

METGUIDE

Methodology for Participatory Assessments

With Communities, Institutions and Policy Makers

Linking Sustainability with Demand, Gender and Poverty

*Rekha Dayal
Christine van Wijk
Nilanjana Mukherjee*

IV. Data Analysis 22

Community-level Analysis 22

Institution-level Analysis 26

Policy-level Assessment 28

Statistical Analysis 29

Appendix A

Participatory Tools 30

Ensuring Quality and Validity of Results 30

Wealth Classification 33

Community Map 35

Transect Walk with Rating Scales 38

Pocket Voting 40

Ladders (1) 43

Card Sorting 45

Ladders (2) 47

Matrix Voting 48

A Hundred Seeds 50

Stakeholders' Meet 52

Policy-Level Assessment 56

General Community Characteristics 58

Semi-Structured Systems Observation Form and Interview Guide 61

Latrine Observation and Scoring Sheets 67

Committee Members Interview and Records Review 69

Appendix B

Scoring Matrixes 74

References 103

IV. Data Analysis 22

Community-level Analysis 22

Institution-level Analysis 26

Policy-level Assessment 28

Statistical Analysis 29

Appendix A

Participatory Tools 30

Ensuring Quality and Validity of Results 30

Wealth Classification 33

Community Map 35

Transect Walk with Rating Scales 38

Pocket Voting 40

Ladders (1) 43

Card Sorting 45

Ladders (2) 47

Matrix Voting 48

A Hundred Seeds 50

Stakeholders' Meet 52

Policy-Level Assessment 56

General Community Characteristics 58

Semi-Structured Systems Observation Form and Interview Guide 61

Latrine Observation and Scoring Sheets 67

Committee Members Interview and Records Review 69

Appendix B

Scoring Matrixes 74

References 103

Foreword

Alleviating poverty requires tangible improvements in poor people's lives, such as clean water, decent housing and sanitation, access to health care and education. The Water and Sanitation Program (WSP) works with its partners to find better ways for the poor to gain sustained access to water supply and sanitation services. A critical step to this end is to increase the poor's participation, in particular women's participation, in service development.

During the 1990s, the WSP and others learnt that focusing exclusively on women was insufficient and the focus shifted to a gender approach, seeking a better balance between understanding women's and men's perceptions, wants, burdens, and benefits. Experience also indicated that water and sanitation investments which take local demand into account are more likely to be sustained. This calls for new methods and tools, to enable project planners and service providers to engage with all consumers and to ensure that frequently excluded groups—most often women, and particularly poor women—are not overlooked.

The Methodology for Participatory Assessments (MPA) presented in the *Metguide* is such a tool. The MPA was developed by the WSP's Participatory Learning and Action initiative, which investigates the links between demand-responsive, gender-sensitive approaches and sustainability, undertaking assessments in 18 large projects in 15 countries. While the assessments add to the evidence that projects that pay attention to gender and poverty have better outcomes, the methodology itself breaks new ground in three important ways. First, it mainstreams gender and poverty indicators into a

participatory methodology that can be used to monitor key aspects of sustainability. Second, it provides a means for stakeholders at various levels—community, project and service provider, and policy—to clearly visualize how their actions can contribute to the goal of sustainability. And third, it uses quantitative statistical methods to analyze qualitative data obtained from communities through participatory techniques.

The MPA, used properly, gives consumers a greater voice in the service delivery process. It helps project and task managers engage all parts of the community, not just the leaders and more vocal members. Communities benefit because they learn about their services through the process, and may identify problems and agree on solutions. The methodology and indicators are applicable not only to monitoring, but to project preparation, and their potential use extends well beyond the water and sanitation sector to any service which would benefit from the poor's active engagement. The *Metguide* and the methodology for participatory assessments are a significant, but a first, step in pulling together key social and sustainability indicators into a single, user-friendly tool. I look forward to its being applied in large poverty projects, adapted, and improved through experience.

Nemat Shafik
Vice President
Private Sector Development and Infrastructure
The World Bank

Preface

The Water and Sanitation Program (WSP) began in the late 1970s as a series of projects seeking to improve low-cost technologies. It has grown and evolved into a global partnership of UNDP, the World Bank, and 15 bilateral donor agencies. It is active in more than 30 countries spread over five regions, and employs more than 70 professional staff. The WSP's mission is to help poor people gain sustained access to water supply and sanitation by: (a) assisting countries to reform their policies, (b) supporting sustainable investments, and (c) learning and disseminating lessons from the field and building capacity to address emerging issues. The WSP has a track record in advancing understanding of the gender, participation, and institutional aspects of poverty.

The *Metguide* is a product of the WSP's global Participatory Learning and Action (PLA) initiative undertaken in partnership with IRC International Water and Sanitation Centre in Delft, The Netherlands. The overall development objective of the PLA initiative is to increase the sustainability of water supply and sanitation (WSS) services for poor communities, by increasing the understanding of the links between gender, poverty, demand, and sustainability.

During Phase I (1998–99), the PLA team developed a Methodology for Participatory Assessments (MPA). Eighteen assessments using the methodology were carried out in partnership with project implementation agencies, sector partner

institutes, and 88 communities in 15 countries in the five regions in which the WSP operates.¹ The projects that were assessed provided predominantly rural WSS services ranging from upgraded traditional sources to piped water supply systems with treatment plants and private connections. The projects were funded by a range of agencies, including various levels of government, the World Bank and the Asian and African Development Banks, seven bilateral agencies—the Australian Agency for International Development, the Canadian International Development Agency, the Danish Agency for International Development, the Japanese International Cooperation Agency, the National Economic Development Authority of the Philippines, the Swedish International Development Agency, and the Swiss Agency for Development and Cooperation—and one international non-governmental organization, CARE.

The assessments sought to document in both qualitative and quantitative terms whether and how gender- and poverty-sensitive participatory approaches are linked to the sustainability and use of WSS services. (See box on findings on page vi.) They also sought to identify the factors that influence the use of these approaches, such as an institutional environment that spells out what the approaches mean in terms of institutional systems, incentives, and performance criteria. The assessments also examined whether or not supportive institutional environments develop by chance or can be fostered

¹ Cameroon and Ghana in West and Central Africa; Kenya, Malawi, South Africa, and Zambia in Eastern and Southern Africa; India, Nepal, and Sri Lanka in South Asia; Indonesia and the Philippines in East Asia; and Bolivia, Colombia, Ecuador, and Peru in Latin America.

Key Findings from the Assessments

The statistical analysis generally affirmed the qualitative findings from the 88 assessments and demonstrates the importance of demand-responsive, gender- and poverty-sensitive approaches to positive service outcomes. The PLA team defined “sustained water supply service” as a service that regularly and reliably provides enough water of an acceptable quality for at least domestic use. Breakdowns are rare and repairs rapid (within 48 hours), and local financing covers at least the regular costs of operation, maintenance (O&M) and repairs. The following findings emerged from the analysis:

- A higher level of participation in establishing a community-managed rural water supply service is significantly associated with a better-sustained service. Participation in this context meant that the community carries out the O&M and management, and the skilled work in O&M and management is paid for and done by men and women.
- Contrary to expectations, a higher demand for a water supply service as expressed through initial payments in cash and/or kind is negatively related to the sustaining of the service. Factors associated with sustained services are community participation in maintenance and management, good governance in participation and service management, and satisfaction of all user categories—women, men, rich, poor—with the service and its direct and indirect benefits.
- Good governance at the community level during the project cycle is positively correlated with a more sustained water supply. “Good governance” in this case comprises the following characteristics: a local organization monitors contributions to construction and deals with defaulters, women participate in monitoring and control, male and female community members are trained in technical, managerial, financial, and water use/hygiene aspects, and accounts are shared with the entire community—females and males.
- Water services financed by bilateral donors have a significantly higher association with sustainability than services financed by other means.
- The more sensitive and supportive the implementing agencies’ score on participation, gender, and poverty issues, the higher the scores for sustained services are in the associated communities.

An “effectively used service” was defined as the combination of the percentage of households with easy access to the improved water supply, the percentage actually using the improved water supply always, at least for drinking, and the environmentally sound use of the water system (drainage present and no stagnant water). Findings on effective use were:

- Services that score better on gender and poverty sensitivity in the communities also score better on effective use. However, gender and poverty sensitivity made no significant difference with respect to sustained services. This seems to indicate that services that do not regard gender issues or the poor may perform well technically and financially, but leave an important segment of the population unserved and have less impact on the use of safe water. Both general access and safe use are important—though not the only—factors in achieving a positive impact on public health.
- The more demand-responsive the project, the better the access to and use of the service. Demand-responsive projects offer male and female users from all socioeconomic strata information and choices in technology and service level, location of facilities, and type of local management, maintenance, and financing systems. The greater and wider the voice and choice, the better the access and use.
- Communities with higher service levels and concurrent improvement of water supply, sanitation, and hygiene (though not necessarily through the same project) had a better effective use than communities with only water projects or a lower service level.

and encultured by policies that encourage sector institutions to apply gender- and poverty-sensitive approaches in their programs.

In each project, agency personnel together with the communities concerned assessed their institutional environment and pinpointed factors helping or hindering the process of equitable community participation and informed decision-making. Stakeholders' Meets brought together representatives from the organizations involved at various levels (community, project, and sector agency) to consider the results. Policy dialogues have started in several countries to address issues that emerged from this assessment process.

The findings from Phase I confirmed linkages between sustained and used services and informed decisions by users with equitable participation by women and men, rich and poor in the burdens and benefits from the scheme. A report that synthesizes the global findings and discusses the implications for practice is being published separately. Reports with results and details of individual assessments can be obtained from the relevant regional office of the WSP or the IRC.

The *Metguide* describes the MPA developed for and used to conduct the assessments. The first four chapters lay out the theoretical underpinnings of the methodology, including the analytical framework and sustainability indicators. They list the various purposes for which the MPA can be used and how it is used. The appendix includes the list and detailed guidelines for the use of the participatory tools, interview and observation forms, and scoring matrixes.

