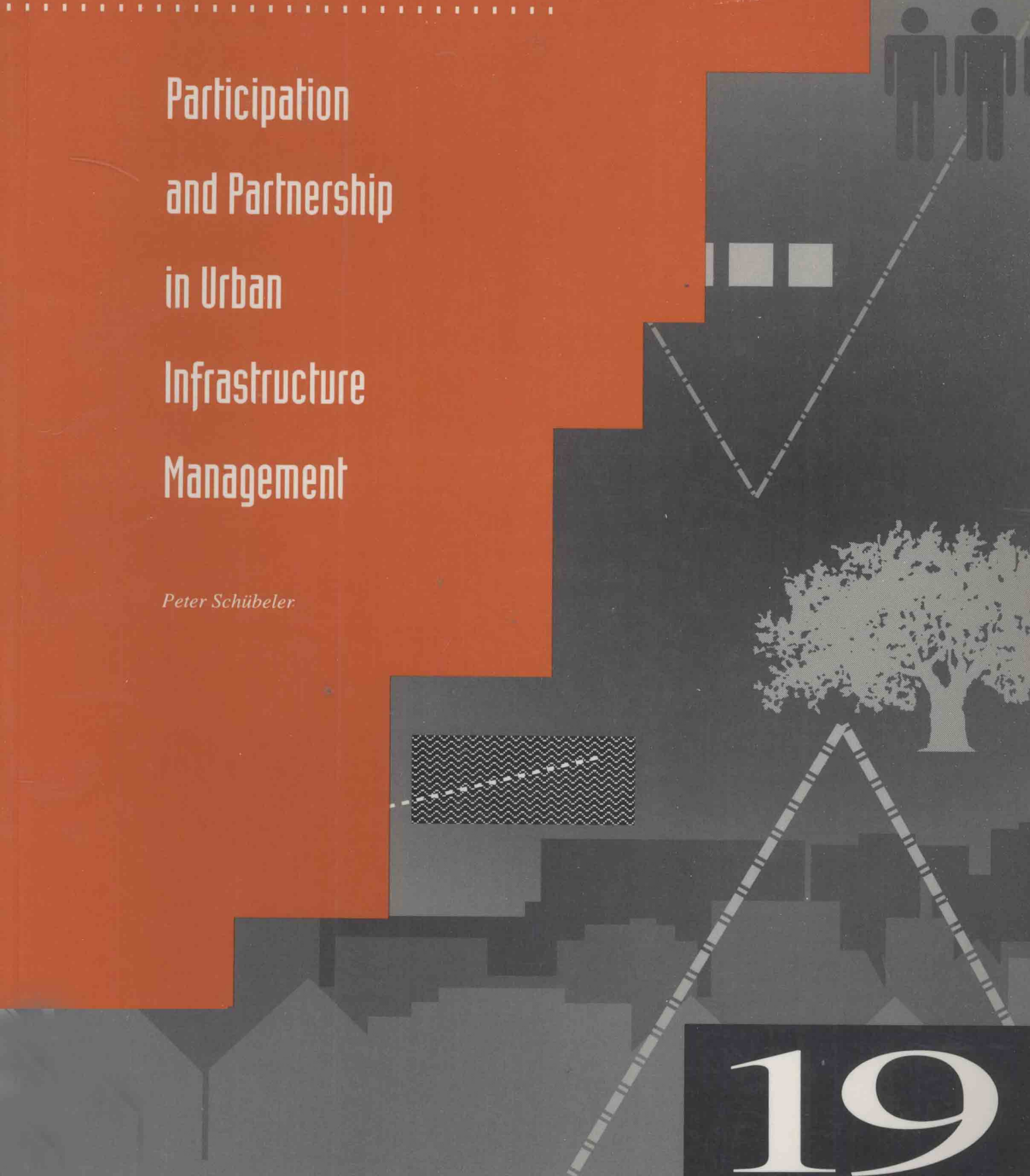
Urban Management Programme

Participation and Partnership in Urban Infrastructure Management

Peter Schübeler



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Deputy Director
Division for Global
and Interregional Programmes
United Nations Development
Programme

Chief
Technical Co-operation
Division
United Nations Centre
for Human Settlements
(Habitat)

Chief
Urban Development Division
Transport, Water, and Urban
Development Department
Environmentally Sustainable
Development
The World Bank

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The Urban Management Programme (UMP) represents a major approach by the United Nations family of organizations, together with external support agencies (ESAs), to strengthen the contribution that cities and towns in developing countries make toward economic growth, social development, and the alleviation of poverty. The program seeks to develop and promote appropriate policies and tools for municipal finance and administration, land management, infrastructure management, environmental management, and poverty alleviation. Through a capacity building component, the UMP plans to establish an effective partnership with national, regional, and global networks and ESAs in applied research, dissemination of information, and experiences of best practices and promising options.

