled out in the TORs. The checklists address rapid sector assessment and RWSS in the project cycle.

**Sample reports:** Good practice examples of rapid sector assessment reports (including back-to-the-office reports and aides-mémoires) and project appraisal documents of multisector projects with an RWSS component.

**Manuals:** Best practice examples of project-specific RWSS operational and technical design manuals, which can be adapted to the multisector project. Also included are generic manuals produced by other agencies such as the Water, Engineering and Development Centre and its WELL resource centre, the UK's Department for International Development, the IRC International Water and Sanitation Centre, and the United Nations.

**Procurement:** Agreements, applications, contracts for works and services, MOUs between different stakeholders, audits, and monitoring sample templates and examples.

**Audits and monitoring:** Sample templates for monitoring and reporting on project implementation performance, as well as examples of progress reports and implementation completion reports.

**Guidelines:** Other useful guidelines for setting up water and sanitation committees, NGO selection criteria, rules for user cost sharing and calculating tariffs.

**Selected reading:** Case studies, source materials categorized by theme; community contracting, decentralization, finance, gender issues, health, legal, hygiene and sanitation, monitoring and evaluation, supply chain, technology, training resources, willingness to pay, notes on lessons learned, and links to presentations on RWSS.

**Useful links:** A list of internal World Bank links and external links to organizations committed to water-related issues is provided for additional resources.



## 5. RESOURCES

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**ANNEX I**  
**SAMPLE TERMS OF REFERENCE FOR**  
**COUNTRY ASSESSMENT FOR RWSS COMPONENT**

(Name of Multisector Project)

(Name of Country)

**Background** (Provide brief description of the project, including its background, stage of development or implementation, geographic scope, etc.)

**OBJECTIVE**

The objective of the country assessment is to establish an operational knowledge base concerning RWSS activities in (name of country). This knowledge base will assist the (name of project) team to identify critical constraints and opportunities for RWSS components within the project. The assessment will set the stage for formulating a strategy on how to incorporate RWSS components into the project and lay the foundation for interface between the project and RWSS sector-based institutions. The assessment seeks to address two fundamental questions:

≈ Do existing policies, practices, and the institutional framework favor sustainable RWSS service delivery in the country?

≈ Depending on the above answer, what should be the strategy for incorporating RWSS components into the multisector and/or country Bank program?

**TASKS**

The country assessment will be divided into the following three major tasks:

**Task 1: Review RWSS Policy and Institutional Framework**

The objective of this task is to clarify the nation's policy for providing RWSS services and its strategy for achieving that policy. It will involve discussions with the responsible sector agency and review of existing strategy documents, master plans, and implementation manuals. This review should be essentially *descriptive*, while task 2 will provide an analysis of performance. It will include the following subtasks:

**Subtask 1.1: Clarify national RWSS goals and objectives.** Specify whether this is expressed in terms of national coverage; access to services; or other indicator(s). It may be in the form of a mission statement of the national agency or national master plan.

**Subtask 1.2: Assess national RWSS strategy.** Assess the government's strategy to achieve its stated goals, focusing on whether, and to what extent, the strategy involves a demand-responsive approach. This may be stated as a set of guiding principles within the context of a master plan or implementation manual for the national agency or ministry. Indicate whether the strategy involves integration of health and hygiene considerations.

**Subtask 1.3: Assess roles and responsibilities.** Clarify the roles and responsibilities for RWSS service provision in the country, in respect of: (a) national policy development and implementation; (b) social intermediation; and (c) RWSS equipment procurement and service provision. This assessment should take into account ongoing programs for decentralization, and clarify the evolving roles of the national government, local government, communities, the private sector, NGOs, and other stakeholders.

**Subtask 1.4: Assess technology options and standards.** Summarize the extent to which communities are provided with a choice of service-level options for RWSS. Indicate how these options are presented to the communities and whether the choices are framed in terms of cost of equipment and cost of operations and maintenance. Describe the technical standards and norms existing in the country, as well as if and how they are enforced.

**Subtask 1.5: Assess finance and cost recovery policy and methods.** Clarify the current policy and practice for local contribution during (a) the equipment and installation phase; and (b) the operations and maintenance phase. Indicate the sources of finance (private, donor, government subsidy) during both phases, and the extent to which user fees are required during the operational phase. Describe mechanisms for collecting user fees and adjusting user fee rates to reflect increases in service levels and covering long-term amortization and equipment replacement cost.

**Subtask 1.6: Assess legal framework.** Clarify the legal status of RWSS assets, indicating to what extent the communities, local government, and the national agency retain ownership of the assets. Summarize any cases of conflicts that have arisen in the project area or the country regarding RWSS assets and mechanisms available to resolve these conflicts.

## **Task 2: Analysis of Ongoing Programs and Institutional Capacity**

Once the basic policy and institutional framework is clarified, task 2 will assess how the strategy is working. This will involve a rapid analysis of the performance of ongoing programs and the capacity of the various stakeholders and actors to play their roles. It will include two broad subtasks:

**Subtask 2.1: Assess program/project performance.** Describe the types and number of donor and internally funded programs for RWSS in the country. Evaluate the basic approaches taken in these programs. Critically evaluate the performance of these programs in terms of their stated goals (for example, coverage rates and sustainability).

**Subtask 2.2: Assess capacity and performance of actors.** Provide a critical overview of the ability of various actors to perform their respective roles as identified in the strategy. This would include, but not be limited to: (a) national agency; (b) local government; (c) community organizations; (d) private sector suppliers of equipment, spare parts, and engineering and operational services; and (e) NGO and social intermediation agencies. Describe the strengths and weaknesses of the above groups of actors in terms of:

- ≈ Local market of suppliers of goods and services for design, construction, procurement, and spare parts provision at the community or local government level
- ≈ Existing and potential capacity of local organizations to provide required community-level intervention in mobilization, subproject identification and preparation, engineering design, training of water committees, hygiene education, and outreach to community members
- ≈ Evolving nature of decentralization and its future role in supporting community-based efforts.

## **Task 3: Constraints and Opportunities: Evaluate a Role for the Project**

The goal of task 3 will be to decide whether or not to include an RWSS component in the (*name of project*) multisector project, and if so, what should be the elements of this intervention. Every effort should be made to link with the ongoing PRSP preparation process and information sources in the country. Depending on the outcome, the next steps in the project preparation process will be identified, including terms of reference for further design activities. It will involve the following subtasks:

**Subtask 3.1: Assess demand and supply for RWSS services.** Provide a broad overview of the extent to which the demand for RWSS services is being met in the country and project area. This should be expressed in terms of (a) physical coverage by types of service and geographic dispersion; and (b) sources of donor or other financing. Secondary data sources should be used for this assessment, which could include PRSP-related studies, social assessments, or RWSS master plans. The outcome of this analysis should show:

- ≈ Whether there is a need for additional financing for RWSS services, which could be met through the multisector project
- ≈ An order of magnitude estimate of the level of RWSS investment requirements, should an unmet demand be identified.

**Subtask 3.2: Assess policy and institutional capacity to meet RWSS demand.** Evaluate the nature and severity of policy and institutional constraints on, as well as opportunities for, the provision and improvement of

sustainable RWSS services. The outcome of this analysis should determine whether the policy and institutional environment is (a) unfavorable, due, for example, to highly centralized, rigid, and supply-driven policies, with little attention to sustainable maintenance; (b) functional and oriented towards demand-driven approaches, but where institution strengthening and capacity building measures will be required to ensure sustainability; or (c) fully functional, such that the multisector project can readily link into ongoing programs and institutional frameworks.