The *Metguide* is a practical tool for all professionals committed to providing sustainable services to the poor through the use of participatory methods and learning evaluations. It will be of particular value to development institutions and

governmental and non-governmental agencies as well as to researchers and policy makers intent on integrating gender and development analysis into sustainability assessments of community WSS services.

The MPA was conceived and developed to monitor sustainability in completed projects. However, the sustainability indicators can be turned around and used as the criteria for the design of demand-responsive services. Thus the MPA has the potential to bring gender- and poverty-sensitive participation into all phases of large investment projects, from design to iterative monitoring as implementation progresses. Further, although the MPA focuses on the drinking water and sanitation sector, the principles and approach of the methodology are applicable to other sectors with participatory services, such as agriculture, health, education, and energy.

Finally, one of the greatest challenges of working with participatory approaches in development studies has been how to deal with information not easily amenable to statistical analysis. Since the PLA initiative was intended to examine critical aspects of sustainability in large investments, it became essential to have a methodology that allowed quantitative as well as qualitative analysis. The approach used for statistical analysis in PLA Phase I has been tested with data from 88 communities in 18 projects. It produced some interesting and provocative findings, but it is open to further development and improvement. Hence the authors would appreciate comments on the methodology. They will welcome opportunities to share the MPA with new projects and programs and to adjust it for use in sectors related to drinking water supply and sanitation, such as health and hygiene and watershed development.

Acknowledgements

The *Metguide* is a joint effort of the global Steering Group of the Participatory Learning and Action (PLA) initiative of the Water and Sanitation Program (WSP). We would particularly like to acknowledge the contributions of our colleagues Rose Lidonde and Noma Musabayame in writing the sections on participatory tools, and the youngest member of the PLA team, Suzanne Reiff, for looking at the document with a fresh perspective.

Preparation of the *Metguide* has benefited greatly from inputs and support from many persons and organizations during the past two years. Only a few of them are mentioned in this document. The PLA initiative was born at a global meeting organized jointly by the WSP and the Gender Network (GENNET) of the Water Supply and Sanitation Collaborative Council (WSSCC) at IRC International Water and Sanitation Centre in The Hague in October 1997. We wish to acknowledge the contributions of our partner organizations the Canadian International Development Agency, the Swedish International Development Agency, the National Economic Development Authority of the Philippines, the United Nations Children's Fund (UNICEF), and CINARA from Latin America in conceptualizing the PLA objectives.

Special thanks are due to WSP's many funders, in particular the governments of Canada, the Netherlands, Norway, and Sweden, the "gender cart-pullers," and the United Nations Development Programme, whose generosity enabled us to undertake this challenge. Participants at a regional consultation in Bangalore, India, in February 1998 helped to develop the analytical framework of the

methodology elucidated in this *Metguide*.

We appreciate the support of the World Bank and IRC management in the preparation of the *Metguide*. Specifically, we are grateful to Vincent Gouarne, Sector Manager, Water and Sanitation Division, for taking a keen, supportive interest in the PLA initiative and its outcomes; Bruce Gross, our Team Leader, for his insight and strong moral support and for finding the resources to carry on the work; Philippe Dongier, Program Manager of the WSP, for his advice and pressure for rigor; and Jan Teun Visscher, Director of the IRC, for believing in and supporting the PLA vision. We could not have prepared and tested the methodology without the support of the WSP's Regional Team Leaders: Jean Doyen in Nairobi for East and Southern Africa, Jerry Silverman in Jakarta for East Asia and the Pacific, and Piers Cross in New Delhi for South Asia. We would also like to thank Jennifer Francis and Maria Lucia Borba from IRC and Indrawati Josodipoero and Karen Jonesy Jacob from WSP-EAP.

We would like to thank our peer reviewers Lant Pritchett, Principal Economist, the World Bank, Jakarta; Lee Travers, Principal Water and Sanitation Economist, TWUWS; Pam Hunte, Senior Anthropologist, SASSD; and Jon Lane, Water and Sanitation Consultant. Their patience, reflected in their detailed comments, constructive criticism, and assistance in addressing the emerging issues, motivated us to bring greater clarity to our work.

As the *Metguide* evolved it drew on a large group of international and national consultants, namely Lisa Price from Wageningen University, and the WSP team of consultants including Sharmila

Goswami, Poornima Vyasalu, A.J. James, Uday Mehta, and Anurag Rohatgi. Shalini Sinha's experience in editing, combined with her specialization in gender studies, good humor, common sense, and penetrating questions, kept both our thoughts and the text of the *Metguide* on track. Finally, Harminder Paul's secretarial assistance through evolving drafts is greatly appreciated.

Rekha Dayal
Nilanjana Mukherjee
Water and Sanitation Program

What began as a modest effort has gone beyond our expectations. We look forward to seeing the *Metguide* being used by others to help incorporate gender and poverty concerns into their operations. The PLA team and the authors hope the guidelines will be widely used and refined further during Phase II of the PLA initiative on the basis of feedback from users.

Christine van Wijk
IRC International Water and Sanitation Centre

Chapter I

Participatory Assessment of Sustainability

The Methodology for Participatory Assessments (MPA) of community water supply and sanitation services set out in this document has been developed by merging, and then expanding upon, the survey approach of the Minimum Evaluation Procedure of the World Health Organization and the participatory tools and methods developed in the Promotion of Women in Water and Environmental Sanitation (PROWWESS) project of the Water and Sanitation Program. This chapter describes the purpose and roots of the methodology and its incremental value in communities, support agencies, and policy-making bodies.

Quest for Sustainability

The worldwide search for factors that determine the sustainability of water and sanitation investments has led, in the last few years, to a nearly universal recognition of the importance of participatory and demand-responsive approaches. The debate is no longer whether these two factors contribute to sustainability. The crux of the matter now seems to be *whose demand and sustainability for whom?* Experience from successful projects and communities with sustained water and sanitation services suggests that services are more likely to be sustained when

both women and men, rich and poor, participate actively in establishing, managing, and maintaining the services.

The Participatory Learning and Action (PLA) initiative began to document this experience systematically through participatory assessments with stakeholders in 18 countries. In the process it developed and tested a methodology that included indicators sensitive to gender and poverty for measuring sustainability, demand, and participation. The methodology is called the Methodology for Participatory Assessments. Learning, for all stakeholders, is the key to every activity; the methodology enables all stakeholders to use the tools and indicators to learn how to enhance the sustainability of water supply and sanitation services, benefits, and investments.

The MPA addresses many concerns in developmental research today and makes an incremental contribution to the sector. It links the sustainability of services with gender-sensitive, poverty-targeted, demand-responsive approaches and reveals patterns of association between how well services are sustained and used and the extent to which institutions and policy makers support these approaches. Of particular value are the indicators that describe

1

What is DRA?

The demand-responsive approach (DRA) takes into account that different user groups (rich men, rich women, poor women and poor men) may want different kinds of service. DRA provides information and allows user choices to guide key investment decisions, thereby ensuring that services conform to what people want and are willing to pay for.



In exchange for making contributions (in cash or kind) for a satisfactory service, the stakeholders have a voice and choice in:

- ✦ Technology type
- ✦ Service level
- ✦ Service provider
- ✦ Management/financing systems
- ✦ Arrangements for sharing benefits and burdens
- ✦ Decisions on service adjustments and expansions

the desired kinds of institutional support, such as institutional systems, expertise, incentives, and organizational climate.

Historical Roots

The MPA builds on earlier works on participation, demand-responsiveness, gender, poverty, and sustainability. The Minimum Evaluation Procedure (MEP) published by the World Health Organization (1983) was the first set of procedures for assessing the sustained functioning and use of water supply and sanitation services that had global applicability and a structured approach. The MEP does not, however, examine local participation in operating and establishing services and is silent on organizational structures and procedures in the agencies. Poverty aspects are included but only

as a dimension of access. Gender aspects are not addressed at all. In addition, the MEP uses observations and surveys by outsiders as methods of data collection.

Though drawing on the MEP, the participatory assessment tools and methods developed by the Water and Sanitation Program for the PROWWESS project (Srinivasan 1993; Narayan 1993) were a distinct contrast. The PROWWESS tools help projects and communities to assess social, technical, and institutional aspects of water supply and sanitation services and include several gender aspects. The participatory evaluation guide helps to examine participation (but not demand); it is a collection of tools to assess various aspects of community-based water supply and sanitation programs in a qualitative manner.

This was the first systematic approach for participatory evaluations of water and sanitation projects. However, many program managers and policy makers prefer a procedure that, in addition to stimulating learning through the use of participatory methods, also generates quantitative information and allows comparisons of project performance and approaches within predictable time-frames and at a reasonable cost.

The global rural water supply and sanitation study of the Water and Sanitation Program (Katz and Sara 1997) investigated the relationship between demand-responsiveness and the sustainability of water systems. It found that projects that were more demand-responsive were more likely to be sustainable, but did not probe the gender dimensions of demand and participation.

The MPA mainstreams gender and poverty as part of the overall monitoring of sustainability in water supply and sanitation projects. Gender indicators are based on Kate Young's work on gender concepts (1993) and on the gender analysis frameworks developed by Catherine

2

Overholt and others (1984) and by Caroline Moser (1993). In its participatory tools, the MPA builds upon earlier participatory methodologies such as SARAR,¹ Participatory Rural Appraisal (PRA), and that developed for the Participatory Hygiene and Sanitation Transformation (PHAST) project. In doing so, it seeks to combine the strengths of MEP's structured approach and the open-ended, visual, and creative approaches drawn from these participatory toolkits.

What Is the MPA?

- It is a *comprehensive method* for social assessment.
- It recognizes the *importance of gender- and poverty-sensitive* approaches.
- It monitors *key indicators* of project sustainability and demand-responsiveness.
- It is a *learning process* for all stakeholders.
- It uses a set of *tested indicators*.
- It uses *participatory tools* at all levels.
- It allows for a *holistic analysis*, relating institutional and organizational factors to outcomes at the community level.
- It is *global*, that is, it can be applied in different settings and with different technologies.

