

WASH Technical Report No. 89

Designing and Implementing
Decentralization Programs in the
Water and Sanitation Sector

by

Daniel B. Edwards
Fred Rosensweig
and
Edward Salt

July 1993

Prepared for the Office of Health,
Bureau for Research and Development,
U.S. Agency for International Development,
under WASH Task No. 256

Environmental Health Project
Contract No. HRN-5994-C-00-3036-00, Project No. 936-5994
is sponsored by the Bureau for Global Programs, Field Support and Research
Office of Health and Nutrition
U.S. Agency for International Development
Washington, DC 20523

RELATED WASH REPORTS

Making Choices for Sectoral Organization in Water and Sanitation. March 1992. Technical Report No. 74. Prepared by Daniel B. Edwards, Edward Salt, and Fred Rosensweig.

Training Guide for a Management Development Program in Water and Sanitation Institutions. July 1989. Technical Report No. 59. Prepared by Daniel B. Edwards and Edward Salt.

Managing Institutional Development Projects: Water and Sanitation Sector. May 1988. Technical Report No. 49. Prepared by Daniel B. Edwards.

Guidelines for Institutional Assessment: Water and Wastewater Institutions. February 1988. Technical Report No. 37. Prepared by Donald E. Cullivan, Bruce Tippet, Daniel B. Edwards, Fred Rosensweig, and James McCaffery.

Preparing for Private-Sector Participation in the Provision of Water Supply and Sanitation Services. August 1993. Technical Report No. 84. Prepared by Jane Walker.

CHAPTER	PAGE
ABOUT THE AUTHORS	v
ACKNOWLEDGMENTS	vii
ACRONYMS	ix
EXECUTIVE SUMMARY	xi
1. INTRODUCTION	1
1.1 Rationale for the Study	1
1.2 Scope of the Study	2
1.3 Methodology	2
1.4 Origin of the Study	2
1.5 Intended Use of This Paper	3
1.6 Organization of the Report	3
2. DEFINING DECENTRALIZATION IN THE WATER AND SANITATION SECTOR	5
2.1 Types of Decentralization	5
2.2 Examples of Decentralization in the Water Supply and Sanitation Sector	6
2.2.1 Delegation	6
2.2.2 Devolution	7
2.2.3 Deconcentration	7
2.2.4 Mixed Forms	7
2.3 Goals of Decentralization in the Water and Sanitation Sector	8
2.4 Wastewater Considerations	9
2.5 Decentralization and the Environment	9
2.6 Relationship to the Political Process	10
2.7 The Link Between Decentralization and Performance	10
3. ASSESSING CONTEXTUAL FACTORS	13

3.1	Introduction	13
3.2	Assessing the Political Climate for Decentralization	13
3.3	Assessing the Policy Environment	14
3.4	Assessing the Current Deficiencies That Are Attributable to Centralization	15
3.4.1	Current Degree of Management Delegation of Decision-Making	15
3.4.2	Efficiency	16
3.4.3	Consumer Satisfaction and Accountability	16
3.4.4	Equity	17
3.5	Assessing the Potential for Private Sector Involvement	17
3.6	Assessing the Decentralization of Rural Water Supply and Sanitation	19
3.7	Assessing the Potential for Improving Peri-Urban Services through Decentralization	20
3.8	Using the Assessment Data	21
4.	ELEMENTS REQUIRED IN A DECENTRALIZATION STRATEGY	23
4.1	Introduction	23
4.2	Intergovernmental Division of Labor	23
4.3	Basic Requirements of a Decentralization Strategy	24
4.3.1	Planning and Resource Allocation	24
4.3.2	Accessing Centralized Resources	27
4.3.3	Generating and Retaining Revenues	27
4.3.4	Assigning Authority Consistent with Parallel Organizations	30
4.3.5	Staffing	30
4.3.6	Providing Essential Tools for Management	32
4.4	Objectives in Different Types of Decentralization Programs	32
4.4.1	Deconcentration	32
4.4.2	Delegation	33
4.4.3	Devolution	33
5.	THE IMPLEMENTATION OF DECENTRALIZATION PROGRAMS	35
5.1	Introduction	35
5.2	Starting a Decentralization Program	35

5.3	Staging a Decentralization Program.....	36
5.4	Principles of Change Management	37
5.5	Changing the Institutional Culture	39
5.6	The Role of Technical Assistance.....	40
5.7	The Role of Financial Assistance.....	41
5.8	The Role of Management Development	41
5.9	The Role of Training	42
5.10	Monitoring the Decentralization Program	43
5.11	Conclusion	43

BIBLIOGRAPHY	45
--------------------	----

BOXES

1. Lessons Learned	3
2. Examples of Private Sector Participation	18
3. Key Elements.....	25

TABLE

Key Indicators, before and after Decentralization	11
---	----

ABOUT THE AUTHORS

Dan Edwards has been with Training Resources Group since 1981. He has over 25 years of experience as a training and organizational development consultant in Latin America, Asia, and the Middle East. He has worked on numerous WASH assignments over the past nine years, primarily in the area of human resources and institutional development. Mr. Edwards has been involved in decentralization efforts in Sri Lanka, Ecuador, and Eastern Europe. He has lived in the Dominican Republic and Panama and speaks fluent Spanish.

Edward Salt has been with Training Resources Group since 1984. He has consulted in training and organizational development in Africa and Asia for the past 20 years. He has been involved in an A.I.D.-funded project in Sri Lanka to strengthen the National Water Supply and Drainage Board since 1986. He has also lived in Ethiopia.

Fred Rosensweig has been Associate Director for Human Resources and Institutional Development for the WASH Project since 1981 and an employee of Training Resources Group since 1984. He has been directly involved in institutional strengthening activities in Tunisia, Ecuador, and Zaire. He has lived in Tunisia, Senegal, and Cameroon and speaks fluent French.

ACKNOWLEDGMENTS

This activity benefitted from the contributions of a number of people.

At the beginning of the activity, WASH invited a group of individuals knowledgeable about decentralization to a one-day workshop. The workshop was instrumental in shaping our initial thinking about decentralization. Participating in the workshop were Fritz Ford, Tim Campbell, Jerry Silverman, Alec Gershberg, and Bill Dillinger from the World Bank; Horst Otterstetter and Miguel Segovia from the Pan American Health Organization; Sonia Hammam and Tamara Arsenault from AID.

The authors would also like to thank those individuals who reviewed the document. Eddy Perez and Craig Hafner from WASH reviewed a near final draft of the document and provided useful comments. Tim Campbell and Guillermo Yepes from the World Bank reviewed the final draft and provided very helpful comments.

Courtney Roberts was responsible for editing the document.

ACRONYMS

A.I.D.	U.S. Agency for International Development
DGM	Deputy General Manager
IEOS	Institute for Sanitary Works (Ecuador)
NGO	nongovernmental organization
NWSDB	National Water Supply and Drainage Board (Sri Lanka)
OD	organizational development
PAHO	Pan American Health Organization
RWSS	rural water supply and sanitation
WASH	Water and Sanitation for Health Project
WHO	World Health Organization
WS&S	water supply and sanitation

EXECUTIVE SUMMARY

During the past several years, many countries have undertaken major efforts to decentralize the delivery of public services. Public pressure for improved services, the explosive growth of cities, a desire to push responsibility down to lower levels of government, economic reform, and increased democratization are all factors that have driven these efforts. The trend toward decentralization coincides with the growing use of the private sector as an alternative to government-provided services.

This paper examines the decentralization of water supply and sanitation services. The purpose of the paper is to provide guidance to project designers and implementers on the design and implementation of decentralization programs in the water and sanitation sector. This document does not provide guidance on whether or not to decentralize; rather, it focuses on how decentralization should be accomplished. The central premise of the paper is that successful decentralization requires redefining central government functions and strengthening local or provincial structures.

The paper is intended to do the following:

- # Define decentralization in the water and sanitation sector
- # Determine the key sectoral and contextual issues to be assessed before designing a decentralization program
- # Discuss the major elements necessary in a decentralization program
- # Provide guidance on the implementation of a decentralization program

The scope of the paper covers urban and rural water supply and sanitation, as well as peri-urban services.

Definition of Decentralization

This document uses Rondinelli's definition of decentralization:

- # *Devolution*: transferring authority and responsibility for decisions, management, and resource mobilization to local governments.
- # *Deconcentration*: placing resources and staff at lower levels within the same administrative structure.
- # *Delegation*: assigning central government duties or responsibilities to a surrogate unit, such

as an autonomous water company or private sector entity.

This paper provides examples of the three types of decentralization and explains that many countries are examples of mixed forms.

Contextual Factors

The starting place in designing a decentralization program is a sound understanding of the current situation in the sector. The project designer should understand a number of broad contextual factors that will greatly influence the form that decentralization will take. These factors include the following:

- # The political climate for decentralization
- # The policy environment and whether it provides the legal framework that supports change
- # An understanding of the current deficiencies attributable to centralization
- # The potential for private sector involvement
- # The decentralization of rural water supply
- # The potential for decentralizing peri-urban services

Elements Required in a Decentralization Strategy

As central governments redefine their roles and local structures and improve their capacity to manage water and sanitation services, the decentralization program must address several basic issues. The six fundamental elements required in a decentralization strategy are:

- # Participating in planning and resource allocation
- # Accessing centralized resources
- # Generating and controlling revenues
- # Assigning authority consistent with other organizations at the same level
- # Controlling staffing
- # Accessing management tools

Implementation of a Decentralization Program

A decentralization program will mean significant sectoral reformCincluding the reassignment of staff, the redefinition of functions, and the emergence of new institutional structuresC that results in great change. This document provides guidance on how to manage this change best. Suggestions are provided on how to stage a decentralization program. A number of change management principles also are discussed, such as the importance of leadership, the need to work simultaneously with the entire organizational system, and the need to alter the reward structure. This document also discusses the role of technical assistance, financial assistance, management development, and training, all of which facilitate the decentralization process.

1

INTRODUCTION

1.1 Rationale for the Study

During the past several years, many countries have undertaken major efforts to decentralize the delivery of public services. Public pressure for improved services, the explosive growth of cities, a desire to push responsibility down to lower levels of government, economic reform, and increased democratization are all factors that have driven these efforts. The overall worldwide trend toward democratization coincides with the growing use of the private sector as an alternative to government-provided services. Governments are asking themselves which public services should be operated directly by government and what the role of government should be.

The trend toward decentralization also has emerged in the water supply and sanitation (WS&S) sector. However, decentralizing water supply and sanitation services in both urban and rural areas cannot take place without significant sectoral reform. Successful decentralization shifts responsibilities to local structures and opens up the sector to new private or semi-private vehicles for the delivery of urban and rural water and sanitation services. This shift of responsibilities means that the central government's role will be different than in the past.

