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Demand responsiveness, participation, gender, and poverty

*making the links with sustainability
of water and sanitation programs*

East and Southern Africa regional synthesis report



**Water and
Sanitation
Program**

An international partnership
to help the poor gain
sustained access to
improved water supply
and sanitation services



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sustainability
of water and sanitation
programs**

**East and Southern Africa
regional synthesis report**

The World Bank
Regional Water and Sanitation Program,
International Water and Sanitation Center

governments of
Kenya, Malawi, South Africa, and Zambia,
and collaborating partners

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Abbreviations and acronyms

CIDA	Canadian International Development Agency
DfID	Department for International Development (UK)
DRA	Demand-Responsive Approaches
DWAF	Department of Water Affairs and Forestry (South Africa)
ESA	East and Southern Africa
IRC	International Research Center for Water and Sanitation (The Netherlands)
IWSD	Institute of Water and Sanitation Development (Zimbabwe)
KWAHO	Kenya Water for Health Organization
MPA	Methodology for Participatory Assessments
NETWAS	Network for Water and Sanitation International
NGO	Non Governmental Organization
O&M	Operations and Maintenance
PALNET	Participatory Learning Network
PHAST	Participatory Hygiene and Sanitation Transformation
PLA	Participatory Learning and Action
SARAR	Self-esteem, Associative strength, Resourcefulness, Action planning, Responsibility
Sida	Swedish International Development Cooperation Agency
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WASHE	Water and Sanitation Committees (Zambia)
WATSAN	Water and Sanitation (Ministry of Local Government and Housing, Zambia)
WSP-ESA	Water and Sanitation Program—East and Southern Africa

Foreword

The Water and Sanitation Program (WSP) works with partners to find better ways for the poor to gain sustained access to water supply and sanitation services. A critical step toward this end goal is to increase gender participation in developing the services, especially of the poor women and men who critically need these services to improve their lives.

For many people who work in the water sector, gender remains synonymous with women's participation. Gender, however, covers a broader concept. It refers to the specific roles and responsibilities of both women and men in society. Even more importantly, it relates to how a society perceives and expects women and men to think and act—because of the way society is organized and not necessarily because of their biological differences.

A fundamental question stakeholders pose is "what is gender mainstreaming?" The term is defined as the process of assessing the "implications for women and men of any planned action, including legislation, policies or programmes in all areas and at all levels. It is a strategy for making women and men's concerns an integral dimension of the design, implementation, monitoring, and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally, and inequality is not perpetuated" (United Nations—Economic and Social Security Council 1997).

It is against this background that in 1997 the Working Group on Gender Participation of the Water and Supply Sanitation Collaborative Council (WSSC) launched the Participatory Learning and Action initiative in partnership with WSP and the International Water and Sanitation Center (IRC) to advance gender concerns and participation. The initiative undertook global gender assessments in

Asia, Latin America, and Africa. In East and Southern Africa (ESA), assessments were conducted in 19 rural and peri-urban communities in Kenya, Malawi, South Africa, and Zambia.

Objectives of the assessments included assessing whether the services had a different impact on women than on men, on poor than on rich, based on the benefits accrued and the burdens borne in delivering and managing the services. Among the expected outcomes was a methodology of tools and techniques that would encourage gender participation and that would be poverty sensitive and demand responsive.

This report is a regional synthesis of the assessments made in ESA. The first section looks into the background to the assessment and the link between the PLA initiative and the Africa Regional Workshop held in Pretoria in 1997 that was organized by UNICEF, WSP-ESA, UNESCO, IWSD, the Water Research Commission, and the Department of Water Affairs and Forestry in South Africa. The second section details the methodology for participatory assessment (MPA) that was developed and tested during the assessments. The framework adopted for the assessments and the MPA is a key that forms the basis for placing gender in the mainstream in the future. The third section provides an overview of the environment in which the assessments were carried out in the respective countries and the purpose of having the countries participate. The fourth section analyzes findings at policy, institutional and community levels. The main findings are summarized according to the assessment framework: *sustainability of the services; demand responsive approaches; participation; poverty alleviation and economic improvements from water and sanitation institutional arrangements; and policy with respect to gender, poverty and demand*

responsiveness. The fifth section details the methods and research tools used; and sixth and final section focuses on the way forward, with specific country and regional work plans.

The countries in which the assessments took place and the Pretoria workshop participants constitute the first audience for this report. However, it should also be of interest to researchers, practitioners and policy makers involved in implementing research design and monitoring sector investments. The plan is that as part of PLA Phase 2, the part-

ners (UNESCO, UNICEF, WHO, IRC and WSP-ESA) will focus on disseminating the assessment products. They will build the capacity of resource centers such as IWSD and NETWAS to review and validate the MPA methodology and apply it at country, project and community levels.

We look forward to working with country teams to incorporate participatory gender approaches in water and sanitation services and to establish links between countries in forming regional and global strategies.



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Executive summary

The role of women in providing water and sanitation for home and community has become widely recognized, and for any project or program aimed at providing such services to be successful, it must ensure women's participation. Thus, when assessments of water and sanitation services in 19 rural and peri-urban communities in Kenya, Malawi, South Africa, and Zambia were carried out, they meant to determine whether approaches that were demand responsive and sensitive to gender and poverty had an overall effect on the impact and sustainability of the services.

Objectives included assessing whether the services had a different impact on men than on women, on rich than on poor, and looking at both the benefits and the burdens of operating and maintaining the services. At the same time, communities and agencies learned to use tools and methods that would help them determine approaches that considered the gender and poverty issues involved in supplying the services.

The assessments evaluated how responsive the service-delivery agencies were to user demands as well as to national sector policies and the institutional framework of the sector. They were perceived as being able to assist countries develop and use their own methods for participatory assessment and to develop strategies that would respond to community demand and incorporate approaches to their water and sanitation programs that took gender and poverty issues into account. Results would feed into the initiative's assessments worldwide.

The framework drawn up for the assessments used participatory tools and other research instruments to indicate the degree to which a community sustains its water or sanitation service, the degree to which the population uses the service, the degree to which the service meets community de-

mands, and the way the benefits and the burdens of the service are spread out among community members. It looked at the degree of balance achieved in establishing and maintaining the service when gender and poverty were considered. During the assessments, the indicators had to be adjusted, to differentiate between demand response and participation, and to indicate shifts in member perception from the time the project was planned until it was implemented and under way.

Methods used included focused group discussions, interviews, direct observation, and a number of research instruments or tools. Participatory tools entailed 1) wealth classification, as perceived by the community; 2) social mapping, in which community members mapped their facilities and classified their socioeconomic areas; 3) a transect walk, cross-checking the social map, making personal observations and conducting a semi-structured interview; 4) pocket or secret voting on behavioral patterns and behavioral change; 5) card scoring on contributions of the different gender and socioeconomic groups; 6) "ladders" assessing costs and benefits, evaluating who did what, how much time it took, and so on; 7) a community history of participation; and 8) stakeholder meetings.

In the four countries, policy reforms have moved towards decentralization, away from top-down administration. Implementation of water and sanitation projects has included gender-sensitive and demand-responsive approaches, albeit these changes are as yet in their infancy. The national governments all have a water policy, and sanitation policies are being drafted. Sanitation coverage has long lagged behind water, but efforts are now being made to correct that situation.

The main findings are discussed by issue: 1) sustainable service, 2) demand-responsive ap-

proaches, 3) participation, 4) poverty and economic improvement, 5) gender, 6) policy, and 7) institutional support.

Sustainable service means whether the community has been able to maintain the water or sanitation system at an acceptable level service throughout its design life without direct external support. It applies to both physical infrastructure and management of the system. Most of the facilities were found functioning. Most communities collected funds for system operation and maintenance, although often financial management was poor. Technical training and backup such as ability to get spare parts were found essential.

All communities had water management committees, with duties and responsibilities that varied from community to community. The more a community had an actual voice in such matters as selecting committee members, the more it felt it owned the scheme and the more effectively it managed the service. The bigger the role of the user, the greater the chance of effective financing, functioning, and management.

Demand-responsive approaches allow the demands of the user to guide the key investment decisions. They establish clear links between what users want and what they are willing to pay for in cash, kind, labor, and time. This factor overlaps with system sustainability: the more a community decides what it wants for itself, the more it sees the system as its own and is willing and able to sustain it. Demand alone, however, does not create sustainability. The community must be involved in all operations, it must ensure user satisfaction with the service, and it must be satisfied of the legitimacy of the governing committee and assured of its good governance.

It was found that a demand-responsive approach is important even in the initial stages of a project, such as selecting the site and setting up local management and financing systems. Often, not enough local voice had been heard in selecting the appropriate technology for a water system, which had weighed against sustainability. A lesson learned was that demand-responsive approaches and community participation need to be adopted for all phases of a project, from initiation and implementation, through operation and maintenance, to monitoring and evaluation. Most of the projects did not have adequate backup support for operation and maintenance, management, training and extension services.

Projects have not responded to demands for sanitation services, which are generally weak. Some communities are now constructing latrines on their own initiative, but these efforts may not be sustainable without some institutional backup. There

was an expressed need for technical support such as development of low-cost technologies.

Participation is defined here as the power to make decisions and increase control over resources and structures. The project sought the participation of all groupings in the community—men and women, rich and poor. The assessments, in trying to evaluate the level of participation of these various groupings, found that indicators for this factor overlapped with those for demand responsiveness. Nevertheless, it was found that in all projects, community members participated to some degree, which varied from place to place. In all projects, the community participated in developing and implementing the scheme. However, only one community participated in conceptualizing the scheme and choosing the technology. Consequently, most communities were not able to foresee and plan for the cost implications of sustaining the service. Nor had there been adequate foresight in providing backup support after the projects were completed, again with a deleterious effect on sustaining the service.

Partaking of project benefits often was based on amount of labor contributed—the more labor, the more water. Another common practice was charging a flat fee. This system, however, even though chosen by the community, allows the rich to receive more from the scheme than the poor, as they use more water for their larger, more intensive holdings. But in balance, the rich are often all called on to shoulder greater burdens in contributing to the scheme.

Participation in sanitation benefits were hard to quantify, although communities in general perceived improved health.

Poverty as participants perceived it was relative and varied from community to community. Community members were given the task of ranking their own communities. Although communities in general classified themselves as poor, they were able and willing to pay for water and sanitation services if the services effectively met their needs. Communities have continued to build their own latrines, although sanitation services were generally not subsidized in the project; therefore, it seems likely that they will continue doing so if they see the value in the service.

Communities saw merit in a water facility for a wide variety of purposes, from improved cash income, education and health to use in small-scale agriculture to time saved from not having to fetch water over long distances. The study indicates that if a community sees the water facility as a benefit, it will support it financially. A water facility is seen as improving the socioeconomic status of the community as a whole.

Gender, referring to the socially determined division of roles, responsibilities and power between men and women, is dynamic, with relationships always subject to change. Although indicators were meant to link gender sensitivity to sustainability of services, gender issues became difficult to impossible to desegregate from other assessments. All four countries are presently developing or improving their gender policies, and the challenge will be to put policy into practice.

Although gender balance may have been handled in the projects, critical issues remain unanalyzed. For example, in the household, when water had economic benefits, the man tended to lead in decision making and the woman was satisfied as long as household needs were met; however, in the community, men dominated and women lost control. Technical training for men and woman, rich and poor, is seen as a way of empowering all those who receive it, giving them skills that can be used even beyond the water facility.

Incorporating and integrating gender issues means building on preexisting gender considerations in the community—which vary from place to place. Concepts of poverty and gender sensitivity became clear as projects took shape, and projects that started with these concepts built in had positive results.

The assessment instruments used were unable to clearly distinguish and evaluate issues of poverty, gender and demand responsiveness. However, poverty- and gender-sensitive approaches did indicate how much and how well the facilities were used.

Policies for water development, a relatively recent occurrence in the region, aim to provide a comprehensive framework for water supply and define roles and responsibilities for the services. Government responsibility for sanitation is less well defined, and lack of attention to it is reflected in the scarcity of appropriate services in the community. Gender issues are relatively new for policy. The assessments show that although there is gender awareness, strategies for integrating gender issues in water and sanitation policies are weak. They also show that although all the countries have policies relating to poverty, they do not directly deal with water and

sanitation services. Government goals are to enable development, meaning that although the government may subsidize the initial investment in a facility, users must progressively assume the costs of operating and maintaining it.

Institutional arrangements for providing water and sanitation services vary, but in all four countries responsibility for water is well defined while that for sanitation is fragmented. Although there is community demand for sanitation support, especially for help on low-cost, appropriate facilities and technologies, that demand is not being met.

The assessments showed that the institutions lack the tools and the skills for applying demand-responsive and gender- and poverty-sensitive approaches. They lack the capacity to follow up a project after it has been completed, there being no extension service to give advice and refresher training. They need to train project staff, develop policies, involve experts in these areas, and allocate the resources that will enable them to ensure that these social dimensions are taken into account. However, institutional support has been strong as a project was being implemented, which has been vital in developing the services.

The objective of field feedback indicated that in general the tools used proved workable and effective and held the interest of community groups, although some refinements need to be made such as simplifying the language of indicator scales. Timing and duration of the assessments and sequence of learning activities were also shown to be important in how the tools are used. Assessment teams need to be experienced in using participatory methods to ensure quality and validity of the data they collect.

Two major products have come out of the initiative: the assessments themselves and the methodology for participatory assessments. The way forward will build on these products. It will concentrate on four areas: *dissemination and advocacy*, using the initiative's results and products; *capacity building and the development of tools*, including publications, videos and training through workshops; *furthering the integration of gender concerns*; and *cross-sectoral activities*.

1 INTRODUCTION

1.1 Background to the assessments

The assessments of water and sanitation services in Kenya, Malawi, South Africa, and Zambia, reported here, were part of a five-year global participatory learning and action (PLA) Initiative of the United Nations Development Program–World Bank Water and Sanitation Program (UNDP–WSP) carried out in partnership with the International Research Center (IRC) for Water and Sanitation and agencies working in the sectors of water and sanitation. They sought to determine whether, in designing and implementing water and sanitation services for rural and peri-urban communities, approaches that were demand responsive and sensitive to gender and poverty had an overall effect on the impact and sustainability of the services.

The PLA methodology, objectives, process, analytical framework, and implementation arrangements were developed with input from the Water and Sanitation Program headquarters and the center staff, the IRC Water and Sanitation Centre, representatives of external support agencies, and NGOs. The assessments were carried out in 14 countries of south and east Asia, Latin America, and east, southern, and western Africa. In the east and southern African region, the assessments were undertaken in the four countries named above.