- It can be used for *large investment* projects.
- It can be carried out within a *short time frame*, usually three to four months.
- It can be used in *all phases of the project cycle*.
- It can be *budgeted as part of regular investment costs* in human and organization resources development.
- Although developed for the water and sanitation sector, its core principles are *applicable across sectors*; thus the methodology can be adapted for use with other basic services.

What Is New about the MPA?

While drawing upon earlier work on participation, demand, and sustainability, the MPA:

- Adds indicators sensitive to gender and poverty.
- Provides for self-scoring by stakeholders.
- Includes statistical analysis of qualitative data from participatory methods.
- Links community, institutional, and policy levels, visualizing sustainability as a goal that must be pursued simultaneously at these three levels.
- Links sustainability with gender, poverty, participation, and demand-responsive approaches.

2

Why gender?

Gender is a specific parameter for socioeconomic analysis. Men and women have different roles and responsibilities in society. They may attach different values to services and the benefits to be derived from them. Consequently, their demand for and access to services and their economic behaviors differ.



What Can It Be Used For?

The MPA is suitable for a number of uses:

- Designing for sustainability
- Monitoring for sustainability
- Local capacity building
- Institutional and policy reform
- Gender and poverty mainstreaming.

¹Self-Esteem, Associative Strengths, Resourcefulness, Action-Planning, and Responsibility.

Thus far, it has been used for three purposes. It has helped to identify key factors associated with sustained and used services in 88 rural and small urban communities in Africa, Asia, and Latin America. It has also been used in an evaluation comparing various donor projects in Indonesia (Mukherjee 1999).

Who Can Use the MPA?

The MPA offers different things to different levels of users/stakeholders, with one common underlying principle. It is designed to enable self-assessment and analysis at each level; this permits stakeholders to take action at their level to enhance sustainability in combination with equity considerations. All stakeholders, from the community level upward, also have access to information generated by the user communities themselves, adding transparency to the entire service delivery process.

Communities

Women and men in the community can use the MPA to assess various dimensions of the sustainability of their services, such as physical functioning, financial adequacy, managerial effectiveness, and sustained access and use, as well as the participation practices that affect these outcomes. Participatory tools are available with self-scoring matrixes to enable them to assess their situation collectively, stimulate an analysis of causes, and identify possible actions to enhance sustainability, use, and equity. They can choose to monitor progress periodically and/or compare their service with those of other communities in the area, and understand in what ways others are doing better or worse. The methodology also highlights specific inequalities with regard to women or poor households.

Project staff

Project personnel who work with communities can participate in community-level assessments as observers, learners, and co-facilitators. These

assessments can replace conventional monitoring activities by project staff. What they learn from communities about what promotes or hinders sustainability at the ground level is likely to be the most valuable feedback possible for project managers and designers of new projects.

Project managers

Project managers can use the MPA to compare communities within and across projects, to identify why some communities do better than others at sustaining project-created infrastructure and its benefits, and/or highlight components in which the project is consistently better or weak. They can use the Stakeholders' Meet, a tool for institutional assessment, to identify and assess factors influencing project impact and sustainability at the community level. During the Meet, project staff, technical and social intermediaries, and community members jointly assess organizational systems and institutional capacity to promote sustainability through the

3

Who can use the MPA?

- ✦ Communities
 - To identify action for enhancing sustainability
 - To reduce gender and poverty inequalities
- ✦ Project staff
 - For community-level assessments from the users' perspective
- ✦ Project managers
 - To compare communities for sustainability and equity
 - To identify and assess institutional factors influencing sustainability
- ✦ Sector policy formulators
 - Planning for sustainability
- ✦ Project designers/donors
 - Designing for sustainability
 - Monitoring for sustainability

use of gender-sensitive, poverty-targeted, and demand-responsive approaches.

Sector policy formulators

The MPA provides a framework to link sustainability outcomes at the community level to institutional factors in sector agencies and to sector policies at the national level. The Policy Assessment Dialogue is a tool that brings these threads together. It presents results from the community and institutional levels to national policy makers, national project directors, and donor partners, and facilitates a joint assessment of existing policy support for sustainability in light of those results. This builds high-level consensus about the kinds of policy support available or needed to foster sustainability through the mainstreaming of gender-sensitive, poverty-targeted, and demand-responsive approaches. It thus sets the agenda for policy improvement.

Project designers or donors, for new projects

Designing for sustainability can be made tangible and verifiable through the use of the Sustainability Indicators and the Conceptual Framework developed for the MPA. They jointly constitute a route map for progress towards sustainability. Although the MPA has not yet been used for designing new projects, the potential for this use seems obvious; work has already begun in that regard. New project designers can draw on the MPA to identify strategic project interventions needed at the community, institutional, and policy levels and to enhance the achievement of sustainability and equity. They can adapt the participatory tools to measure sustainability for use in stakeholder consultations or as tools for planning and design within the same conceptual framework.

Methodology for Participatory Assessments

This chapter outlines the theoretical underpinnings of the Methodology for Participatory Assessments (MPA). It describes the features, the analytical framework, the indicators, the analysis of gender and poverty aspects as an integral part of monitoring sustainability and participation, and the learning function of the participatory methods and tools.

Core Features

The MPA examines the relationship between sustainability and the application of approaches that are demand-responsive, participatory, and gender- and poverty-sensitive.

- The methodology focuses on *institutional* and *organizational* factors as well as *community* factors. It treats the outcome at the community level as a product of elements that are locally specific and of elements that derive from institutional environments and sector policies that support the emergence and strengthening of the community-level factors.
- The analytical framework covers not only service performance and use as determinants of sustainability and equity, but

also *process indicators*, thus enabling a more holistic analysis.

- The assessments use participatory tools *at all levels*. One novelty of the MPA lies in the use of these tools with a range of stakeholders including policy makers and staff from local governments and service delivery agencies.
- Capacity building through *joint investigation and analysis* is an integral part of the MPA. Participants identify problems and solutions and are more likely to own the outcomes. *Self-scoring* allows for instant feedback,

4

Assumptions underlying the MPA

When sector institutions and policies enable all stakeholders in communities (rich and poor, women and men) to initiate a sustainable service (that is, to take informed decisions about the type of service and management and financing systems they want and can sustain) and help them to build necessary capacities (to maintain and manage the service so that burdens and benefits are equitably shared), then the communities are likely to better sustain and use the service.

which in turn encourages action towards finding a solution.

- Besides its use for community and agency self-assessment, the MPA has been used for the *quantitative analysis of qualitative data* gathered through participatory methods.

Three-Step Participatory Assessments



The application of the methodology uses a three-level systems approach. This approach focuses on the community-level process as well as on the institutional and policy factors that support the use of participatory, gender- and poverty-sensitive, and demand-responsive approaches. The design of the assessments links outcomes at the community level to institutional arrangements, as well as to national sector policies. The quest for sustainability must be pursued simultaneously at all three levels, in a mutually reinforcing way. An evaluation of how water and sanitation projects are implemented with men and women in user communities is the first obvious level. Institutional factors that shape implementation strategies and approaches constitute the second level. The policy environment in the water and sanitation sector is the third level.

Analytical Framework

The design of the assessments is based on an analytical framework (see Fig. 1 on the following page) reflecting the following assumptions:¹

- A. The degree to which a community sustains an installed water supply and sanitation (WSS) service is positively related to
- B. The degree to which its population—male and female, rich and poor—uses the service,
- C. The degree to which the service meets the

- D. The way in which burdens and benefits of the service and of the participation in its sustenance are divided between men and women, rich and poor, and
- E. The degree of gender- and poverty-sensitive participation in the establishment and management of the service.

The framework is divided conceptually into two time frames: the situation and processes at the time of establishment of the services and the current situation. Assessments are of services that have been functional for some time (arrows from right to left in Fig. 1) or forward looking (arrows from left to right). The relationships between variables A and B are assessed with men and women in the communities and constitute the analysis of the current situation. Variables C, D and E are also assessed with the communities but their indicators and sub-indicators span the two time frames. The division between the two time frames indicated by the dotted line in Fig. 1 is hazy and issues are examined across the time line, particularly for variables C, D and E.

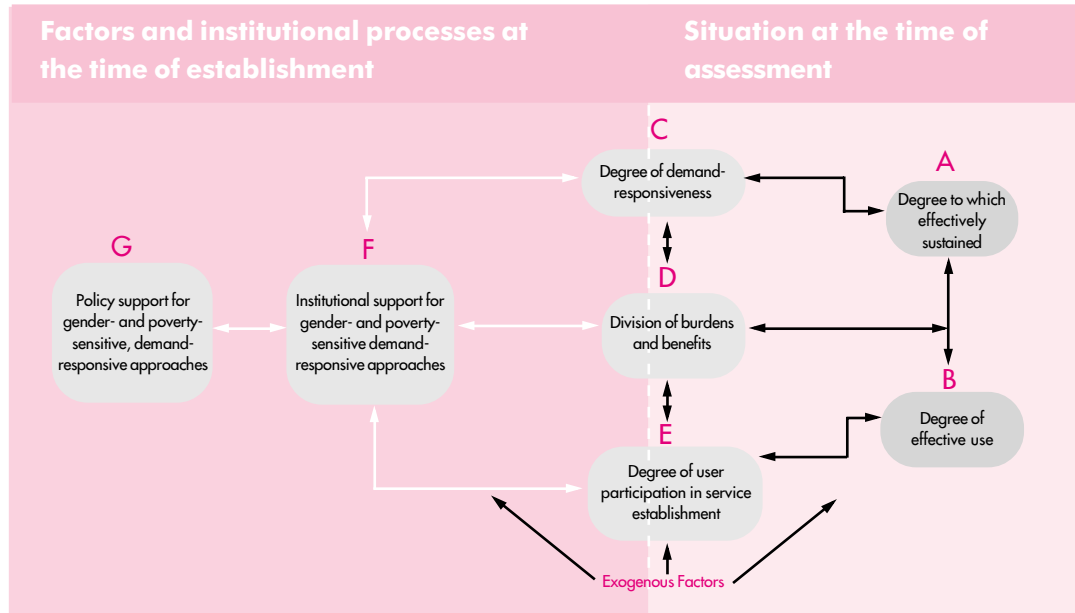
The analytical framework also includes variables F and G, which are assessed by analyzing the history of the service establishment and the nature of the enabling institutional and policy environment. The underlying assumption is that the degree of service sustainability is positively associated with:

- F. Institutional support for demand-responsive and gender- and poverty-sensitive and participatory approaches, and
- G. The presence and application of demand-responsive and gender- and poverty-sensitive policies in the project and the sector.