**Subtask 3.3: Recommended role for the project.** Based on the above analyses, determine whether there is a role for the multisector project to play in RWSS service provision and recommend an overall strategic approach for this to occur. This may involve one or more of the following strategic options:

#### STRATEGIC OPTIONS FOR RWSS SERVICE PROVISION

Constraints and Opportunities		Sample Strategic Options
Demand-Supply	Policy and Institutional Environment	
Demand is already met through existing finance and projects	N/A	<ul style="list-style-type: none"> <li>Do not include RWSS component</li> </ul>
Demand is not met through existing finance and projects	Unfavorable	<ul style="list-style-type: none"> <li>Do not include RWSS component</li> <li>Introduce pilot projects through multisector investment funds to promote reform and dialogue</li> <li>Prepare a separate sector-specific project</li> </ul>
	Favorable, but some need for reform and capacity building	<ul style="list-style-type: none"> <li>Include RWSS component with coordination, reform, and capacity building elements</li> </ul>
	Fully favorable and functional	<ul style="list-style-type: none"> <li>Include RWSS component, directly linked to ongoing programs</li> </ul>

**Subtask 3.4: Contribute to project logical framework.** Depending on the outcome of subtask 3.3, provide a concise statement of the RWSS-related development objectives, as well as draft outcome indicators, to be integrated into the project logical framework.

**Subtask 3.5: Definition of next steps.** Based on the above results, spell out the next critical steps to be taken, in the context of project preparation. This could include, but not be limited to, the Terms of Reference (Annex 1) for consultancy to:

- ≈ Finalize project strategy
- ≈ Prepare operational manual and guidelines
- ≈ Prepare project rules and covenants
- ≈ Contribute to project logical framework, and technical, economic, environmental, and social analyses
- ≈ Develop project monitoring and supervision arrangements.

#### Outputs

The output of this assignment will be a country assessment report summarizing the results of the above tasks. The consultants will present a draft report and verbal briefing of the major findings after three weeks of fieldwork. A final report will be presented one week following comments by the project task team leader.

#### Level of Effort and Expertise Required

The country assessment will be carried out by a two-person team:

- ≈ Water supply and sanitation engineer/specialist
- ≈ Rural development/social scientist.

Both persons will have extensive field experience in the planning and implementation of community-managed water and sanitation projects, preferably both in and outside the country.

**ANNEX II**  
**CHECKLIST FOR RAPID SECTOR ASSESSMENT**

## **1. National RWSS Goals, Targets, and Indicators**

- Is there a stated national goal for rural water supply and sanitation?
- Is it stated in terms of:
  - (a) Coverage (for example, 'xx% of communities have RWSS systems')
  - (b) Access to services (for example, 'xx% of population have access to RWSS services')
  - (c) Health, hygiene, or sanitation factors (d) Other indicators?

## **2. National RWSS Strategy**

- What is the strategy to achieve the goal?
- Does it also include an element of the demand-responsive approach and effective and sustained service delivery? Is there any link with hygiene and sanitation strategies?
- Are there links with the PRSP and are they consistent with the Millennium Development Goals? Are there clear and realistic indicators?

## **3. Roles and Responsibilities**

- Who is responsible for national policy development and implementation (for example, a central ministry, a parastatal agency, donor projects, service fees)?
- What is the distribution of roles and responsibilities for RWSS services? How does this relate to decentralization programs, central government of parastatal agency, local governments, communities, private sector, and NGOs? What is the capacity and performance of the actors?

## **4. Technology Options and Standards**

- Do communities have a choice in the scale and type of RWSS systems installed?
- Are these choices framed with regard to cost of construction and operations and maintenance?
- Are there standards and norms with regard to RWSS service levels in the country?

## **5. Finance and Cost Recovery**

- What is the policy for local contribution for construction and installation of the system?
- How are operations and maintenance services financed (user fees, community funds)?
- What are the sources of funds for the contributions of various actors?
- Does the policy include arrangements for long-term system amortization and replacement?

## **6. Legal Framework**

- What is the legal framework regarding asset ownership and water resource use?
- Have there been any serious conflicts regarding water resource use and are there any effective mechanisms for resolving these conflicts?

## **7. Analysis of Ongoing Programs**

- Describe the types and number of donor and internally funded programs for RWSS in the country. What is their performance of the strategy in terms of achieving the stated goals (for example, coverage rates)?
- To what extent is the demand for RWSS services being satisfied through ongoing programs?
- What is the capacity and performance of the actors in playing their respective roles? These would include, but not be limited to: national agency, local government, community organizations, private sector suppliers of equipment and spare parts, engineering and operational services, NGOs, and social intermediation agencies
- What is the capacity and performance of the local market of suppliers of goods and services for design, construction, and procurement at the community or local government level?
- What is the existing and potential capacity at local level to mobilize social intermediation and engineering aspects of the ongoing programs?
- In the context of decentralization, in what direction is this evolving?
- How effective are the programs in achieving the national goal and strategy?

## **8. Strategy for RWSS in the Project**

- How can the project contribute to unmet RWSS demand in the project area?
- Is there need to differentiate between types of systems and geographic areas?
- Is there need for sector reform and capacity building that can be addressed in the project, or should this be addressed in a separate stand-alone project?
- What should be the distribution of roles and responsibilities among sector stakeholders?
- What should be the next steps in the detailed preparation of the component, including establishing subproject rules and operational manuals?

**ANNEX III**  
**SAMPLE TERMS OF REFERENCE**  
**FOR RWSS INTERVENTION DESIGN**

*(Name of Multisector Project)*

*(Name of Country)*

**BACKGROUND**

*(Provide brief description of the project, including its background, stage of development or implementation, and geographic scope, drawing on country assessment or other preliminary information on the RWSS sector.)*

**OBJECTIVE**

The objectives of the RWSS component design are to establish an implementation strategy, define project activities, and prepare guidelines under which RWSS subprojects will be funded by *(name of multisector project)*.

*(Add any additional information or objectives identified in the country assessment.)*

**TASKS**

The assignment will be divided into the following tasks:

***Task 1: Summarize Policy and Institutional Issues***

Based on the country assessment or other existing information, summarize the main policy and institutional issues for RWSS, with particular reference to sustainable service delivery, to be financed under the project. This would include, but not be limited to:

- ≈ Policy and institutional environment and extent to which the demand-responsive approach is used
- ≈ Extent of unmet demand for RWSS services and performance of other projects or programs.

***Task 2: Carry Out Sector Dialogue and Participatory Strategy Formulation***

In view of the overall policy and institutional issues summarized above, initiate a participatory process with the major stakeholders and arrive at a consensus on the basic strategy for including RWSS components in the project. This would be implemented through a series of consultations and workshops, and would address how, and under what conditions, RWSS investments will be made under the project. It would include, at a minimum, the following strategic themes:

≈ **Policy and institutional framework.** Are fundamental reforms needed of the existing policy and institutional framework before RWSS can be considered part of the project (for example, reform of the central or sector-based agency)? If so, how will they be addressed – within the project, or in a sector-based project?

≈ **Roles and responsibilities.** Clarify areas of responsibility and collaboration for RWSS components of the project. For example, should RWSS subprojects be required to collaborate with existing sector-based institutions and existing norms? Do such norms need to be created?

≈ **Establishing technical norms and making service-level options available to communities.**

Recommend a policy and approach to ensure availability of service-level choices to communities and adherence to technical norms during both the investment and operational phases. This should include a policy and implementation framework for communications with the community at all stages of the subproject cycle.



≈ **Hygiene and sanitation issues.** Recommend a policy and approach to ensure that hygiene and sanitation issues become part of the RWSS component.

≈ **Finance and cost recovery.** Recommend a policy and approach for finance and cost recovery for both the investment and the operational phases.