The specific objectives of the assessments were:

- to determine the extent to which the projects were based on the principles of demand responsiveness, were participatory, gender sensitive, and had a poverty focus
- to assess the impact of participatory, gender-sensitive approaches in the sustainability of projects
- to determine the factors that facilitated or limited the implementation of participatory, gender-sensitive

approaches in planning and executing the projects

- to assess the impact of the projects and programs on different gender and socioeconomic groups such as rich men and women, poor men and women, young and old, considering the benefits as well as the burdens of operating and maintaining the projects in the household
- to use the findings of the assessments as inputs in refining rural water supply intervention strategies
- to develop, refine, and institutionalize the assessment methodology and findings in national, regional, and global sectors
- to assess whether demand-responsive and gender- and poverty-sensitive participation is positively associated with sustained water and sanitation services, and the impact of such services on women and men, rich and poor
- to familiarize communities and agencies with self-assessment methods using gender- and poverty-sensitive tools
- to develop, continually refine and institutionalize the assessment methodology and findings in national, regional, and global institutions

The outputs of the assessment will be used to influence the development of policies that focus on:

- institutional issues, as these appear to be critical in addressing participation and gender and demand responsiveness in delivering services
- improved participation and gender-related tools and techniques for the design, implementation, and monitoring of investments
- capacity building of sector institutions to examine, analyze, and address participation and gender issues

In east and southern Africa, the PLA initiative coincidentally came at a time when the region was preparing to hold a gender workshop in November 1997. The regional workshop was addressing gender issues, seeking to incorporate them into policy

and functioning of institutional water and sanitation programs. It indicated that different countries were at different stages of understanding issues and implementing gender policies. Some countries had policies on gender, others were still trying to influence policy change, and still others were seeking guidance in operational guidelines for integrating gender issues.

The PLA initiative was seen as contributing to the overall thrust of the aims of the regional partners—UNESCO, UNICEF, and the Water and Sanitation Program—East and Southern Africa (WSP-ESA)—and national sector partners and as valuable in addressing issues such as operational guidelines for incorporating gender concerns, developing gender-sensitive tools, and developing and institutionalizing monitoring and evaluation systems. Specifically the PLA assessments were perceived as being able to

- assist countries to develop and institutionalize participatory assessment methods, which would link the use of demand-responsive approaches and poverty, gender, and participatory approaches to sustainability of water and sanitation services
- assist countries to develop long-term strategies for integrating approaches in their water and sanitation programs that are cognizant of gender and poverty and responsive to demand
- feed into the assessments of the global initiative, which were aimed to determine if gender, poverty, and demand-responsive approaches are linked to project performance and sustainability

1.2 The PLA assessment framework

The assessments, which in the east and southern Africa region have commonly been referred to as gender assessments, were conducted on the assumption that *sustaining water and sanitation services is positively linked with the use of demand-responsive, gender- and poverty-sensitive, participatory approaches in establishing and maintaining the services.*

The assessments adopted a systems approach. They emphasized the relatedness of the outcomes in a community to how responsive the service-delivery agencies were to user demands as well as to national sector policies and institutional framework of the sector. The assessment also sought to analyze as determinants of sustainability not just the input and output indicators but also the process indicators (see annex 3) (figure 1.1).

The framework depicts the following assumptions:

- A the degree to which the community sustains an installed water supply or sanitation service has an effect on
- B the degree to which the population uses the service, and in turn is positively associated with
- C the degree to which the service meets the demands of the major population categories, and
- D the way in which burdens and benefits of the service and of the participation in its sustenance is divided between men and women, rich and poor.

Variables A to D assessed the current situation at the community level. However, the results of the variables were seen to a varying degree as a product of processes through which the services had been established and the institutional and policy framework underlying these processes. Variables E to G assessed and analyzed the history of service establishment and the nature of an enabling institutional and policy framework. The underlying assumption was that the degree of gender- and poverty-sensitive participation in sustaining water and sanitation services was positively associated with

- E the degree of gender- and poverty-sensitive participation in establishing the service
- F the institutional support for demand-responsive, gender- and poverty-sensitive approaches
- G the presence and application of demand-responsive, gender- and poverty-sensitive policies and strategies

To test the assumptions, the indicators (detailed in annex 3)¹ seen to be generally applicable to different scenarios were developed to address issues pertaining to sustained services, demand responsiveness, participation, and institutional and policy conditions. Subsequently the assessments were carried out in the communities to analyze the current situation of the water and sanitation services as regards sustenance, effective financing, management, use of the service, and participation. At the institutional level, the assessments analyzed the policy and institutional framework in relation to gender, poverty, participation, and demand-responsive approaches.

The framework used during the field assessment looked at assumptions A–D and then E–G, which had an influence on creating the enabling environment for gender and poverty participation. The variables were adjusted during the global analysis, as there was noticeable overlap between demand-responsive approach indicators and indicators of participation. Also, indicators did not adequately

¹ The detailed assessment Metguide is available as a separate document, "A manual for sustainability monitoring: Gender perspective in the water and sanitation sector," METGUIDE vol. 1, by Rekha Dayal, Christine van Wijk and Nilanjana Mukherjee with the PLA Steering Team (Washington, DC: World Bank Water and Sanitation Program [1999]).

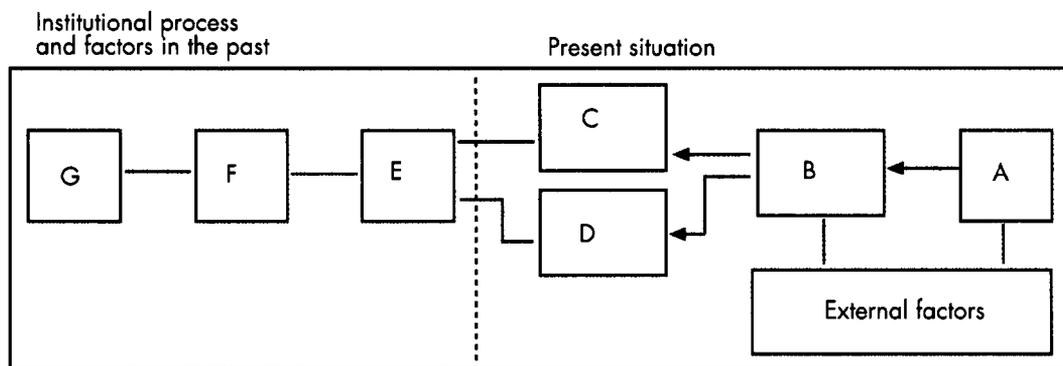


Figure 1.1. Analytical framework of the assessments.

differentiate between the power that participants perceived that they had—or did not have—to make decisions at the start of the project and how that perception changed and they became empowered as the project was implemented. Other adjustments included details such as eliminating data relating to leaking taps from the main indicator B, “Effective use”, and placing it under A, “Effectively sustained, Effective management” (see annex 3). Data analysis is explained in section 2.2.

Definition of terms

Since the assessments were going to contribute to regional and global syntheses, it was vital that there be a common understanding of terms, definitions, and assumptions used in the assessment framework. Definitions are found in the glossary.

Selection of projects

In line with the PLA assessment guidelines, the projects in the region were selected using the following criteria:

- communities who were willing to participate in the assessment
- projects that had been initiated five years earlier but had had no external support for the previous three years
- readiness of the agencies to participate in the assessments and to provide logistical support to the process
- projects with both water and sanitation components
- projects in different regions, so as to provide a diverse sample

Budgetary constraints made it impossible to follow all these criteria and to have different regions participating in all countries. In some communities, the water project had been supported with external intervention but sanitation facilities had been established through community initiative.

1.3 Participating countries and communities

In east and southern Africa, the countries that participated in the assessment were Kenya in east Africa, and Malawi, Zambia, and South Africa in southern Africa. The 19 communities involved are listed in table 1.1.

All the participating countries volunteered to take part in the assessments and saw benefits beyond simply contributing to the global study.

- Malawi was in the process of conducting a socioeconomic study involving different stakeholders with different interests. For instance, the Canadian International Development Agency (CIDA) was starting a community water and sanitation project for health in Malawi, and the process needed some socioeconomic and technical baseline data. Another interest was to identify gender issues in water and sanitation for policy analysis. Malawi plans to use the assessment findings in policy development and programming.
- Malawi did not use the coding system for indicators (outlined in annex 3), as technical support in training the team was delayed. They proceeded to carry out the study. But since they had not used the coding system, the results could not feed into the statistical analysis although they provided valuable qualitative output.
- South Africa has invested a lot in water projects and wants to develop a monitoring and evaluation system, which would be institutionalized. It also would like to use findings from the assessment to highlight key issues in poverty, gender, sustainability, and demand-responsive approaches for policy change.
- Zambia perceived using the assessments to address gender concerns in water and sanitation issues. The outcomes will be adopted as part of the national gender policy in water and sanitation, and the key issues will be included in the peri-urban and rural water strategies. There

Table 1.1. Participating countries and communities

Country	Province or region	District	Communities
Kenya (4)	Coast Province	Kwale	Mnyenzi Mwangoni Mwembeni Mwenengo
South Africa (2)	Northern Province		Tisane Laaste Hoop
Malawi (9)	Northern Region	Thyolo	Bvumbwe Sandama
		Phalombe	Mphuka Yuwa Kaledzera
	Southern Region	Karonga	Photongoma Mwamtawali Mwambuli 2 Mwenengolongo
Zambia (4)	Northern Province		Chiba Luandui
	Western Province		Mungwi Nalisila

is also a plan to use the findings to enhance the national gender policy as well as for communication and advocacy.

- In Kenya the assessments were initiated through the Rural Water and Sanitation Working Group in the Department of Water, Ministry of Environment and Natural Resources, and in collaboration with other sector partners. The sector partners envisage using the appropriate guidelines in their respective programs and policy.

In all four countries, the partners formed a gender steering committee or gender assessment committees to organize, plan, and review the assessment findings. The committees are expected to further advise the respective sector ministries on the implications of the findings of the assessments in relation to sector planning.

Focus groups

The number of participants differed from community to community. In some cases, the number of participants for each tool was different. Table 1.2 presents the number of participants in each community.

In terms of gender participation in the assessment, the representation of men and women was almost equal, thus giving a balanced view on the different issues. However, due to limitation of the tools or coding, information was not always collected or recorded in a gender-desegregated manner. This has had implications for the analysis in relation to the issues of gender, demand-responsive approaches, participation, and poverty.

Table 1.2. Numbers of participants in the focus groups by community and gender

Country	Community	Male		Female		Total (no.)
		(no.)	(percent)	(no.)	(percent)	
Kenya	Mnyenzi	7	32	15	68	22
	Mwenengo	6	50	6	50	12
	Mwembeni	6	30	14	70	20
	Mwangoni	10	48	11	52	21
Country totals		29	39	46	61	75
South Africa	Laaste Hoop	6	40	9	60	15
	Tisane	5	45	6	55	11
Country totals		11	42	15	58	26
Zambia	Chiba	15	50	15	50	30
	Luandui	12	38	20	63	32
	Mungwi	15	50	15	50	30
	Nalisila	9	45	11	55	20
Country totals		51	46	61	54	112
Grand total		91	43	122	57	213

The composition and number of the focus groups in Malawi was not always consistent, making it difficult to tabulate data and do a comparative analysis with data from other countries on various aspects of the framework.

2 METHODOLOGY

The assessments on the link between sustainability and gender-sensitive and poverty- and demand-responsive approaches were carried out using a variety of tools. The PLA framework developed a set of indicators seeking to link sustainability with demand-, gender-, and poverty-sensitive approaches. The research methods developed were thus linked directly to each of the indicators. The methods included participatory research instruments (referred to in the report as participatory tools), semi-structured questionnaires, focused group discussions, interviews, and direct observation.² The research instruments were deliberately applied in a systematic way, complementing one another in such a way that each would enhance the depth of information gathered. In addition, the tools provided checks and balances within each tool and then between tools. Some of the tools allowed for the collection of both qualitative and quantitative data, others allowed for group discussion and observation.

While the assessments were supposed to assist countries in addressing issues of links between sustainability, participation, gender, poverty, and demand-responsive approaches, they were also part of the global learning process. Systematic data collection and recording was therefore a necessity. Country teams were trained in the PLA methodological framework, research instruments and data recording in the forms. Consistency was paramount, but it was recognized that applying the methodology would have to be country and community specific. The assessment would also be a way of testing the methodology. The participatory tools used for the community-level assessments evolved from approaches used earlier in SARAR (self-esteem, asso-

ciative strength, resourcefulness, action planning, responsibility), PRA (participatory rural appraisal) and PHAST (participatory hygiene and sanitation transformation) exercises. These methods, which use participatory visual tools, were adapted and developed during the country team training for the assessments. In some cases, the tools were pre-tested before being used in the assessments. The specific methods used are defined below.³

2.1 Research instruments

Wealth classification: Communities in all the countries assessed who among them were rich, of average means or poor. The communities voted to decide the percentages of these categories.

Social mapping: Communities mapped their existing facilities and the socioeconomic classifications in terms of numbers, types, and location of water and sanitation facilities created before and after the project, location of rich and poor households, and planning and selection of participants in the focused group discussions.

Transect walk: This was used to cross-check information provided on the social maps, and for the assessment teams to make their own observation of the facilities. A semi-structured interview guide was used during the transect walk, and observations were made to answer questions on sustained services.

Pocket voting: Using secret voting, the communities assessed their behavioral patterns in relation

² All research instruments are described in detail in the Metguide

³ The methods were used systematically and are tabulated in the order they were used in the field

to water, sanitation, and decisionmaking. Information on changes in behavior as related to water use, decisionmaking, sanitation use, and hand-washing habits was tabulated. This gave gender and socioeconomic desegregated data on service operation and on effective use of water and sanitation facilities.

Card scoring: This tool assessed the contribution of each socioeconomic group in establishing the service. Information was recorded on the level of participation of the different gender and socioeconomic groups, the type of contribution, participation in monitoring, and control at time of establishment.

Ladders 1: The communities assessed the worth of the benefits from the service in relation to the contributions they made for its establishment and maintenance. Community perceptions on the different types of benefits from the service were carefully assessed to include cost-benefit analysis. In summary, the information was related to demand-responsiveness for water and sanitation service.

Ladders 2: This instrument was meant to assess the impact of the service on women's workload in relation men's workload.⁴ It recorded and evaluated who performed what task, what tasks had to be done to keep the service functioning, and how much time it took to perform the various tasks. It also collected data on how the work was paid for.

History of participation: This tool was used to decide who in the community made what decisions in relation to the water and sanitation services.

Stakeholder meetings were carried out at the institutional level to determine the role of the various stakeholders in implementing the services and what project rules and regulations were in place to foster demand-responsive approaches and considerations about participation and gender. Using the community assessments and reports, the stakeholders analyzed their institutions to determine whether they had policies or strategies in place that would ensure that gender and poverty were considered and demand-responsive approaches were used while the project was being implemented.

2.2 Data analysis

Data were analyzed at country, regional, and global levels. At the country level data were analyzed manually. The Kenya and Zambia teams were for-

tunate in that each had a statistician among them.

Both qualitative and quantitative information was translated into numbers using a coding system developed for the purpose and the information entered on spreadsheets. Further analysis was done using the statistical computer software SPSS.

At the regional level, data analysis went as far as to correlate the association between two variables. It was not possible to run a regression analysis, which would have established causation, because the sample was small. The regression analysis was done at the global level.