¹The analytical framework for the MPA evolved in consultation with a wide range of subject experts and practitioners and was field-tested in two locations. The final set of variables, indicators, and sub-indicators has been used in 18 locations globally.

Figure 1

MPA: Analytical framework



There are many ‘exogenous factors’ that may influence the relationships among the variables as depicted in the framework (such as the type and complexity of the technology, age of the system, variations in drought conditions and availability of alternative sources, local mobility and access to spare parts and other resources outside the community, communications, leadership situations, and gender and poverty conditions specific to the location). Capturing these through qualitative data recorded by the assessment team as well as the data collected in the Community Data Sheet is an important element of the methodology.

Sustainability Indicators

The MPA uses gender- and poverty-sensitive indicators clustered by variables based on the questions below.

Sustainability is measured by combining the group of indicators for an effectively sustained service with those for effective use, as it was hypothesized that the mere presence of a

technically sound system would not ensure long-term sustainability.

The division of burdens and benefits is measured using data disaggregated by gender and poverty levels in order to capture the differences in access and in the division of work and benefits during service establishment, delivery, and management. The E set of indicators of participation, when disaggregated by gender and poverty, also helps to measure levels of good

5

Are you looking for answers to some of these questions?

- ✓ Are the burdens and benefits equitably divided?
- ✓ Is there institutional support for sensitivity to gender and poverty?
- ✓ Does policy support exist?
- ✓ Is it effectively sustained?
- ✓ Is there effective use?
- ✓ Is it responsive to demand?
- ✓ Is there participation in service establishment and operation?

Table 1

Indicators for water supply services

Variables	Indicators and sub-indicators
A. Effectively sustained	<p>SYSTEM QUALITY</p> <ul style="list-style-type: none"> • Construction matches design, quality of materials and workmanship <p>EFFECTIVE FUNCTIONING</p> <ul style="list-style-type: none"> • Service operation in terms of water quantity, quality, reliability, and predictability <p>EFFECTIVE FINANCING</p> <ul style="list-style-type: none"> • Coverage of investment and/or recurrent costs • Universality and timeliness of payments <p>EFFECTIVE MANAGEMENT</p> <ul style="list-style-type: none"> • Level and timeliness of repairs • Budgeting and keeping accounts
B. Effective use	<p>HYGIENIC AND ENVIRONMENTAL USE</p> <ul style="list-style-type: none"> • Proportion and nature of population using the service • Degree of improvement in water use habits* • Presence and state of waste water disposal provisions for R/P
C. Demand-responsive service	<p>USER DEMANDS</p> <ul style="list-style-type: none"> • Type and proportion of contribution at the time of establishment of service, by M/W, R/P <p>PROJECT RESPONSIVENESS TO DEMAND</p> <ul style="list-style-type: none"> • User voice and choice in planning and design, by M/W, R/P • Satisfaction of user demand for M/W, R/P • Ratio of user-perceived costs-benefits for M/W, R/P
D. Division of burdens and benefits	<p>GENDER AND POVERTY FOCUS DURING ESTABLISHMENT AND OPERATIONS</p> <ul style="list-style-type: none"> • Nature of community payments at the time of establishment of the service • Cost sharing/contribution sharing between and within households for construction and O&M • Division of skilled/unskilled and paid/unpaid labor between M/W, R/P in establishment and management of the service • Division of functions and decision-making between M/W, R/P
E. Participation in service establishment and operation	<p>PARTICIPATION DURING ESTABLISHMENT AND OPERATIONS</p> <ul style="list-style-type: none"> • Degree of control in construction schedules and quality of works by M/W • Composition, status, and rules and tools of control of managing committee, as present and known to M/W, R/P • Responsibilities for maintenance and management • Type of skills created and practiced among M/W, R/P • Transparency in accounts (M/W, R/P)
F. Institutional support for gender- and poverty-sensitive, demand-responsive participation	<p>ENABLING ORGANIZATIONAL SYSTEM</p> <ul style="list-style-type: none"> • Indicative strategy as reflected in service objectives, implementation strategies, and project performance criteria • Sex and class disaggregated planning and monitoring systems in operation • Expertise as reflected in the type of agencies involved, field teams, and team approach <p>ENABLING ORGANIZATIONAL CLIMATE</p> <ul style="list-style-type: none"> • Capacity building, managerial support, and staff performance incentives
G. Policy support for gender- and poverty-sensitive, demand-responsive participation	<p>SUPPORTIVE SECTOR POLICY AND STRATEGY</p> <ul style="list-style-type: none"> • National sector policy for water and sanitation present with sustainability and equity as explicit goals • Degree to which national sector strategies are present to guide the achievement of the policy goals and incorporate participation, demand-responsiveness and gender and poverty perspectives

M/W: men and women. R/P: rich and poor.

* 'Degree of improvement in water use habits' includes always using protected water sources for drinking and food preparation.

governance and community empowerment. The F and G indicators are measured in the context of establishing the service, because institutional policy support for approaches likely to create sustained services is critical at the time services are established. The seven variables with their primary indicators and sub-indicators, *for water supply only*, are listed in Table 1.

The indicators and sub-indicators for sanitation programs differ and are given in Table 2 below. This list applies only to community-managed sanitation programs and services. For programs that link directly with individual households, partially different indicators and scales will be required.²

Table 2
Indicators for community-managed sanitation programs and services

Variables	Indicators and sub-indicators
A. Effectively sustained	<p>FUNCTIONING PROGRAM</p> <ul style="list-style-type: none"> • Coverage levels for safe excreta disposal, drainage, and solid waste disposal • Upkeep of coverage levels • Level of quality of installation and upkeep <p>EFFECTIVE FINANCING</p> <ul style="list-style-type: none"> • Degree of autonomous financing of household facilities and community services • Coverage of costs • Degree and timeliness of payment <p>EFFECTIVE MANAGEMENT</p> <ul style="list-style-type: none"> • Level and timeliness of repairs of community systems • Budgeting and accounting for service to M/W, R/P
B. Effective use	<p>SAFE AND ENVIRONMENTALLY SOUND USE</p> <ul style="list-style-type: none"> • Degree and nature of access (R/P) • Change in disposal practices by and within households (M/W/C/R/P) • Environment free from human waste risks
C. Demand-responsive service	<p>USER DEMANDS</p> <ul style="list-style-type: none"> • User contributions during implementation <p>PROJECT RESPONSIVENESS TO DEMAND</p> <ul style="list-style-type: none"> • User voice and choice in planning and design • Satisfaction of user demand • Ratio of user-perceived costs/benefits for M/W, R/P
D. Division of burdens and benefits	<p>GENDER AND POVERTY FOCUS DURING ESTABLISHMENT AND OPERATIONS</p> <ul style="list-style-type: none"> • Nature of payments • Cost sharing in community and households • Division of labor between M/W in R/P households • Division of functions and decision-making between M/W, R/P

M/W/C/R/P = men, women, children, rich, poor
(Domains E, F, and G: same as for water services)

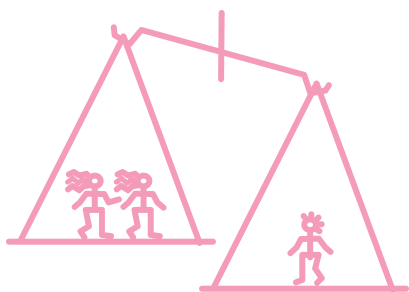
² It should be noted that due to the small number of water projects/programs with a sanitation component included in the PLA's Phase I assessments, for which this methodology was developed, the data and the underlying indicators were not analyzed statistically. Only frequencies were recorded and analyzed. Application in a larger sample for sanitation may show that some of these indicators and clusters are not statistically significant.

Mainstreaming Gender and Poverty Aspects

A major incremental contribution of the MPA is that it mainstreams gender and poverty analysis as part of the overall monitoring of sustainability in WSS projects. The poverty indicators assess how poverty- and gender-conscious the services are, by community and by project. The participatory tools and analysis of scoring allow communities, project agencies, program managers, and policy makers to learn how the following conditions of the service are met for poor members of a community, especially women. The lists below summarize how these aspects are included in the inventory and analysis of conditions and practices.

Gender indicators

- *Access to information:* Do men and women have equal access to information about their WSS service?
- *Decision-making at planning stage:* Do men and women both make decisions during project planning and design?
- *Construction and maintenance:* How are the tasks of building and operating the WSS service distributed between men and women? Who does the skilled and unskilled work?
- *Training and payment:* Do men and women have equal access to training and to paid work on the projects, as well as to other benefits they may perceive?
- *Productive use:* Are both men and women able to use water for small-scale economic



and reproductive (domestic) uses? What are the implications for water availability and distribution of benefits?

- *Managerial decision-making:* Do men and women both have managerial control over the operation of the WSS service?
- *Benefits:* What are the practical and strategic benefits of the service and of the participation process for women and men, as perceived by either group? How do perceived benefits relate to perceived costs?
- *Policy and strategy:* What gender policies exist in the sector and in sector agencies? Are they implemented in staffing and staff cooperation, procedures and training and supported by management?