≈ **Community support and institution building.** Define the strategy to ensure local capacity for sustainable service provision. This will include: a) Local government capacity to backstop communities; b) Support to NGOs and private sector to provide sustainable supply chains for software and hardware components; c) Community contracting mechanisms; and d) Ensuring environmental and social safeguards and mitigation during installation and operational phases.

### **Task 3: Define RWSS Component and Activities**

Based on the results of task 2, specify the types and estimated magnitude of RWSS investments that would be financed under the project. If applicable, define sector-specific institutional and capacity building activities to be financed under the project. Describe how and where linkages with other subprojects or programs (such as health-related projects) will be promoted.

### **Task 4: Elaborate Operations Manual for RWSS Subprojects**

Within the framework of the above strategy, and in collaboration with (*specify the main stakeholders*), spell out the rules and procedures for identifying, preparing, appraising, implementing, and monitoring community RWSS interventions within the context of the project. The implementation manual would specify all the steps in the subproject cycle, and provide a checklist of critical items or issues to be addressed at each stage in the cycle (see Annex 1 for a list of model operations manuals).

### **Task 5: Elaborate Community-Based RWSS Management Tools**

In addition to the project-based guidelines, the consultant will collaborate with sector-based stakeholders to prepare a set of toolkits to be used and continuously improved on by the communities and RWSS service providers. These tools would be developed in local languages and user-friendly formats. They would be at various levels of technical detail and targeted to various stakeholders, according to their roles and responsibilities. Specific areas would include, but not be limited to:

- ≈ Participatory analysis of existing water and sanitation facilities, as well as hygiene and environmental practices, as part of needs assessment
- ≈ Simple tools for assessing different technologies and making an informed choice of service-level options
- ≈ Communications approaches in respect of ensuring long-term operations and maintenance and financing through user fees and tariffs
- ≈ Communications approaches in respect of promoting hygiene and sanitation benefits
- ≈ Forming, organizing, and managing water user committees
- ≈ Community contracting methods, management, and documentation
- ≈ Standards and norms for private sector-based operations and maintenance services
- ≈ Standards and norms for spare parts supply and social intermediation services
- ≈ Standards and norms for community-based performance monitoring and auditing of RWSS services.

### **Task 6: Finalize Logical Framework and Monitoring and Evaluation Plan**

Based on the overall strategy and project subcomponents, a short workshop would be conducted with the project team and major RWSS stakeholders to summarize the sector-based goals, development objectives, and project

inputs and outputs. This will also provide a forum for arriving at a consensus concerning indicators of performance at various levels:

≈ Project performance, which would be part of the operations manual

≈ Community-level and institution-level performance, which would be part of the locally-based RWSS management tools.

**Task 7: Specify Critical Issues and Risks**

Specify critical policy or institutional issues that have a bearing on the successful achievement of sustainable RWSS services and recommend conditionalities or measures to address these issues or minimize the risks.

**OUTPUTS**

The consultant will produce the following outputs:

**SUMMARY OF CONSULTANT OUTPUTS**

Week	Output
0	Commencement of assignment
2	Preliminary report, which would summarize results of tasks 1, 2, and 3, with an outline and work plan for completing tasks 4-7
4	Draft RWSS component operations manual (task 4)
6	Final operations manual (task 4). Draft logical framework and critical issues report (tasks 6-7)
8	Draft community-based RWSS management toolkit (task 5)
10	Final locally-based RWSS management toolkit (task 5)

**LEVEL OF EFFORT AND EXPERTISE REQUIRED**

The design of the RWSS intervention will be carried out by a three-person team:

≈ Water supply and sanitation engineer/specialist 2.5 months

≈ Rural development/social scientist 1.0 month

≈ Communications/publications specialist 1.0 month

The water supply and rural development specialists will have extensive field experience in the planning and implementation of community-managed water and sanitation projects, preferably both in and outside the country.

The communications/publications specialist would be locally-based. A local graphics and publishing company may also be engaged to produce the locally-based management toolkits.

**ANNEX IV**  
**CHECKLIST FOR RWSS SUBPROJECT COMPONENT DESIGN**

## **1. Promotion**

- A field-tested communications strategy and program
- Trained promoters or facilitators
- Explanation of policy framework (such as demand-responsive approach) and institutional responsibilities.

## **2. Application and Preselection**

- Application form designed and field tested
- Preselection criteria and procedures established (including score sheets)
- Community facilitation support available.

## **3. Proposal Formulation/Community Support**

- RWSS proposal templates and guidelines
- Guidelines and resources available for community-level technical assistance
- Procedures for recruiting and paying for community-level technical assistance.

## **4. Appraisal**

- Establishment of appraisal criteria and checklist
- Establishment of qualified evaluation team
- Template community subproject agreement.

## **5. Implementation (Construction and Community Development)**

- Eligible project list
- Procurement guidelines and forms
- Flow of funds guidelines and forms
- Community development guidelines and procurement procedures.

## **6. Operations and Maintenance**

- Guidelines for operations and maintenance management, including cost recovery and contracting
- Community-level training for continued service delivery and operations and maintenance management.

## **7. Monitoring and Evaluation**

- Midterm review
- Implementation completion report
- Specific reviews and focused impact studies.

**LIST OF DOCUMENTS REQUIRED DURING PROJECT PREPARATION**

*(These documents and guidelines are all available in the resources section online)*

**Global Tools**

- ≈ Terms of reference for intervention design
- ≈ Checklist for RWSS component design

**Applications, Forms, and Contracts**

- ≈ Community project request form
- ≈ Memorandum of understanding (MOU) between ministry and local government
- ≈ MOU between local government and community water agency
- ≈ MOU between local government and community
- ≈ MOU between community water agency and community
- ≈ Letter of invitation to bid by a community/farmer group
- ≈ Subproject proposal format
- ≈ Letter of submission of bid
- ≈ Instructions to bidders
- ≈ Contract for works
- ≈ Order and contract for services
- ≈ Order and contract for supply of goods
- ≈ Contract form
- ≈ Subproject appraisal checklist
- ≈ Subproject completion report
- ≈ Environmental impact assessment

**Guidelines and Manuals**

- ≈ Community promotion guidelines
- ≈ Application/action by community guidelines
- ≈ Guidelines for designing a water supply and sanitation committee
- ≈ Guidelines for calculating tariffs
- ≈ Community mobilization and planning guidelines
- ≈ Manual on hygiene promotion

## TABLE OF CONTENTS

### **1. Background**

- ≈ Country context: national goals and strategy
- ≈ Policy reforms
- ≈ Roles and responsibilities amongst local government, private sector, communities, water and sanitation agency

### **2. Project Description**

- ≈ Overview
- ≈ Project goals
- ≈ Performance indicators
- ≈ Project components and items to be financed

### **3. Eligibility Criteria for RWSS Investments**

- ≈ Community eligibility criteria
- ≈ Subproject eligibility criteria
- ≈ Criteria for subproject prioritization
- ≈ Project appraisal

### **4. Subproject Identification**

- ≈ Promotion campaign
- ≈ Community water and sanitation agency roles and responsibilities
- ≈ Application by community
- ≈ Selection of community
- ≈ Subproject appraisal

### **5. Subproject Implementation and Monitoring**

- ≈ Implementation planning and funding
- ≈ Community mobilization
- ≈ Planning for construction
- ≈ Procurement and contracting

- ≈ Guidelines
- ≈ Procedures for approval of procurement
- ≈ Procurement of goods and works
- ≈ Procurement by communities
- ≈ Procurement by consultant services
- ≈ Operations and maintenance
- ≈ Auditing
- ≈ Monitoring and evaluation
  - ≈ Monitoring methods
  - ≈ Evaluation methods
  - ≈ Roles and responsibilities
  - ≈ Key monitoring and evaluation indicators
  - ≈ Monitoring of gender aspects
  - ≈ Water and sanitation committee indicators
  - ≈ Supervision by the World Bank
  - ≈ External monitoring and evaluation