2.3 Strengths and weaknesses of the methodology and research instruments

In general the strengths of the assessment framework were as follows:

- It enabled the assessment of the two levels, that is, the community level and the higher level of institution and policy. This allowed a more holistic type of analysis, looking at inputs and outputs as well as process indicators.
- The methodology and research instruments that allowed for self-assessment led to capacity building in the community. Community assessment of existing situations led communities and national governments to seek solutions.
- The methodology, as opposed to extractive traditional methods, allowed for instant feedback into the community.
- The methodology could also be applied to different components in assessing water and sanitation programs. For example, if the interest were in assessing sanitation alone, then only assessment indicators on sanitation would be used.
- It allowed for a large amount of data to be collected at the same time and for triangulation of the information. The research instruments allowed for cross-referencing and cross-checking of data.
- The use of participatory visual tools allowed for participation by both men and women, rich and poor. It facilitated a process in which sensitive aspects like sanitation and wealth ranking were discussed without inhibition.
- Overall, the methodology was seen as being useful in raising awareness on gender, poverty,

⁴ Since there were no latrines built with project support, the teams did not look at the impact of latrine facilities in relation to women's workload.

demand-responsive approaches and their impact on sustainability. The methodology also brought forth other developmental issues, such as poverty eradication.

- The methodology was useful in monitoring and evaluating water and sanitation projects. However, there was need to simplify it to enable different agencies to carry out the assessments without external support. The need within the region was to institutionalize the assessment framework during project design, implementation, monitoring, and evaluation.

2.3.1 Strengths of the process adopted

- The use of mixed teams comprising government or agency staff and independent consultants facilitated logistical arrangements and unbiased assessment.
- The process of getting stakeholder endorsement created ownership of the assessments at country and regional levels. This is important for follow-up and implementation of the outcomes of the assessments. In all the countries, steering committees were formed comprising interested government agencies, stakeholders, and individuals. These committees were useful in ensuring quality and in managing the logistical arrangements. The steering committees also started developing strategies for incorporating gender issues (as discussed in section 1.3).

2.3.2 Weaknesses of the methodology

- The methodology was found to be expensive in terms of resources needed to carry out the assessments. In the region, the total expenditure for each country was on average US\$30,000, without counting the government input. This may be because the training method and materials had to be developed or adapted, as the approach was new. As the method becomes more institutionalized it may be cheaper to apply.
- The different recording instruments were useful for checks and balances; however, there were too many to handle and operate conveniently.
- As part of the participatory learning and action, the PLA team had drawn up a codebook, which was a detailed set of questions to be used for gathering and recording information on water projects and a similar set for use with sanitation projects. It was found that, while the questions were a useful guide, they were too restrictive to deal with region-specific issues.

For example, the codebook recorded information on only the sanitation projects that had had external assistance. In some of the assessments, a significant number of latrines had been initiated by the communities, but there was no way to record them in the codebook. There were also other forms of solid waste management that could not be adequately recorded in the codebook. Ultimately some of this pertinent information was not recorded, and this affected the statistical analysis and the regional perspective.

- The methodology needs refinement, as there were many inconsistencies in coding of questions, the terminology used, and the variables coded. The framework focused on finding socioeconomic, gender-desegregated data. However, the coding itself did not provide for desegregated data. This limited the results of the study in relation to its set goals.
- The framework makes assumptions that are not applicable at the global level. It is appreciated that it would be difficult to construct a framework applicable to all situations. Therefore, the assessment framework should allow for flexibility. Presumably, as the framework is institutionalized at the national level, adapting it will become easier. This, however, calls for careful coding and better understanding of data analysis tools such as the SPSS and Excel computer packages.

2.4 Other issues

There were other issues that, although not directly linked to the methodology, affected its application:

- In some countries, the assessment teams were not familiar with participatory methods but rather were more conversant with traditional approaches to research. This made it difficult to adequately adapt the tools, where necessary. It appeared as if the methodology tools were inflexible, but in reality, any of the tools could have been adapted as long as the objective for doing so was not lost.
- Since the team was expected to apply a multidisciplinary approach, gender-awareness training would have been useful to expose all members to gender-related terminology.
- The assessments were carried out under time pressure. This had implications on training, pre-testing, and actual implementation of the assessments. Ideally the assessment teams should have been trained, allowed time to pretest the tools and comprehend the process of filling in

the codebook, and then further trained on adaptation of the questions, language, and visual tools. Time was not sufficient to pretest and adapt the tools and questions.

- There was a feeling that the training did not give sufficient direction as to the degree of flexibility allowed when implementing the assessments. There was always the consciousness that the country assessments were feeding into a global study and hence adaptation was limited.
- The community socioeconomic data derived were not sufficient for detailed analysis of pov-

erty issues. Poverty must be analyzed in greater detail if the study is to link it to sustainability of the services.

- The indicators used in the framework did not immediately bring out the gender aspects, which became sidestreamed into obscurity. There is need to further refine indicators on gender, access and control over resources, strategic and practical needs, and equity issues.

Most of these weaknesses may be overcome by revising the methodology to allow for consistency in coding and using variables.

3 EAST AND SOUTHERN AFRICAN REGION

In the context of the PLA assessments, the east and southern African region refers to Kenya, Malawi, South Africa, and Zambia.⁵ Although the region had wanted a more representative sample, a large sample size was not feasible because of budgetary constraints. Also, the methodology was being tested to determine whether its assumptions about impact on project performance and sustainability were correct.

3.1 Geography and climate

The east and southern African region lies between the equator and the Cape point. It covers a coastline of over 10 000 kilometers stretching from Kenya in the east to Angola in the west. Its land area is about 7 million square kilometers with an average altitude of 1000 meters above sea level. Climate varies between the north and the south. The north experiences two rain seasons annually, and the south, one. In the northwest, rainfall occurs all year round, and vegetation in the north is savanna grasslands. Toward the equator temperatures and humidity are relatively high; farther south toward the Tropic of Capricorn the temperature variation is greater, and the air is dry; the west coast is extremely arid.

3.2 Demography and socioeconomic activities

The region has a population of over 136 million, which is about 2 percent of the world's popula-

tion. The growth rate for the four countries in the assessment ranges from 2.2 to 3.8 percent, and it is expected that the region's population will rise to more than 298.7 million by the year 2025. About 75 percent of the people in the region live in rural areas.

Zambia

Water supply and sanitation have been fragmented in Zambia with different operational strategies, technologies and approaches. Recent years have seen sector reforms and reorganization. One change has been the launch of water sector reforms (1993) aimed at establishing policies, strategies and institutions to improve the delivery of water and sanitation for better quality of life and more productivity of the people. Reform objectives include

- establishing an appropriate institutional framework
- designing mechanisms for private sector participation and coordination with other organizations in the sector
- increasing emphasis on community consultation and participation
- facilitating the use of technologies that are appropriate to local conditions and developing the human capacity of the sector

Changes have included the formation of the national water policy, the drafting of sanitation guidelines and the move towards decentralization and formation of water, sanitation and hygiene structures (WASHE) at national, provincial and district levels.

⁵ Although Tanzania and Uganda had expressed interest in participating in the assessments, budgetary constraints made this unfeasible.

While the region has potential for improved economic performance, this has not been realized in the last few years. The gross domestic product (GDP) has been growing at a slower pace than the population, which made this region's per capita economic growth the lowest in the world during 1982–92. The 1996 GDP of the four countries involved in the study is as listed:⁶

Kenya	US\$ 280
Malawi	170
South Africa	3160
Zambia	400

The rural population is mainly subsistence farmers, who produce cash crops and food for consumption. The agricultural base depends on the natural rainfall cycle, but southern Africa is prone to drought. The drought not only diverts resources to emergency supply but also tends to distract process approaches such as community management. Participation in community projects during drought periods becomes secondary to emergency management.

East Africa has been a recipient of refugees from neighboring countries. This has caused the redirection to emergency supplies of resources that would otherwise have been used for social services. A large non-productive population (younger than 15 and over 60 years of age) also characterizes the region. The percentage of the employed productive population, who are the potential taxpayers, is therefore very small. But the population has continued to grow. The 1996 population figures for participating countries are as follows.⁷

Kenya	27 799 million
Malawi	9 845
South Africa	42 393
Zambia	8 275

With increasing population growth and demand on social services and declining economy, the water and sanitation services have largely been supported through external donor funding.

Mortality rates have generally remained high for children under the age of five. Some of the killer diseases include diarrhea, malaria, acute respiratory infection, malnutrition, measles, pneumonia, and AIDS and related diseases. Some of these diseases are preventable through good access to safe water and improved sanitation and hygiene; others, such as malnutrition, are linked to poverty and a poor economic situation. Child mortality rates in

1996 for the under-fives for the four countries are as follows:⁸

Kenya	83 deaths per 1000
Malawi	217
South Africa	83
Zambia	202

South Africa

Before independence, the water supply and sanitation sector in South Africa was fragmented with each homeland government having its own WATSAN policies. The challenge at independence in 1994 was not only to improve coverage but also to develop sector policies. The Reconstruction and Development Policy laid the foundation for improved water supply with a strategy that was basically supply driven. In the absence of strong local authorities, the Department of Water Resources and Forestry was mandated to provide water and sanitation services. Recent policy initiatives have included the development of a gender and poverty policy. More recently local authorities have been mandated to develop water and sanitation services. The private sector is also involved, and there is greater community participation in implementation, operations, and maintenance.

3.3 Overview of water and sanitation policy and institutional framework in east and southern Africa

There has been a significant shift in policies, institutional arrangements, and implementation processes and approaches in the region during the 1990s. The 1980s were dominated by policy approaches that promoted supply-driven programs, with the state being recognized as central in providing water and sanitation services. Planning was generally top down with "experts" dominating the sector. The top-down, supply-driven approaches had some negative effect on the sustainability, replicability and utilization of projects. Furthermore, the sectoral approaches of the 1980s placed more emphasis on the hardware components, with water being given priority. Sanitation and hygiene activities were and still are lagging behind water provision.

⁶ UNICEF, *The State of the World's Children 1996* (Oxford: Oxford University Press, 1997)

⁷ Ibid.

⁸ Ibid.

Malawi

Until 1998, Malawi did not have a water or sanitation policy. As a result, coordination and management of water and sanitation programs among stakeholders has been a problem. While the Ministry of Water Development is responsible for water, there is no single ministry responsible for sanitation. The responsibility seems to be divided among the Ministry of Water Development, the Ministry of Health and Population, the Department of Local Government, Administration in the Office of the President, and the Gender, Youth and Community Services. This situation has adversely affected the performance and management of facilities. The Malawi management policy and strategies for water resources aim to ensure sustainable management and use of water resources and sanitation facilities, while ensuring that all citizens have access to safe and adequate water and sanitation.

The national policy on gender, which is in the final stage of formulation, provides guidelines for mainstreaming gender issues in national and sectoral development policies and programs. An implementation strategy for the policy is soon to be launched.

Recent years have seen sector reforms in both east and southern Africa. Some of the policy reforms include the move toward decentralization, with the state being seen as a facilitator and not a provider in developing services.

Changes in implementation have included community management and gender-sensitive and demand-responsive approaches. These policy gender changes are still at infancy in most of the countries. Policies related to gender and poverty are not yet included within the water and sanitation policies but are found within the overall country policies.

The policy reforms that have taken place have been developed to provide a more comprehensive framework for the water supply sector; all the countries have a water policy. Sanitation policies are still being drafted.

In general there are efforts toward providing water and sanitation as an integrated entity, and

institutions are forming intersectoral teams to facilitate implementation. Policy changes have also necessitated institutional reforms and reorganization. Although the institutional framework varies from country to country, in all four countries, water and sanitation are the responsibility of national governments.

3.3.1 Sanitation

Sanitation coverage has long lagged behind that of water. One of main policy-related problems is that sanitation does not have a clear institutional home in most countries in the region. Most often, it is shared among a number of ministries in the central government. Regionally or locally, it is the responsibility of a number of different authorities, usually health, water, local government or public works. As a result, sanitation projects are generally weak and ill conceived. Although sanitation probably needs to be addressed from a multisectoral approach, a lead agency is often helpful to provide a focus and some institutional accountability for the operations. Having recognized the situation, countries across east and southern Africa are making efforts to correct it. A number of countries have established initiatives to address the matter.

Kenya

The aim of policy is to guide water sector activities to achieve sustainable development and management of water resources. The policy provides a framework in which the desired targets or goals are set and it outlines necessary measures to guide the entire range of actions to synchronize all water-related activities and actors. The basic areas addressed by the policy include water resource management, water supply and sewerage development, institutional arrangements, and financing for the water sector. The ministry recognizes the enormous task and the concerted efforts needed to adequately provide these services, and it has formed both urban sanitation and rural water supply and sanitation working groups, constituting various sector partners, to plan the delivery of services.

4 MAIN FINDINGS

This section comprises the assessments in the 19 communities, which were brought together to form the regional analysis. The findings cover the following issues:

- sustainable service
- demand-responsive approaches
- participation
- poverty alleviation and economic improvement
- gender
- policy framework
- institutional arrangements

The last two issues were used to assess whether national institutional policies and strategies provided guidance and support for gender-, poverty-, and demand-response approaches.

It became clear during the country, regional, and global analysis that the indicators for gender and poverty had not been well defined. Although originally these two indicators had been used to select participants for the focused group discussions, during the assessments important information emerged regarding them. During the country and regional analysis, it was realized that as gender, poverty, and demand response were to some extent interdependent, they should cut across all other variables. However, as the indicators for gender and poverty had not been sufficiently defined, important issues relating to them could not be easily disaggregated, and the framework did not provide for recording that would allow further analysis.

To make maximum use of the data, the independent variables of gender, poverty, and demand response were clubbed with the dependent variables to determine if there are links between them.

4.1 Sustainable service

“Sustainable service” refers to the ability of the community to maintain the water or sanitation sys-

tem at an acceptable level of service throughout the design life of the system without direct external support. The water and sanitation services were assessed by both the physical infrastructure and the ability of the users and the local management committee to adequately maintain, manage, and finance them. Effective financing, management, and functionality each contributed to sustainable service and were assessment criteria. The level of sustainability was found to have been influenced by such factors as

- consumer satisfaction
- commitment to contribute toward maintaining the service
- technical and managerial abilities
- financial arrangements to cover operation and maintenance
- sense of ownership
- access to tools and spare parts
- technical support and backstopping

The assessments found some of the water facilities were indeed sustainable overall, in financing, management, and functionality. This was to be expected, as sustainability was one of the criteria for selecting the projects for assessment. Water facilities met the criterion of functionality, although a few gravity-fed schemes in Malawi were not functioning at maximum, as some were more than 10 years old, and their pipes needed replacing.

Effective functioning of systems that have adequate quantity and supply is positively associated with effective use, which leads to sustained service. This result, while expected, indicates that facility design is an important step in well-functioning services.