Poverty indicators

- *Access to service:* Who has WSS facilities and who does not?



- *Differential service levels for differential groups:* To what extent do different groups have different service levels?
- *Functionality:* When water supply or sanitation is deficient, do the poor suffer more?
- *Contributions to investment and recurrent costs:* Who has contributed to the investment costs, and in what form (in cash or kind)?
- *Differential payments:* Do those with greater access, reliability, and water quantity also contribute more for this better service?
- *User satisfaction:* How satisfied are rich and poor users with the technical aspects of the service?
- *Demands met:* Water and sanitation projects provide water for domestic and productive use. But they also provide status, a better position for women, and better

control for people over their local services and conditions. What demands are met for rich and poor?

- *Perceived cost-benefit ratios*: What value do the poor and the rich place on these benefits in proportion to their own contributions in cash, kind, and time?
- *Representation of the poor in decision-making*: In what planning decisions did the poor have a say? Are they represented in the local management organization?

Learning Together: Participatory Tools and Techniques

While there is considerable experience in using participatory tools at the community level, the MPA uses a participatory methodology at all levels, including policy-making.

Participatory methods were developed almost three decades ago, but technical and social surveys by outsiders are still the most common form of assessment for community-managed WSS services. Surveys provide the desired information but are expensive and extractive in nature and do not create ownership or build human capabilities. Often, they collect data from individual household heads, often without distinguishing between male and female responses. The inability of surveys to deal with these aspects reduces their cost-effectiveness in the longer term.

Participatory activities, on the other hand, not only provide data for outsiders but also are an established learning tool for various interest groups within communities and agencies. The tools and the resulting data give the participants mutual insight into their respective situations, which is a first condition for action if action is needed. Open discussion in focus groups increases the chance of obtaining credible and relevant information because biased answers tend to be checked by group dynamics. When the group scores the findings together, it can cross-check for correctness, completeness, and predictive value through a transparent process. The groups must, however, be sufficiently homogeneous and the discussion moderated to ensure that all have an equal voice; otherwise the elite and extroverted will dominate.

Participatory tools and techniques used with *all* stakeholders are a first step in the experiential learning cycle of projects and services. In this cycle, the different groups in a community assess the situation, identify areas for change, and take collective action. They then repeat the analysis as needed to plan further, to do things better, or take up a new activity as a follow-up to the first. Thus, assessment and planning are part of a spiral process to do better, to do more, or both. Through participatory evaluation, the communities themselves generate and use knowledge to solve their own problems.

Table 3

Differences between survey methods and participatory activities

Technical and social survey	Participatory activities
Evaluators <ul style="list-style-type: none"> • analyze information • make generalizations • recommend action 	Stakeholders <ul style="list-style-type: none"> • analyze information • internalize information • apply lessons

6

Why participatory?

- ✎ Participatory activities are a learning process for the communities and institutions.
- ✎ Open discussions in focus groups provide credible and relevant information.
- ✎ Participatory methods yield more information in a short time.
- ✎ The process adds ownership to findings and commitment to action.



The MPA combines the use of participatory assessments at community, agency, and policy levels with more conventional research methods by scoring the outcomes of the participatory tools sessions into ordinal scales. This makes it possible to do both qualitative and quantitative analysis of the data. Details on how to use the methodology to conduct assessments in the field are explained in Chapter III.

Chapter III

Guidelines for Conducting the Assessments

This chapter outlines the actual procedure of the Methodology for Participatory Assessments (MPA). It includes steps for selecting communities, establishing the partnership for the assessment, and data gathering. Two important elements of the MPA are covered. The first is the process of data gathering beginning at the community level, followed by the institutional level (Stakeholders' Meet), and concluding with the policy level (Policy Dialogue). The second is the self-scoring, which is the use of participatory tools for learning in partnership with the users and institutions involved in service delivery.

Selecting and Training the Assessment Team

The assessment team should be multi-disciplinary, ensuring a mix of professional skills and expertise.¹ Ideally, the team should consist of members from the selected community, representatives from the project agency(ies), including field extension staff, a sociologist or

participatory development specialist with gender training and orientation skills, and a water or sanitary engineer familiar with the MPA.² If statistical analysis is intended, a development economist, sociologist, or statistician familiar with non-parametric statistics and participatory methods will also be needed. A local illustrator can help to prepare or adapt the participatory tools. Expertise and experience with participatory methods and gender analysis are a must for everyone on the team.

The community members should represent all the existing economic classes, not just the elite. A mix of respected female and male community members and project or government representatives can pave the way for the assessments in the communities.

The training can be divided into two phases:

- In the planning phase, a team of regional trainers,³ well versed in and trained to use the methodology, helps to plan the

¹The establishment of a Gender Assessment Committee at the national/project level, comprising representatives from sector line ministries and partner agencies may be useful. The role of the committee would include defining the scope of the assessment, assuring quality, conducting peer reviews, and selecting the assessment team. The committee will not conduct the assessment but will supervise it.

²It is recommended that community members participating in the assessment should be paid for their time as the others in the team are.

³An objective of Phase II of the PLA, planned to begin in mid-2000, is to have a team of trained trainers, with hands-on experience in the application of the MPA, in each Water and Sanitation Program region.

Key elements of the training process

The training helps the team to assimilate the methodology and its application. The data collection and analysis is a learner-centered, participatory process. The aim is not to extract information but to generate discussions to facilitate community analysis and action planning. Elements of the training are:

- ✄ Conceptual understanding of the framework.
- ✄ Objectives of the assessment, implementation, and/or monitoring process.
- ✄ How to deal with the expectations of the participants in relation to the objectives and/or other issues.
- ✄ Facilitation process and logistic arrangements.
- ✄ Definition of terms and concepts to ensure consensus on issues of interpretation and perception.
- ✄ Review of the indicators, means of verification, coding, scores, and data entry.
- ✄ Emphasis that the team will be expected to collect disaggregated data on gender, poverty, and demand-responsive approaches and analyze how these factors affect project performance and sustainability.
- ✄ Team involvement in development and adaptation of the assessment materials.
- ✄ Hands-on experience with participatory tools and scoring matrix. Thorough review of the purpose and application of each tool or research instrument, how the materials for administering the tools are developed (e.g., pocket voting), and the information expected to emerge from each tool.
- ✄ Selection of communities for pretesting and preparation for and implementation of field-testing.
- ✄ Feedback session and modification of the assessment tools.
- ✄ Definition of the scope of the study and sampling criteria.
- ✄ Outline for report writing agreed upon.



Key outputs of the training

- ✄ Conceptual understanding of the assessment framework and issues.
- ✄ Consensus on objectives of the assessment, implementation and monitoring and evaluation aspects, and gender and poverty aspects.
- ✄ Scope of study including analysis at three levels (and ensuing qualitative and quantitative analysis).
- ✄ Sampling criteria defined.
- ✄ A skilled assessment team.
- ✄ Modified and adapted assessment tools/research instruments, including field books.
- ✄ Defined roles and responsibilities, including data entry and report writing.
- ✄ Action plan for the fieldwork, including logistics.

8

Assessment team

The following is suggested as an ideal combination of skills for the field study assessment team. Gender balance should also be ensured.

- ✦ Members of the community and the local WSS management organization (male and female)
- ✦ Field staff
- ✦ Project officials
- ✦ Sociologist/participatory development specialist with gender training and orientation skills
- ✦ Sanitary or water supply engineer.



assessments and prepare for the training of assessment team members. During this phase, the team of trainers and project managers defines what the training will entail. For example: How much training may be needed on participatory methods, gender, and gender analysis?

- ✦ During the training, the assessment staff become familiar with the concepts and tools of the methodology and gain experience and confidence in its application. It is important for the team members to have a hands-on

or role-play exercise after covering each tool, demonstrating how they will apply it in the field. The training can be structured to focus on the three levels of the assessment: community, stakeholder, and policy levels. Training further encompasses preparing the field books, practicing gender and poverty analysis, entering data, and scoring. It also includes practice on how to analyze outcomes of individual sessions and how to summarize and analyze the outcomes of a community assessment as a whole. At the end of the training, trainers and the assessment team do a first hands-on experience to practice the community process in the field.

The duration of the training depends on the skills and experience of the staff, but generally lasts about two weeks.

9

The MPA is a process-oriented methodology. It requires a different approach when working with the community. Team members must recognize that the community has its own knowledge and creativity and that gender relations affect participation, control, and benefits. Hence, the team must have extensive experience in the use of the participatory tools and activities and know how to conduct a gender analysis.



If the team has had no prior experience in participatory approaches and gender issues, the training should be lengthened so they can develop skills in these aspects.

Criteria for Community Selection

The criteria for selecting communities for the assessment are the following:

- ✦ When used as a self-evaluation tool, the methodology helps participants to assess services that are operating in one form or another. Thus the water and sanitation system should have been established and

functioning for a sufficiently long period of time.⁴

- The service should have some form of decentralized management, that is, it should not be exclusively managed by an external agency.
- The project organization and community should be interested in the assessment and willing to participate.

The assessments are usually carried out in a sample of communities. In order to define the sample, each project defines its range of environmental and social conditions, groups them in zones, and then selects communities that sufficiently represent these zones in numbers proportional to their presence in the program. Data that illustrate the representativeness of the assessment communities are also collected and reported as part of the assessments.

The size of the community sample will depend on the size of the project and the conditions. The aim is to involve those communities that provide a good cross-section of the technical, social, economic, cultural, political,

administrative, and environmental conditions in the project area without a bias in selection. Low-income communities should be well represented. When the variation in conditions is large and resources limited, it is sometimes necessary to choose the zones representing the two extremes and an intermediate situation and draw the community sample from these.

The sample size and rigor of sampling procedures will also vary according to the purpose of the MPA: for training purposes, as a tool for planning, monitoring, or evaluation, or for case studies. Sample size and sampling procedures will also depend on whether statistical analysis is required. When such analysis is required, expanding the sample to include all the communities that originally completed the establishment of service will enhance the statistical value of the analysis. In certain cases, however, working with a large sample of communities may mean working with communities whose systems are seriously out of order and helping them to identify what factors influenced this situation, without resources available to assist them in remedying the situation.