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FOREWORD

This paper has been prepared for the urban infrastructure management component of the joint UNDP/UNCHS (Habitat)/World Bank Urban Management Programme (UMP). The UMP is a major long-term technical cooperation program designed to strengthen the contribution made by cities to human development (including economic growth, social development, and the reduction of poverty). The UMP seeks to promote coherent urban policies, strengthen urban management, and enhance the provision of municipal services by harnessing the skills and strategies of regional networks of experts and communities, as well as public and private sector organizations. It does this primarily through its regional offices in Accra, Ghana; Cairo, Egypt; Kuala Lumpur, Malaysia; and Quito, Ecuador.

The UMP relies on two mutually supportive processes to facilitate capacity building in its five theme areas of municipal finance and administration; urban infrastructure management; urban land management; urban environmental management; and urban poverty alleviation:

- **City or country consultations** which bring together national and local authorities, the private sector, community representatives, and other stakeholders to discuss specific issues within the UMP's theme areas and propose reasoned solutions. In so doing, UMP thematic policy framework papers, discussion papers, and management tools may be used as starting points for discussion. Consultations are held at the request of a city or country and are intended to provide a forum for discussion of a cross-section of issues, generally resulting in an action plan for policy program change.
- The development of **regional networks of experts** in each of the five UMP theme areas for the purpose of providing technical advice and cooperation and to ensure a sustained capability to support consultations and follow-up. This follow-up includes facilitating the implementation of action plans and the corresponding mobilization of resources. Typically, after having participated in supporting several city or country consultations in their specific area of competence, these regional experts become the foundation of the human resource base in the program.

By synthesizing lessons learned, identifying best practices, conducting state-of-the-art research, and disseminating program-related materials, the UMP core teams in Nairobi and Washington, D.C. provide support for the regional programs and networks.

Mark Hildebrand
Director
Programme Coordination
United Nations Centre for
Human Settlements (HABITAT)

Anthony Pellegrini
Director
Transportation, Water and
Urban Development Department
The World Bank

ABSTRACT

Infrastructure service users make important contributions to the provision, operation, and maintenance of infrastructure service systems in cities and towns in developing countries. These contributions may occur within development projects or, more importantly, in the regular daily processes of service provision. The potential benefits of community and service user participation are not being fully realized, however, due to numerous constraints, including shortcomings in prevailing policies.

Participation in infrastructure service management—which includes planning, programming, and monitoring as well as implementation and operation and maintenance—is a form of partnership between government and service user communities which may be promoted in the context of programs for improving infrastructure service management. In particular, participation is essential to realizing demand-oriented service delivery. As countless experiences have demonstrated, the benefits of participation derive not only from mobilizing additional community resources but, more importantly, from increased effectiveness in the use of available resources.

Participatory strategies must consider the role of many stakeholders at the community level (households, community-based organizations, leaders and, in particular, women), the intermediary level (non-governmental organizations and special purpose government agencies), in the private sector (formal and informal enterprises), and in government (technical agencies and local government authorities). It is important that they take a process-oriented approach to infrastructure systems and consider all processes by which users gain access to services, including private and informal provision as well as public sector service delivery.

Participation implies that people acquire a greater voice in local affairs and an expanded role in decisionmaking processes; it is inseparable from empowerment. At the same time, the justification for participatory strategies must lie in their contribution to the specific objectives of infrastructure service delivery.