Most of the communities were collecting funds for operation and maintenance. The level of local financing, which varied from scheme to scheme, was influenced by factors such as complexity of

Table 4.1. Local financing of the service

Country	Purpose of funds	Who pays	Time frame of payment	Financing systems
Kenya	100 percent of operation and maintenance costs	all users; the poor are exempted in some communities	< 6 months	some communities charge a flat fee, and others according to water collected
South Africa	operation and maintenance and future replacement costs; (Laaste Hoop also pays loan for capital development); 100 percent of operation and maintenance costs	all users	< 6 months	generally a flat fee; in Laaste Hoop, a prepaid card system
Malawi	< 100 percent of operation and maintenance costs	all users	> 6 months	flat fee
Zambia	100 percent of operation and maintenance costs	all users except underprivileged, as determined by that community	—	flat fee

the technology, existing backup systems, and training in financial management (table 4.1).

The findings indicate that the communities paid for the operation and maintenance of facilities. However, these expenses were often poorly budgeted, and financial books were poorly maintained. Some of the reasons that accounted for the communities' willingness to pay for the operation and maintenance of the facilities were that the facilities met the demands of the users and the communities were allowed "voice and choice".

Financing systems at the community level were generally flat rate. While this system may be a result of user voice and choice, it may well lead to

further entrenching the poverty among the poorer members of the community. If rates are not related to actual usage, the better off who have water-transporting devices and water storage facilities will use more water and thus be subsidized by the poorer. It is pertinent to create awareness of this possibility when training the community and water-point committee members. Such training is geared at sensitizing communities to poverty issues. It may also be useful for projects to assist communities in setting proper tariff rates for water consumption, to avoid the rich exploiting the poor and to ensure that the tariff fee collected will meet both operation and maintenance costs and future upgrading or replication of systems.

Findings

- In all the assessed communities there are systems that are financed and used effectively; they are sustainable.
- When a service meets the demands of the users in quality, quantity and regularity of service, there is a greater chance of willingness to pay for and manage the system, which leads to sustainability.

4.1.1 Management systems

A good local management system is an important factor in sustainability. In the study, all the water sources had water committees, but their composition and responsibilities varied, from water committees at point source in Kenya, Malawi, and Zambia, to scheme committees in South Africa.

Factors assessed in measuring management effectiveness included the existence of water committees, timeliness and level of repairs, account-

Table 4.2. Effective management, by country

Country	Timeliness of minor repairs—		Does the authority—		Are accounts shared
	at scheme level	at water point	prepare realistic budget?	maintain proper accounts?	
Kenya	< 2 days	< 2 days	no	yes	shared with office bearers
Malawi	2–7 days	2–7 days	no	yes	no
South Africa	< 2 days	alternate mode available in down time	yes	yes	shared with community, mostly men
Zambia	> 7 days	> 7 days	no	no	no

Field insight—Zambia

In Zambia, where communities were paying a flat rate, one of the members listed a fishpond as the benefit of improved water service. This community member, who was a leader, was also one of the few listed as being rich.

Field insight—Kenya

In Kenya people with large land plots reported improved opportunities for gardening as a benefit from improved water sources. The introduction at some water points of water vending has ensured that water charges are based on use.

ability, and transparency in management (table 4.2).

Most communities said that the committees met as need arose, such as to attend to repairs, make duty rosters for clearing the surroundings, elect or reelect members, and resolve conflicts. Several factors were found to influence the effectiveness of the management of the service:

- Management committees that allowed voice and choice were accepted by the community.
- Committees that had been selected by the community were regarded as legitimate, and the community accepted them.

Findings

- Ownership of the facility and legitimacy of its committee are linked to sustained service.
- There is a link between functioning service, effective financing and management.
- Local financing systems that do not charge according to water used but charge a flat fee may end up disadvantaging those already disadvantaged—the rich, who have more needs for water, will use more; the poor, with fewer water needs, will end up subsidizing the rich.
- Good governance at the community level during the life of the project leads to a more sustained water supply.
- Effective use, financing and management are a function of user “voice and choice”; the more the user has voice and choice the greater the chance of effective financing, functionality, and effective management.
- Communities are willing to invest in sanitation services but lack technical know-how about low-cost, appropriate, and sustainable technologies.

- Where the community accepted the committee, the community viewed the water source as something it owned. Implicit ownership leads to willingness to operate and maintain the facility, through cash payments or carrying out preventive maintenance.
- The effectiveness of management committees was hampered by the lack of local backup systems, for example for providing spares or training in maintenance. Training seems to have ended with project completion, and there was no support for refresher training. This is not to imply that there are no institutions that have the task of providing local committees with backup support. The issue is that the local institutions (local government or local authorities) do not have the capacity to support the water and sanitation services because they lack resources.

4.1.2 Technical and managerial training

Training is a factor that strongly influences sustainability of water services. All local management committees and pump caretakers were trained to carry out repairs. The assessment found that training both men and women in technical, management, and hygiene aspects leads to functioning systems. Communities also value the skill development. In South Africa, skills development was listed as one of the benefits of the water and sanitation programs.

Findings

- Training is an essential element in effective management.
- Community efforts at effective management are weakened by lack of institutional support in access to spares, technical support, backstopping and refresher training.

4.1.3 Effective use

Sustained and effective use of a water and sanitation service are other variables that should be considered in evaluating the sustainability of the service. Communities that previously used unprotected water sources such as open wells, springs, and canals have changed to safe protected sources (figure 4.1). However, when the unprotected sources were more convenient to use, they were preferred for such activities as washing clothes, watering cattle, and soaking cassava.

Field insight

In Kwale District of Kenya, because the district lacks backup support, people must travel 600–700 kilometers to Nairobi, the capital, for spare parts. Supplies and spare parts need to be more readily available. The district can help by purchasing spares and bringing them into the community. The community can then purchase them locally without having to travel 700 kilometers. Also, project staff can work on behalf of the community with private traders, encouraging them to sell spares in local shops. In Zambia, the communities cannot replace components of the windlass technology provided by the project because they are not available locally.

Findings

- Services that are gender and poverty sensitive rate high in effective use but are not significantly more sustainable; a service may perform well technically and financially yet leave an important section of the population unserved and have less impact on hygiene practices.
- Projects that provide a high level of service and that combine water supply, sanitation and hygiene as their objectives make better effective use of improved water points than projects that only supply water or that rate lower in services performed.
- Initial payments alone for a water system do not create community ownership and support; factors with more impact are community participation, good governance, and satisfaction of users with the service.

4.1.4 Sustainability of sanitation projects

The assessment questions were designed for externally supported sanitation programs. Therefore, in some assessment communities data were not collected on community-initiated latrines.

The results indicate that no local sanitation efforts in the assessment areas had been supported by projects, although there were community-initiated latrines in Kenya, South Africa, and some parts of Zambia. These latrines were functioning, and people were using them, but sanitation coverage is very low. In Kenya and Zambia latrines are likely to collapse because the soils are sandy and loose.

A picture emerges:

- The communities value improved sanitation and are willing to invest in it. However, they need support in developing appropriate and affordable sanitation technologies and skills for constructing sustainable structures.
- The investment policies focus on water and not on sanitation.
- Some projects did not even include hygiene and sanitation education, and this has implications on behavioral change.

4.1.5 Conclusions on sustainability of services

- The projects assessed presented elements of sustainability of systems measured through their effective functioning, effective financing and effective use. The ownership of the facility and the legality of the management committee affect the sustainability of a service.

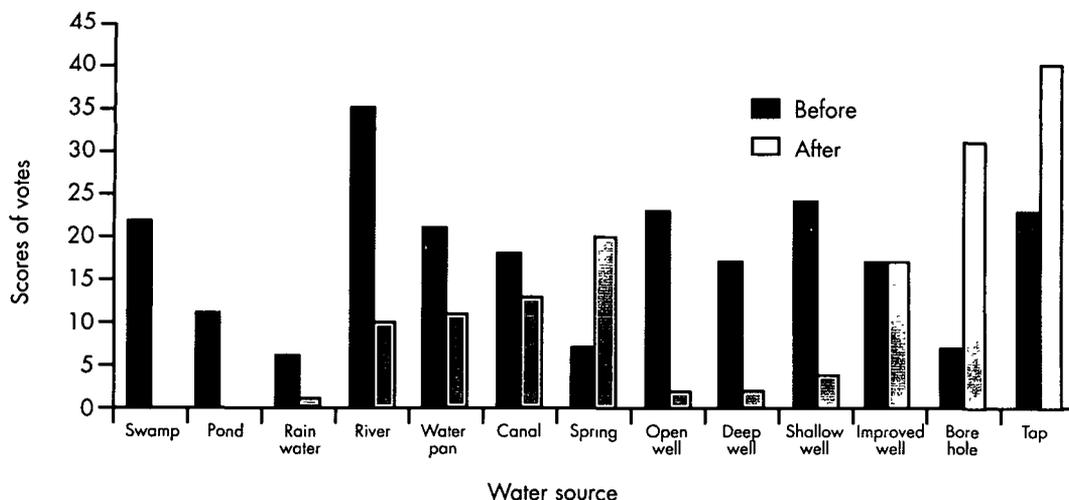


Figure 4.1. Water source pattern before and after the project.

- The effectiveness of the service is a function of user participation in establishing and running it. The bigger the role of the user, the greater the chance of effective financing, functioning, and management.
- When a service meets the demands of the users in quality, quantity, and reliability, the chance is great that the users will pay real costs and manage the system, leading to its sustainability.
- Community efforts toward effective management of the service are weakened by the lack of institutional support for access to spares, technical support, and refresher training. In Kenya, the project staff and the community noted that support stopped when the project was completed.
- Training of both men and women is an essential element for effective management of the service.
- Local financing systems in which charges for water are not tied to its use may end up to the disadvantage of those already disadvantaged. In other words, paying a flat fee for water likely means that the poor, who may have lesser water needs, subsidize the rich, who have greater needs for water.
- Sanitation services are not given priority in investment policies. The result is that sanitation coverage is low and inadequate. Communities are willing to invest in sanitation services but lack technical know-how on appropriate and sustainable technologies.
- There is a link between effective financing, functioning, and management of water service and sanitation service.
- The approach goes beyond service establishment to include service exploitation and takes into account that different user groups (rich men, rich women, poor men, poor women) may have different needs.
- The value attached to the service by poor men and women, rich men and women is expressed through what they are willing to contribute to real project costs in cash, kind, labor, or time.
- Responsiveness of the project allows people's voice and choice in the level of technology and service, location of facilities, local financing system, local management, and local maintenance arrangements.
- If service delivery satisfies a community, the satisfaction will generally lead to other benefits, such as practical gender needs, strategic gender interests, economic benefits, and productive gains.
- The value of a service to the community is measured by comparing the service's benefits with community's input in kind, cash, labor, materials, and time.

There is a close relationship and overlap between demand-responsive approaches and participation. When a community participates in a project by providing labor, materials, time, and cash, it is an expression of its demand for the service. When the project involves the community in deciding the site for the facility and the technology to be used, it is responding to the community's demand. A DRA in its true context, therefore, implies that a project facilitates a community's participation in gender and socioeconomic class differentiation, in deciding user priorities, technical options, and cost implications in the investment, and in project operation and maintenance. This is to ensure that the community makes informed decisions and choices about the type of services provided.

In the projects assessed, DRA methodologies were applied without in-depth conceptual definitions. The approach was viewed and articulated as community participation. The degree of that participation and the ability of a project to respond to the needs that the community expressed varied from project to project. Generally, participation was through consulting and involving the stakeholders. The communities expressed their demand for the service through their contribution of time, labor, and cash. However, the projects did not systematically provide up-front guidance on the technical options and the financial implications of the investment, operation, and maintenance.

The value that the community attaches to the service is measured by what it is willing and able to contribute. The assessment found that communities express their demand and attach value through

4.2 Demand-responsive approaches

The demand-responsive approach (DRA) is a methodology that allows demands of the consumer, whether an individual or a community, to guide the key investment decisions. This approach establishes clear links between the kind of service and service benefits the various stakeholders want and what they are willing to contribute in cash, kind, labor, and time for establishing and running the service. Ideally, in a demand-responsive system communities make informed decisions about the level of service they want and can manage to sustain, with an understanding of the implications of their decisions. The priority for participation is given to communities that actively seek to improve their water supply as a community service. Some of the characteristics of a DRA:

their contributions. Different types of contributions as the project began were uprooting trees, providing sand, stones, and other materials, carrying water, digging, and backfilling trenches, crushing stones, mixing concrete, carrying and laying pipes, providing tools and cash, and mobilizing the community. Contributions did not strictly follow gender or socioeconomic patterns. However, community participation in the project was along gender and sex roles: men did the heavy, manual work, and women the lighter tasks, such as cooking and providing water. Furthermore, contributions were in either cash or kind, depending on each person's ability as perceived by each community. The rich often paid more during crises, when the equipment broke down and community contributions were not adequate to cover the repairs. This was true for communities in Kenya and Zambia.

Decisions had to be made at each stage of the project (table 4.3). Decisions taken jointly by the implementing agency, users (male and female) and local bodies had to do with project initiation and location of facilities. Outside agencies were largely responsible for selecting the technology. The negative outcome of this is that without the full involvement in the selection of the technology, users are not informed of the implications of the technology in terms of operation and maintenance and the cost of replacing it. An example is the Malawi projects, where gravity-fed systems have proven too expensive for the communities to replace.

All users, men and women, rich and poor, were involved in making decisions on the location of the

facility, how local management should be organized, the method of financing, the fees, and who would serve as members of the management committee. The positive implications of this are that the users eventually see the committees as legal and the water points as their own, and this perception contributes to their willingness to pay for their services. In the assessments, satisfaction with the service was said to have led to such benefits as water for domestic use, economic use and improved health. Perception of benefits was not influenced by either gender or economic status (table 4.4).

Both men and women, rich and poor, in the community consider water for domestic uses such as drinking, cooking, and bathing a very good benefit. Economic benefits include water for such activities as watering animals, vegetable gardening, and construction. Health benefits are linked to improved hygiene practices and reduction of diarrheal diseases.

During the assessment, community response in relation to value for costs was that for both men and women, status had no influence on the amount of cost of the benefits, and for the rich, gender did not influence the valuation of benefits (table 4.5).

In Kenya and South Africa, all respondents indicated that they got value for their inputs. Their scores for their satisfaction with the benefits ranged from 50 to 100 percent.