10

Factors to consider in community selection and data gathering

- *Environmental and technical conditions:* type of water sources (ground and surface water), availability and quality of fresh water, water resources, developments in water and land use, and WSS technologies used.
- *Demographic conditions and developments:* population size, density, growth, and migration.
- *Economic conditions:* economic base (e.g., subsistence, cash crop, or industrial and services economy), communications (e.g., near major cities, well-connected, or isolated), character of the settlement (e.g., rural village, small market town, or low-income urban), and level of economic growth.
- *Socio-cultural conditions:* religious, caste, and ethnic composition, literacy levels by sex, heterogeneous or homogeneous society, seclusion of women, and so forth.
- *Political and administrative conditions:* decentralization and devolution, and types and legal status of water and sanitation management organizations.



⁴ This criterion is valid only if the methodology is being used for sustainability monitoring; it is obviously not applicable in the design of projects for sustainability.

Information Gathering and Analysis

After determining the community sample, the assessment team approaches the selected communities to gauge their interest and willingness to participate in the assessments. This exercise should be repeated until the required number of interested and willing communities is found. Several refusals may make the sample less representative but voluntary participation is essential.

Together with the local authorities, the team collects the general data on the community and the service and records them on the Community Data Sheets (see page 58). During the overall analysis, these data make it possible to assess whether a particular external or system-related factor, rather than community factors, explains the linkages found. Examples of such factors are the age of the systems (do newer systems perform better than older ones, irrespective of responsiveness to demand, gender, and class?) and poverty (are services better sustained in richer communities than in poorer, irrespective of other factors?). Information gathering takes place at three levels: community, institution, and policy.

Participatory assessment activities with the community are:

- *Observation of physical conditions*, together with a representative group from the community during a Transect Walk. These observations are linked with key questions to individuals living near the works who may have direct knowledge of the service, e.g., maintenance, repair, and use. Both female and male community representatives should take part in the review visit and discussions of the technical service works!
- *Participatory activities with selected tools*, including *focus group discussions with key*

groups in the community (male and female, rich and poor, users and non-users). These activities use a specially designed sequence of participatory exercises diagramming local conditions, practices, and preferences.

- *Open interviews with key respondents*, male and female members of the water committees, the operator, and/or other persons involved in operation and maintenance.
- *Review of written records*, e.g., logbooks and minutes of water committee meetings and general assemblies.

Information gathering at the implementing agency level takes place by means of:

- *Stakeholders' Meet* (with all the stakeholders) using a range of participatory exercises.
- *Review of project documents*.

Information gathering at the policy level incorporates:

- Policy-level assessment with key officials at the policy level, national directors of assessed projects, and representatives of external support agencies.

Representative Focus Groups

The assessments rely on participatory initiatives with focus groups rather than on survey questionnaires. Therefore, adequate representation of the various sections of the community is critical. To ensure a good representation, purposive (or stratified) sampling through Social Mapping is proposed. The procedure for this is as follows:

Small communities

During the first day, the community members assist the assessment team in a general assembly to draw a social map of their settlement. This social map

consists of a bird's-eye view (not to scale) of the local roads, paths, compounds or houses, and facilities. Then the people mark the compounds or houses of poor, rich, and middle-class families using colored powder (when drawing on sand), crayon, paint (when drawing on paper), colored pins, or some other local material. The definitions of the three categories are relative and based on the people's perceptions of economic status. (For the definition of these categories, see Appendix A, Wealth Classification.) To arrive at two major categories—'rich' and 'poor'—the following procedure is used:

1. If all three economic categories have approximately equal proportions, one rich and one poor neighborhood are chosen at random.
2. If the intermediate and poor categories are of approximately equal proportions and there are only a few rich families (less than 10%) relatively far from the intermediate level, focus group sessions involve randomly chosen intermediate and poor neighborhoods. The team also discusses with both groups in what ways the few rich families differ and adds this as qualitative information to the data. If the rich families differ only marginally in their characteristics from the intermediate group, the two groups should be taken together.
3. If there are only a few (less than 10%) poor households, focus group discussions involve randomly chosen intermediate and better-off groups, but qualitative data are added on how the contributions and benefits differ for the really poor households. This is done by either interviewing them separately or (if socio-culturally possible) inviting them to take part in the discussions of the randomly chosen intermediate group and indicate how their situation differs.

The position of single-headed households needs special attention in defining and classifying those

who are poor and better off. A high percentage of female-headed households has been known to have both positive and negative effects on gender burdens and benefits in water supply services. It can be positive in that access to decisions and new maintenance and management roles has sometimes been easier, and these women sometimes have a good income and control the income from their own enterprise. It can be negative in that many other female-headed households are very poor and, like old couples, may be less able than other poor families to contribute labor in addition to, or instead of, cash payments.

Large communities

In large communities a social mapping of the whole community is not possible. Here the procedure is to divide the overall community, with the help of the local authorities, into poor, middle-level, and rich localities (as defined by the community leaders, who either use an existing map or draw a map not based on individual households but on community sections). Again the definition of poor, middle-level, and rich is their own. The team assigns numbers to each type of locality, puts the numbers of each type on folded pieces of paper in a box, and draws three times: one rich, one poor, and one middle-level locality where the fieldwork is done. In these three localities the social mapping then takes place as above.

In both cases special care is needed to ensure that the selected areas include non-users. If non-users live in one specific area not included in the sample, the team visits and conducts a participatory review with this area separately.

Visualization and Self-Scoring

The assessments use open-ended and visual methods to bring local situations and practices into focus. These methods do not require literacy,

and so allow those with lower or no literacy—often women, the poor, and older people—to participate. Since the outcomes are visible to all, they generate transparency, discussion, and the emergence of one or two consensus viewpoints. On the basis of these agreed viewpoints, the groups of women and men are asked to identify where their community belongs on a ladder of scores (see Appendix B, Scoring Matrixes) for the particular indicator being measured. Agency personnel and policy formulators follow the same process of joint scoring on the matrixes at the institution and policy levels.

Self-scoring by stakeholders at every level is a significant departure from conventional assessment methods. It is carried out in three steps:

1. Men and women in project communities, agency personnel in sector institutions, or policy formulators at the national level use participatory tools to assess aspects of their respective services, institutions, or policies. They produce a visualized summary of their scores, such as marks along a rope, number of pebbles or beans in the cells of a scoring matrix, number of voting cards put in the pockets of a pocket voting matrix, and so forth.
2. The group uses these outcomes to reach

11

The advantages of self-scoring

- ✦ It minimizes biases of ‘desirable’ answers by individual respondents.
- ✦ It eliminates biases due to coding by researchers.
- ✦ The process of arriving at a consensus about the score allows conflicting views to surface and be resolved and hitherto unexpressed information to be revealed. The final scores are only those that are confirmed by everyone who participated.
- ✦ By its very nature, the process empowers groups of stakeholders to analyze and improve their situation.



consensus on their score on the ordinal scale associated with the assessed aspect.⁵

3. The group analyzes the data.

An example of a ladder of scores for a community-level assessment is given below.

Getting the Full Benefit

Experience with the use of the MPA so far has given rise to a few cautions:

Example of a ladder of scores for community-level assessments

0	No women in management functions at all, or only in name.
1	Women are members of the lower-level management organization but do not regularly attend meetings.
2	Women members take part in meetings of lower-level management organizations, but not in decision-making.
3	Women members attend meetings of lower-level management organizations and take decisions together with men.
4	Both women and men participate in meetings of higher-level management organizations and take decisions jointly.

⁵For statistical analysis, the individual scores are also recorded.

- If the participatory approach is converted into a conventional survey, the communities, practitioners, and management lose the learning and the capacity building effects of the methodology.
 - Assessment teams should avoid using participatory methods in an extractive manner, for example, not analyzing or sharing the findings with participants or sharing the overall assessment outcomes only with local leaders or the elite.
 - Although gender and poverty aspects are built into the analytical framework and indicators of the MPA, a conscious effort to highlight these issues at every stage is essential. A team loses this perspective when it does not help participants to analyze outcomes on gender and discuss the implications, or involves women and poor individuals in the assessment but analyzes and discusses the overall findings in a meeting with only male leaders.
 - Careful selection of the assessment team and hands-on training are critical for success. The hands-on training prepares the team to understand the different angles of the MPA and to practice its use, analysis, and recording in a community. Prior experience in participatory research and gender analysis is essential for the team.
 - Boxes and scales alone cannot catch the richness of community conditions, achievements, and problems. In order to elicit the full picture, it is essential to note down interesting information during the participatory sessions and inquire into other local factors that may play a role. The assessment teams are advised to take copious notes and to include sections for note taking in field books and scoring matrixes.
- Unlike conventional survey research, the assessments combine data gathering with analysis on the spot by the participating groups at every level of assessment. The assessment team only facilitates the analysis, along the lines of the Analytical Framework described in Chapter II. The actual process of data analysis is described in the following chapter.

Chapter IV

Data Analysis

This chapter discusses how the data collected through the participatory methods (described in the previous chapter) can be analyzed. It describes suggested types of analysis at three levels of assessment: the community level, institutional level, and the policy level. These are the levels and types of analysis that will be used by most project personnel, sector agencies, and policy formulators. The chapter concludes with a brief look at possibilities for statistical analysis.

Community-level Analysis

During a community-level analysis, men and women in project communities assess various aspects of their services using participatory tools and produce a visual analysis of the data. Participatory assessment uses self-scoring at each level, so that each participatory exercise results in a picture, diagram, or map of information for all participants to see and use to draw conclusions.

Analysis of outcome per tool

The most basic analysis is at the level of every tool. The outcome, such as a social map, a series of smiling faces, a drawing, a diagram, or pictures with voting cards of women and men,

is displayed in a way that all can see, often on the ground.