The purpose of this paper is to provide guidance to project designers and implementers on the *design and implementation* of decentralization programs in the water supply and sanitation sector. While the question of whether or not to decentralize water and sanitation services is an important one, it is not the focus of this paper. The focus is that decentralization in water and sanitation services will take place in many countries because of overall trends in government, public pressures for improved services, and the desire to reduce costs to national governments. The primary question addressed in this document is how decentralization should be accomplished.

This paper is intended to do the following:

- # Define decentralization in the water and sanitation sector
- # Determine the key sectoral and contextual issues to be assessed before designing a decentralization program
- # Discuss the major elements necessary in a decentralization program

- # Provide guidance on the implementation of a decentralization program

The main premise of this paper is that decentralization requires a significant reorganization of the sector, which results in a redefinition of the central government's role and increased responsibility at the local level. Too often decentralization is implemented without adequate attention to the redefinition of roles and responsibilities and the development of local capacity to carry out increased responsibility. Improving skills among employees and developing structures for decentralized operations are important as governments or organizations implement decentralization. The paper discusses the critical elements in designing a decentralization program and ways to manage the process of change that occurs within organizational and management systems at both the national and municipal levels, during decentralization.

1.2 Scope of the Study

This paper covers decentralization in rural water supply and sanitation, urban water supply and wastewater in large cities and smaller municipalities, and peri-urban water supply and sanitation.

This paper refers to urban and rural examples throughout since they present different issues.

1.3 Methodology

The material presented in this paper was collected by a variety of means:

- # Field research
- # A review of project and evaluation documents
- # Interviews with staff and consultants of development agencies, such as the World Bank, the Pan American Health Organization (PAHO), U.S. Agency for International Development (A.I.D.), and WASH.
- # A one-day consultation with invited development planners and policy analysts from the World Bank, PAHO, A.I.D., and WASH.

1.4 Origin of the Study

From 1990 to 1992 WASH carried out a study on sectoral organization in which the WASH team visited five countries (Chile, Malaysia, Paraguay, Tunisia, and Zimbabwe) to determine how each country organized the water and sanitation sector and what issues are involved in the choices each country has made. During these field visits, decentralization emerged as one of the key areas for additional study and guidance. The report from that study (Edwards et al. 1992) highlighted several lessons about how to achieve effective decentralization. These are summarized in the box below. These lessons learned were the starting point for this paper.

Box 1

Lessons Learned

- ? Decentralized levels should have the power to mobilize resources, a high degree of autonomy in staffing decisions, and an ability to control budgets.
- ? When the water and sanitation sector is organized to retain responsibility for overall planning at the national level, this function must also exist at the local level, through regional planning and coordination groups.
- ? In large federal systems, organizational units that specialize in water and sanitation activities should be created at multiple levels in decentralized structures (e.g. a state water department, a water quality department within the ministry of health, etc.), and the units' roles must be separated and defined carefully.
- ? Decentralization of the rural water and sanitation subsector usually is associated with the decentralization of other governmental sectors.

1.5 Intended Use of This Paper

The paper is intended to help project designers and implementors in the design and implementation of decentralization efforts. The purpose of the paper is not to add to the body of theoretical literature on decentralization. Nor does it intend to be prescriptive about whether or not water and sanitation services should be decentralized.

This paper will assist project designers in understanding the dimensions of the problem and the types of activities to include in a decentralization program.

1.6 Organization of the Report

The paper is organized around the major steps that are necessary in designing and implementing a decentralization program. Chapter 2 provides a conceptual framework for understanding decentralization and how it can lead to improved performance. Chapter 3 outlines the sectoral and contextual issues that need to be assessed in order to design a decentralization program as well as ways to involve the private sector. Consideration of these contextual issues may provide an idea of the political and programmatic support needed in a decentralization program. Chapter 4 focuses on the development of a decentralization strategy and suggests the key elements to include. Chapter 5 provides guidance on the implementation of decentralization programs. It describes change management principles and their application to various types of decentralization programs defined in this paper.

2

DEFINING DECENTRALIZATION IN THE WATER AND SANITATION SECTOR

2.1 Types of Decentralization

The most generally accepted definition of decentralization is provided by Rondinelli (1990). This definition describes three types of decentralization, each one offering a different power relationship between the central government and the local government.

- # **Devolution** is the transferring of authority and responsibility for decisions, management, and resource mobilization to local governments (regional or municipal). In a fully devolved system, higher levels of government have no direct, operational role in service delivery or resource mobilization once power is transferred. However, they might retain a regulatory role or facilitate funding. The concept is to "turn it over" to a lower level. Tasks carried out at central levels are given to other levels to manage.
- # **Deconcentration** describes various types of administrative arrangements that place resources and staff at lower levels within the same administrative structure. Deconcentration is a reorganization scheme in which power may be retained at the center or delegated, as desired. A national water authority that sets up a regional structure and transfer staff to work in regional offices is an example of deconcentration. Or, a municipal water company that sets up city-sector management units and transfers staff from a central office to these units is decentralizing by deconcentrating.
- # **Delegation** is the process of a power center assigning operational duties or responsibilities to a surrogate unit or "concessionaire." For example, the shift of responsibility from the Public Works Ministry to a series of regulated public water companies is an example of delegation. A variation on this is for the public sector to delegate responsibility to a non-public sector entity, such as a private contractor or a nongovernmental organization (NGO).

These definitions are very useful in understanding type of and degrees of separation of authority in decentralization programs.

In practice, many countries do not fall neatly into one of the three types of decentralization

programs mentioned above; in fact, it is common to find systems that are hybrids of the three types. For example, rural water supply often operates through community structures that are responsible for independently managing the water system but are regulated and supported by a state-operated technical organization. Often, the technical organization will delegate portions of its operation to the private sector (e.g., well-drilling concession).

One important factor affecting the type of decentralization is the variability in the capacity of local governments. Large cities clearly have more financial and human resources to take on increased responsibility than small cities and are capable of functioning effectively in a devolved system. Small cities, on the other hand, usually lack resources and do not benefit from the same economies of scale as large cities. The consequence is that small cities will require more assistance and a longer time frame before they are capable of assuming full responsibility for their water supply system. Delegation or deconcentration may be a more appropriate form of decentralization for small cities, at least in the short and medium term.

In the examples used in this paper, deconcentration has been attempted most often, but devolution is taking place more and more in countries that are moving away from state-run economies and empowering local government. In any case, an appropriate transfer of power and authority to a lower level is needed to make decentralization effective.

2.2 Examples of Decentralization in the Water Supply

and Sanitation Sector

In general, the structure and management of the water and sanitation sector is characterized by a high degree of centralization. There are, however, a number of examples where various forms of decentralization have taken place, (Chile, Malaysia, Sri Lanka) or are underway (Central Europe and Mexico). These examples, while not the only ones, illustrate how countries are attempting to decentralize the sector.

2.2.1 Delegation

Chile delegated all rural and urban water supply to regional water companies in 1991. The country was divided into geographic zones, with a different water company, operating as a commercial enterprise, responsible for both urban and rural systems in each zone. The central government retains a minimum of 51 percent of the shares of the companies that were set up and requires that one governmental organization regulate and ensure that water quality and engineering norms are met. Another government agency provides managerial and business advice and performs such tasks as inspecting the books to ensure fiscal reliability and approving tariff changes.

In Brazil, much of the responsibility for water and sanitation has been given to state governments. State governments have, in turn, delegated this responsibility by forming semi-autonomous water companies that are required to operate as self-sufficient, non-profit commercial enterprises. The main areas in which the water companies are not autonomous are tariff increases^Cwhich must be approved by the state government^Cand appointment of a water company's chairman of the board of directors. These state enterprises have acquired the infrastructure that municipal government formerly operated. The national level provides loan funds to state governments, who in turn lend money to water companies.

2.2.2 Devolution

Throughout Eastern Europe governments are attempting to devolve responsibility for urban water and sanitation to lower government units, mostly municipal governments. In some cases they have set up semi-autonomous, regional water companies as in Chile. These local government units are trying to decide whether to privatize or delegate authority to concessionaires.

Many cities in Latin America operate their own public water companies. In some cases these companies have a high degree of autonomy; in other cases they are overly controlled by municipal governments. Examples of cities that have well run municipal water companies include Monterrey, Mexico; Santiago, Chile; Medellin, Colombia; and Mina Gerais, Brazil.

2.2.3 Deconcentration

The Sri Lankan WS&S sector was fully centralized from 1974 to 1984. A national water board held all decision-making powers, employed most managerial staff, and operated central offices located in the capital city. The Water Board was responsible for all rural and most urban schemes. Operational staff for small village schemes usually lived on or very close to the water treatment plant sites but had no authority. Over a seven-year period beginning in 1985, the National Water Supply and Drainage Board (NWSBD) set up five regional service centers around the country, which had a progressively higher and higher degree of financial and managerial authority. The Water Board, which maintains a cross subsidy from urban to rural systems, has reassigned increasing numbers of staff to regional offices, modernized its systems, and trained its workforce in commercial practices.

Deconcentration of rural water supply systems also has taken place in Ecuador where the Institute for Sanitary Works (IEOS) operates as a centralized promotional and technical agency with offices in each province. Through its provincial offices, which have been strengthened in recent years, IEOS constructs rural water systems and transfers control over them to community water boards, who then operate and maintain the systems semi-independently. After the transfer, IEOS provides continuing technical assistance and limited support for operations and maintenance and retains the authority to approve tariff changes and regulate the financial and legal affairs of the community structures.

2.2.4 Mixed Forms

The predominate form of decentralization in the water and sanitation sector is a mixed form. Brazil, which was cited as an example of delegation, also has numerous examples of delegation where cities have their own independent companies. Malaysia is also an example of a mixed form. Malaysia has devolved the water and sanitation sector partially. Its constitution establishes that water is a state matter, although central ministries carry out some technical support and policy and financial functions. Individual states have chosen to carry out this responsibility in different ways with some states utilizing autonomous water boards, which set their own tariffs and run operations in a commercially focused way, while in other states, state water departments or the state public works department carries out this function. Several states are experimenting with privatizing plant operations, and others are moving toward establishing water boards. The federal government maintains the civil service, handles foreign loans, and is building a centralized capability to deal with regional environmental issues.

A key indicator of successful decentralization is whether the water supply system operates in a commercially-oriented manner or it relies on subsidies. In Ecuador, urban water supply is the

responsibility of each municipal government, which operates systems with subsidies rather than as commercial enterprises. Financing for urban water development may come from various central government entities including the National Development Bank. In Mexico, a new World Bank financed reform program calls for the decentralization of urban water supply services. The plan is to move the water supply function from direct management by city government and to semi-autonomous water companies that have a mandate to operate as commercial entities. A federal agency provides normative oversight and facilitates funding. However, local and state politics continue to determine employment, in these new companies.

Because urban water supply is a municipal responsibility, it does not necessarily mean that the responsibility is decentralized. Municipal companies are often departments of the local government; thus, they are a part of the municipal government structure. When the municipality owns the utility, it may staff it with municipal employees, set up an autonomous company, or delegate operations to a private contractor.