A number of points emerge from the assessments in relation to DRA:

- The communities have been expressing their value for the water services through their contributions of cash, kind, labor, and time. How-

Table 4.3. Decisionmakers at various stages of the project

Country and community	Initiation	Technology	Site	How local management is organized	Financing	Management system
<i>Kenya</i>						
Mnyenzi	E	A	E	D	D	D
Mwenengo	D	D	E	D	D	D
Mwembeni	E	A	E	D	A	E
Mwangoni	E	A	A	D	D	D
<i>South Africa</i>						
Tisane	D	D	D	D	D	D
Laaste Hoop	D	C	C	D	D	D
<i>Zambia</i>						
Chiba	B	A	E	D	D	D
Luandui	E	A	E	D	D	D
Mungwi	E	A	E	E	E	E
Nalisila	E	E	D	D	D	D

Survey was conducted with members of focused discussion groups in the communities; the number participating was small and varied from group to group

A – outside agency

B – local bodies

C – male users

D – male and female users (no decisions were made by female users alone)

E – users, agencies and local bodies

Table 4.4. Perceived benefits by social economic status and gender

Country and community	Rich men	Poor men	Rich women	Poor women	Average score
Kenya					
Economic	4	4	4	3	4
Domestic	5	4	5	4	5
Health	5	5	4	5	5
South Africa					
Economic	4	5	4	5	5
Domestic	5	5	5	5	5
Health	4	5	5	5	5
Zambia					
Economic	3	2	3	3	3
Health	4	4	4	4	4

Survey was conducted with members of focused discussion groups in the communities; the number participating was small and varied from group to group

- 1 - very little benefit
- 2 - little benefit
- 3 - medium benefit
- 4 - good benefit
- 5 - very good benefit

Table 4.5. Ranges in percentage of the total value of cost of the benefits delivered by the service. Number of respondents in each community ranges from 10 to 15 persons

Country and community	Poor women (%)	Rich women (%)	Poor men (%)	Rich men (%)
Kenya				
Mnyenzi	50-80	50-80	50-80	50-80
Mwenengo	80-100	80-100	80-100	80-100
Mwembeni	80-100	80-100	80-100	80-100
Mwangoni	50-80	80-100	80-100	80-100
South Africa				
Tisane	80-100	80-100	80-100	50-80
Laaste Hoop	80-100	50-80	50-80	80-100
Zambia				
Chiba	80-100	80-100	80-100	50-80
Luandui	50-80	50-80	80-100	50-80
Mungwi	20-50	10-20	20-50	10-20
Nasilila	50-80	50-80	50-80	20-50

Ranges are as specified in the codebook of questions, explained in section 2 3 2/

ever, a high demand for a water service does not seem to be the only factor that contributes to sustaining the facility. Other factors include community participation in operation and maintenance, user satisfaction with the service, acceptance by the users of the committees as legal governing bodies, and good governance by the committees.

- The projects have been responding to the expressed demands for water, applying demand-responsive or participatory approaches that allow for users' voice and choice in site selection, local management systems and financing mechanisms. The projects have not facilitated voice and choice in selection of technology,

which has negative implications for the future of the facilities. The more demand-responsive a project is the more effectively are its services used.

- Demand-responsive approaches are positively associated with effective use. Using DRA in the initial stages of the project is positively associated with all communities effectively using and sustaining the service. Demand responsiveness at all stages of project life is positively associated with effective use and management of the facilities.
- Demand-responsive approaches or participation should be adopted for all phases of the project—initiation, implementation, operation

and maintenance, and monitoring and evaluation. Most of the projects assessed were not responding to community demands in their operation and maintenance activities. That is, institutional mechanisms were lacking for providing backup support for operation and maintenance, management, training and extension services.

- Projects have not responded to the demands for sanitation services. The communities have continued to build their own latrines without much institutional support. These initiatives might be dampened by weak project support, as the skills and technology options at community level are limited.
- Responsibility for sanitation is fragmented among different ministries, leading to weak institutional arrangements and no policies to support sanitation demand.
- Demand-responsive approaches need to be clearly articulated within projects or programs to ensure that institutions (including community institutions) have the capacity to respond to the demand. For instance, although the Kwale Water and Sanitation Project in Kenya acted in response to community demand for sanitation, it did not respond adequately. Communities are therefore now taking their own initiatives to construct latrines. However, if the responsible institutions had the capacity to respond adequately and appropriately to the demand, the community initiatives would be more sustainable.

The assessments show that the responsible institutions were unable to respond to community

demands for affordable and sustainable sanitation options, training in technical and managerial skills, and technical support for operation and maintenance of existing systems.

4.3 Participation

Participation is about power—the power to make one’s decisions and to organize the participation of women and men, rich and poor, to increase their control over resources and structures.

Policies on participation clearly exist in the countries of the assessments. The effort is increasing to develop frameworks for participation by creating an enabling environment. It is evident from the assessments that participation in the communities was of different types and levels:

- passive participation
- consultation
- empowerment through voice and choice

It emerged during the assessments that participation indicators overlapped with DRA indicators. Furthermore, the levels of participation had not been significantly split to show ordinary participation and participation with empowerment. These indicators were split later during analysis.

All projects had some level of participation, although the degree varied from project to project. For instance, Irish Aid in Zambia, the agency that implemented the projects, ensured community consultation in choosing the site for the facility. In Kenya, participation began as the community was made aware of project rules and consulted on the choice of the site, and this participation developed into empowerment.

Participation data from the assessments may be grouped under

- project development and implementation
- operation and maintenance
- benefits and burdens

4.3.1 Participation in project development and implementation

All projects had an element of participation in choosing the site for the facility, providing labor and materials, establishing a committee, setting bylaws or regulatory systems, and so on. However, the projects did not consider participation in conceptualization (with the exception of the Tisane community in South Africa), technology choice, and attendant definitions and obligations that are instrumental in sustaining a project. For instance, it is still not clear how the different socioeconomic groups participated. These shortcomings can be attributed to the lack of tools

Findings

- The more demand responsive a project is, the more effectively used are its services.
- A demand-responsive approach in the initial stages of a project is positively associated with all community groups—rich men and women, poor men and women—effectively using and sustaining the service.
- The approach should be demand responsive in all phases of the project, from initiation, implementation, operations and maintenance, through monitoring and evaluation.
- Communities continue to build their own latrines even though they have little institutional support, limited skills, and few technology options.
- Institutional arrangements to support sanitation demands are weak, and there are no policies in relation to sanitation.

Findings

- The higher the level of community participation in establishing a service, in implementing it, and in operating and maintaining it, the more sustained the service.
- Empowered participation, with voice and choice in selecting committees, setting tariff rates, and scheduling hours of the service is positively associated with effective use; limited community participation in selecting project technology has a negative impact on project sustainability.
- Participation and demand-responsive approaches overlap.

that show up the gender and socioeconomic disparities in participation. The PLA tools used during the assessment greatly facilitated participation by gender and socioeconomic class. Bringing out some of these gaps is highly recommended, so that these concerns can be addressed.

Projects did not conceive the cost implications of the services in terms of investment and operation and maintenance. Consequently, the communities were limited in making informed decisions in relating to type or choice of the technology, level of service, and actual tariffs for operating and sustaining the systems.

4.3.2 Participation in operation and maintenance

There was no foresight to provide backup support after the projects were completed, and the lack of this support affected the sustainability of the services. Communities have the capacity to sustain the systems but often lack the necessary institutional support to assure quality and accessibility of spare parts.

Assessment findings indicated that men and women, rich or poor, participated in operating and maintaining the systems. Some communities worked out ways the poor could pay. For instance, in Kenya instead of paying cash, the poor contribute in kind or pay on credit. In some cases in Zambia, the poor were totally exempted from paying.

During the assessments, one of the challenges was trying to find out who in the household actually paid the money for operation and maintenance, as these issues were regarded as personal. In fact, in one of the communities in Zambia, the assessment consultants were told "to stop entering into people's bedrooms to see how matters are discussed".

The projects did not tie budgets to actual expenditure for operation and maintenance. It was diffi-

cult for the communities to make a realistic calculation or have a vision of the long-term implications for sustaining the services, given that the facilities have a limited lifespan and need replacement. But the project implementers themselves lacked a visionary outlook and did not provide the users with the necessary information to make informed decisions on technology and management options.

A good example is Malawi, where most of the systems have lived beyond their realistic lifespan and actually need replacement, but the communities had not planned for this.

While one might argue that at the time the project was conceptualized, most work focused on technology testing, and hence no clear solutions may have been available. However, when one looks at the current project implementation approach, it becomes clear that the agencies have not learned from the past. For instance, Irish Aid in Zambia and South Africa still have not changed their approaches to provide for sustainability of their projects.

4.3.3 Participation in benefits and burdens

Benefits were accrued from all projects. However, in some cases, the level of benefit was based on labor contributions. That is, the more labor one contributed the more water one was allowed.

Where a flat rate was charged for water, the rich got greater benefits than the poor. For example, in South Africa the rich, who owned wheelbarrows and carts that were ox or donkey driven, used them to fetch and sell water. In Kenya the rich, who had large plots of land, could undertake limited horticulture, but the poor with farms far from the water facility and smaller plots could not use much water for agriculture.

The burden of running the water facility was normally shared among all users. However, the rich were often called upon to shoulder extra responsibility, particularly during crises, as for instance in Kenya and Zambia. Greater benefits might accrue to the rich but they also shoulder greater burdens. The community will tolerate the rich profiting from greater benefits if their incentive causes the rich to contribute more to the scheme.

4.3.4 Participation in sanitation benefits

The benefits to a household from sanitation were difficult to define, although people perceived benefits in improved health. Sanitation tended to be viewed as an individual issue. The household de-

demand for sanitation was not as high as the demand for water. In terms of participation, it was difficult to quantify the findings.

The benefits related to sanitation cannot be immediately conceptualized as can the benefits of water. Hence overall, the demand and the participation of the communities were not high, although some communities did undertake their own initiatives to address sanitation. These communities have been crippled by lack of technical options and environmental limitations such as sandy, loose soils or floods.

4.3.5 Participation summary points

What emerges in relation to participation therefore is that

- A high level of community participation in establishing the service during its implementation and in its operation and maintenance results in a more sustainable service. Community participation is needed in making decisions about project site, technology, and rules for governance.
- The more empowered the community is during a project, the more effective the project is likely to be. The service is effective when communities have a voice and choice in selecting committees, establishing tariff rates, and scheduling hours of operating the service.
- The level of participation varies from community to community. What is evident is that when community participation in selecting the technology is limited, the impact on the sustainability of the project is negative.
- Participation and DRA overlap; community contributions that are seen as participation may actually be an expression of community demand.

4.4 Poverty alleviation and economic improvement from water schemes

4.4.1 Socioeconomic status

Poverty is characterized by deprivation and inability to afford the basic needs required for a normal quality of life. Poverty as perceived is relative and location specific, varying from community to community and from region to region. Poverty definitions as perceived by the community differed from national definitions. Communities defined their

members' socioeconomic status; regional aggregation gives figures of poor 53 percent, medium 33 percent, and rich 14 percent (table 4.6 and figure 4.2).

Table 4.6. Wealth ranking by country and community (percentage)

Country and community	Rich	In-between	Poor
<i>Kenya</i>			
Mnyenzi	8	63	29
Mwangoni	4	32	64
Mwembeni	15	67	17
Mwenengo	40	0	60
<i>South Africa</i>			
Laaste Hoop	3	50	47
Tisane	5	30	65
<i>Zambia</i>			
Chiba	7	26	67
Luandui	17	22	61
Mungwi	5	20	75
Nalisila	36	20	44

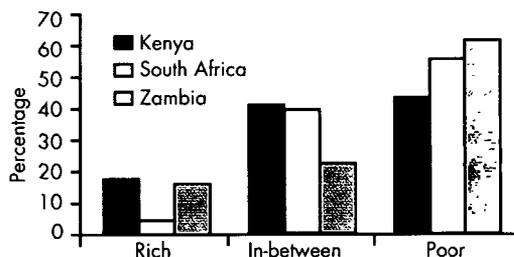


Figure 4.2. Regional wealth ranking.

4.4.2 Payment for services

Although the communities largely classified themselves as poor, this did not mean they were not able to pay for the services. All the communities indicated that they were paying for operating and maintaining the service and were willing to do so, in spite of their socioeconomic status, if the service met their demand and was effective (table 4.7). Some of the communities had also contributed to the capital development of the service.

The study suggests that a community, whatever its socioeconomic status, will financially support a water facility if it sees its value in socioeconomic improvement. Communities used the water for small-scale agriculture activities such as gardening, watering livestock, construction, brewing beer, soak-

Table 4.7. Responses on effective financing by country

Country	Responses		
	Does fund collected from scheme cover cost?	Payment by users	Timeliness of user payments
Kenya	100 percent of O&M cost	all pay	arrears < 6 months
South Africa	O&M cost + future replacement cost	all pay	arrears < 6 months
Zambia	100 percent of O&M cost	poorer households formally exempted	arrears < 6 months
Malawi	< all O&M cost	all pay	arrears > 6 months
Overall rating	100 percent of O&M cost	all pay	arrears < 6 months

O&M – operation and maintenance

^a Although communities see the value and benefits of the water services, the delay in securing payments for operation and maintenance affects the viability of sustaining the system. Usually it is a matter of socioeconomic disparity, and thus the rich step in to supply the funds needed to repair or maintain the system.

ing cassava. They saw benefits in the reduced distances they had to travel to collect water and improved safety for children drawing water (table 4.8).

Although sanitation services were generally not covered by subsidy in the assessment areas, communities have continued to build their own latrines (Kenya, South Africa, and some parts of Zambia). If assisted with low-cost, appropriate and sustainable sanitation technologies, it appears that communities will, in spite of their poverty, build their own latrines as long as they see the value for doing so (table 4.9).

The projects generally focus on interventions geared toward providing primary water supplies. Evidence suggests that in general, people value services that improve their socioeconomic status. But water service delivery is normally based on domestic water consumption rather than socioeconomic development. An issue that was raised from the assessments was how the projects were directly addressing poverty. What may be required is for projects to look at the productive demands of the users in relation to water and sanitation services. If the returns from the service are visible then there are greater chances of the service sustaining itself.

Hence there is need for development programs to link service delivery to poverty alleviation.

The assessments indicate that community members are unaccustomed to viewing projects from the socioeconomic perspective of rich and poor, men and women. Hence, economic devices, instruments, and assessment tools need to be explicit and evident in implementing the project, to address the issues of gender, poverty, and DRA. In addition, “poverty-sensitive” projects that require the poor to contribute labor rather than cash actually take the poor away from productive activities, such as working in their fields, which is probably their source of livelihood.

Sometimes projects targeting the poor benefit the rich by providing them more opportunities to engage in construction and income-generating activities. The rich are also closer to the service and thus have better access to it.

Poverty- and gender-sensitive approaches, although not making a significant impact on the sustainability of the projects, had their impact on effective use of the service. Projects that offer voice and choice to different socioeconomic groups make a difference in how much and how well the facilities are used.