## **6. Technical Design Aspects**

- ≈ Design parameters
- ≈ Sanitation
- ≈ Water source siting and selection
- ≈ Construction procedures and technical specification
- ≈ Water-lifting devices
- ≈ Water quality
- ≈ Other technologies

## **7. Training and Capacity Building**

- ≈ Local government
- ≈ Private sector
- ≈ Water and sanitation agency
- ≈ Communities

## **8. Financial Management**

- ≈ Project accounts and payments
- ≈ Fund flow mechanism for subproject implementation
- ≈ Audit

## **9. Environmental Impact Identification**

**SAMPLE LIST OF SERVICE-BASED PERFORMANCE INDICATORS FOR RWSS****Coverage**

- ≈ Percentage of households/population with access
- ≈ If houses are excluded, what are the reasons?
  - ≈ Point sources: within a certain distance
  - ≈ Connections: based on # of households with connections.

**Quality, Sanitary, and Environmental Conditions**

- ≈ Water quality parameters (for example, lead, arsenic, cadmium)
  - ≈ Measured: daily, monthly, annually
- ≈ Other quality parameters (for example, taste, color)
- ≈ Sanitary conditions at and around the point sources (for example, protecting potable water sources from animals, proper drainage).

**Availability**

- ≈ Number of days per month service provided, number of hours per day
- ≈ Average waiting times at point sources
- ≈ Number of days/hours service interrupted.

**Operations and Maintenance**

- ≈ Accomplishment of routine and periodic maintenance tasks according to schedule
- ≈ Response time to repair breakdowns
- ≈ Types, number, and cost of repairs
- ≈ Types, number, and cost of spare parts replacements.

**Financial Issues**

- ≈ Does established tariff level cover recurrent administrative and operations and maintenance costs, major repairs, and system rehabilitation and expansion?
- ≈ Cost recovery: amount of tariff arrears, percentage of consumers who have paid
- ≈ Is there a positive cash flow? Account balance? Is this sufficient to cover major repairs?
- ≈ Maintenance of bank account, financial records
- ≈ Is there an audit mechanism? If so, when was the last audit and what were the results?

**Consumer Relations**

- ≈ Time for collecting user fees
- ≈ Responsiveness to complaints and inquiries
- ≈ Customer satisfaction (from surveys)
- ≈ Does management body provide periodic reports to community?

**ANNEX VIII**  
**OUTLINE TERMS OF REFERENCE FOR PROJECT SUPERVISION MISSIONS**

**Introduction**

The following can help task managers assess the progress of the RWSS component at various stages of project implementation. Prior knowledge of these issues by implementing agencies would also help them prepare for supervision missions and make supervision time in the field more effective.

**Project Launch**

The following items may be verified during a project launch mission or workshop.

**Written documentation.** Is a field-tested operations manual complete? Is it written in local language and accessible to all stakeholders (it may be useful to have manuals targeted to various levels)? Are procedures, rules, and procurement regulations clear? Do the templates facilitate their implementation? Are they based on a demand-responsive approach? Do they include environmental and water quality standards? Do they reflect the 'dos' of RWSS project design?

**Stakeholder analysis.** Are all the people who are involved at various levels fully aware of their roles and do they have the capacity to carry them out? How will the project rectify perceived capacity gaps? This analysis may include short visits to potential project sites for first-hand assessment and interviews with stakeholders.

**Work plan.** Is there an implementation plan for the first six months of the program, with clear delineation of responsibilities? Does this include such key initial activities as promotion and the establishment of project information management systems? Does the management information system include collection of baseline information for monitoring and evaluation, which could be tied to targets in the PRSP? Is there an agreed plan for the types of information required for the supervision and follow-up missions (see below)?

**Subproject Supervision and Follow-Up**

It will be useful for the supervision mission to structure its regular supervision missions around the following elements to gain a cumulative picture of how the project is proceeding throughout its life. These may be organized as follows:

**Overall progress.** This will include quantitative information related to the number and types of systems, number of communities and populations served, and overall costs and disbursements. The supervision missions should aim to continuously build an information base on cumulative RWSS outputs and outcomes. This would be rapidly reviewed during each supervision mission to get a feel for progression towards original targets, and assessed in more detail in annual, midterm, and final reviews. This information would emanate from the logical framework and include such indicators as:

- ≈ Number of communities, populations, and households serviced by improved RWSS (by type of system and region)
- ≈ Investment costs (total costs, costs per system, cost per household, variations by region)
- ≈ Completion and quality of works (planned versus actual)
- ≈ Performance of systems (continuous service and breakdowns)
- ≈ Impact on health (follow up of baseline surveys and PRSP indicators)
- ≈ Capacity and performance of the actors (analysis of actors: national and local government, communities, private sector, and NGOs)
- ≈ Customer satisfaction
- ≈ Lessons learned.

**Subproject field verification.** It will be useful for the supervision to carry out a short field trip to verify reported



results and adherence to project rules and procedures, gain a firsthand appreciation of field-level implementation constraints, and discuss potential solutions (see attached checklist).

**Stakeholder assessment.** The supervision mission should assess the actual performance and capacities of various stakeholders and institutions, with the aim of identifying problems, issues, and potential solutions.

**Policy and institutional issues.** If the component includes policy and institutional reforms, which may include legislation or capacity building of the national water or sanitation agency, the supervision mission should report on the progress of these reforms.

**Work plans.** The supervision mission should verify the work plans for the next implementation period, focusing on milestones and responsibilities.

## Resources

The supervision mission for the RWSS component should have at a minimum:

- ≈ A technically-qualified person familiar with RWSS design, installation, and management
- ≈ A social scientist familiar with the software aspects of RWSS projects.

This expertise may be drawn from other members of the team supervising the multisector project as a whole.

## Checklist for Subproject Field Visit and Verification

The following items should be verified during field verification of individual subproject sites:

**Promotion and preselection activities.** Did the community receive adequate information prior to its application? Was the application and preselection process perceived as transparent?

**Subproject development, proposal, and appraisal.** Has the community gone through a process of informed choice regarding the technology, level of service, and implications for operations and maintenance? Have they focused on health and sanitation issues? Have they received adequate technical assistance?

**Subproject implementation progress.** The supervision mission should assess the implementation progress in comparison with the agreed plan. This should include not only civil works and procurement, but also community support and software aspects. Any major deviations from the agreed schedule should be analyzed and addressed. In respect of the works, it is imperative to explicitly focus on performance for three contractual areas:

- ≈ Timing of works
- ≈ Cost of works
- ≈ Quality of works.

**Subproject service provision.** For those communities where investments are completed, the supervision mission should verify the functionality and sustainability of the RWSS services. These will include responding to the following main questions (with sample indicators):

- ≈ Is the water flowing reliably? (days of continuous service; number and types of breakdowns)
- ≈ Is the water and sanitation committee functional? (legal agreements; maintenance records and documents; training and competence of members)
- ≈ Are tariffs being collected? (collection rates; positive bank account balance)
- ≈ Is water quality being assured? (monitoring records; environmental management plan)
- ≈ Is hygiene being promoted and assimilated? (assessment of assimilation of messages for behavioral change)
- ≈ Are vulnerable groups served? (assessment of actual versus planned coverage rates)
- ≈ Are customers satisfied? (results of focus group discussions)

**ANNEX IX**  
**SAMPLE TERMS OF REFERENCE FOR HYGIENE SPECIALIST**

### **1. Rationale for Improved Hygiene Behavior**

The rationale for proposing such an initiative in (*country X*) is:

- ≈ Diarrheal diseases are one of the most important causes of morbidity and mortality in Indonesia in children under five years old.
- ≈ Reliable data on handwashing with soap after using a toilet or after cleaning up a child are limited. However, studies in rural areas indicate that handwashing occurs mainly after work but that handwashing with soap is not common.
- ≈ Informal discussions with community women and men revealed that soap is not used for killing germs but for smelling good.