2.3 Goals of Decentralization in the Water

and Sanitation Sector

The most commonly stated goals of decentralization are increased efficiency and responsiveness to communities. However, decentralization will not necessarily achieve these goals. A decentralized structure can stimulate local decision-making that is inequitable (Campbell et al.). If care is not exercised, decentralization can lead to duplication of efforts and poor economies of scale, resulting in increased costs. The larger perspective also can be lost when sectorwide concerns such as long-range planning or environmental protection are left unaddressed (Edwards et al.).

WS&S institutions have an advantage over some public sector institutions in that they produce a commodity that can be paid for by consumer fees and whose consumption can be measured. As a result, WS&S institutions lend themselves to a business-like structure. Most public sector institutions do not deal with a marketable commodity but with human services (education, health). Even though water supply and sanitation can be organized and managed as a business, current sectoral organization largely follows a social service orientation and structure. The challenge in the WS&S sector is to transform water and sanitation utilities—which traditionally have operated as highly centralized, inefficient, politicized, state-run national institutions—into responsive, efficient, and business-like organizations that are managed locally.

The decision to decentralize is often linked to financial goals and economic policies. However, problems of inefficiency or lack of funding cannot be solved automatically by simply transferring authority to the state or regional levels. Particularly in situations where central governments wish to off-load costs to lower levels of government, problems occur when the power to raise revenues

(bonds and taxes), set tariffs, and enter into financing agreements is not transferred (Campbell et al.).

In addition, decentralization does not build capacity at the lower level automatically. Often, lower levels of government do not have the capacity to manage a water system, and without technical assistance and other capacity-building measures problems of institutional capacity that existed under a centralized operation are simply passed on to the new structures. Additional pressures are added to the decentralized operations without concomitant skills and training.

2.4 Wastewater Considerations

The institutional manner in which wastewater is handled is an important question in decentralization. The collection, disposal, and treatment of urban wastewater is either carried out by a separate wastewater authority, municipal or national in scope or water and wastewater is the responsibility of a combined utility. Because wastewater management is more difficult technically and more costly than water supply systems, undertaking the task of decentralizing wastewater services is more complicated than water supply. Municipalities might welcome the responsibility for water supply because of its potential for full cost recovery, but they might be much less interested in assuming the responsibility for wastewater, which would be likely to remain subsidized. Where the responsibility for water and wastewater is located in the same agency, as is often the case in small municipalities, decentralization must address both at the same time.

2.5 Decentralization and the Environment

One of the issues that must be considered in a decentralization program is how environmental concerns will be addressed. The main environmental concern in decentralizing water and sanitation services is water pollution control. One of the advantages of a strong and effective centralized system is the ability to monitor and enforce pollution standards. On the other hand, one of the consequences of decentralization may be a lack of attention to pollution control, at least at the local level.

Water pollution control is an issue that local governments often find difficult to deal with. They usually lack the capacity to enforce regulations and the authority to formulate local regulations. If the source of water pollution is a local industry, local governments may not want to disrupt the local economy by enforcing standards. The cost of cleaning up the pollution may be prohibitive, especially if the municipality has limited resources. The source of the pollution may be outside the

municipality's jurisdiction. All of these factors often result in the lack of will to take on a pollution control role at the local level.

To be effective, water pollution control should involve efforts at the central, regional, and local levels. The central level is responsible for setting realistic standards; the regional level for monitoring and enforcement; and the local level for managing discharges and providing treatment. In decentralizing, it is unrealistic to shift full responsibility for water pollution control to local governments. Water pollution control is a complex problem, requiring the coordinated efforts not only of multiple levels of government, but also of the private sector and individual citizens. A decentralization program needs to determine who will take responsibility for water pollution control so that this important environmental issue is not ignored.

2.6 Relationship to the Political Process

When there is a general political movement towards decentralization of public services, the decision to decentralize becomes primarily a political one. In situations where a country is decentralizing a range of functions, water supply and sanitation often will follow the same trend. Many of the countries reviewed for this study (for example, Bulgaria, Chile, Hungary, Indonesia, Malaysia, Sri Lanka, Tunisia) have decentralized local government, education, public health, and other sectors, as well as water supply and sanitation. When the decentralization of water supply and sanitation services follows a political trend, there is the added benefit of having the political will to support the process. This political will is central to the success of a decentralization effort.

2.7 The Link Between Decentralization and Performance

Many international and bilateral agencies believe that the water supply and sanitation sector is overly centralized and bureaucratic. Also, state-run, centralized utilities are rarely efficient or able to meet high performance standards. Civil service structures protect poor performers; labor unions protect employees against the whims of politicians and maintain overstaffing; patronage provides employment opportunities and contracts for the party in power; and political interference and lack of autonomy are perennial obstacles to efficiency in government-managed services (Cullivan et al.).

To what extent is centralization itself a contributor to poor performance? The performance of decentralized agencies is likely to be similar to centralized agencies unless major structural changes

assuring considerable joint autonomy and responsibility are affected (Ostrom et al.). Studies of private sector organizations in the United States, however, indicate that the trend of the past 20 years has been to break up very large corporations into manageable pieces and to create accountability structures down to the lowest management unit (Peters and Waterman). The amount of information and number of decisions that can be managed at the top is limited by the size of the organization. The trend has been to push responsibility down as far as possible and make that level accountable for results.

The history of organizational and management practice in industry suggests that there is a direct link between the degree of centralization in decision-making and the ability to meet consumer needs. Business success ultimately depends on the ability to control costs and generate a positive bottom line. The need for decentralized decision-making is particularly true where rapidly changing market forces require quick response and decision-making. The recent trend in large manufacturing organizations has been to remove layers of management to improve efficiency and communication and reduce organizational distance between levels. In many cases, entire operations have been given complete control over all operational decisions.

The extent to which centralization is a cause of poor performance in water and sanitation sector organizations is difficult to determine precisely, primarily because comparative studies have not been made and documented; however, based on the data available there is every indication that centralized, non-commercially structured water utilities are poor performers. This is particularly true when water and sanitation organizations are placed under the scrutiny of modern business analysis and held to the productivity standards of utilities in the industrialized world. Staffing ratios are often higher by a factor of 10; subsidies are common; and service is poor.

In Sri Lanka, performance indicators demonstrate dramatic improvement under decentralization. For example, the changes in productivity from 1984 to 1990—the six years in which the National Water Supply and Drainage Board in Sri Lanka was carrying out a decentralization program—are as follows (Bradley):

- # 18 percent improvement per year in collections,
- # 10 percent improvement per year on staffing ratios,
- # 18 percent overall increase in collections,
- # 13 percent billed new connections per year,
- # 13 percent improvement per year in the cost of operations and maintenance, and
- # 14 percent annual debt reduction.

Table 1 shows key indicators, expressed in totals before and after decentralization.

Table 1**Key Indicators, before and after Decentralization**

<i>Indicator</i>	<i>Before Decentralization (1984)</i>	<i>After Decentralization (1990)</i>
Collections (Rupees Million)	56	422
Collections (% O&M Costs)	31	99
Collections (% Total Costs)	26	77
Billings (Rupees Million)	224	503
Debt Service (Rupees Million)	33	123
Consumer Complaints (% Connections)	>10	3
Billed connections to employee ratio	13	26

Source: Executive Summary of the Final Report on Institutional Development of the NWSDB. August 1991.

Many of the current performance deficiencies encountered in the water and wastewater sector relate in some measure to the manner in which sectoral institutions are organized and managed. Excess staff in top-heavy, capital-city bureaucracies are common. Lack of attention to consumer needs is the norm. Donors are increasingly reluctant to lend or grant funds for overly bureaucratized operations and often require some form of decentralization and institutional improvement as part of the conditions for loans or grants.

Water and wastewater organizations that provide the best service to the largest possible numbers at reasonable cost are well managed and use delegation as a managerial norm. Effective organizations in any sector usually follow a management practice that delegates to a level where the service to consumers is manageable, efficient, and responsive. A primary benefit of decentralization is to increase efficiency. Other factors such as political patronage, high staff turnover, and lack of consumer orientation also were present before decentralization and are typical of government-managed, centralized agencies. And, while decentralization is no guarantee against these deficiencies, there is opportunity to address them when restructuring a sector. A decentralization program is a moment of major systematic change for organizations; it presents unique opportunities for organizational improvement.

3

ASSESSING CONTEXTUAL FACTORS

3.1 Introduction

The starting place in designing an effective decentralization program is a sound understanding of the current situation in the sector. This chapter is intended to provide guidance on what contextual factors are critical to understand before designing a decentralization program. The findings in this assessment will provide the following:

- # An indication whether current conditions are conducive to a decentralization program
- # Better understanding of the problems that need to be addressed in a decentralization program
- # Information that will be useful in designing a decentralization strategy

Not all problems in the water and sanitation sector can be attributed to overcentralization and therefore addressed in a decentralization program. Problems such as inadequate cost recovery, inappropriate technology, and poor service cannot be solely attributable to an overly centralized sector. Yet, even though some problems may not be caused solely by centralization, they may be easier to address in a decentralized system.

3.2 Assessing the Political Climate for Decentralization

Even if one were reasonably certain that decentralization is the answer to many problems facing the water and sanitation sector, the required support by important actors might be unavailable. Political forces tend to protect and benefit from the status quo, and consideration should be given to whether the political and economic climate will support the changes required to achieve decentralization. Decentralization usually requires some potentially difficult actions: relocation and reduction in staff, changes in priorities, and changes in the decision-making and priority-setting processes.

Water and sanitation services traditionally have been sources of political patronage. One of the things that politicians can give the people in exchange for votes is water. Another is jobs working

in the secure public service sector. Unless there is a governmental move towards increasing local responsibility, decentralization of water and sanitation would be highly visible and vulnerable to attack. A unilateral attempt at a major decentralization program in water and the sanitation sector would be difficult.

In the absence of a major governmental movement toward decentralization and the accompanying political support for it, however, a "soft" strategy, such as deconcentration or some degree of restructuring might be appropriate and could be supported. It may be possible, for example, to place the emphasis on improving regional operations. This could be followed by first reducing overhead and increasing involvement of the private sector by contracting out services, followed by reducing staff. It may be possible to decentralize in stages.

If other government programs are being decentralized, it would be useful to assess the extent of these efforts, the degree of decentralization contemplated and the degree of political support. Is there a general decentralization movement underway? A mandate to decentralize, which is supported from the highest levels of government and the top management of the organization or sector, is an important precondition; in fact, without a political mandate, decentralization is unlikely to be successful. Because institutional transformation is very difficult and requires changes in structure as well as in attitudes and behavior, it is important that continued, steady support and pressure is exerted at all political levels.