The facilitators ask probing questions to help the group to draw its conclusions. For example: What does the picture say? Does it reflect the real situation? Are there other factors or situations that are not in the picture? What can we learn from it? Does it show something specific about gender and class differences? Sometimes the facilitators can help the group to focus better on gender and class differences by drawing up simple two-by-two tables, (see Example 1 page 23), and having the group complete them from the data generated. This itself can be a learning process for the community and may lead to collective, corrective action.

Analysis of relative performance

By single factor: To help the community groups compare their situation with situations in other communities, the relevant Scoring Matrix (see Appendix B) is presented to the group in the form of a scale with descriptions for each score. The facilitators should write these beforehand on large sheets of paper using large letters. Based on the outcome of the exercise, which should be presented graphically, and the related

Example 1

Gender analysis of activities profile



Purpose

To visualize the division of skilled and unskilled work between women and men and rich and poor in constructing and maintaining the WSS facilities.

The activity is preferably done with several female and male focus groups in the poor and well-off parts of the community. Alternatively it is done with the full local water and sanitation committee and other community leaders, both female and male. However, this limits the information and analysis to a smaller group.

Process

Through discussion, the group determines which members of the community perform which jobs for the water supply or sanitation program, such as hand pump caretaker, tap attendant, hygiene promoter, treasurer, secretary, chairperson or member of the water committee, water system administrator, operator, or latrine mason.





The facilitator then draws a matrix on the ground in the soil, with three rows and three columns. One column is labeled "women" and the other "men." One row is labeled "unskilled, low-status work," and the other "skilled, high-status work."



It is also possible to use cards depicting the labels or pictures for each category placed on a large cloth on the ground.

Through discussion, the participants divide the identified local jobs into work that is mainly physical and has a low status and work that is skilled and has a high status.

The team or a participant enters the job names or pictures in the unskilled/low status and skilled/high status categories.

Using colored slips, beans, or other materials, the participants then mark the number of women and men who carry out the respective functions in the appropriate boxes (see box below).

	Men	Women
Skilled work	 	
Unskilled work		

 Rich  Poor

Analysis

The participants review who does the skilled work and who does the unskilled work and what the gender implications are. For example, do women mainly do unskilled work while men do skilled work? They reflect on the amount of time and labor involved, on the value of the work for the community, and the implications for the persons involved and their families.

Note: For skilled work, such as operator, it is important to check who carries out this work; is it the operator himself/herself who does the work or, for example, do some of his/her relatives help when the operator is absent?

The same exercise (separately or in a combined table) may be done for paid and unpaid labor and for jobs without and with training.

discussion, the group must agree on the score from the matrix that best matches that outcome. This may require a considerable amount of time. The facilitators record the scores given according to the type of group (men, women, rich, or poor).

At this point the participants may decide to analyze each factor immediately or to do so later in combination with other factors. When the factor is analyzed, the participants may discuss their score in relation to higher scores and begin to consider changes that may increase sustainability, use, and/or equity.

By aggregation: As shown in Table 1 (see page 9), sustainability and effective use and the factors affecting them are measured through a set of indicators and sub-indicators. The facilitators help community groups add up scores for each sub-indicator to arrive at aggregate indicator scores. For example, scores for the indicator Effective Financing are derived by aggregating the scores achieved for Coverage of Investment and/or Recurrent Costs and Universality and Timeliness of Payments (see Example 2).

The facilitators then present the results of

aggregation and the maximum possible scores to the group in a visual format. This could entail a simple bar diagram (see Example 2), a pie chart in which the whole pie represents the maximum possible score, or any other visual format that is easily understood by the group. The diagram is drawn on paper or created on the floor with different lengths of rope, pieces of paper or cloth, or other materials depending on what is available locally and what the group can understand easily. Once the group grasps the idea, repetition of the process is easy. Groups have even come up with better alternatives to express the analysis visually.

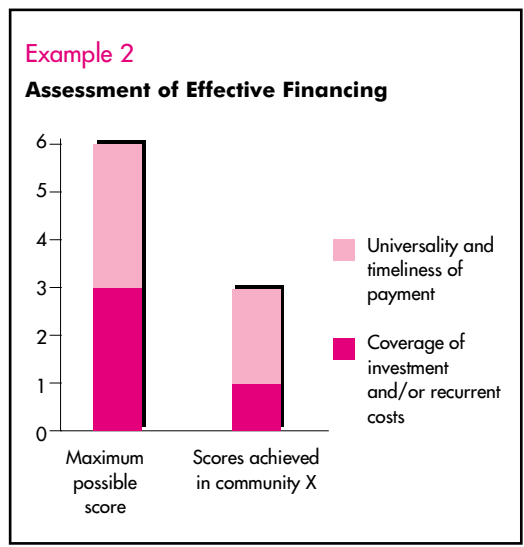
The facilitators then encourage the group to compare the scores actually achieved and the maximum possible scores. They ask the group why the achieved scores are high, low, or in-between for different aspects. When a degree of consensus begins to emerge, the facilitator steers the discussion toward what can be done to improve the situation.

Strength-weakness analysis

To help the community get an overall picture of strengths and weaknesses in participation, sustainability, and use, the team presents the overview of the respective community scales and scores (see Example 3). The facilitator then helps the community identify the strengths and weaknesses and cross-checks whether the picture correctly summarizes the situation. Discussion of the weaknesses is then related to what the community can do about them and what resources and opportunities may be available to tap, both locally and further afield.

Comparison with other communities

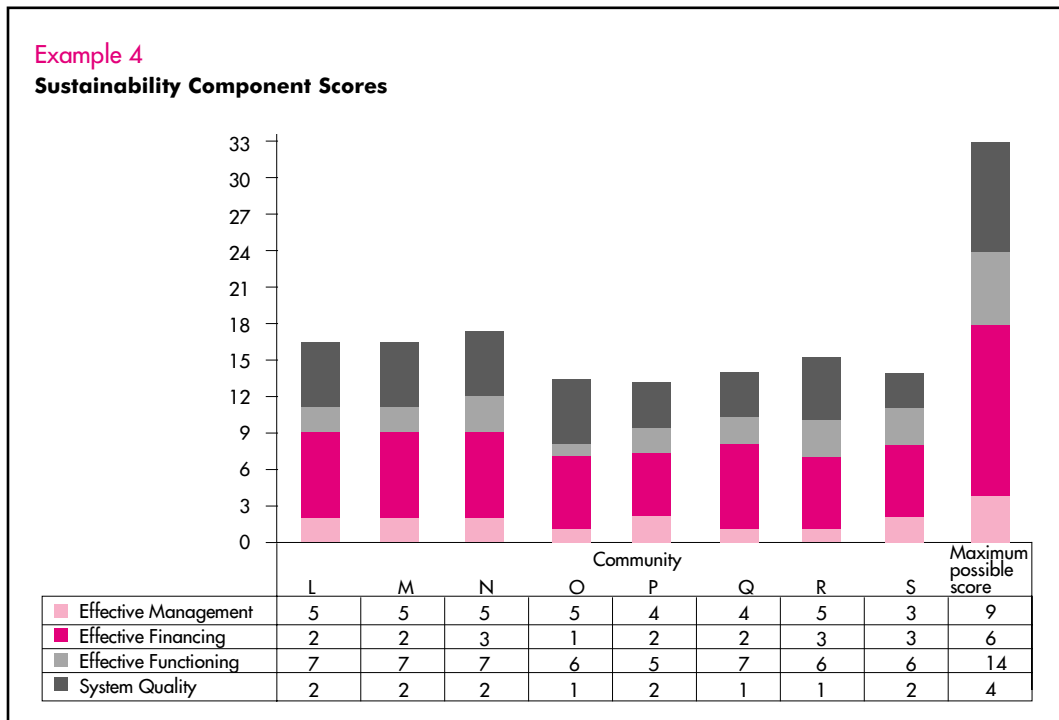
To help the community compare its performance with that of other communities in the project, the facilitator aggregates the results of the sustainability indicators for that community and depicts the results along with those of several others in the project area (see Example 4). The





variations in scores across communities usually raise useful ideas about what has worked, where, and why. The facilitators can also provide information they have gained from the other communities to help the group identify how something could be improved in their own community.

Out of such analyses emerge specific ideas about how a community may enhance the sustainability and effective use of its services. Facilitators should take a back seat at this point, as the group begins to turn the ideas into plans for specific action.



An additional part of the facilitators’ task is to ensure that someone in the group assumes responsibility for the safekeeping of the assessment outcomes. They should also ensure that the plans and agreed responsibilities are recorded so that the group can monitor its progress later. Facilitators should take away only their own notes and copies they make of the outcomes.

If the results have not been analyzed with the community at large, the facilitators and the other members of the team (local women and men, project staff, and local authorities) should present a summary of the assessment results to a village gathering of all households. The community representatives should then explain the actions they have agreed to take as a consequence of the assessment. The meeting invites public discussion, provides clarifications, and develops wider support for further action. This last meeting ensures that the PLA work is fully transparent to all and that no potential conflicts and misunderstandings remain.

assessments constitute the first type of analysis at the project institution/agency level. In the analysis, participants can compare the results of the respective communities and identify factors on which scores are consistently low or high across the sample, as in Example 5.

Typical questions in this analysis are:

- Which are the high-, medium-, and low-performing communities in terms of sustained and effectively used services? In terms of gender- and poverty-sensitive participation? Of demand-responsiveness of services?
- Do these results match our own monitoring information? If not, why?
- What factors emerge as strengths and weaknesses in the assessed communities? Are some common to all or most communities?
- What do the findings indicate about the agencies’ project approaches?