It is now recognized that handwashing is a much more cost-effective means of lowering diarrheal incidence than the more costly infrastructure building programs. Nevertheless, hygiene promotion initiatives in the country have in the past focused on the provision of water and sanitation facilities, good storage methods, and water treatment, but not on handwashing. Little is therefore known about the availability, affordability, and desirability of soap, especially for use after contact with excreta, in rural and semi-urban areas. There is a need to make a connection between hygiene promotion and provision of water and sanitation facilities on the one hand and the production and distribution of affordable soap on the other hand. Soap manufacturers stand to gain by selling more soap through an expansion of their market into more households and by better market penetration towards poorer households. Public agencies stand to gain by involving soap manufacturers in their programs aimed at improving the quality of life by reducing morbidity related to improper hygiene practices.

### **2. Objectives and Scope of Work**

The World Bank would like to procure the services of a behavior change specialist to assist in developing and improving the programming of health activities through a public-private partnership. The consultant will provide guidance and facilitation during the mission to interested partners to consolidate resources and focus efforts towards an appropriate handwashing campaign through existing programs, projects, and available data.

The specific objectives of the assignment are:

- ≈ To visit the project sites to understand the context and scope of existing activities, particularly current school and community hygiene promotion activities being implemented in conjunction with village water supply and sanitation infrastructure improvements
- ≈ To understand, generally, the current status, constraints, and drivers for handwashing in communities
- ≈ To meet with government, NGO, and private sector stakeholders to introduce the handwashing program concept, and assess interest and possible ways forward
- ≈ To provide a model for collaboration and action for a public-private partnership for handwashing within the context of the project
- ≈ Gain buy-in from key stakeholders to adopt the model for collaboration.

### **3. Responsibilities of the Contracted Specialist**

The consultant will be responsible for the following:

- ≈ Conducting an assessment of the project with a focus on behavioral change objectives

- ≈ Providing input to the midterm review process specifically relating to component 2
- ≈ Production of a framework for action within the project for developing a campaign for handwashing with soap in collaboration with identified partners and government agencies
- ≈ Obtaining support/buy-in from Ministry of Health and Ministry of Education for the proposed framework.

#### **4. Qualifications and Selection of the Consultant**

The consultant will be a public health specialist with expertise in developing hygiene education programs and possibly brokering partnership programs for health. S/he will have a track record of at least 10 years' experience in planning and developing social marketing and health behavior campaigns. Commercial/industry sector experience is an asset.

#### **5. Final Products**

The final products include:

- ≈ A final report detailing meetings with stakeholders and recommendations for a framework for action for an improved hygiene/handwashing education program
- ≈ Recommendations and feedback to the midterm review.

#### **6. Time Schedule**

It is expected that the work will last about two weeks from mobilization to final report.

## ANNEX X

### SAMPLE BYLAW OF VILLAGE WATER AND SANITATION COMMITTEE

(This sample bylaw is drawn from India and governs the formation of a village water and sanitation committee)

#### Constituted for the

Village ..... Block ..... District .....

The Gram Panchayat of Village ..... Block ..... District .....constituted under clause 29 (6) of the United Provinces Panchayat Raj Act 1947 and Govt. of UP GO NO-2158/33-1-2001/48/99 TC-II dated 18 September 2001 hereby approves the formation of Village Water and Sanitation Committee and authorizes it to perform planning, construction, maintenance and operation of water supply schemes under the Swajaldhara Programme. The Gram Panchayat hereby promulgates the rules and regulations for the formation and operation of activities.

#### General Rules

1. This set of rules shall be called Village Water Supply and Sanitation Committee Rules.
2. This set of rules shall be applicable within the boundaries of the revenue village .....
3. This set of rules shall become operative from the date of notification.

#### Definitions

1. 'Gram Sabha' means a body established under clause 3 and formed by individuals registered in the voters' list of the village.
2. 'Gram Panchayat' means a Gram Panchayat (constituted) under clause 12 of the Act.
3. 'Population' means the population as determined in the previous census whose compatible data have been published, and the population at present as ascertained by the actual census carried out under the Swajaldhara Programme.
4. 'Panchayat Area' means the territorial area of a Gram Panchayat, announced as such, under the sub-clause (I) of clause II.
5. 'Public property and public land' means such buildings, parks, gardens or other places, where one can enter either on some payment at the spot or by some other means or where admission is permitted.
6. 'Village' means a public area, entered as village in the revenue documents of the district in which it is situated and wherein such an area is also included which has been declared as a village for the purposes of this law, by the state government through an ordinary or an extra ordinary order.
7. 'Village Water Supply and Sanitation Committee' means the committee formed under the Swajaldhara Programme
8. 'Support organization' shall mean an organization which will help in the operation of the project in the Swajaldhara Programme village. This may mean an NGO, a community-based organization, a firm or a company.
9. 'Quorum' shall mean presence of over 50 percent of the total number of adults in all the households living in the revenue village.

#### Rule 1

Village Water and Sanitation Committee (VWSC) Formation Procedure:

1. JPS constituted by UP Panchayat Rule Act 1947 Rule 29-6 will be work as VWSC.
2. Chairman of VWSC will be elected member of Panchayat.
3. 7-14 members shall be co-opted from users groups.
4. VWSC treasurer will be nominated by VWSC members.

5. VWSC account will be operated jointly by chairperson and treasurer of VWSC.

6. Among all VWSC members (elected and co-opted) the selected members, the representation of SC/ST shall be 20 percent and that of women shall be 30 percent.

### **Rule 2**

The tenure of Village Water and Sanitation Committee:

1. The normal term of the Village Water and Sanitation Committee shall be five years. After five years the Village Water and Sanitation Committee shall be selected by the proposal of the Gram Panchayat.
2. In case of dissolution of Gram Panchayat the Village Water and Sanitation Committee shall function till the new Gram Panchayat is formed. If the new Gram Panchayat expresses its confidence in the Village Water and Sanitation Committee by passing a specific proposal to that effect, in such cases the pre-constituted Village Water and Sanitation Committee shall complete its term.
3. In the event of the newly elected Gram Panchayat expressing its lack of confidence, the re-election of the Village Water and Sanitation Committee shall take place, otherwise the previously elected Village Water and Sanitation Committee shall complete its term.
4. After the completion of the term, the new Village Water and Sanitation Committee shall be formed according to the rules mentioned above.

### **Rule 3**

Relation of Village Water and Sanitation Committee with the Gram Panchayat:

1. The Village Water and Sanitation Committee is constituted as a sub-committee of the Gram Panchayat. Therefore, it shall, every year, submit its description of activities, accounts of income and expenditure and follow the suggestions as proposed by the Gram Panchayat.
2. The Village Water and Sanitation Committee shall have its accounts audited as that of Gram Panchayat.

### **Rule 4**

Functions of the Village Water and Sanitation Committee:

1. The Village Water and Sanitation Committee shall, according to the process provisioned in the Swajaldhara Programme, survey the assets related to the previously established drinking water supply scheme and prepare a detailed list thereof.
2. The Village Water and Sanitation Committee shall, for the money received from government/other institutions, open and operate an account in any bank or post office.
3. The Village Water and Sanitation Committee shall collect contribution (cash/labor) for construction works and money from beneficiaries/Panchayat for the operation and maintenance of schemes.
4. The members' contributions and statement of income and expenditure of Village Water and Sanitation Committee shall be made open to public.