3.3 Assessing the Policy Environment

Decentralization requires a supportive policy environment, one that provides the legal conditions to implement change. An assessment of the legal framework is important since governments often transfer responsibilities administratively, but hold back the legal or political authority to meet those responsibilities (Silverman). Examples of policies that must be in place for decentralization to succeed include the following:

- # The legal right of municipalities to collect taxes
- # The right of local structures to control funds collected from users
- # The power of local utilities to hire and fire staff
- # The autonomy of local utilities to charge realistic tariffs
- # Laws that allow the private sector to manage or own water and wastewater companies

- # Realistic technical norms and standards that allow local agencies to use affordable technologies

The above list is certainly not complete, but it gives an indication of the types of policy issues the central government must resolve before decentralization can occur.

The importance of the existence of these supportive policies is illustrated in Tunisia. The Tunisian government decided to decentralize the rural water and sanitation sector in the late 1980s, and passed a law allowing community water user associations to collect funds and operate and maintain rural water systems built with government funds. This law sent a clear message to the central and provincial governments and provided the impetus to implement a successful nationwide community management program (Rosensweig et al.).

3.4 Assessing the Current Deficiencies That Are

Attributable to Centralization

If there is a reasonable chance that decentralization will be supported politically, it is important to assess the degree of current decentralization in the water and sanitation sector and to determine what changes are needed and possible. It may be that the sector already is performing as well as possible, given current conditions, and neither change or further decentralization is needed.

One of the key factors to consider when assessing which deficiencies are attributable to centralization is the size of the country. It may not make economic or financial sense to decentralize in a geographically small country, especially if the population does not exceed several million. The difficulty in achieving economies of scale coupled with start-up costs of decentralization might make it infeasible to pursue an ambitious decentralization strategy. A better strategy might be to strengthen the capability of an existing centralized agency and pursue a modest version of deconcentration. On the other hand, in a large country such as Brazil, Indonesia, or Mexico, decentralization might be the only way to improve efficiency.

Notwithstanding the current structural configuration, it is important to understand current deficiencies before designing a decentralization program. The sector's deficiencies will provide a starting point for determining whether the sector's performance is linked to its current structure. Below are four suggested areas to assess. These questions are applicable to both urban and rural water supply and sanitation.

3.4.1 Current Degree of Management Delegation of Decision-Making

The primary management questions are who has decision-making authority and who has the information in the system needed to make decisions. Assessing delegation of decision-making requires that a determination be made about the degree of authority or autonomy to make important decisions (like staffing and budgeting) that would allow for modern, efficient and business-like operations. Questions to answer include the following:

- # How are decisions currently made in the sector?
- # To what extent does the current system allow for delegation of responsibility and authority to management units that have the information to make informed decisions?
- # To what extent do managers at lower levels (either within the same organization or within a devolved or delegated system) have the capacity to decide what needs to be done, have input into budgets and the ability to select staff?

3.4.2 Efficiency

This area relates to cost effectiveness and the ability to provide the best quality service for the least per unit cost to the largest number of users. Key efficiency questions to answer include the following:

- # What is the degree of financial self-sufficiency of water supply and sanitation organizations, i.e., the degree of subsidization?
- # What is the proportion of staff in central locations to those in district or regional offices? Would current numbers and skill levels be required after decentralization?
- # What is the cost of service compared to other public services, taking into account the degree of subsidy required?
- # What is the ability of the sector to provide services?
- # Does the current arrangement achieve economies of scale? Is there a minimum of duplication of efforts to avoid redundancies in equipment and personnel?
- # To what extent do specialized skills exist at decentralized levels?

3.4.3 Consumer Satisfaction and Accountability

Effectiveness in this area is determined by how responsive the service is to the needs of consumers, whether the appropriate structures for consumer input are in place, and whether mechanisms for accountability exist. Some questions are:

- # Are the consumers satisfied with the services they receive?
- # Is the proximity of offices to consumers adequate? How much time is required of consumers or potential consumers to obtain services.
- # Is the sector or organization structured so that the public has a way to influence the quality and quantity of the service? If services are provided locally, is local opinion able to influence decisions?
- # Does utility management respond to a board of directors made up of local interest groups?
- # Does the structure require transparency in management information available for the public or consumers?

3.4.4 Equity

This area responds to the question: how can the interests of the least favored and least influential be served in ways that are equal or fair to all segments of the population. Key questions include the following:

- # To what extent are resources raised from general revenues used to serve the common good and to what extent are the privileged receiving disproportionate access to services?
- # Does the system allow provision for cross subsidy (urban to rural, rich to poor, commercial to non-commercial, geographic redistribution)?
- # What kind of services do the rural and peri-urban poor receive?

Assessing these four areas will provide a picture of the current performance of the sector and how this performance is linked to the centralization of the sector. If a sector has delegated decision-making, is providing services efficiently, satisfying consumers, and serving all segments of the population, one can conclude the sector is performing well.

Box 2

Examples of Private Sector Participation

- ? *Service contract:* The least amount of private sector involvement is through contracting selected operational services. The amount and mix of involvement through contracting is variable and is the subject of continual analysis in commercially oriented water sector institutions. Examples include equipment rental, billing and collections, vehicles, meter reading, and maintenance services.

- ? *Management contract:* In this type of contract full responsibility for operation and maintenance of the water supply system is given to the contractor. Management contracting is more extensive than service contracting.

- ? *Lease contract:* In addition to having responsibility for operations and maintenance of a system, the contractor provides working capital and replacement of physical assets with a short life (not fixed assets). The lessee assumes no commercial risk for the fixed assets.

- ? *Concession to Build, Operate, and Transfer:* In this example, a firm finances investments in fixed assets, provides working capital, and is responsible for operations. The assets are owned for the period of the concession but are transferred to the public authority afterward.

- ? *Divestiture:* The most complete form of private sector involvement is complete ownership and control of the public sector assets.

3.5 Assessing the Potential for Private

Sector Involvement

Decentralization may be linked with the potential to move responsibility for certain services to the private sector. See Box 2 below for a range of options available to enlist private sector involvement. The options are presented in increasing degree of involvement of the private sector so service contracts represent the least involvement and divestiture, the most (Walker, 1993).

The five types of private sector involvement all are applicable to urban water and sanitation, and service contracting is most applicable in rural areas. For example, a community might enter into a contract with a local mechanic to provide maintenance services, or a regional office of the national

water agency might contract with a firm to provide backup maintenance services to communities.

If one goal of decentralization is to reduce the role of the government agency (for whatever reason), expanded private sector involvement becomes an important strategy. Full privatization would require, by definition, a sectoral arrangement that is fully devolved. Authority for selling shares in and capitalizing on a good that previously was state-owned must be reassigned legally to for-profit firms. Determining the appropriate degree of private sector involvement is a complicated issue and would require more analysis than is possible in this paper.

However, in assessing the potential for private sector involvement, some questions to answer include:

- # What specific services that could be provided more efficiently, qualitatively better, or less expensively by the private sector?
- # To what extent does the capacity to become involved exist in the private sector?
- # To what extent is the private sector interested in investing in or providing services to the water and wastewater sector?
- # Can government employees be motivated to move to the private sector?
- # Is there a potential for savings over time if the government reduces permanent staff and contracts for services as needed?
- # Is there a favorable political climate for increased private sector involvement in the water sector?
- # Is there a legal and policy framework that supports private sector involvement?
- # Is the local regulatory environment conducive to private sector involvement?

3.6 Assessing the Decentralization of Rural Water Supply and Sanitation

The most common form of decentralization in rural water supply and sanitation is deconcentration. Generally, rural water supply and sanitation organizations are almost always government agencies set up to promote, organize, and construct rural water systems with varying degrees of community involvement. Promoting hygiene education might be a companion goal. Rural water and sanitation agencies are set up to organize and promote; they are not designed to make a profit or sell water, as are urban water utilities. They depend on funding from the national treasury and from external sources, such as bilateral and multilateral agencies and NGOs, for the capital costs of construction. Increasingly, government agencies are requiring communities to meet the costs of operations and maintenance. The decentralization challenge for RWSS agencies is first to ensure that there is sufficient deconcentration of authority and responsibility to the regional or provincial level and second, to ensure that the provincial levels work with the community in a partnership and involve them in planning and management of the constructed systems.

As the government begins to disengage from the promotion of new systems, it must leave behind a self-sufficient structure, such as a community water user association, that is capable of operating a rural water system. Ultimately, government organizations are challenged to turn over full responsibility to local structures, thus drastically reducing the role of the center.

The role of NGOs in the decentralization process deserves special mention. Even as countries deconcentrate responsibility for rural water supply to regional offices, they will continue to rely on NGOs for the implementation of rural water supply and sanitation programs. NGOs, including international organizations such as CARE, Catholic Relief Services, and Save the Children, and indigenous PVOs such as Agua del Pueblo in Guatemala have long been active in rural water supply. However, despite the critical role that NGOs play in promotion and construction, few NGOs provide the operations and maintenance back-up support that is required for major repairs and system replacement over the long term. The responsibility for operations and maintenance usually is seen as the shared responsibility of the community and the local government agency. This means that NGOs have to place a strong emphasis on developing the capacity of communities to manage their own systems and must work closely with the water supply agency's regional offices so they are prepared to provide backup support.

It is unrealistic, however, to expect that rural water supply can be completely managed outside of the government. Deconcentration is required so that provincial offices have the authority to work effectively with communities. Communities can take on a major share of responsibility for their water system, but generally they will require some back-up support for major repairs and system replacement. Delegation of responsibility to rural communities will always have some limits.

3.7 Assessing the Potential for Improving Peri-Urban Services

through Decentralization

The rapid expansion of peri-urban areas in many cities in developing countries is well documented. This expansion has put an enormous strain on the urban utilities that are unable to meet increased demand for services, particularly in mega-cities such as Bangkok, Cairo, Jakarta, and Mexico City. The inability of the urban utilities to serve the peri-urban areas is caused by a range of factors including lack of property rights, inappropriate technologies, lack of financial resources, weak institutions, and lack of political will to provide service. In many cases, because these areas are not recognized officially by the government, there is no incentive for the local water utility to provide services (Solo et al.).

As long as the centralized urban water utility believes that it has sole responsibility for providing services to the urban poor and does not look for ways to involve peri-urban communities in providing services, the urban poor will remain poorly served.

As in the case of rural water supply and sanitation, decentralizing services offers increased potential for serving the urban poor. Decentralization might take the form of the deconcentration of the urban water utility, and departments that can be more responsive to different parts of the city would be set up. This is an attractive option for very large cities with populations of 10 to 15 million.

Decentralization also could allow opportunities for increased local management of services. Condominial sewers are among the more affordable technologies that work much better when communities take responsibility for their operation and maintenance.