As a form of partnership between service user groups and government authorities, participation exists in a wide variety of forms, which range from government participation in and support of community-based development activities on the one hand to people's participation in government-directed management functions on the other. In between, various forms of involvement and collaboration are possible. Four main strategic approaches may thus be identified:

- community-based support strategies
- area-based involvement strategies
- functionally-based collaboration strategies
- process-based decentralization strategies

An important characteristic of each approach is the manner in which it defines the sharing of infrastructure service management tasks and responsibilities between stakeholders at the community and government levels, and how it structures the relationships between them. A large body of experience demonstrates the relative strengths and weaknesses of each of these strategic orientations. The strengths of each approach tend to complement the weaknesses of the others. A certain evolution from one approach to the next is advantageous and frequently observed.

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CONTENTS

EXECUTIVE SUMMARY

i. Infrastructure users contribute in many ways to the provision and operation and maintenance of infrastructure systems. In the context of development projects, the benefits of participation derive not only from cost reduction and resource mobilization during implementation, but also from more effective targeting of project measures to the real needs of the people. Participation enhances user "ownership" of facilities, thus helping to ensure fuller and more efficient use, better maintenance, and more reliable operation.

ii. Outside the project context, community-based processes of informal housing production also involve major contributions to infrastructure service provision. Additionally, infrastructure users may perform important functions in the government's overall management of infrastructure systems. Participation is essential to demand-oriented infrastructure service delivery.

iii. However, the potential contribution of user participation is constrained by numerous factors such as the absence of secure tenure rights, inappropriate technical standards, rigid planning methods, time-bound project management requirements, and the absence of workable models. Participatory infrastructure management calls for an appropriate organizational basis for the partners, a clear division of tasks in line with the interests and capacities of each partner, adequate communication channels between participants, and a favorable policy context.

The Partners

iv. The main partners in participatory infrastructure management are:

- ***community-based organizations (CBOs)***, which are often formed when neighbors join forces to improve local security, housing quality, environmental quality, basic utilities, and social services. **Community leadership** is very important to participatory infrastructure development. Since **women** normally organize household access to drinking water, sanitation, and waste disposal services, they play a key role in the struggle to improve service access and quality.

- ***non-governmental organizations (NGOs)***, which may be understood as a "third system" between the public and the private domains. Their main functions include mediating between communities and government authorities, advocating community interests, consulting and providing support to community-based development, and, occasionally, managing project activities.

- ***private sector actors***, who range from informal workers and small-scale enterprises (e.g. waste collectors and scavengers) to large-scale business firms who may contract with the government to provide selected infrastructure services.

- ***local government authorities***, who bear primary responsibility for provision of infrastructure as well as other urban services. As well as being humanistic and idealistic, the interests of local government authorities are political and economic. Being at the "contact" level of government, local authorities are very much concerned with the level

of satisfaction of the people with service delivery performance. Local government technical departments are particularly concerned with **reliable operation** of infrastructure facilities, **minimization of operating costs**, and **adequate cost-recovery**.

What is Participation?

v. Participation in infrastructure management is a process whereby people—as consumers and producers of infrastructure services, and as citizens—influence the flow and quality of infrastructure services available to them. Participation is not limited to development projects. It is important that participatory strategies build upon existing informal processes and community-based infrastructure development, promoting them and linking them to formal systems. Participatory approaches depend upon voluntary relationships or partnerships between two or more of the groups mentioned above, which include private sector infrastructure suppliers as well as infrastructure users.

vi. The impact of participatory infrastructure development extends beyond service improvement to include enhancing people's capacity to manage local affairs and interact more effectively with authorities and other partners. Participation is inseparable from **empowerment**. At the same time, participatory management requires inputs of time, organizational capacities, and other skills, which need to be both understood and supported by policy makers and infrastructure managers. Participation involves risks and costs as well as benefits. In the right circumstances, however, the benefits of participation can far outweigh the costs.