### **Rule 5**

The Village Water and Sanitation Committee, with the help of community and support organizations, shall depict, at a public spot, the community map of the village depicting public properties, natural resources and households of the village to which it belongs.

### **Rule 6**

The Village Water and Sanitation Committee, along with its support organization, shall discuss all possible options of the drinking water supply scheme and the drainage system for disposing waste water of the households; and shall select the optimum option based on its merits and demerits and on the financial capacity of the villagers.

### **Rule 7**

The committee, with the participation of the village, shall place all the community action plans before the general

meeting of the village, wherein one adult member from each household must be necessarily present. The meeting will be held according to the determined quorum.

Quorum: Presence of adult members of more than half of the households of each cluster in the village.

**Rule 8**

The committee shall measure, in every season (Winter, Summer, Rainy), the water at the source and shall maintain its record. It also shall prepare a plan of necessary environmental arrangement to conserve the source of water.

**Rule 9**

The committee shall conduct the capacity development programs and shall get deposited the prescribed contribution for latrine, compost pit, soak pit, garbage pit, rain water tank, hand pump boring, tree plantations, irrigation pool, community centers lane, naula, gadhera, modification, etc., according to the demand and shall make the amount of grant available to the beneficiary in two installments. At the same time, it shall also get deposited the prescribed contribution and maintenance advance for the proposed scheme.

**Rule 10**

If the source of water lies in the forestland, the committee shall start proceedings with the support organization to acquire the forestland on lease, and shall regularly deposit the annual lease rent and maintenance amount.

**Rule 11**

Water Tax Assessment and levying:

The Village Water and Sanitation Committee shall be free to determine the water-fee for the operation and maintenance of the constructed drinking water scheme/schemes in the village and the existing ones in whichever condition it may be.

To maintain uninterrupted water supply in the village the Village Water and Sanitation Committee shall prepare the annual income/expenditure budget, by fixing the water tariff to be levied upon the consumers and place it before the general meeting of the village to pass a resolution to pay all the dues regarding the operation, maintenance, wear and tear, electric bill and chemicals, etc., for the water supply scheme/schemes, from the said proposed water-fee.

**Rule 12**

In case of any conflict on issues like construction of water supply schemes, maintenance, acquisition of land for construction, water pollution, water tariff collection, etc., the committee, with assistance of village level institutions, Van Panchayat, Revenue department, Forest department, is free to settle the issue.

**Rule 13**

Responsibilities and rights of the committee:

In order to plan, execute, operate and maintain the drinking water and environmental sanitation works in the village, the committee shall be free to determine the technological options in the general meeting and assign the various responsibilities to members; form rules of environmental sanitation, cleanliness of home and village and prescribe token pecuniary punishment in cases of their being ignored; deposit the amount so levied in its accounts and issue valid receipt to the person concerned.

The committee shall be free to enter into any agreement regarding drinking water and environmental sanitation schemes; receive amounts for the works; open joint accounts in the bank/post office and comply with the agreement.

The documents to be maintained:

The committee shall keep up the following documents regarding its income, expenditure, assets, decisions, observations, etc.:

1. Procurement register
2. Membership register
3. Assets/stock register

4. Visitors' register
5. Baseline/general information register
6. Cash/labour contribution register
7. Bank/post office pass book, and check book files
8. Cash book, ledger, and voucher
9. Receipt book
10. Water tariff collection register
11. Electricity bill register
12. Payment and expenses register
13. Other necessary documents

### **Implementation Phase**

#### **Rule 14**

It shall be the responsibility of the committee that the procurement of works be of the precise quality, such as of the ISI brand, etc.

#### **Rule 15**

It shall be the responsibility of the committee to select, impart training and employ on an honorarium basis the local skilled labor to complete the works.

#### **Rule 16**

The committee shall undertake to upkeep all pass books and cashbooks of joint and other accounts, voucher files, related store books; register of labor contributions, scheme proceedings, visitors and suggestions, measurement of source, latrines, baseline, healthy home survey, and other allied registers.

#### **Rule 17**

Maintenance of all documents related to accounts shall be the responsibility of the Chairman/Treasurer.

#### **Rule 18**

Storing and maintenance of the material and updating the documents shall be the responsibility of the committee and it can select and authorize any person for this work, on a voluntary or honorarium basis.

#### **Rule 19**

Completion of scheme according to the agreement with the concerned organization, making demands of payment and completion of all formalities shall be the responsibility of the committee.

Preparing of the financial accounts and accounts of physical progress shall be the responsibility of the committee, which it will put up before the general meeting and obtain its approval after informing the Gram Pradhan.

### **Post-Implementation Phase**

#### **Rule 20**

The committee shall be fully responsible to acquire all the constructed works and operate and maintain them. The committee shall have the right to nominate any person/persons (voluntary/selected on honorarium basis) according to the accepted rules for the maintenance of works.

**Rule 21**

The committee shall have the right to collect the amount determined for the operation and maintenance of works from each family and deposit the same every month in the bank account of the committee.

**Rule 22**

In order to meet the maintenance expenditure, the committee shall have the right to increase or decrease the actual costs of water.

**Rule 23**

To ensure benefits of the constructed works of drinking water, sanitation, health, and environmental awareness the committee shall undertake healthy home survey at every six months and discuss the results with village community.

**Rule 24**

Committee will hold at least one meeting every month. This meeting would review constructions works, community development works and physical and financial progresses made towards operation and maintenance.

**Rule 25**

The applicant shall have to deposit Rs. 1,500 as lump sum with the committee for every new connection, according to the availability of water. The applicant has to bear all expenses for the connection to bring water from the main pipeline to the home. The connection shall be made by the Village Water and Sanitation Committee, through the person responsible for maintenance.

**Rule 26**

The connection-holder shall not tamper with the main pipeline and the committee shall have the right to impose Rs. 500 as pecuniary punishment and even disconnection on the booster pump user.

**Rule 27**

The connection-holder shall have to pay the prescribed water-fee every month. The committee shall have the right of disconnection in case of non-payment for two consecutive months.

**Rule 28**

Only one private connection shall be given to one family. The holder shall not lease or sublet another connection from his connection to anyone else. The committee shall have the right of imposing pecuniary punishment/disconnection.

**Rule 29**

Open defecation, grazing of cattle, disposal of dead bodies, and rubbish dumping shall not be allowed within around 100 meters of the water source. If any one is found doing so, the committee shall have the right to impose a fine of Rs. 50 and even increase the pecuniary punishment in case the offence is repeated.

**Rule 30**

In cases of natural calamities/contingent situations the Gram Panchayat shall repair the works from its own resources.