Increasingly, NGOs are becoming active in peri-urban water supply and sanitation. As in rural areas, the role of NGOs is primarily in program implementation. However, in peri-urban areas, the role of NGOs in the decentralization process takes on special meaning. NGOs are able to act as intermediaries in situations where government agencies feel constrained because of the lack of formal or legal status of communities. In these situations, the neutral status of NGOs enables them to act as buffers between the communities and the official government agencies. An assessment of the potential for improving services in peri-urban areas through decentralization should include an assessment of the capacity and willingness of NGOs to work in peri-urban water supply and sanitation.

3.8 Using the Assessment Data

An understanding of the contextual factor should provide important information and insights regarding the design of a decentralization effort. An assessment of the contextual factors should result in the identification of issues that must be addressed in the decentralization program. This will include the policy constraints, the problems caused by centralized control, the potential for private sector involvement, and most importantly, the degree of political support.

The next chapter will provide guidance on what should be included in a decentralization strategy.

4

ELEMENTS REQUIRED IN A DECENTRALIZATION STRATEGY

4.1 Introduction

This chapter explains the basic issues that must be addressed in designing a decentralization program. The first section discusses the allocation of the basic roles and responsibilities in the water and sanitation sector. The next section discusses six fundamental elements that must be addressed in any decentralization strategy.

The decentralization strategies described in the next two chapters are especially relevant to systems that are being devolved or deconcentrated, the two most common types of decentralization in the water and sanitation sector. Deconcentration involves the placement of staff and allocation of resources at lower levels in the same administrative structure. Devolution includes the transfer of authority and responsibility to local government.

4.2 Intergovernmental Division of Labor

The most basic issue to resolve in designing a decentralization program is the intergovernmental division of labor among the central, regional, and local levels. Deciding how to allocate basic functions among the different levels of government is a complex but critical issue to address. The basic functions which must be allocated are the following:

- # Planning and budgeting
- # Developing and implementing policy
- # Providing financing
- # Providing research and development, technical assistance and training
- # Monitoring and enforcing environmental regulations
- # Providing bulk water

- # Designing and constructing systems
- # Operating and maintaining systems
- # Promoting customer and community involvement
- # Providing health and hygiene education

Although the allocation of these functions will depend on the specific situation, there are some general tendencies as to how these functions are allocated. In most countries, the central government retains responsibility for developing and implementing policy, providing financing, and providing technical assistance and training. In most situations, the local level is responsible for operating and maintaining systems, providing health and hygiene education, and promoting customer and community involvement. The provision of bulk water is often a regional responsibility.

The functions that vary greatly in their allocation are planning and budgeting, designing and constructing systems, and monitoring and enforcing environmental regulations. In a deconcentrated system, the central office generally will retain some role in planning and budgeting and designing and constructing systems; while in a devolved system, local government will have these responsibilities. Monitoring and enforcing environmental regulations, although usually seen as a central government responsibility, is often beyond the capability of both local and central government. With increased attention being given to environmental issues, the importance that countries place on this function will increase. Over time, local and regional governments can be expected to take on more of the responsibility for carrying out this function.

Although the discussion so far has focused on the responsibility of government for these functions, many of these functions will actually be carried out by private sector organizations and NGOs under the direction or auspices of government. Increasingly, different levels of government are turning to private and nongovernmental organizations to implement various functions; however, the government is retaining the responsibility for making sure that these functions are carried out.

4.3 Basic Requirements of a Decentralization Strategy

This section discusses six fundamental elements that must be addressed in a decentralization strategy. Together they represent the capacity and authority that the decentralized level should have to function effectively. Box 3 provides an overview of the six elements.

Box 3

Key Elements

- ? *Participating in planning and resource allocation:* The decentralized levels should participate actively in the planning process and in allocating resources.

- ? *Accessing centralized resources:* There should be a clearly understood process for accessing resources that are to remain under central control. These include such items as specialized skills and equipment.

- ? *Generating and controlling revenues:* The decentralized level should be able to generate and control revenues.

- ? *Assigning authority:* Managers of water and sanitation at the decentralized level should have authority consistent with that delegated to managers in parallel ministries and governmental organizations at the same level.

- ? *Staffing:* Managers of water and sanitation at the decentralized level must have control over staffing so that staff are loyal to local management instead of a body at a higher level. Decentralized levels need an adequate number of staff with skills appropriate to the functions that have been decentralized.

- ? *Providing management tools:* The management tools required for management decision-making (computerization, management information, equipment, administrative systems) should be provided to the decentralized level.

4.3.1 Planning and Resource Allocation

The decentralized levels should participate in an organized process of planning and allocation of resources. This planning and budgeting process should be systematic, consistent over time, and relatively transparent. A decentralized operation needs to be able to operate within a budget that it controls and for which it is accountable. The budget process needs to be reliable and tie planned activities to a vision of achievement for the planning period. The process also should include a way for the decentralized level to monitor the use of resources and performance outcomes.

Participation in resource allocation decisions takes different forms in different types of decentralization. For example, in a fully devolved or delegated operation the utility would have autonomous control of such decisions. A highly deconcentrated organization would rely largely on local planning and budgeting while retaining some measure of control at the central level.

In Malaysia, in states that have set up water boards, these boards essentially are financially autonomous and have responsibility for developing their own budgets for operations and maintenance and setting tariffs to cover operating costs and debt service on loans for capital expenditures. In others, state water departments have been set up. They participate in state-level legislative processes that review and approve annual plans, including the identification of priority areas for development of new piped water supply systems. Most funds for capital expenditures in Malaysia are budgeted and appropriated at the national level as part of a five-year planning process in which individual states bid for the systems they believe ought to be constructed.

In situations where a gradual decentralization approach is attempted, the planning and budgeting mechanism is one of the most important areas for delegating increasing responsibility to the local level. A strategy to achieve decentralization gradually would stage the planning and budgeting process so that increasing degrees of involvement in and delegation of authority in annual budgeting and planning cycles would occur.

Zimbabwe has begun a process of deconcentration by structuring a formal district-level planning process that includes standardized guidelines for planning, specific criteria for measuring performance, training of district-level staff in the planning process, and a structured process for approval of plans. While the approach stops short of giving districts the power to make budget and planning decisions, it is a step that over time could lead to greater participation in the resource allocation and planning process.

The way to develop planning capacity at local levels is to require that determination of resource needs be specified through the annual budget exercise. Managers should be required to justify the resources they need each year (a zero-based budget exercise) and present a proposed budget consistent with operational and development needs. A separate capital investment budgeting exercise also should be carried out based on long-, medium-, and short-range investment plans. Experiencing the consequences of budget planning creates accountability and stimulates planning and goal setting for upcoming tasks and staffing and equipment needs. It also creates a framework for a management information system and performance indicators. In a newly decentralized organization such exercises often are new and require training, but they present valuable opportunities for learning key management skills. Entry into a budget development exercise brings with it the requirements for thinking ahead as well as looking at past performance.

The budget cycle also focuses attention on income and expenditure. Where do resources come from? How can they be increased? How can service be extended? And conversely, how can economies of scale be achieved? Balance-sheet thinking stimulates a chain of management analysis and leads to increased fiscal responsibility. Most highly centralized operations maintain the

hierarchy of a few budget holders at the top deciding for the many at the bottom who have limited sense of the financial consequences of their actions.

Another part of the planning and budgeting process is ensuring that a monitoring function exists at the lowest possible decentralized level. A plant superintendent who knows what his plant's performance is expected to be and can track that performance in a timely way is far more likely to be able to make satisfactory budget projections and to stay within allocated expenditures.

Theoretically, there is no reason centralized operations need be inefficient and wasteful. However, in practice, decentralization supports the systematic matching of resources to local needs. In Malaysia, committees at the state level made up of elected officials and heads of government agencies have explicitly defined roles in both administration and coordination. This structure is repeated at the district level so that community issues and technical problems can be raised and addressed. In Zimbabwe, experienced ministry personnel, who can offer a more practical, "on-the-ground" review of district-level development plans than can be carried out at the national level, staff provincial-level development committees.

4.3.2 Accessing Centralized Resources

The provision of specialized equipment and technical support is important to the local level, but due to scarcity and expense can rarely be provided by the local agency.

Decisions on the disposition of special equipment present special challenges for centralized state corporations that are moving to a decentralized status. A determination could be made, for example, that specialized technical services requiring scarce equipment should be provided by the private sector and that their cost should be borne at the local level. In such a scenario, the local organization might buy the equipment from the centralized level. Another choice could be to retain the equipment and set up an allocation system requiring advanced planning and budgeting for its use. The costs could then be charged to those who use the equipment. Specialized human resources could be considered as "consultant" resources available to a national system. Once again, the choice would be to retain these resources in a central pool or to rely on the private sector for these services. In moving to a deconcentrated system, specialized central office resources are likely to be required to train, assist, and perhaps manage the decentralized operations until the decentralized operations are self-sufficient or able in other ways to obtain the specialized skills required. When trying to achieve deconcentration, a lengthy transition period for building local capacity is required.

In Sri Lanka, as the national agency began to deconcentrate staff and resources to regional centers, the role and need for central office staff diminished over time. However, some very experienced and specialized staff resources continued to exist at the central levels. At times, each regional center needed these resources, and during the first years of the deconcentration program these staff served

as technical supervisors. Over time, the role of specialized staff changed to that of technical resource people or consultants and their roles as supervisors stopped.

In Eastern Europe, the movement towards devolution has left many very specialized staff, who formerly worked in research institutes, outside of the system. Because all authority was devolved to local units, resources at central levels that could not be placed at lower levels were asked to leave or to work under contract. Some of these specialized staff have set up private companies, and because of the abruptness of this strategy, others have emigrated.

When district-level staff rely on centralized resources for such critical technical support services as drilling boreholes, collecting hydrological data, or conducting training on the use of new computer software, it is critical that a dependable process exists for local organizations to access these skills.

4.3.3 Generating and Retaining Revenues

A corollary to budgeting and planning is the autonomy to generate and retain revenues at the local level. Effective decentralization must press down responsibility for raising and retaining revenues. If decentralization is to take place, financial authority must be delegated or devolved to lower levels. This is perhaps the most important factor in autonomy. Because all other powers tend to derive from the ability to control financial resources, the appropriate degree of financial delegation must be determined, and a process to delegate increasing amounts of financial authority developed.

As governments realize that full-cost recovery is a fundamental aspect of sustainability, the authority to generate and retain revenues takes on even greater importance. Under devolution or delegation, the local agency responsible for its water system must have full authority to raise and disburse revenue. The objective of creating self-sufficient operations at appropriate levels requires that revenues are retained and used locally, not passed on to central accounts for redistribution. However, some type of legal restraint or review procedure for setting tariffs and financial management normally exists as a means to protect the public from monopoly.

Many local water and wastewater utilities do not rely solely on user fees to recover costs. Some countries have decided appropriately to cover a portion of the capital costs, especially for wastewater, from general tax revenues. In this case, the subsidy should be transparent. The role of tax revenues in supporting water and sanitation services underscores the inseparability of decentralization of water and sanitation services from decentralization of local government in general.