Table 4.8. Benefits deriving from water schemes

Country	Perceived benefit
Kenya	Improved cash income (from water vending), agriculture, livestock watering, improved education, ^a construction of houses, adequacy and reliability, safety for children, quality of water, time saving, water for domestic use (washing clothes, cooking), improved health
South Africa	Time saving, skills training, adequacy and reliability, cash generation, improved quality of water improved health, water for domestic use (drinking and cooking)
Zambia	Time saving, improved health, agriculture, livestock watering, construction of houses, generation of cash, beer brewing, reduced distance to travel, food processing (cassava soaking)

^a Improved education is in relation to the fact that one of the schools used to close during the dry months of the year due to shortage of water. Now the school is able to stay open all year round. This is another perceived socioeconomic benefit from an improved water service

Table 4.9. Scores for sanitation of place of defecation by country

Country and place of defecation	Rich men (no.)	Poor men (no.)	Rich women (no.)	Poor women (no.)	Total (no.)
<i>Kenya</i>					
• Pit latrine	2	0	2	0	4
• Bush	1	4	1	6	12
<i>South Africa</i>					
• Pit latrine	0	6	0	9	15
<i>Zambia</i>					
• Latrine with mud brick wall and grass-thatched roof	4	7	4	6	21
• Latrine with grass thatched shelters without roof	0	1	0	2	3
• Latrine with mud plastered wall and grass-thatched roof	0	1	1	2	4
• Latrine with burnt bricks wall and iron sheet roof	1	1	0	0	2
• Pit latrine	3	3	2	3	11
• Bush	4	5	4	6	19
• Urinal shelter	4	1	0	2	7

Survey was conducted with members of focused discussion groups in the communities; the number participating was small and varied from group to group. The cat method and the VIP latrine, although listed, received no scores.

Findings

- Poverty is relative; it varies from community to community and from region to region.
- Although communities largely classify themselves as poor, they are paying for their own operation and maintenance services of the water supply.

4.5 Gender

"Gender" in this context refers to the socially determined division of roles, responsibilities, and power between women and men. Gender identities and relations are dynamic. They vary over time, from culture to culture, and with economic classes, age, and marital status.

One of the main issues that emerged during the assessment was that while there was an attempt to link the use of gender-sensitive approaches, among other variables, to the sustainability of the services, the gender aspect had been integrated so completely within the indicators that it invariably became invisible. This meant that some of the information collected in a gender-desegregated manner information was not recorded in the same desegregated manner. Future improvements of the assessment framework should include gender-specific indicators.

All four countries participating in the assessment were in the process of developing or improving their gender policies. Kenya is reviewing its policy; Zambia is drafting a policy, and the gender assessments

are expected to feed into the sector policy of Rural Water Supply and Sanitation and the peri-urban strategy; Malawi and South Africa both have a gender policy, and Malawi is developing guidelines to facilitate incorporating gender issues in other policies. The challenge is to translate gender policy into practice and to ensure the practice is followed when programs are implemented. This requires analytical measures to address poverty, gender, and DRA aspects and to create an enabling environment for incorporating gender issues.

In addressing gender issues, the projects have tended to look at household and community participation and the number of men and women in the committees without addressing the gender roles and responsibilities in decisionmaking processes. Consequently, men and women may have been involved in equal numbers, but true gender balance in assuming roles and responsibilities may not have been achieved, and this situation needs to be studied.

It is evident from the assessments that one cannot transplant the application of a gender policy and the experience from one community to another. One needs to look at the social and environmental context of each area and address gender issues within that perspective.

It should also be noted that there were competing interests in water use. When the water had economic benefits, the man tended to take the leading role. The woman did not seem to mind this situation as long as the economic viability was contained at the household level. However, the moment the issue of the service moved into the community, men dominated, and women lost all

control over the resources, although they did have access to services.

However, if both men and women, rich and poor, receive technical training, the training ensures that they will be empowered. The technical skills they gain build confidence among all, including women and the poor. These skills can provide opportunities and be used elsewhere, besides managing the facilities. The more the community recognizes the benefits the project brings them, the greater its willingness to sustain the services.

The institutions that are expected to implement gender policies lack the tools for gender promotion, professional and technical training, and the requisite skills. To incorporate gender issues, therefore, it is important that institutions have the capacity to respond adequately to people's demands.

Gender considerations in the community have existed even without projects advocating them. Incorporating gender concerns must build on these experiences without trying to change the social fabric. Overemphasizing the role of women can lead to overburdening them rather than improving their standard of living. During the assessment, however, it was found that in all community-initiated latrines, men did the digging, while women provided food.

Findings

- The challenge is how to translate gender policy into practice and ensure that the policy is carried out when the program is implemented.
- Projects do not address the critical issues of true gender balance concerning roles and responsibilities in decision-making processes.
- When the water has economic benefits, the man tends to take a leading role, and the woman does not seem to mind as long as she has control in the household; but water resources in the community become male dominated.
- Technical training ensures empowerment; both men and women, rich and poor, need to be entitled to receive it.
- By participating, women gain confidence.
- Institutions need professional and technical training and skills building to be able to integrate gender issues.
- An overemphasis on gender roles and prominence for women can lead to overburdening them rather than improving their standard of living.
- Projects that were gender and poverty sensitive at the start and during project implementation are positively associated with effective use.

Catering for gender and poverty factors during project initiation reflected positively on the effectiveness of the project. The approach toward poverty and gender sensitivity may not have been a clear concept that was spelled out as the project began, but it was enacted when the community began carrying the project out. Projects that did have gender and poverty sensitivity built in as the project was implemented, as happened in Kenya, South Africa, and Zambia, also had positive results.

4.6 Policy framework

The development and reform of water policies are relatively recent occurrences in the region (1993 in Zambia, 1994 in South Africa, 1998 in Malawi, 1999 in Kenya). The policies have been developed to provide a more comprehensive framework for the water supply sector and to define the roles and responsibilities of all stakeholders in the sector. Major policy developments are the following:

- A move toward decentralizing the function of providing the services (Malawi, South Africa, Zambia). Decentralization facilitates the use of demand-responsive approaches, as services are provided at the lowest administration level that is near to the users of the service.
- A move to using the private sector in providing the services (Kenya, South Africa, Zambia). The private sector is able to respond to demand faster than public service.
- Adoption of community management strategies in operating and maintaining services (all four countries of focus).
- Development of sanitation policies, although the policies are often merged with the water policy (Malawi, South Africa).

Governmental responsibility for sanitation is uncertain and often lies with several ministries. The impact of the lack of attention to sanitation is directly reflected in the community, as appropriate sanitation services are scarce. The absence of sanitation policies has had a negative effect on sanitation coverage. Zambia has developed a national environmental and sanitation strategy (1998) in an effort to put sanitation at the forefront of the agenda and to spell out the roles and responsibilities of the various actors.

Gender issues are a relatively new area for policy. South Africa has a gender policy, and Malawi is discussing one. Zambia's gender policy, presently in draft form, should provide guidelines for considering gender in water and sanitation services. What is evident from the assessment is that there is gender awareness in the four countries but

the strategies for incorporating gender issues in water and sanitation programs are weak. During the assessments, none of the projects could articulate the strategies they used to ensure gender issues were addressed. The projects have focused on strategies to balance gender concerns—generally by having gender balance in committees and by training women in hygiene issues. Policies and strategies have not addressed women’s strategic needs, which would change the position of women in society, but rather have tended to focus on practical needs such as reduced distances to water sources.

Policies on demand-responsive approaches are often conceptualized and take form as a result of community participation in development projects. All four countries have strategies for facilitating participation in the projects, creating an enabling environment for community participation with empowerment.

Points that emerged from the assessments in relation to policy support are the following:

- All the countries participating in the assessment have national policies on poverty. However, there are no specific institutional arrangements or processes to ensure that the approaches made in providing water and sanitation services are poverty sensitive.
- Although the overall goals of the water and sanitation projects were to eradicate poverty and uplift the standards of the user committees, most of the services provided were for primary water supply. One of the major findings in all the countries was that users valued water not just for domestic use but also for economic activities.
- The objective of various governments is to create an enabling environment for development, taking maximum advantage of the capabilities of the central and the local government, the formal and informal sectors, NGOs, and communities. The subsidized services in the region can no longer be sustained by government support. While it will still be necessary for the government to subsidize a substantial portion of the capital investment cost of new services, users must progressively assume recurrent and operation and maintenance costs.
- The existence of water policies may have been instrumental in enabling the projects to respond

Global results

The global results through the regression analysis indicate that projects with a higher service level and projects combining water supply, sanitation and hygiene objectives used water points more effectively than projects that supply only water or have a lower service level.

to the demand for water services. Lack of sanitation policies has had a negative impact on the development of that sector and on projects’ ability to respond to the demand for sanitation services.

- The involvement of the private sector in water and sanitation projects creates an enabling environment for community management of the facilities. Other factors that have had a positive influence on management of the facilities have been decentralization and policies on participation.

Findings

- Although national policies in relation to poverty exist, there are no clear specific institutional arrangements and processes to ensure the application of poverty-sensitive approaches in water and sanitation programs.
- A major finding is that users value water not just for domestic use but for economic activities as well; however, although the overall goal of the water and sanitation projects is to alleviate poverty and uplift community standards, most of the services that have been provided are only for the primary supply of water.
- Governments cannot continue to subsidize services; although government may undertake a substantial portion of the capital investment costs of new services, users must progressively assume the recurrent and operational and maintenance costs.
- Lack of sanitation policies has had a negative impact on the development of sanitation projects and may explain the lack of ability to respond to demand for sanitation.
- The involvement of the private sector in water and sanitation projects, decentralization, and policies on participation have had a positive impact on community management of facilities.

4.7 Institutional arrangements

Institutional arrangements for providing water and sanitation services vary from country to country. In all the communities assessed, the provision of water falls within the technical ministry or department of water resources. This creates an enabling environment for the technical aspects of water services. However, these departments, which are largely technical in approach, are unaware of and do not

consider such social aspects as poverty, gender and participatory approaches.

The processes used in involving communities largely looked at communities as a whole without attempting to desegregate data by gender or socioeconomic groups and targeting interventions in that manner. Although institutional arrangements to include gender-sensitive approaches were weak, community participation with empowerment was facilitated at the community project level (see sections 4.2 Demand-responsive approaches and 4.3 Participation).

In all the focus countries, while responsibility for water is well defined, responsibility for sanitation has been fragmented without one institution being clearly designated to take charge of it. In Kenya, water is placed within the Ministry of Natural Resources, Water Resources Department, hygiene is within the Ministry of Health, and sanitation is under the Ministry of Health and the Ministry of Local Government, although in the past it has been under the Department of Water. Efforts are being made through the sanitation working group to rationalize the situation. The Ministry of Water Resources has formed urban and rural water and sanitation working groups to identify issues and their solutions and act on them.

In South Africa, both water and sanitation are placed under the Department of Water Affairs and Forestry. However, the ministry's primary responsibility is to provide water. There is a move to use local authorities as service providers. The delivery mechanisms in all the countries are through the line ministries and NGOs. South Africa has also used the private sector for delivery, and the other three countries are exploring the possibilities of private

Kenya

The aim of policy is to guide water sector activities to achieve sustainable development and management of water resources. The policy provides a framework in which the desired targets or goals are set and it outlines necessary measures to guide the entire range of actions to synchronize all water-related activities and actors. The basic areas addressed by the policy include water resource management, water supply and sewerage development, institutional arrangements, and financing for the water sector. The ministry recognizes the enormous task and the concerted efforts needed to adequately provide these services, and it has formed both urban sanitation and rural water supply and sanitation working groups, constituting various sector partners, to plan the delivery of services.

sector partnerships to deliver water and sanitation services.

In Zambia, sanitation is the responsibility of the ministries of Local Government, Health, and Energy, operating through the program coordination unit and the reform sector unit. Water and Sanitation (referred to as WATSAN) is located in the Ministry of Local Government and Housing, and there have been efforts to form intersectoral committees such as the water, sanitation, and hygiene education committees. A project-coordinating unit has been established to facilitate the review of both rural and urban sector policies. The coordinating unit in turn mandated the reform sector unit to review the respective policies. Local authorities are envisaged to be increasingly involved in providing water and sanitation services in the future. They have been given more authority, and there has been a move toward forming integrated water and sanitation committees, called WASHE.

In Malawi, the government has been the main provider of services, with sanitation falling under the Ministry of Health. Partners of the government include NGOs and external support agencies. Community participation has mainly been by providing labor and selecting sites for the services.

As stated previously, the assessments indicate that there is demand for sanitation support, but this demand is not being met by government institutions. The demand is largely for research on low-cost, appropriate facilities and technologies and development of skills to construct such facilities.

The support of government institutions is evident when the project is being implemented, but it tends to be weak after the project is complete. Emerging from the assessments are the following points:

- Institutions lack the tools and the skills for applying demand-responsive and gender- and poverty-sensitive approaches. The assessments did not use tools designed for collecting gender- and poverty-desegregated data. Communities are often viewed as a homogeneous entity, being referred to as "users", "target groups" or "households". Communities, however, have applied poverty-sensitive approaches, using targeted payment systems with the poor often exempted or being allowed to pay in kind.
- The institutions lack the capacity to follow up a project once it is completed. The communities indicated that they found it difficult to get advice and refresher training. Such support from extension services is essential to sustain community efforts.
- The institutional support evident as the project is being initiated and implemented has been vital in developing water and sanitation services.

- The lack of institutional skills in addressing gender and poverty issues has meant that projects treated them superficially. Thus it will be difficult to assess future impact of water and sanitation services by gender and socioeconomic groups. Institutions still focus on the facility hardware. Although a social scientist was on the team in the projects that were assessed, no one was skilled in gender or poverty issues.

Institutions need to be strengthened in skills for responding to user demand and for applying demand-responsive and gender- and poverty-sensitive approaches. This may involve using experts in these areas, training project staff, developing policies, advocating gender and poverty aspects. It will mean allocating adequate resources to take care of these social dimensions of the water and sanitation projects. Project staff appraisal should take into account how well the social aspects within the water and sanitation projects are addressed.

Findings

- Institutions lack instruments and strategies for applying demand-responsive, gender- and poverty-sensitive approaches.
- Sustainable community efforts depend to a large extent on support from institutional extension services. But institutions lack the capacity to follow up with advice, refresher training or extension support.
- Institutional support, which is vital in project development, is evident during project initiation and implementation stages.
- Institutions still focus on hardware. The lack of institutional skills in handling issues of gender and poverty has meant that projects addressed them only superficially.

5 METHODOLOGY AND RESEARCH INSTRUMENTS

One of the objectives of the assessments was to test a methodology that used participatory approaches in linking demand-responsive, gender- and poverty-sensitive approaches and participation to the sustainability of water and sanitation services.

The general feedback from the field teams in the four countries was that the participatory learning and action tools proved workable and effective in drawing out the needed information, attracted and held the interest of community groups, and generated lively discussion even on subjects considered sensitive. They helped reveal information about positive and negative aspects of project planning, design, and implementation, people's access to and use of the services, and the way the projects were being managed and maintained. Some variation experienced in how different teams applied the tools pointed to the need for more guidance on selecting assessment teams and giving them the training they needed to apply the methodology.

5.1 The tools

Wealth classification required communities to decide who among them were rich, of medium income, or poor. The process involved voting based on socioeconomic indicators, such as property ownership. The results of a community's own wealth ranking were used as a basis for sampling, as the study was based on data desegregated by gender and socioeconomic status.