**ANNEX XI**  
**CHECKLIST FOR RWSS PROJECT MONITORING AND EVALUATION INDICATORS**

According to Project Cycle Stages

**Pre-planning**

- Information about project received by local government stakeholders and communities
- Self-assessment forms distributed and collected
- Partner organization contracted

**Planning**

- Community-based organizations mobilized, formed, and registered
- Feasibility studies and designs completed
- Staff in local government trained by the project

**Implementation**

- Percentage and total population covered by water supply facilities
- New sanitation facilities under construction, completed, and under rehabilitation by type
- Percentage community coverage by hygiene promotion
- Community-based organizations trained by type of training
- Project agreements maintained with local authorities
- Sector development plans and budget allocations approved

**Operations and Maintenance**

- Operations and maintenance expenditure and cost recovery rates
- Water quality
- Number of water users
- Sanitation facilities in regular use
- For hygiene awareness, handwashing after toilet use

According to Stakeholders Involved

Village/Community – Indicators	Phase
<ul style="list-style-type: none"> <li>Local government held community-wide meeting for community participation in project planning and management for (a) technology selection; (b) procurement of material in bulk; and (c) ratifying operations and maintenance charges</li> </ul>	Planning, implementation
<ul style="list-style-type: none"> <li>Percentage of households that contributed cash/labor/kind against total number of user households</li> </ul>	Planning, implementation
<ul style="list-style-type: none"> <li>Percentage of operations and maintenance collection against the required target</li> </ul>	Operations and maintenance
District/Municipality – Indicators	Phase
<ul style="list-style-type: none"> <li>Multidisciplinary group in place</li> </ul>	Pre-planning
<ul style="list-style-type: none"> <li>Amount of proposals approved by <i>(date)</i> as a percentage of allocations made and communicated by the state for the year</li> </ul>	Planning
<ul style="list-style-type: none"> <li>Percentage of periodic review visits undertaken in the last quarter as against planned for the quarter</li> </ul>	Planning, implementation, and operations and maintenance
State – Indicators	Phase
<ul style="list-style-type: none"> <li>Is there a signed MOU with the government based on a vision document along with an action plan?</li> </ul>	Pre-planning
<ul style="list-style-type: none"> <li>Percentage of persons (different stakeholders) trained as against targeted in the quarter as per state’s capacity building plan</li> </ul>	All phases
<ul style="list-style-type: none"> <li>Percentage of periodic review visits undertaken in the last quarter as against planned for the quarter</li> </ul>	Planning, implementation, and operations and maintenance

**Water Supply, Sanitation, and Health**

- Health benefits
- Improved hygiene practices (like handwashing with soap and stool disposal)
- Improved coverage
- Equitable access
- Hygienic use of WSS (both water and sanitation) services
- Poverty alleviation by enhancing productivity
- More efficient use of time saved in collecting water
- Sustainable scheme management and maintenance
- Reduction in walking distance and time saved
- New water-related productive activities
- User satisfaction with water supply service and sanitation facilities
- Sustained access for all rural habitations to minimum xx liters per capita per day water from improved sources throughout the year
- Reduced incidence of water-related diseases

### **Community Contracting**

*Community-Based Contracting: A Review of Stakeholder Experience*  
Samantha de Silva, World Bank

*Community-Based Water Systems in Small Towns in Sri Lanka*  
Water and Sanitation Program

*Community Contracting in Rural Water and Sanitation*  
World Bank

*Instrumentos para la participación de la comunidad: Manual para la capacitación de capacitadores en técnicas participatorias*  
Lyra Srinivasan, UNPD

*La contratación por la comunidad, empoderamiento y saneamiento rural en el Perú*  
Water and Sanitation Program, November 2001

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*Environmental Standards for Water, Environmental Resources Management*  
ODA Ref. 3274, London

*Guidance Manual on Water Supply and Sanitation Programmes*  
WELL/DFID (Water and Environmental Health at London and Loughborough, Department for International Development)  
(See chapters 2.3 Health Aspects, and 2.5 Environmental Sustainability)

*Operation and Maintenance of Rural Water Supply and Sanitation Systems: A Training Package for Managers and Planners*  
IRC International Water and Sanitation Centre  
(See module 1, unit 4: Linking Water, Health, Sanitation and Environmental Protection)

*Towards Better Programming: A Manual on Communication for Water Supply and Environmental Sanitation*  
UNICEF in collaboration with IRC

### **Finance**

*Designing Direct Subsidies for the Poor: A Water and Sanitation Case Study*  
Public Policy for the Private Sector, The World Bank Group

*Do Cross-Subsidies Help the Poor to Benefit from Water and Wastewater Services? Lesson from Guayaquil*  
Water and Sanitation Program

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World Bank, 1999

*Estudio costos en proyectos rurales que proveen agua en la Región Andina*  
Water and Sanitation Program, World Bank

*Financing Water and Sanitation: A Policy Briefing Paper*  
WaterAid

*Financing Water and Sanitation: Key Issues in Increasing Resources to the Sector*  
S. Annamraju, B. Calaguas, and E. Gutierrez, WaterAid

*Improving Cost Efficiency of Rural Water Supply Projects: Findings, Conclusions, and Recommendations of a Regional Cost Study*  
Alain Mathys and Shirley Claire, Water and Sanitation Program, World Bank

*Managing Water as an Economic Good: The Transition from Supply Oriented to Demand-Responsive Services*  
Mike Garn, World Bank

*Perú: Modelos de política financiera en la dotación de servicios de agua y saneamiento sostenibles a comunidades rurales*  
Francisco Verdara, Water and Sanitation Program

*Subsídios para elaboração de programas estaduais de saneamento rural*  
Instituto de Planejamento Econômico e Social IPLAN

## **Gender**

*Gender in Water Resources Management, Water Supply and Sanitation: Roles and Realities Revisited*  
IRC, Water and Sanitation Program, Gender Issues Network Water Supply, and Sanitation Collaborative Council

*Género en el sector agua y saneamiento de la Región Andina, Hallazgos: Recomendaciones y propuesta estratégica*  
Water and Sanitation Program

*Objetivos e indicadores, incorporación de la mujer a las tareas relativas al agua y al saneamiento*  
UNPD

*Toolkit on Gender in Water and Sanitation: Gender Toolkit Series No. 2*  
Monica S. Fong, Wendy Wakeman, and Anjana Bhushan

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*Achieving Sustained Sanitation for the Poor: Policy and Strategy Lessons from Participatory Assessment in Cambodia, Indonesia and Vietnam*  
Water and Sanitation Program

*An Anthropological View of Sanitation Issues in Rural Bolivia: A Summary*  
Water and Sanitation Program, World Bank

*Aprendamos Jugando*  
Pasatiempo de Educación Sanitaria, USAID

*Domestic Hygiene and Diarrhoea: Pinpointing the Problem*  
Val Curtis, London School of Hygiene and Tropical Medicine

*Ecological Alternatives in Sanitation*  
Department for Natural Resources and the Environment, August 1997

*Handwashing for Health: The Power of Market*  
World Bank

*Health and Hygiene Education in Water and Sanitation Projects*  
Water and Sanitation Program, CARE Peru

*Hygiene Promotion: A Practical Manual for Relief and Development*  
Suzanne Ferron, Joy Morgan, and Marion O'Reilly

*La pequeña y mediana entidad de servicios de saneamiento (PYMESS): Propuesta para mejorar la gestión en la ciudad de Talavera*

Water and Sanitation Program, World Bank, Municipalidad Distral de Talavera Apurimac, CESAL, MEBE Consultoria S.A., January 2001

*Learning the Fundamentals of Hygiene Promotion*

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*Marketing Sanitation in Rural India*

Water and Sanitation Program

*Metodologías participativas en educación sanitaria: Una adaptación de PHAST para Comunidades Rurales Andinas del Perú*

Water and Sanitation Program, World Bank, November 2001

*Motivating Better Hygiene Behavior: Importance for Public Health Mechanisms of Change*

UNICEF

*On-Site Sanitation: An International Review of World Bank Experience*

Water and Sanitation Program

*Promoting Health and Hygiene through the School System in Peru*

Water and Sanitation Program

*Sanitation, Health and Hygiene in World Bank Rural Water Supply and Sanitation Projects*