In a deconcentrated system, there is the possibility of cross subsidies from large urban areas to smaller municipalities that cannot afford to pay full costs. A deconcentrated system is also less tied to the broader decentralization of government services.

In a deconcentration or delegation scenario, a staged strategy in which at each level or stage an assessment is made of the capability to responsibly manage resources seems to work best. Increased performance should bring with it increased deconcentration or delegation.

Allowing local governments to raise revenues requires a philosophical stance at the central level that supports autonomy of the water authority and demands that the authority have the institutional framework and capability to carry out a commercial function. Any water system has recurrent costs as well as longer term capital costs. Central governments must be willing to let go their financial authority and be willing to develop the capacity to manage those costs. It is unlikely that governments will be able to decentralize financial management responsibilities without first making investments in strengthening the capability of local organizations to carry out these responsibilities (Rondinelli, 1989).

Two of the key revenue-raising mechanisms mentioned in this section are tariffs and taxation. A discussion of the full range of financing mechanisms is beyond the scope of this paper. The two discussed below are two of the key mechanisms which can be used at the local level.

Tariffs

The ability to charge fees for water in order to recover costs deserves special mention because it is often handled poorly. One of the most important measures of decentralization rests in the question: who sets the tariff? Should the central government set the tariff (i.e., determine the price of water) or should it confine its role to regulating and approving fees charged? In a centralized system, the central government conducts the study that proposes the rate. The regulatory role is to protect the public against a natural monopoly. Often, a utilities commission conducts tariff studies and then submits them for approval at the appropriate governmental level.

Two other important tariff questions are what costs should be recovered and what is a fair rate. If government intends to finance capital construction from general revenues or international loans, building cost recovery into tariffs may be unfair to poor people who pay proportionately more of their income for basic services than do the rich.

It is increasingly accepted that tariffs should cover the full cost of the service including capital costs. However, there are exceptions to this in developing countries. The question often arises whether the costs of operations and maintenance reflect an efficient use of resources by the water authority. Consumers might ask if they are being asked to pay for water at the lowest possible price. And, if the water company is not doing the best job of billing and collecting fees, should the consumers that pay be required to cover the bad debt of those who do not pay? Should costs of inefficiently managed systems be passed on to consumers? On the other hand, if tariffs are maintained at unrealistically low levels to please political interests, distortions in the price of water occur, and the water company must have subsidies from general revenues to meet normal operating

costs.

Systems that operate under subsidy tended to operate the least efficiently of all in the countries studied. Decentralization is supported best by tariffs sufficient to provide funds for good quality operations and reasonably remunerated staff. Tariff policies that assume minimal levels of operational expenses and low staff salaries may be counterproductive and create poorly motivated staff, ineffective operations, and poor service.

Sometimes, the decentralization of tariff setting can make self-financing more difficult. In Malaysia, most states do not seem anxious to face the political problems of raising tariffs. In theory, states are able to set tariffs, and water should be self-supporting. In fact, few if any states in Malaysia have either the will to fight this battle or the accurate and timely data as background. Central governments are not necessarily any better at setting tariffs. The government of Sri Lanka refused to raise the tariff for several years to prevent offending political interests and for fear that voters would rebel. This same pattern is repeated worldwide in both centralized and decentralized operations.

In general, if responsibility is decentralized and a system is required to operate commercially, there is more likelihood that tariffs will be set at levels that allow at least recurrent costs to be recovered.

Taxation

Tax reform may also be necessary to support a decentralization effort, especially in situations in which devolution to municipal systems occurs. Errors in devolution usually occur when the central government unloads onto local government unwanted responsibilities for water companies that have been highly subsidized and inefficient, without giving local government the authority to raise revenues. In addition to tariffs, revenues can come from bonds and taxes. National governments may be reluctant to grant the authority to municipalities to levy additional taxes on businesses and individuals. Yet, the ability to levy local taxes is one important vehicle to raise revenues to support water and sanitation services. Decentralization has the best chance if the means as well as the authority to tax is passed down to the local level. However, the ability to levy and collect taxes is a function that municipalities will not be able to take on without significant assistance.

4.3.4 Assigning Authority Consistent with Parallel Organizations

The authority assigned to water and sanitation managers at decentralized levels must be parallel with similar levels in other ministries and governmental organizations. In Sri Lanka, the government set up a strengthened regional political structure and either devolved or deconcentrated a number of public services. Managers in organizations parallel to the water authority, such as the power company, had full authority to make a range of decisions. However, the regional manager of the water authority did not have the same powers, even though the official title, Deputy General Manager (DGM) for the Regional Service Center, implied full authority within the Sri Lankan system. In practice, the DGM frequently had to consult with the Home Office before making decisions in response to local politicians' requests.

The function of a regional water company, whether its powers be privatized or delegated from government, must include representation in regional coordination and decision-making bodies. If the top executive is considered a junior member of the water and sanitation establishment because he or she has not been given the necessary authority, concerned parties continually bypass the regional level and go the level where decisions are made. If the water authority is a national organization, regional executives should be considered on a par with high-level national posts. If it is a regional water company, only the board of directors should be senior to them.

4.3.5 Staffing

There are two key staffing issues that need to be addressed in a decentralization program: control over local staff and the adequacy of trained staff.

Local control

The first issue of local control over staff is critical. In a devolved or delegated situation, local control should include the authority to deal with such issues as recruitment and selection, dismissal, compensation, benefits, training, and promotions. In a deconcentrated situation; however, water agencies are likely to be required to follow most or all of the personnel policies of the larger government organization.

Staffing is an important issue for several reasons. To be able to build and maintain employee loyalty, management must be seen as the authority to whom staff report. In order to build the kind of team that will be responsive to the goals and needs of a decentralized (and presumably efficient)

operation, management needs to be able to retrench when over-staffed or dismiss employees when they are not responsive to improvement measures.

The ability to hire and fire staff is critical. It is inappropriate to require a water or wastewater organization to operate as a business, while maintaining the same procedural requirements for discipline and dismissal that protect poor performance as found in a typical government institution. The government is not set up to be a business. It does not have the agility in staffing that commercially oriented organizations have.

One of the primary reasons water boards in Malaysia are seen as being able to do a better job than state water departments is they have much greater control over staffing and personnel decisions. In Malaysia, fully devolved water boards justify hiring additional staff based on financial analysis of their own operations. The state water departments, on the other hand, work in environments where the state government often feels that it cannot afford additional staff or that it would be politically unwise to hire them. Water boards have the ability to hire and fire without following a cumbersome state process and make decisions about budgets.

On the other hand, many of the reasons that managers at the state government level in Malaysia recorded less than optimal performance in their partially devolved function was related to the centralized nature of the personnel function, including the rotation of engineers between water supply departments and state public works departments, the difficulty in getting sufficient staff allocations and appropriate position classifications, as well as the problem of getting centralized personnel staff to understand the need for commercial accounting skills.

Adequacy of staff

The major tasks of job classification and the configuration of jobs must occur in a decentralization program. This might require a complete redefinition of all jobs, duties, and classifications. This task should include a review of job descriptions and the skills required, and should take into account the delegation of authority needed for supervisory and management effectiveness at lower levels.

In many cases, people with skills different from those who worked at the centralized level or held positions in other ministries will be needed. Accountants or engineers with no financial or commercial experience might not have the skills or inclination to design new financial systems.

Attracting qualified staff to work at the local level will require both financial and non-financial incentives. Financial incentives include competitive salaries and benefits as well as indirect benefits (e.g., availability of government transport), while non-financial incentives include such things as career enhancement, status, good working conditions, ability to work close to home, and expectation of impact (Silverman).

The best way to ensure that employees will accept their redefined roles is to involve those affected

in the process of redefinition. Top down reclassification and role changing usually is very difficult if one wants to retain and motivate the same staff.

4.3.6 Providing Essential Tools for Management

Modern management practice requires that managers have a reliable management information system so they can make informed decisions. In a decentralized system, information may be available locally or it may have to come from the central agency. Any decentralization program should include the development of a management information system.

Utilities in developing countries are making increased use of automated management information systems. System development and training programs will be required for staff at all levels including both clerical staff and management to be able to use an automated system. These programs are especially important when an effort is being made to strengthen the commercial function in a utility. Financial management will be strengthened by developing the capability to use computer-based management information systems. Such tasks as billings, collection and accounting functions will be made much easier with computers.

Management information systems require modern administrative systems. Such systems as maintenance management, billing and collections, personnel systems, payroll, manpower planning, stores and supplies, and procurement all need to be developed at the local level if the agency is to be able to carry out its increased responsibilities. If such systems are to be successful, significant training and expenses will be required at the beginning. Management information systems need to be tailored to the needs and capacity of the local agency. A small municipality, for example, will be unable to use a complex information system that a large urban utility could use.

4.4 Objectives in Different Types of Decentralization Programs

Taking into account the six elements discussed in this chapter and the contextual factors will allow a project designer to formulate the objectives of a decentralization program. A program can have a range of objectives. This section offers some possible program objectives organized by type of decentralization. The reader should not assume that these objectives will be relevant in a given situation. They are provided as a checklist to use in making sure that the key elements are addressed in a decentralization program.

4.4.1 Deconcentration

- # Design and develop an administrative structure with full service capabilities at the regional levels.
- # Reallocate responsibilities for budgeting and planning.
- # Reassign trained staff to the appropriate levels, especially those with specialized skills.
- # Strengthen the newly deconcentrated structure's capacity to operate more efficiently.
- # Rationalize the use of limited or specialized equipment over the entire system.
- # Develop cost reduction programs by improving skills in such areas as water loss, operations and maintenance, and improved billing systems.
- # Increase contracting of services to the private sector to reduce costs and improve services.

4.4.2 Delegation

- # Design a staged transition scenario from the current system to a delegated system.
- # Identify the most appropriate organizations to run the water system.
- # Develop a program agreement with appropriate organization(s) for water supply management.
- # Design the appropriate oversight mechanisms for such tasks as contract management, standard setting and enforcement, and financial accountability and auditing.
- # Develop mechanisms for setting and reviewing tariffs.
- # Develop mechanisms to ensure appropriate financing for system improvements.

4.4.3 Devolution

- # Design a staged devolution scenario to achieve turn over of responsibility to local entities and phase out the existing structure.
- # Develop a strategy to transfer physical assets.
- # Determine the legislative requirements for devolution and transfer of power.
- # Implement an institutional improvement program to train the municipal- or state-level staff in the skills required to manage newly inherited systems.
- # Provide financing mechanisms to support devolved systems, through such measures as taxation, bonds, and national or international loans and grants.

5

THE IMPLEMENTATION OF DECENTRALIZATION PROGRAMS

5.1 Introduction

Whereas the focus in Chapter 4 was on the design of a decentralization program, this chapter focuses on its implementation. This chapter provides guidance on how to manage the change process that occurs during a decentralization program. The examples and discussion points that follow are drawn from field experiences at both the institutional and sectoral levels. An assumption that has been made throughout this paper is that decentralization programs should be designed to improve sectoral performance. At a minimum decentralization programs call attention to the need for institutional change and strengthening. Staff are relocated, jobs and tasks are often redefined; new responsibilities are required, and new structures emerge. This chapter is intended to provide insight on how to manage these changes best.