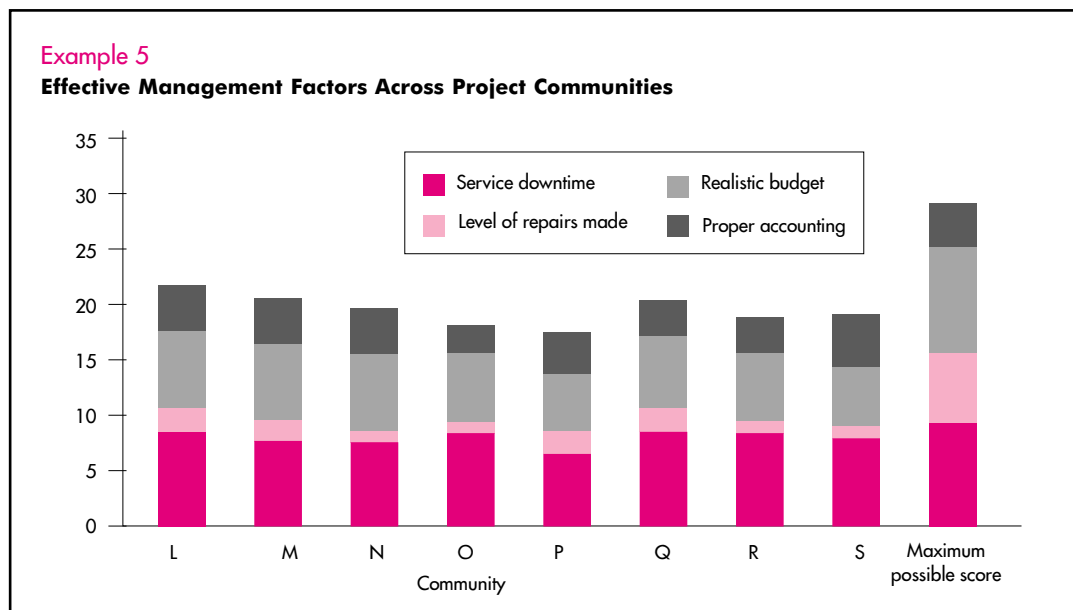
Institution-level Analysis

Analyzing results from communities

Summary results from the community

Stakeholders’ Meet

The second type of analysis is the Stakeholders’ Meet, which captures the views of different categories of stakeholders on the institutional

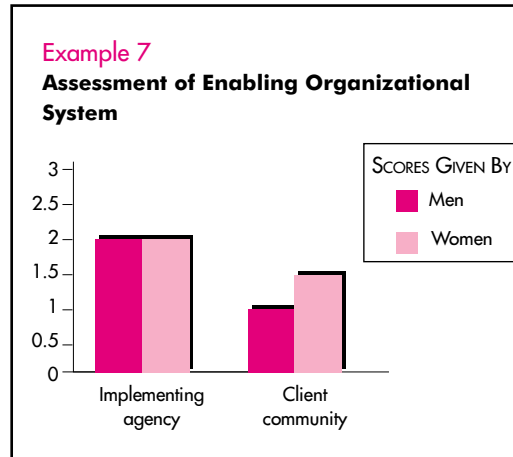
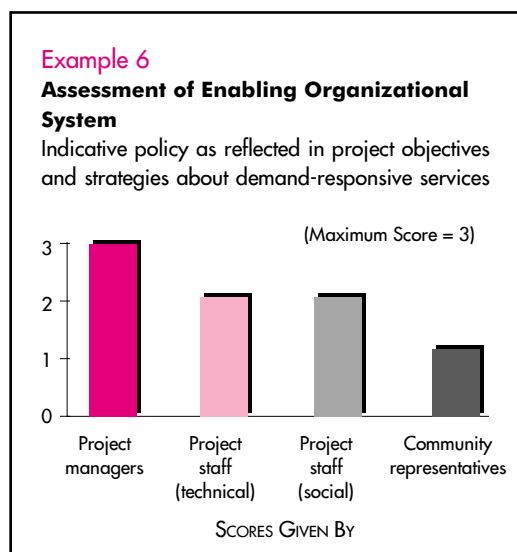


mechanisms for sustainability, participation, demand-responsiveness, gender, and poverty. The stakeholders participating in this analysis are agency personnel of different types, community representatives, and social intermediaries.

Gender differences in responses within the stakeholder categories are interesting and important to record. Hence it is essential to invite responses from each category separately. This means deciding on and consistently using color-coded voting tokens or response markers of different shapes and types for all stakeholders throughout the workshop.

At the end of each exercise, as described in the Stakeholders' Meet in Appendix A (page 52), the facilitators gather all participants to examine the visual outcome of the exercise. Scores given by each stakeholder category are averaged or modal scores chosen as typical of each group. Co-facilitators quickly plot the resulting pattern in a simple visual form (see Examples 6 and 7).

In the subsequent analysis, similarities and differences in responses among stakeholder categories and sexes are noted. Facilitators ask



questions to make participants think about the implications of the results for the project. What does the emerging pattern mean? What does it say about the strengths or weaknesses of the project? Are the results expected? Is anything surprising? To whom? Why? What are the implications for further exploration? For further action for improvement? Who should do what?

Facilitators use such questions to generate group discussion. In case inter-category sensitivities are anticipated, the discussion may be held in several small, homogeneous groups in which people might feel more comfortable in expressing their opinions. Co-facilitators then bring results from all groups to the plenary. Summarizing group responses on cards helps focus this presentation and makes it easier to record the results later.

At the plenary, if a consensus seems to emerge from the discussion about the overall score to be assigned, it is recorded on a large scoreboard. This is done graphically, showing each achieved score against the maximum possible score to enable visual monitoring of the assessment activity as it progresses from one exercise to the next. If consensus is not achieved, the differing scores are recorded as such and marked with the names of stakeholder categories

whose assessments they represent. The group then moves to the next exercise.

At the end of all the assessments, the final scoreboard is presented to the whole group. They use it to identify and jointly rank areas of institutional strength and areas of institutional weakness.

Facilitators generate a plenary discussion on what can be done to build on the strengths and improve the areas of weaknesses. The participants discuss, agree upon, and record implications for action needed at each of the three levels: the community, the sector agency/institution, and the policy level.

Scores and agreed actions are recorded for future progress monitoring by the participating stakeholders and for presentation at the next assessment level, the Policy Assessment Dialogue.

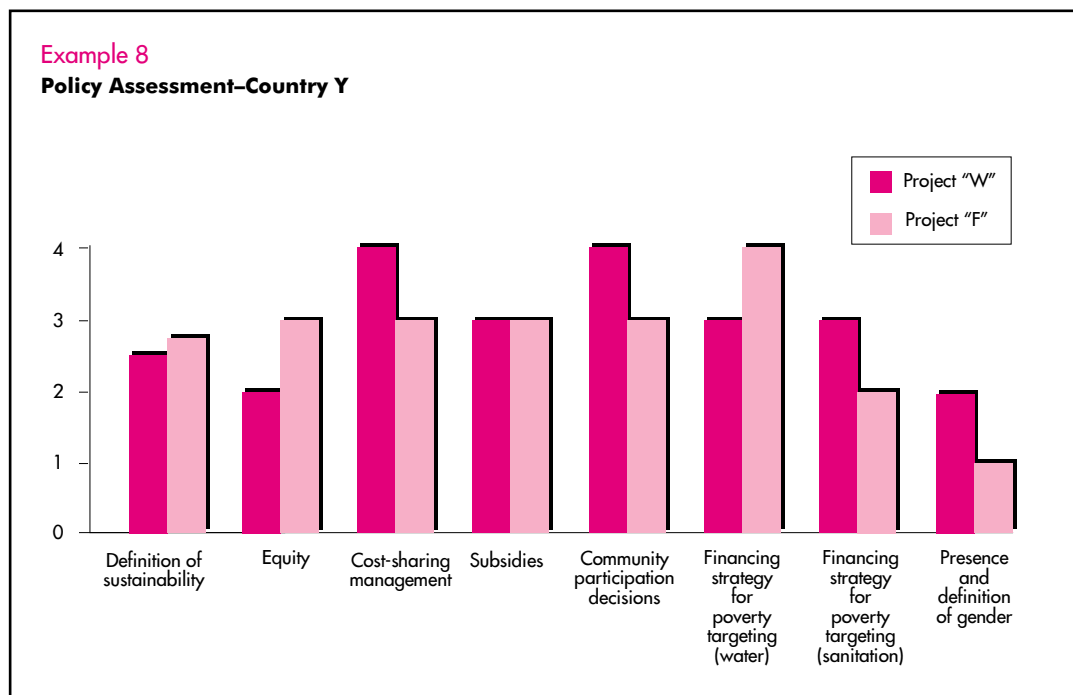
Policy-level Assessment

If the interview option is chosen (described on

page 56), the results are discussed with the interviewees as the interview progresses. This may serve as a joint analysis of findings, although it is limited to two people at a time. If the more participatory workshop option is chosen, the process is very similar to that for the Stakeholders' Meet.

In this case, the final scoreboard will depict the seven aspects assessed (see Example 8). Scores from more than one project may be used together at the Policy Dialogue Workshop, as all projects operating in a country within the same time frame are influenced by the same sector policies. Experiences of several projects regarding policy-related obstacles or support can make the Policy Dialogue a more potent instrument of change. (In Example 8, both projects came across as weak on their vision with respect to gender, which was related to the lack of clarity in sector policies at the time about why or how gender was important.)

In the next step, the whole group identifies the policy-level actions needed on the basis of the



results. It would be useful to extend the analysis at least as far as getting the group to prioritize and establish a logical sequence for the needed changes. The country situation will determine how much specificity and detail are relevant at this workshop.

Statistical Analysis

Statistical analysis is possible if the sample of projects or communities within a project is large enough to warrant and allow this. It is often

attractive to policy makers and academics who may prefer quantitative studies. A sociologist, economist, or statistician who is experienced in the use of non-parametric statistics as well as with participatory tools should carry out such an analysis. The main functions will be to analyze frequencies and cross-tabulations, and to test the strengths of association between likely individual factors and among their levels of demand-responsiveness, participation, and sensitivity to gender and poverty, and the achieved levels in service sustenance and use.