Europe and Central Asia Regional Studies Program, World Bank

*Towards Better Programming: A Manual on School Sanitation and Hygiene*

UNICEF in collaboration with IRC

*Towards Better Programming: A Sanitation Handbook*

UNICEF in collaboration with IRC

*Water, Sanitation and Hygiene: A Country Situation Analysis Paper from Lao PDR*

World Bank

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*El impacto de reglas institucionales en la sostenibilidad del suministro de agua en áreas rurales*

Jose Quiton, Water and Sanitation Program

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Water and Sanitation Program, World Bank

*Launching Sector Reforms*

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*Perú: Lineamientos para un programa nacional de agua y saneamiento rural, documento de Trabajo*

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*Reforming Water Supply in Abidjan, Côte d'Ivoire: A Mild Reform in a Turbulent Environment*

Claude Menard and George Clarke

*Tool Box Integrated Water Resources Management: Sharing Knowledge for Equitable, Efficient and Sustainable Water Resources Management*

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*El Alto Condominial Pilot Project Impact Assessment: A Summary*  
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*Evaluación intermedia del segundo programa de Apoyo a las operaciones del FONCODES: Evaluación de impacto de los proyectos financiados por FONCODES informe final*  
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*Evaluación participativa de 15 sistemas de agua y saneamiento en la República de Bolivia*  
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*Ex-Post Evaluation of the Honduran Social Investment Fund (FHIS 2)*  
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*Impact Evaluation of the Jamaica Social Investment Fund: Interim Final Report*  
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*Participatory Evaluation: Tools for Managing Change in Water and Sanitation*  
Deepa Narayan, World Bank Technical Paper 207

*Social Funds: A Review of World Bank Experience*  
World Bank, February 2002

## **Supply Chains**

*Creating Successful Private Sector Supply Chains*  
Water and Sanitation Program

*The Growth of Private Sector Participation in Rural Water Supply and Sanitation in Bangladesh*  
Water and Sanitation Program

*The Private Sector in Water Competition and Regulation*  
World Bank

*The Rope Pump: Private Sector Technology Transfer from Nicaragua to Ghana*  
Water and Sanitation Program

*The Treadle Pump: An NGO Introduces a Low-Cost Irrigation Pump to Bangladesh*  
Water and Sanitation Program

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*Consumers Choice: The Sanitation Ladder, Rural Sanitation Options in Lao PDR*  
National Water Supply and Environmental Health Programme, Ministry of Health, Vientiane, Lao PDR, Water and Sanitation Program, East Asia and the Pacific (WSP-EAP), May 2001

*Metodologías y tecnologías apropiadas en proyectos de saneamiento básico rural: Compendio de experiencias y evaluaciones de proyectos en Bolivia y Ecuador*

*Propuesta de normas de diseño para infraestructura de servicios de agua y saneamiento en el área rural*  
Water and Sanitation Program, April 2000

*Rural Poor Choose Their Water and Sanitation Services in Lao PDR*  
Sanitation Program for East Asia and the Pacific, Water and Sanitation Program

*Taller Regional, tecnologías adecuadas en saneamiento básico para el ámbito rural, Memoria*  
Water and Sanitation Program, April 1998

*Tecnologías apropiadas: Diseño y construcción de tanques de ferrocemento*  
Carlos Ibarra Sandoval, Water and Sanitation Program

*Uso del ferrocemento, bombas manuales y desinfección del agua en el área rural del Perú*  
Water and Sanitation Program, August 1999

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*Giving Communities Choice Is Not Enough!*  
Jennifer Sara, World Bank

*Promoting DRA in Lao PDR: Water Supply Informed Choice*  
Lao Country Office, World Bank

*Willingness to Pay for Water in Remote Chinese Villages*  
Huang Ping, Chinese Academy of Social Sciences

*Willing to Pay but Unwilling to Charge*  
Water and Sanitation Program





## ANNEX XIV USEFUL LINKS

### Internal Links

*Rural and Small Towns Water and Sanitation*

*Community Contracting, Rural and Small Towns Water and Sanitation*

*Toolkits for Private Sector Participation in Water and Sanitation*

<http://www.worldbank.org/html/fpd/water/wstoolkits/index.html>

*Rural Water and Sanitation Online Documentation*

[http://www.worldbank.org/watsan/rural\\_online.html](http://www.worldbank.org/watsan/rural_online.html)

*Water Supply and Sanitation Publications*

<http://www.worldbank.org/html/fpd/water/publications.html>

*Gender and Social Intermediation*

<http://www.worldbank.org/html/fpd/water/topics/socialintermediation.html>

*Rural Water and Sanitation Presentations*

<http://www.worldbank.org/html/fpd/water/forum2002/index.html>

*Social Funds*

*Community-Driven Development*

### Technology-Related Links to RWSS

*SKAT-Watsan*

[http://www.skat.ch/ws/link/watsan/WW\\_tech.html](http://www.skat.ch/ws/link/watsan/WW_tech.html)

*SaniCon-Sanitation Connection*

<http://www.sanicon.net/themes/intro.php3?theme=3>

### Participatory Planning-Related Links

*Livelihoods*

<http://www.livelihoods.org/>

*Tools for Training and Planning M&E (Intranet)*

### External Links

*CEPIS: Pan American Center for Sanitary Engineering and Environmental Sciences*

<http://www.cepis.ops-oms.org/indexeng.html>

*Development Gateway*

<http://www.developmentgateway.org/>

*Department for International Development (DFID)*

<http://www.dfid.gov.uk/>

*GARNET*

<http://www.lboro.ac.uk/departments/cv/wedc/garnet/>

*Global Water Partnership*

<http://www.gwpforum.org/servlet/PSP>

*Integrated Resource Management Research Pty Ltd*

<http://www.iwra.siu.edu/>

*International Water and Sanitation Centre*

<http://www.irc.nl/>

*Stockholm International Water Institute*

<http://www.siwi.org/>

*The Water Page*  
<http://www.thewaterpage.com/>

*The World Water Assessment Programme (WWAP)*  
[http://www.skat.ch/ws/link/watsan/WW\\_tech.html](http://www.skat.ch/ws/link/watsan/WW_tech.html)

*Third World Water Forum, Kyoto, Japan*  
<http://www.waterforum.org/>

*UNICEF Water, Environment and Sanitation*  
<http://www.unicef.org/programme/wes/>

*WaterAid*  
<http://www.wateraid.org.uk/>

*Water Magazine*  
<http://www.watermagazine.com/>

*Water and Sanitation Program*  
<http://www.wsp.org/english/index.html>

*Water Web Organization*  
<http://www.waterweb.org/>

*Water, Engineering and Development Centre (WEDC)*  
<http://www.lboro.ac.uk/departments/cv/wedc/>

*World Commission on Dams*  
<http://www.dams.org/>

*World Conservation Union*  
<http://www.iucn.org/>

*World Health Organization Water, Sanitation and Health*  
[http://www.who.int/water\\_sanitation\\_health/en/](http://www.who.int/water_sanitation_health/en/)

*World Resources Institute*  
<http://www.wri.org/>

*Water Supply and Sanitation Collaborative Council*  
<http://www.wsscc.org/index2.cfm?CFID=3498&CFTOKEN=58384806>

*Worldwatch Institute*  
<http://www.worldwatch.org/>

*World Water Council*  
<http://www.worldwatercouncil.org/>





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**Rural Water Supply and Sanitation Toolkit  
for Multisector Projects Website:**  
<http://www.worldbank.org/rwsstoolkit/index.htm>

For additional information contact:  
The Water Help Desk ([whelpdesk@worldbank.org](mailto:whelpdesk@worldbank.org))  
Or visit the Water Supply & Sanitation Blue Pages at:  
[http://www.worldbank.org/html/fpd/water/pdf/bluepages\\_2000.pdf](http://www.worldbank.org/html/fpd/water/pdf/bluepages_2000.pdf)