5.2 Starting a Decentralization Program

The first step in a decentralization program is to develop a vision of a decentralized water and sanitation sector. This vision should paint a picture of what the sector will look like in the next five to 10 years. This vision should address the following issues in a general way.

- # The roles of the central, regional, and local governments.
- # The dependence of local governments on the central government for financing.
- # The percentage of total costs recovered from tariffs.
- # The quality of water and sanitation services to consumers.
- # The kind of consumer orientation the service-providing agencies have.
- # The type of control the local water agencies have over personnel.
- # The control the local agencies have over their own finances.

Once this vision of how things will work in the future is developed, the more specific long- and short-term goals and objectives of the decentralization program can be formulated. A flexible, master design should then be developed which specifies a preliminary institutional framework for the sector organizations, specific roles of the central and decentralized units, policy changes that need to be addressed (especially in the finance and personnel areas), and the kind of training that is likely to be needed.

The decentralization program should have a flexible implementation strategy that involves the affected staff in defining and accomplishing the needed changes. One important feature of the strategy should be the development of an approach to institutional learning. Any decentralization effort is unlikely to occur as planned. It is very important for the key organizations involved in decentralization to develop mechanisms for reflecting on and drawing from lessons learned.

In designing a decentralization program one way to begin is to conduct an interactive workshop. This would be a process wherein a core group of staff from the key organizations in the sector would work collaboratively with the help of a workshop facilitator to define issues, agree on an overall direction, and develop a plan for implementation. The interactive process helps to achieve understanding and build commitment to the program among those who will be most affected by the changes.

Realism is required in determining the time it will take to achieve a restructured, improved sectoral system. Decentralization can be a process of profound institutional change, and seven to ten years is not an unreasonable expectation to turn around an operation. In many instances, an entire institutional culture must change. New managers may need to be developed or old managers may need to learn new philosophies. Decentralization is not simply redrawing the organizational chart. A deconcentration or a devolution program requires transferring people, developing new structures, changing reporting relationships, adding services, and improving existing operational systems.

5.3 Staging a Decentralization Program

Decentralization takes time. The combination of policy changes and institutional strengthening at the local level is a lengthy process. Examples of deconcentration programs, such as those in Sri Lanka and Tunisia, have taken five to seven years. Examples of devolution or delegation can be expected to take even longer, i.e., 10 to 15 years, because of the need to develop local capacity. Because of the amount of time required to complete the process, changes associated with decentralization should be staged so that strengthening is systematic and gradual. One approach is to set up pilot regions and deconcentrate authority for making major decisions to these regions. Then, as experience is gained, lessons learned can be passed on.

Often organizational change requires experimentation. Actions and activities are monitored,

reflected on and conclusions are drawn. Implementing a pilot approach, which studies and defines problems, followed by agreeing on activities designed to foster change has proved successful in many efforts.

An example of an incremental strategy is to increase authority and responsibility transferred to decentralized levels as performance improves. A relationship between the central operation and the local operation can be one of resource or technical consultant to clients until the local operation can be independent. This will allow the central staff to have an important role and use existing skills for helping others learn. Eventually, a core of central staff may remain employed as inspectors or regulators in a devolved system.

5.4 Principles of Change Management

The following principles may be applied in the design and conduct of decentralization programs that seek to create institutional improvements. These principles come from the organizational development field and will be useful in guiding the implementation of a decentralization program. (Edwards, 1988).¹

1. For change in organizational culture to begin or become established requires a catalyst.

Outside stimuli or pressure for change is often required for change to be initiated. When the Government of Sri Lanka realized that the budget item for national water supply and the debt associated with it would be second only to the subsidized national airlines, they decided to set up an institutional improvement program coupled with decentralization.

2. Leadership within the organization is critical.

Organizational change requires leadership. Most organizational systems have set up elaborate ways to support the status quo—labor unions, guilds, political interests, social structures, etc. The most successful change projects require enlightened leadership combined with high-quality technical assistance. Change management requires a great deal of learning, training, and exposure to new ideas. Strong leadership does not have to be embodied in one person, but could be provided by a group of senior managers.

¹ For a more detailed description of the processes of institutional development, refer to the WASH publications *Managing Institutional Development Projects: Water and Sanitation Sector*, WASH Technical Report No. 49, May 1988. Prepared by Daniel B. Edwards.

3. *The entire organizational system needs to be involved at the same time.*

The whole system must work together to stimulate, reward, and sustain organizational change. Essentially, the process requires that individual actors see reasons to change and rewards for reinforcing new actions. New ways of operating will become internalized by individuals and within management and administrative systems. Change must take place across all levels. If the focus is only on the middle and senior levels, the lower levels will not understand and support the changes.

4. *Multiple pressures need to be brought to bear on the entrenched system, habits, and individuals for change to occur.*

In change management, it is important that change strategies involve multiple pressures on the same problem area. Pressure for change needs to come from all directions: above, below, and laterally. Trying to change even one thing, while ignoring others can create isolation. Experience has demonstrated that organizations change when the complex of environmental factors is altered.

5. *Lasting organizational and individual change cannot occur without the consent and involvement of those affected by the change.*

The best way to ensure disaster in organizational change is to exclude people involved or to impose change. Fortunately, there are many documented examples of people's positive involvement in change efforts. Collaborative planning structures, such as steering committees, review groups, or task forces, are valuable mechanisms for involving staff in the planning process.

The principle is to find ways to involve those most affected by the decentralization in problem solving activity. Groups formed at the beginning of a change effort might continue throughout the entire life of the change project.

6. *Change in organizations will endure when the reward structure is altered.*

An important principle of change management is the process of identifying the current reward structure within an organizational system and creating the changes needed in it to ensure that new behavior is rewarded and the structural and procedural changes implemented are supported by the reward structure.

In centralized systems, the reward system often is structured around the power and authority of

central office staff. They have decision-making power regarding key items: staff, budget and finance, award of construction contracts, and provision of supplies and services. Institutional change requires the reward structure that accrues to central staff be transferred to decentralized levels.

For example, in Sri Lanka, one of the decentralization goals was to improve operations and maintenance. Yet, most of the prestigious jobs were in engineering design. The highest ranked and best remunerated jobs needed to be restructured. A new set of management positions was created in effect making the regional manager of operations a deputy general manager. In addition, the staff working in the operational areas were given special performance-based incentives designed to reward improved performance related to consumers, commercialization, and cost effectiveness.

Other devices that help to sustain or support decentralization through rewards include:

- # Special allowances such as special benefits for educating children, assistance with housing, and incentive pay for staff that must be outstationed or relocated
- # Special awards for productivity and efficiency
- # Special recognition programs, such as incentive pay or performance-based awards, that make people feel important
- # Promoting (fast-track provisions) staff for taking jobs in hard-to-staff places.

7. *Resistance to change is to be expected and should be anticipated and smoothed out.*

When one begins to alter power relationships and rewards it is normal to expect resistance. Resistance can be managed if relationships are altered slowly and an opportunity is given for adjustment, compromise, and equity. But as power relationships are altered and the status quo is threatened, fierce protective maneuvers can be expected. These protective maneuvers can be dealt with in a variety of ways including consensus building with a critical mass of people, support from top management, and conflict management.

5.5 Changing the Institutional Culture

One of the goals of a decentralized water and sanitation sector is to improve the commercial viability of sector institutions. For example, in Eastern Europe this has occurred as the national level has devolved responsibility to county government and removed subsidies, and it has also been the case in Chile where state companies have been delegated responsibility to provide water commercially, in a self-sufficient way. The goals of financial viability and commercial orientation have been integral to the decentralization programs studied. Simultaneously, moving from a centralized operation to a commercial focus and a decentralized operation requires a change in institutional culture.

Changing an institutional culture requires that individuals within the organization learn and adopt different norms and patterns of individual and group behavior. Some ways of operating that previously were successful in the organization will no longer be rewarded. People usually behave in accordance with a set of beliefs and assumptions they make about what is done or should be done to be accepted by others and rewarded. If inefficiency is the norm and attitudes are lax, there often are environmental factors that sustain and reward these actions and beliefs. If poor performance is ignored or supported by the supervisory culture, staff will believe there is no reason to change.

Altering the organizational culture is a slow process when the consequences of the old behavior are minimal, but making change a condition of survival and using peer group pressure can accelerate this process. Survival of the organization and an individual's livelihood often is at stake when an organization moves from subsidized to commercial operations. Training, which adds energy and develops new skills, could be provided. The cumulative effect of training, consultative support, pressure from the top, empowerment through delegation, rewards for appropriate behavior, and learning by doing pays off within an organization.

Changing the institutional culture is more possible if there is a mandate and leadership for it. A decentralization program is an opportunity to build or rebuild an institution.

5.6 The Role of Technical Assistance

Technical assistance has a vital role to play in bridging the gap between the policy level decision to decentralize and the reality of running a water and sanitation system at a local level. This is especially true when systems are devolved or delegated. When the system is deconcentrated, the central-level organization can be a source of technical assistance.

There are few examples of decentralization programs linked with institutional improvement projects. One of the best examples found is the deconcentration program in Sri Lanka. Other attempts at large systems change in water and sanitation have been in Brazil and Chile. Technical assistance and training played significant roles in Brazil and Sri Lanka; however, in Chile very little technical assistance, aside from the business oversight from the central government, has been structured into that program. It is still too early to know if the Chile experience would have benefited from technical assistance.

Many East European countries have passed laws and assigned responsibilities to lower level governmental units without institutional improvement programs or technical assistance. Local governments lack resources in important areas, such as commercial management (tariff setting, billing, and collections) and technical planning. In Bulgaria, for example, as water and sanitation systems have begun to operate in a decentralized manner, significant problems have been encountered in managing staff and in providing services. Essentially, these systems were devolved and then abandoned by the central government.

Decentralization programs require technical assistance in the planning and transition periods, and in any subsequent strengthening efforts. The primary functions of technical assistance in a decentralization and organizational change program are to support management as it makes changes and to transfer skills in areas of technical and managerial deficiency.

There are several types of technical assistance needed. Organizational development (OD), a process requiring specialized skills in organizational change, will be needed. OD is a special area of experience and knowledge. In addition to academic study and a foundation in management sciences, an effective OD consultant must have specific personal qualities. Primary among them is the ability to engender trust and confidence in others who are taking risks to change behavior. The OD practitioner must be perceived as a neutral, third party who is able to listen to all sides and help facilitate the process.

In addition to OD skills, a technical assistance team might include a range of technical specialists depending on the areas of assistance needed. These areas might include engineering, finance, training, operations and maintenance, and public awareness. The specialists might assist in developing new systems and procedures, training counterparts, and seeking organizational support to put plans into action. In addition to a resident team, short-term technical assistance can play a valuable role.