Social mapping required a community to map itself, indicating existing facilities, their numbers, types, and location of water and sanitation facilities established before and after the project, location of rich and poor households, and planning

Wealth classification issues and observations

- The communities had their own way of assessing themselves that did not follow the national indicators of poverty. While national indicators for poverty may be based on per capita income, community measurement may be based on type of house, clothes, number of meals per day or education.
- The measure of richness or poverty was relative in each community.
- The socioeconomic analysis was not comprehensive enough on issues of poverty to enable the assessment to draw concrete conclusions.
- Issues of poverty must be studied in greater detail if poverty is to be linked to sustainability.
- While the tool superficially brought out socioeconomic data by gender, the subsequent codebook questions were not consistent in addressing gender and socioeconomic issues.

and selection of the focused group discussions.

Transect walk was used to cross-check information on the map. It allowed the assessment team to make its own observation of the facilities and to understand more about the community and its topography and resources. It also helped confirm the social map. A *semi-structured interview guide* was used during the transect walk to facilitate observation. Information was gathered on the functionality of the system, effective use of both water and sanitation facilities, reliability of the water source, quality of works, solid waste management, and design of water and sanitation facilities.⁹

⁹ Other tools were also used to answer the questions on sustainability.

Social mapping issues and observations

- Besides being a data collection tool, mapping was found useful in creating community awareness about development issues. For example, in Malawi one community became concerned when they saw from their map that one of the two water points was located near the chief's house and the other near the house of a relative.
- The tool enabled people to start planning ways to address their own issues such as management of water points or funds for maintenance—issues of which they are aware but about which they may need external stimulation. The study was thus found to be a capacity-building process and not just a method of extracting information.
- The tool is gender sensitive, allowing for participation of all gender and socioeconomic groups.
- Women paid particular attention to detail as compared with men. Because the map as a tool was expected to provide as much information about the community as possible, women could contribute heavily to it. The process encouraged women, who were normally quiet in a community meeting, to open up and express themselves.
- The tool could also be used in wealth ranking.
- It was suggested that the tool be administered before wealth ranking as it "broke the ice" in the community.

Transect walk issues and observations

- Although the tool was found useful, it was noted that recording the data was difficult as there was a lot more information to be recorded than the recording instruments were capable of capturing.
- The transect walk should be repeated after the assessments are completed at the community level for comparative purposes on the findings.
- During the transect walk it became clear that sanitation projects had not been project supported. Where there was sanitation it was community initiated.
- The tool helped identify issues relating to availability of water and sanitation services, how effectively they were used, and their operation and maintenance.
- The transect walk facilitated learning for both facilitators and the community, as participants realized resources they might have been taking for granted and gained new insights into what they could do.

Pocket voting involved the communities using secret voting to assess their behavioral patterns in using water and sanitation facilities and making decisions as a result of the projects. Information generated was gender and socioeconomic desegregated data on service operation, effective use of water and sanitation facilities.

Pocket voting issues and observations

- It was noted that the name of the tool may need to be changed as it may confuse communities in certain environments. In South Africa, for instance, the assessments were carried out just before the elections, and some people seemed to think that the process was part of the elections.

Card scoring required the communities to assess their contribution in establishing the service. Information was recorded on the level of contribution of the different gender and socioeconomic groups, type and degree of contribution, monitoring and control when the project was established.

Card scoring issues and observations

- The tool was useful in getting communities to appreciate the importance of their contributions.
- The tool had limitations in that it was not able to give information on the level and extent of contributions.
- The gender dimension in the household could not be adequately addressed as the groups started bringing in stereotypes; for example, when a man contributed cash, it was assumed that he had contributed for the family.
- The use of other gender-sensitive tools, such as gender-resource analysis, would have brought out information on control and access to resources.

Ladders 1 dealt with cost-benefit analysis and helped the communities assess the worth of the benefits from the service in relation to their contributions. Community perceptions on the different types of benefits were carefully assessed. The information was related to demand and response for water and sanitation services.

Ladders 1

- No specific issues or observations came out of Ladders 1.

Ladders 2 was used by the communities to assess the impact of the service on women's workload in relation to that of men. The data collected pertained to who performed what task, how much time the tasks took, and whether or not people were paid for doing the work.

Ladders 2 issues and observations

- The tool allowed for manual data analysis, which would be necessary if one had no access to computer software packages for analysis.
- There was inconsistency between the codebook tools and the recording instruments, as they used different sets of variables.
- It was difficult to record information about which were paid tasks and which were not. Some community members performed tasks without cash payment but derived some other benefit. Such benefits were not considered a payment.
- The specific objective of each question was not clear, leading to different interpretations by each country assessment team.
- The tool was able to make community members aware of how much work the women performed. Using task target analysis, which looks at the overall tasks performed by women in relation to time, would have brought out issues more clearly and placed them in the right perspective.

History of participation was used to determine who in the community were responsible for making decisions related to the water and sanitation services. Information collected covered the types of decisions made and the people who made them throughout the project cycle.

History of participation issues and observations

- The tool failed to bring out gender-desegregated data on community participation.
- The tool drew out data on the broader issues on participation.
- It was noted that the communities were involved in making decisions over issues like siting of the facility, management of the system, users' fee and maintenance, but not in the selection of the technology.

Stakeholder meetings at the institutional level determined the role the various stakeholders had in implementing the services and what project rules and regulations were in place to foster demand-respon-

sive, participatory, and gender considerations. Using the community assessments and reports, stakeholder meetings were held to analyze institutional response to community needs. The meetings drew out information on the nature of the policies and strategies on sustainability, poverty, equity, gender, demand-responsive approaches, and participation. They addressed the strategies on capacity building, support for community initiatives, and capacity to respond to community demand.

Stakeholder meeting issues and observations

- Institutional analysis at project level depended to a large extent on the availability of records. The information given through discussion was to be confirmed using records. However, weak record keeping affected data collection. The gender steering committees in each of the assessment countries facilitated continuous institutional assessment, as they regularly interacted with the gender teams at meetings. Furthermore, all the assessment teams had government teams working with them, who provided valuable information on the policy and institutional framework.
- Overall, the process of assessing the institutional and policy framework should have been strengthened to improve the analysis of issues relating to policy environment for gender, poverty, participatory, and demand-responsive approaches. Weaknesses in the analysis process may be linked to the limited time within which the assessments were conducted.

Review of records, literature, and structured questionnaires: Information from applying the research instruments (participatory tools, observation, interviews, semi-structured questionnaires) was recorded in the data-entry forms or the codebook, which had been designed together with the participatory learning and action framework. Issues and observations on each tool are given in section 5.1.

Some training material tips:

- Codebook questions or scoring format scales to be used with each PLA tool should be clearly identified, and the scale and tool presented together in the methodology guide.
- For field use it helps to paste the pictures for visual tools on color-coded cards of adequate size. Color helps to identify a set of pictures in a stack of tools. The card backing allows the pictures to withstand damage from repeated use. If long-term use is envisaged, the card-backed pictures can be laminated with plastic film.

- Large plastic garbage bags keep tools and other materials safe during fieldwork in the rainy season.

5.1.1 Timing and duration of the assessments

Sessions have to be staggered over several days and scheduled at times and places decided in consultation with the groups of men and women to be met. The aim is to enable all interested people to participate without disrupting their domestic routines and livelihood-related activities. This usually implies at least five to seven days per community, and *not* during the busy periods such as planting and harvesting time. After dinner—evening to late night—was the favored time in many communities.

The methodology recommended is to use most of the tools in separate male and female groups to fully capture gender differentials in views and experiences. This is based on past experience of women's voices not being adequately expressed and heard in many cultures in which men dominate community decisionmaking and public gatherings. The lesson from this suggests that the decision to separate groups by sex should be made based on local cultural norms and in consultation with men and women from the community.

5.1.2 Sequence of learning activities

It is important for the assessment team to establish a degree of trust with the community before introducing participatory learning and action exercises. The sequence of exercises should then lead to a progressive opening up of areas to be explored. The experience of the teams in Kenya, South Africa, and Zambia was that social mapping was an icebreaker. It was a group activity that men and women could both quickly move into and get involved in, thus overcoming their initial reticence. It was a visual activity, which allowed illiterate participants to join in, and it built everyone's confidence to participate further. The initial map thus produced showed only the water and sanitation service infrastructure, major landmarks, and clusters of homes. After doing the wealth classification exercise, the groups returned to the map to mark the homes of the well off, the poor, and the middle-income groups. Further analysis on the map then identified differentials among households in access to services, training received, composition of service management committees, and so on.

The assessment teams established rapport with the communities by first meeting village elders to

explain their purpose and to seek their approval, and by joining in community activities. These were such activities as participating in communal prayers at the mosque, attending a wedding, or helping harvest coconuts. In all countries but Zambia, the wealth classification exercise was found a useful opener, as it included asking community groups to draw pictures of persons who were well off, not so well off, or poor. The drawings challenged the group's creativity and generated much laughter. In Zambia, the communities were not comfortable with the tool. Hence, wealth ranking may not always be a good tool for breaking the ice, and facilitators need to gauge the situation and create the ideal climate before applying the tool.

In all communities, pocket voting exercises were found repetitive and became monotonous for the participating groups. A tip could be gained from other parts of the world, where color-coded voting tokens were used for men and for women, so that they could vote at the same time but the results could still be tallied by sex.

The sequence of activities should be modified to suit local conditions and community members, with the aim of fostering mutual trust and people's confidence and sustaining group interest in the process. The sequence in which the tools are presented is only a suggestion. Users need not apply the tools in this order step-by-step but use their own discretion about which tool to apply when.

5.1.3 Training the participatory learning and action teams

It is critically important that the assessment teams be experienced in using participatory methods to ensure quality and validity of the data they collect.

Participatory approaches and tools: The assessment revealed that it is not the knowledge of the participatory tools but the experience in using them that is important. For instance, some of the assessment teams who had claimed familiarity with the tools were not able to actually apply them and let them unfold to allow the community to participate. It is important to appreciate that this methodology is a process; it requires working with the community and recognizing that community members have their own knowledge and creativity. Hence, it takes more than just going through the training to be able to apply the methodology effectively.

If a team is experienced in participatory methodology, training in the use of the PLA method should take about a week. The training should include

- becoming oriented to the assessment objectives and sensitized to gender and poverty issues in participation and as expressions of demand
- simulating using each PLA tool through role playing in the classroom followed by reflection on the activity
- field-testing the application of each tool in a real community situation
- critiquing the experience with the trainer
- fine-tuning tools and planning team strategies for overcoming possible problems in the field, based on the field-test experience

Experience from the assessments shows that the technical people sometimes feel uncomfortable using the participatory tools. "Let me come for training when you finish with the visual exercise." The training program should be reorganized to focus initially on attitudinal change and community-based participatory approaches before embarking on PLA methodology training.

If team members have had no prior exposure to participatory methods, an additional week of training is recommended to help them develop the attitudes and behavior they need to apply the tools successfully in the communities. It is likely that they would still need assistance from the trainer when they work with their first community and when they have to deal with unexpected situations in the field.

The one week of PLA training recommended does not include time needed to develop culturally appropriate visual tools, to consult with the proposed community about their willingness to participate in field testing, or to plan the logistics—all of which may need at least another week.

To be able to incorporate gender and to target poverty issues in sector projects, it is necessary to involve country-level training or resource organizations to provide ongoing guidance and training support to managers and designers of water and sanitation projects. Phase 2 of the PLA initiative will focus on producing country-specific capacity-building materials, training trainers in relevant country-level institutions, and networking among them to develop and apply the methodology further.

5.1.4 Community capacity building

The program plan is for the communities themselves to be able to use the assessment tools. For this to become possible, the scoring scales must be further simplified. To develop local capacity, male and female community members who were articulate,

literate, and interested were involved in planning and facilitating the PLA exercises, wherever possible. The experience indicated a promising potential for community empowerment through participatory monitoring and follow-up community action. PLA assessments in each community should conclude with a session on planning what action will be taken to address the issues and concerns emerging from the assessments.

In future assessments, particularly where project-implementing agencies have ongoing relationships with project communities, using PLA methodologies should be seen as an ongoing community capacity-building effort. Teams of external facilitators should include selected community members as cofacilitators who learn to facilitate exercises, analyze and score through hands-on training. Project authorities can then plan a schedule of joint learning assessments with the community facilitators for tracking aspects of the project and services that are mutually considered relevant to monitor.

5.1.5 Points from stakeholder meeting and policy assessment dialogue

The level of the English language used for all the scales of assumptions F and G (see annex 3) needs to be simplified and the sentences shortened to minimize the risk of misrepresenting in local languages the complex ideas they contain.

The stakeholders' meeting should be held in a neutral venue where participants from the community feel comfortable. Venues that worked well were school halls or small lodging houses in town. Government offices and large hotels were inappropriate environments for this event as participants were not relaxed in them.

When presenting the scales for "enabling organizational system" (assumption F, annex 3) to the participants, it is advisable to allow them first to select from the cards representing various levels in the scale the one that best depicts the situation of their project. Only after they have selected and marked the card should they be asked to arrange all the cards on a scale, that is from the lowest to the highest value for each item being assessed. This helps counteract the tendency of some project personnel to choose the highest scoring card to show the project in a positive light.

The policy assessment dialogue worked well in a half-day workshop using interactive and visual participatory methods. Policy-level personnel who were not familiar with such methods enjoyed the experience and appreciated its value as a policy-evaluation tool.

5.2 In summary

Projects were initiated externally, except in Tisane in South Africa, where the community requested the project. Communities participated in identifying sites and in selecting their own committees and establishing their by-laws. The assessments did not make it clear what mechanism were used to ensure participation of all community groups, although the PLA tools did help determine what socioeconomic groups were involved. The limited sample size in the assessments made it difficult to accu-

rately determine what gender and socioeconomic equities or disparities may have existed.

The projects advocate community participation and approaches that are poverty and gender sensitive and demand responsive. But institutions have not practiced these techniques by, for example, providing clear guidelines or training to make these approaches feasible. Institutional support is weak, as evidenced by poor financing and staffing, and that weakness negatively affects gender concerns and promotion of hygiene and sanitation procedures.

6 THE WAY FORWARD

Two major products have come out of the participatory learning and action initiative: 1) the assessments themselves and the findings from them, and 2) the methodology for participatory assessments (MPA). The methodology combines gender and poverty indicators with those for demand responsiveness and sustainability. Because the communities participated in the assessments, they were able to see problems that threatened the sustainability of their services and take steps to correct them.

The way forward will build on these two products—the assessments and the methodology—and will use the knowledge gained so far in deriving these products to change policy and practice.

6.1 Work plans for countries participating in the PLA assessments

The PLA assessment is seen as a part of the overall initiative to address gender issues in water, hygiene and sanitation activities. To this extent, the participating countries developed work plans that are seen to carry the PLA initiative into phase 2. Most of the country activities are related to policy development, operational strategies for handling gender issues, and development of gender-sensitive tools. Specific country work plans were as follows.