There are a number of skills that have been defined as necessary for effective performance of long-term advisors (McCaffery). Effective consultants are skilled in communication, are non-judgmental, and have accepting attitudes, cross-cultural sensitivity, and the ability to be facilitative rather than directive. The least successful consultant is directive and ?expert-oriented@ in situations where the client needs to be helped to solve his or her own problems.

5.7 The Role of Financial Assistance

This section discusses the importance of recognizing that there are some initial costs associated with decentralization that the central government will have to provide until local institutions are capable of cost recovery and financial management. Because it will take time before any utility is financially self-sufficient, a phased strategy of outside financial assistance will be required.

When responsibility is delegated or devolved to a municipal agency, a range of operational costs must be taken into account. Many of these costs should be viewed as investment costs since in the long run they will help the municipality become stronger and better able to achieve financial health. These costs include the following:

- # Severance pay for staff who are released
- # Training costs
- # Equipment for operations and maintenance
- # Computers
- # Technical assistance

Similarly, in the case of a deconcentrated rural water and sanitation sector, the central government will have to provide ongoing support to its provincial offices, and the provincial offices, in turn, to communities. The central government will have to provide training and technical assistance, while the provincial offices will have to provide training and back-up support for operations and maintenance until the community is ready to manage its system with minimal outside support.

The goal clearly should be to phase out this financial assistance, but it is unrealistic that a municipal agency or community water user association that has been totally dependent on outside support would be able immediately to meet all its costs. Therefore, a transition period is necessary.

5.8 The Role of Management Development

In the decentralization program conducted with the National Water and Sanitation (NWSDB) in Sri Lanka an intensive management development program was central to team and skill development and greatly assisted the decentralization process. The description of this program and a management training manual have been published and are available from A.I.D. through the WASH project (Edwards and Salt, 1988). Some of the benefits of conducting a management development program concurrent with a decentralization program are as follows:

- # Provides an incentive to staff who are in new positions by helping them to learn new job skills
- # Provides a forum for team building and legitimizes the concept of learning about management in water utilities
- # Demonstrates that management is a skill that can be learned
- # Provides an opportunity for managers to help each other and compare ideas and strategies
- # Teaches new skills in communication, planning, conflict management, team work, getting results from others, collaboration, performance review, monitoring, and feedback
- # Develops a core group of people who become committed to decentralization goals, because managers are identified as the most important people in the decentralized system

If management development is to be used to lead the decentralization effort, it should begin within the first year and continue through the life of the program. A management development course also should be developed for mid-level supervisors as well.

5.9 The Role of Training

Training is critical in any decentralization effort, particularly in deconcentration and devolution efforts. As responsibility shifts to lower levels, skill needs at those levels also increase, but too often responsibility shifts without the effort to develop skills. Training is one of the keys to developing capacity at decentralized levels.

Training should be an on-going process for all water and sanitation institutions. In large systems, training should be an organizational function so that recurring skill needs can be addressed. Depending on the depth and breadth of skill deficiencies, training can be a very useful tool as a companion to the development of upgraded organizational functions. Training alone, however, cannot substitute for management deficiencies, lack of equipment, and unclear rules and responsibilities. In situations where staff lack the necessary skills, specific knowledge or information and have the opportunities to learn and apply learning in the work place, there is a critical role for training.

A strong internal training system involves management and supervisors in the development of training programs. Training professionals conduct detailed needs analysis to define specific skills in areas where management indicates that performance problems exist.

In a devolved or delegated situation, a national agency may continue to provide training to municipal agencies. In Mexico, the training arm of the national government offers courses to utility

managers. This national capability provides a great service to small utilities not large enough to develop their own internal training programs. In a deconcentrated example, the central organization probably would provide training to regional offices.

5.10 Monitoring the Decentralization Program

The implementation of a decentralization program needs to be monitored. Because of the widespread changes that most decentralization programs bring about, regular monitoring is important to identify issues that need to be addressed and to determine mid-course corrections. The monitoring task will be much easier if measurable indicators are agreed upon during the design of the program. These indicators fall into two broad categories.

The first category includes indicators that track the overall program. Although these indicators will vary greatly according to the country, they should cover financial, institutional, technical, and health aspects. Examples might be the amount of central government subsidy, the ratio of staff working in the central and regional offices, percentage of people served, and rate of infant mortality.

The second category includes performance indicators for specific utilities or agencies. These types of indicators will show how a particular utility is performing after decentralization. Examples of specific performance indicators include coverage in the service area, water production per connection, percentage of unaccounted-for-water, employees per 1000 connections, operating revenue per m³ produced, total costs per connection, and debt service as percent of operating revenues (Gavin et al, 1992). Monitoring based on indicators such as the ones cited above implies that individual utilities and agencies have the capability to collect and analyze data. In the beginning of a decentralization effort, most utilities, especially ones in small municipalities, are unlikely to be able to collect such data, but over time the capability can be developed.

A central government agency should be given clear responsibility for monitoring the decentralization program. This agency should establish a monitoring process that should include collecting and analyzing data to track the indicators. The process should also allow for examining implementation problems and recommending actions to address the problems. Although one agency should have lead responsibility for monitoring the program, it is important to involve a wide range of institutions affected by decentralization. Selected individuals could work in task forces to review the program and recommend actions. An approach that involves a wide range of people stands the best chance of developing commitment to the program.

5.11 Conclusion

The decentralization of water and sanitation services is occurring in many countries throughout the world. The result is a growing body of experience that other countries can draw on. This paper has attempted to capture some of that experience so that others may benefit. The focus of the paper has been on the actual design and implementation of decentralization programs rather than on the decision of whether or not to decentralize in the first place. The guidance offered is intended to be practical and useful to those who are responsible for designing and implementing programs.

One of the lessons learned in writing this paper is that there are no formulas for decentralization. A decentralization program can take one of many paths, depending on the particular circumstances in that country. Yet there are two fundamental principles that apply in nearly every situation. First, decentralization will only be successful when there is also a commitment to strengthen capacity at the local level. Local governments and provincial offices of central organizations will not be able to take on increased responsibility automatically, merely because they have been given the responsibility on paper. Second, decentralization will not work without political support. The changes that accompany decentralization are too widespread to withstand inevitable resistance without firm political support.

In the coming years there will be more examples of efforts to decentralize water and sanitation services. It is hoped that this paper will offer guidance for these efforts.

Bibliography

- Bradley, Robert Ph.D. 1991. *Final Report on Institutional Development of the NWSDB*. USAID and NWSDB. Sri Lanka: Water Supply and Sanitation Sector Project.
- Campbell, Tim; Peterson, George; and Brakarz, Jose. 1992. *Decentralization to Local Government in LAC: National Strategies and Local Response in Planning, Spending and Management*. Washington, D.C.: The World Bank.
- Cullivan, Donald; Tippett, Bruce; Edwards, Daniel; Rosensweig, Fred; and McCaffery, James. 1988. *Guidelines For Institutional Assessment: Water and Waste Institutions*. WASH Technical Report No. 37. Arlington, VA.
- Edwards, Daniel B.; Salt, Edward; and Rosensweig, Fred. 1992. *Making Choices for Sectoral Organization in Water and Sanitation*. WASH Technical Report No. 74. Arlington, VA.
- Edwards, Daniel B. 1988. *Managing Institutional Development Projects: Water and Sanitation Sector*. WASH Technical Report No. 49. Arlington, VA.
- Edwards, Daniel B. and Salt, Edward. 1988. *The Management Development Program for the National Water Supply and Drainage Board of Sri Lanka*. WASH Field Report No. 230. Arlington, VA.
- Edwards, Daniel B. 1990. *Strategy for Developing Training Capability in a Water and Sanitation Institution*. WASH Technical Report No. 68. Arlington, VA. 1990.
- Edwards, Daniel, B. and Salt, Edward. 1989. *Training Guide for a Management Development Program in Water and Sanitation Institutions*. WASH Technical Report No. 59. Arlington, VA.
- Gavin, John; Darling, Jonathan; Game, Roberto C.; Laport, Robert; and Stomberg, Chris. 1992. *Performance Indicators for Selected Water Supply and Sanitation Utilities in Ecuador*. WASH Field Report No. 379. Arlington, VA.
- LATIE. 1991. *Decentralization to Local Government in LAC: National Strategies and Local Response in Planning, Spending and Management*.
- McCaffery, James. 1991. *Selection and Role of Long-term Advisors*. WASH Technical Report No. 69. Arlington, VA.
- Ostrom, Elinor; Schroeder, Larry; and Wynne, Susan. 1990. *Institutional Incentives and Rural Infrastructure Sustainability*. Burlington, VT: Associates in Rural Development, Inc.

- Peters, Thomas J. and Waterman, Robert H., Jr. 1982. *In Search of Excellence*. New York, NY.
- Rondinelli, Dennis A. 1989. *Decentralizing Public Services in Developing Countries: Issues and Opportunities*. Research Triangle Park, NC: Journal of Social, Political and Economic Studies, Volume 14, Number 1.
- Rondinelli, Dennis A. 1990. *Decentralizing Urban Development Programs: A Framework for Analyzing Policy*. Washington, D.C.: Office of Housing and Urban Programs, U.S. Agency for International Development.
- Rondinelli, Dennis A.; McCullough, James S.; and Johnson, Ronald W. 1987. *Decentralizing Public Services in Developing Countries: A Framework for Policy Analysis and Implementation*. Research Triangle Park, NC: RTI and DAI.
- Rosensweig, Fred; El Amouri, Tahar; and Jennings, Lee. June 1992. *Summary Report of the Action Plan to Develop the National Strategy to Create and Monitor and User Associations*. WASH Field Report No. 368. Arlington, VA.
- Silverman, Jerry M. 1990. *Public Sector Decentralization: Economic Policy Reform and Sector Investment Programs*. Washington, D.C.: The World Bank, African Region.
- Solo, Tova M.; Perez, Eduardo; and Joyce, Steven. March 1993. *Constraints in Providing Water and Sanitation Services to the Urban Poor*. WASH Technical Report No. 85. Arlington, VA. March 1993.
- U.S. Agency for International Development. 1991. *Decentralization and Democratic Governance. A Review of Latin American Experience and lessons for Sub-Saharan Africa*. Washington, D.C.: Office of Housing and Urban Programs.
- U.S. Agency for International Development. 1991. *Ghanaian Decentralization*. Office of the House and Urban Programs. Washington, D.C.
- Walker, Jane. 1993. *Preparing for Private Sector Participation in the Provision of Water Supply and Sanitation Services*. WASH Technical Report No. 84. Arlington, VA.
- WASH Project. 1991. *Private Sector Participation in Urban Water Supplies: Issues for Investment in Indonesia*. 1991. WASH Field Report No. 330. Arlington, VA.