6.1.1 Kenya

One of the immediate actions will be to disseminate the country results of the PLA assessments to different stakeholders. Dissemination strategies will include holding workshops. The gender and sanitation task forces working to develop policies will

The way forward

- *Dissemination and advocacy*, using the initiative's results and products. The plan is to develop materials for specific audiences—technical papers about concepts behind the initiative, papers on best practices. These will be distributed regionally and globally. Advocacy will use videos and other material in workshops, forums, and meetings with decision-makers and technical staff.
- *Capacity building and development of tools*. The "Manual for sustainability monitoring", the Metguide, will be made available along with a training video. Training sessions will be held for field practitioners, and a training-of-trainers program will be developed to use the MPA (the methodology for participatory assessments). WSP resource persons will participate and follow up activities as required. Tools for integrating gender are envisioned.
- *Furthering the addressing of gender issues*. Learning how to address gender concerns is an ongoing process. Cases highlighted by the global initiative merit in-depth study. Materials such as the Metguide will be developed with gender and poverty issues in mind. Concerns will broaden from rural communities to encompass poor urban communities. Gender in sanitation issues will receive more attention.
- *Cross-sectoral initiatives*. The MPA can be modified for use in other sectors, such as health and energy, for improving household and community services. Professionals in these sectors will have the opportunity to develop and adapt the MPA indicators for assessments in their own specific areas of concern.

also use the report. It is envisaged that the country will then develop a position paper, which will feed into the development of national policies on gender and sanitation.

More concrete plans will be developed in collaboration with the different stakeholders.¹⁰

6.1.2 Malawi

In addition to disseminating the results of the assessments to different stakeholders, the country would like to

- conduct workshops on gender issues, to create awareness and advocate development of a gender-sensitive water policy.
- conduct consultative meetings on participatory hygiene and sanitation with different stakeholders. The assessment results point to the fact that hygiene and sanitation are weak, and the country would like to introduce the Participatory Hygiene and Sanitation Transformation (PHAST) initiative, which is already being implemented in most east and southern African countries. The consultative meetings should lead to the development of a proposal for funding training of trainers in the country and also for initiating PHAST.
- carry out an assessment of the sanitation situation, the results of which should be used to create awareness and to advocate priority setting in allocating resources for sanitation. While the PLA assessments helped highlight the problem of lack of sanitation, it is felt that in-depth studies are still needed, and data from such a study could be used to create awareness of the need for sanitation in the country.
- conduct workshops for sector partner staff on DRA. Again this need came into focus from the results of the PLA assessments, which indicated that both the concept and the operation of DRA in the country are weak.

6.1.3 South Africa

To wrap up the PLA assessments, South Africa aims to report to the communities who were involved. This is seen as a capacity-building process, and it is hoped that the results will assist the communities to take corrective measures in areas identified as weak. Aside from this short-term activity, South Africa envisages several activities.

It plans to develop two videos from the raw footage on the assessments. The first video is seen as promotional material to create awareness that will focus on best practices. The other will be on training in how to use participatory tools for monitoring and evaluation.

Another activity will be to identify participatory tools that can be used for daily monitoring of water and sanitation projects. The long-term plan is to refine and institutionalize the assessment methodology so that it can be put into use in the projects. This strategy should incorporate assessment tools for monitoring water and sanitation programs and training in their use.

6.1.4 Zambia

Zambia would like to disseminate the results of the PLA assessments to stakeholders. The findings will be incorporated into peri-urban and rural strategies, which are near completion. The aim is to develop a gender strategy in the water sector. Training is envisioned on the use of gender-sensitive tools.

6.2 Regional plans

The PLA assessments are viewed as part of the overall regional initiative articulated at the regional workshop on gender held in South Africa in November 1997. The detailed work plans developed during the workshop, which was organized by UNESCO, UNICEF, WSP-ESA, NETWAS International (Kenya) and IWSD (Zimbabwe), are to be used as a reference tool.¹⁰ During that workshop, many of the 17 countries¹¹ that participated but were not assessed expressed the need for support in areas such as policy development and advocacy, and development of gender-sensitive tools and operational guidelines.

The regional plans are mainly concerned with supporting country initiatives and acting as facilitators with the partners who organized the regional workshop. Activities will include helping produce the country reports on the PLA assessments, which the countries would like to use for advocacy and to create awareness, and updating stakeholders on PLA assessment results. When the assessments started, they were funded by different stakeholders and endorsed at the regional workshop. The

¹⁰ *Clean water and better sanitation: a responsibility for all*, Summary proceedings of the Regional Gender Workshop, Pretoria, South Africa, November 1997 (Nairobi: UNDP-World Bank Water and Sanitation Program, 1997).

¹¹ Angola, Botswana, Eritrea, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe.

results should, therefore, be disseminated in a similar forum.

Other dissemination strategies will include producing flyers, technical papers, and field notes on PLA results. Video scripts will be developed. The aim is to produce materials for training, awareness creation, and advocacy.

A felt need expressed during the regional gender workshop in 1997 was to develop tools for incorporating gender issues in water and sanitation programs. Phase 2 of PLA will aim at refining and developing new tools and producing a prototype toolkit, which can then be further adapted within each country. The gender-sensitive toolkit developed will need to be pilot tested to assess its application in selected countries before its use can be scaled up. As an initial step this will be undertaken through a gender MPA resource training workshop that will include the two international training centers, NETWAS and IWSD; the assessment consultants; steering committee members; and a few focal country representatives. The workshop is scheduled to take place towards the end of the year 2000.

Follow-up activities that incorporate gender issues were suggested and planned during the regional synthesis workshop in 1999 in Nairobi. A list of specific activities that WSP-ESA plans to undertake is as follows:

- Disseminate gender assessments to sector country regional partners (1 synthesis, 4 country reports, 4 field notes (Kenya, Malawi, South Africa, Zambia) by September 2000.
- Incorporate good practices on gender issues in policies, programs, monitoring, and evaluation throughout client countries.

- Refine project implementation manuals to deal with gender issues and incorporate lessons from ongoing projects that can be applied in water and sanitation programs in country in Malawi, Zambia and Tanzania.
- Hold a workshop for regional resource centers (IRC, IWSD, NETWAS) and sector partners to review the gender MPA as a tool to validate project rules and processes and to design a monitoring and evaluation framework (November 2000).¹²
- Conduct policy dialogues and in-country consultative meetings for stakeholders on gender advocacy to promote consideration of gender issues.
- Support in collaboration with sector partners gender training-of-trainers workshops in client countries to improve program capacity on how to use the MPA and develop country action plans.
- Ensure that MPA is adopted regionally and used in at least four countries— Kenya, Malawi, Tanzania, Zambia.
- Undertake in-house training for Bank program staff on MPA and gender issues.
- Develop a framework in relation to project rules and processes that will measure or monitor gender equalities.
- Support sector programs that will link gender and poverty concerns to project performance.
- Participate in advocacy forums such as the upcoming International Training Network Centers conference (November 2000) and the recently established Global Gender Alliance meetings and activities.¹³

¹² The study produced an interesting innovative approach, *Methodology for Participatory Assessments*, on how to assess the way in which gender issues are handled and how to design and implement projects that address gender and poverty concerns.

¹³ The Gender Global Alliance was formed and endorsed at the 2nd World Water Forum held in March 2000 in The Hague, Netherlands. It is a network of people and organizations working to achieve equity among women and men, irrespective of their age, color, creed, language, or income, regarding participation and decision making in uses and benefits of water resources. It will work on collaborative activities to advance the knowledge and practice of gender mainstreaming, make visible the benefits of adopting gender approaches for sustainable economic and social development, maintain effective advocacy within international, regional, and local decision-making bodies to ensure gender is given due attention at in relevant institutions, contribute to policy development for participatory water management, and identify options and methods for institutional arrangements, program design, implementation, and monitoring and evaluation. A proposal to this effect has been developed and is subject to approval by the Global Water Partnership. The activities of the network are to be implemented through existing regional and country networks and organizations.

The Global Water Partnership is an independent network open to national governments, research and non-profit organizations, UN agencies, multilateral banks, private companies, and other institutional stakeholders involved in managing water resources. The Partnership helps members exchange knowledge and experience in the practice of integrated water resources management. Through its worldwide network, GWP identifies critical needs for knowledge both regionally and globally, helps design programs for meeting those needs, and serves as a marketplace for providers and financiers of the required knowledge.

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Annex 2 Glossary

access to service	the degree to which each household and persons in these households are able to use the service. Criteria for water services set by sector policies mostly consider the number of users and the distance to the facility, for example, a minimum of one improved water point for every 250 inhabitants and at a distance not greater than 200 meters from any user. Whether these criteria are the same as those defined by the users depends on local conditions. In some situations, social relationships may bar certain groups from using the service; in others, the new facilities may not be competitive with the indigenous sources in social or physical access
benefits	the gains from the service as perceived by the stakeholders for themselves or their family and group in terms of greater convenience, more or better or more reliable water for various uses, collection safety for women and girls, more time for school for children, improved family status, improved hygiene and better health, reduced social or economic conflicts, more time for relaxation or for development, increased value of plots, more income, cost saving, and so on
community	the geographic and administrative agglomeration of all hamlets, quarters, and households, which has “adequate access” to an improved water supply system or combination of systems
cost–benefit analysis	evaluation of the costs of an activity in relation to the benefits to be derived from it
costs	the price paid for using the service as defined by the stakeholders in terms of time and effort, level of payments, risk of social conflicts, sanctions for not adhering to norms or rules, reduced contacts
demand	the level of service and benefits for which people are willing to contribute in time, kind, and cash
demand-responsive approach	a methodology that allows demands of the consumers as individuals and as a community to guide key investment decisions. Such an approach establishes clear links between the kind of service and service benefits the respective stakeholders want and what they are willing to contribute in cash, kind, labor, and time for the establishment and running of these services. Ideally in a demand-responsive system, communities make informed decisions about the level of service they want and can manage to sustain, with an understanding of the implications of their decisions. Priority for participation in a demand-responsive approach is given to communities that actively seek improvements to their water supply as a community service. The approach goes beyond establishing the service to using it and takes into account that different user groups—rich men, rich women, poor men, poor women—may have different demands. Since improved water supply and sanitation are basic services strongly related to public

health and health costs of a society, a demand-responsive approach to these services is not only geared to meet the demands of individual users but also of the community as a whole, that is, the combined demand of the households within its boundaries

gender	refers to the socially determined division of roles, responsibilities, and power between women and men. While biological division—referred to by the terms “male” and “female”—is static, socially constructed gender identities and relations are dynamic. They vary over time, from culture to culture and with economic classes, age, and marital status
gender- and poverty-sensitive approach	the degree to which a project takes into account that the demands, costs, and benefits of services, control over services and service benefits, and value of contributions differ for men and women, the rich and the poor
informed decision	a choice made by a group or individual with a clear understanding of the implications of that choice. The implications may be in investment or recurrent cost, expected participation in planning and implementation, responsibility for operation and maintenance, and possible effects of the service, in terms of social concerns, economics, or health
poverty	a situation in which access to and control over resources is insufficient to cover the basic requirements for water, food, shelter, health, and education. Poverty is not only an absolute but also a relative concept, in that in each society some groups will have better access to and control over resources than others. Poverty can be gender specific in those societies where men and women in households each have their own sources of income and responsibilities for financing. So, it is possible that male heads of households have considerable income from sources such as cash crops, yet the women in the household cannot pay for water and food, which are culturally their responsibilities, because they have less access to the means of production than the men. The classification of relatively rich and poor households is done through participatory tools (see that section) and is related to access and benefits of the service and the participation process
sanitation service or program	any provision or combination of provisions to dispose of human and animal waste and waste water
sustained sanitation	the maintenance by the community of an acceptable level of public and household sanitation without external support
sustained water service	maintenance by the community of an acceptable level of water service throughout the design life of the water supply system without direct external support. Sustained services are examined in terms of both physical infrastructure and the ability of the users and the local management organization to adequately maintain, manage, and finance the service. Thus, the level of sustainability may be influenced by factors such as consumer satisfaction, commitment of users, technical and managerial abilities, financial arrangements to cover O&M, legal or informal ownership, access to tools and spare parts, and technical support and backup
task target analysis	in this context, analysis of a woman’s time and workload, comparing it with that of men
use of service (effective)	the degree to which all individuals, rich or poor and those in the middle-income group, male and female, in the community use the improved facilities hygienically throughout the year and the degree to which they have abandoned their previous more risky, unhygienic patterns. Whether the intended users actually use the service will depend on whether the perceived benefits of the service offset the perceived costs
voice and choice	technique in which the end user has a say in what is done and how it is done in planning and implementing a facility or system
water service	any combination of improved water supply systems that delivers water for domestic and small-scale productive use within a community or cluster of communities

Annex 3 Key indicators for the assessments

A. Effectively sustained	<p>Functioning system</p> <ul style="list-style-type: none">• level of quality of the works (degree to which they are suited to the operation)• service operation in water quantity, quality, and reliability of supply <p>Effective financing</p> <ul style="list-style-type: none">• coverage of investment 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 accounting for service
B. Effective use	<p>Hygienic use by all</p> <ul style="list-style-type: none">• proportion and nature of population using the service• degree of improvement of family water-use habits
C. Demand-responsive service	<p>Meeting user demands</p> <ul style="list-style-type: none">• range of service characteristics users contribute to, for men and women, rich and poor• achieved balance of user-perceived cost–benefits for men and women, rich and poor
D. Division of benefits and burdens	<p>Economic participation</p> <ul style="list-style-type: none">• division of skilled and unskilled, paid and unpaid labor between men and women, rich and poor• cost sharing and contribution sharing between and within households <p>Participation in management</p> <ul style="list-style-type: none">• function-holding and decisionmaking by men and women, rich and poor
E. Participation in service establishment	<p>User voice and choice in planning and design</p> <ul style="list-style-type: none">• degree of informed decisionmaking by men and women, rich and poor on service initiation, choice of technologies and service levels, location of facilities, choice of local service management organization, type and size of contributions to service exploitation; choice of local maintenance system

User contributions to service establishment

- type and proportion of contribution by men and women, rich and poor
- local monitoring and control, specifying men and women, rich and poor

Management capacity created

- type of management skills created among men and women, rich and poor
- composition, status, areas, and tools of control of managing committee, as present and known to men and women, rich and poor

F. Institutional support for gender- and demand-responsive participation

Enabling organizational system

- indicative policy as reflected in service objectives, implementation approaches, and project performance criteria
- sex and class disaggregated planning and monitoring systems in operation
- required project expertise reflected in type of project agencies, field teams, and team approach
- extent and nature of staff training available for new approaches

Supportive organizational climate

- understanding and incentives for demand-responsive and gender- and class-sensitive participatory approaches

G. Policy support for gender and demand-responsive participation

Supportive sector policy and strategy

- national sector policy for water and sanitation present with sustainable services and equity as explicit goals
- degree to which national sector strategies are present to guide the achievement of the policy goals and lay down community participation and management; gender sensitivity and equity; and demand responsiveness

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