Management Functions

vii. Management is a cyclical process involving the formulation of goals; planning and programming; implementation; operation and maintenance; monitoring and evaluation; and application of information derived from monitoring to planning and operational functions. Participation is important for each of the following functions:

- *Goal and policy formulation*, which in principle expresses the values, needs, and aspirations of all interest groups. Public support is mustered for selected goals through a two-way process of information exchange and consultation.
- *Long-term planning,* which, as well as being a response to policy goals for infrastructure service systems, is based on real demands. Users may contribute to this process, both with regard to identifying effective market demand and interpreting development goals.
- *Medium-term investment planning and programming,* which calls for user participation in a bottom-up process involving the identification of needs, setting of priorities, selection of appropriate solutions, and definition of an investment program in relation to the means available. This bottom-up decisionmaking process can only work effectively if the participating communities and user groups have access to relevant information on conditions and technical possibilities.
- *Implementation of plans,* construction of facilities, and development of service delivery systems, which are influenced by people who, as **users**, purchase municipal services

such as water or sewer connections. Through their contributions to government projects, the construction of individual private facilities, and/or the provision of informal local services that may operate independently of public infrastructure systems, people are also involved in implementation as **producers**.

- *Operation and maintenance functions*, which encompass service use, service supply, and the upkeep of facilities. Proper use of public facilities by people can substantially improve their effectiveness and at the same time reduce maintenance requirements. Additionally, service users and community groups may themselves make important contributions to the maintenance of local segments of municipal facilities.

- *Monitoring and evaluation* of system performance, which constitutes an essential link in the management cycle. Because they are directly affected by the operation of infrastructure systems, users are in a good position to contribute to monitoring the condition and performance of systems.

Strategies for Participation

viii. Participation exists in a wide variety of forms, ranging from government involvement in community-based development activities to people's participation in government-directed management functions. These approaches are in no way exclusive and often take place at the same time. Four main strategic approaches are identified:

- *Community-based strategies*, which constitute the most elementary form of participatory development. The frame of reference for development inputs is the social group or community itself. The main objectives are to **support** the local development of infrastructure services; **enhance** community groups' capacity to manage service development; and **enable** these processes through appropriate changes in the legal, technical, and policy context. Typical measures include organizational and technical extension services. Enabling measures involve recognition of people's rights to self-help infrastructure improvements, tenure security, and awareness building programs.

  The principal strengths of this approach derive from creative learning and the community's potential for self-organization. However, this strategy does not always succeed in introducing representative and functionally-oriented organizations. The bottom-up, community-based approach also faces inherent difficulties in linking locally developed infrastructure systems to municipal networks. The approach is seldom able to mobilize more than a modest volume of resources.

- *Area-based strategies,* which are the common form of government-directed programs for participatory infrastructure upgrading. Rather than a social group, a particular residential area constitutes the frame of reference of development efforts. Programs **involve** beneficiaries at various stages of the development process, with the principle objective of improving the efficiency and cost effectiveness of government activities. Typical measures include awareness building, community participation in demand analysis and the choice of solutions, and mobilization of resources for implementation and operation and maintenance. Organizational capacity-building may also be introduced.

This approach is well suited for channelling larger volumes of resources and for ensuring more effective linkages between local level development and municipal systems. Improvement measures may become standardized and supply-driven, however, loss of community "ownership" and poor cost recovery are common problems with this approach.

- *Functionally-based strategies,* which employ the functional structure of the infrastructure system as the frame of reference for organizing developmental inputs. The main objectives of this approach are first to designate areas of responsibility within which each stakeholder may pursue particular interests and exercise capacities, and second to establish effective **collaboration** between these various domains. Typically, a community group will take responsibility for managing and financing "internal" activities such as local garbage collection, while the municipality will ensure the "external" tasks such as onward transfer and disposal of waste materials. Ancillary programs of community development and organizational and technical support are also important along with training and awareness building.

  The strength of functionally-based collaborative approaches lies in the relatively high level of empowerment of participating community groups. Because project implementation and financing remain more clearly in community hands, loss of project "ownership" and poor cost recovery do not become problems. The most important difficulties concern coordination and linkage between the "internal" facilities and the government-sponsored "external" facilities.

- *Process-based strategies,* which take the entire process of infrastructure management as their frame of reference. The basic objective is to improve the efficiency, demand responsiveness, and accountability of infrastructure service management through a general **decentralization** of delivery processes. Decentralization implies a double movement of, on the one hand, devolving decisionmaking processes and operational responsibility to more local bodies and, on the other hand, opening management functions at each level to the exchange of information from "below."

  Privatization of specific service delivery tasks and other forms of public-private partnerships are important decentralization strategy measures. Decentralization strategies depend upon measures of institutional development to increase responsibility and authority to local bodies and develop their capacity. The strength of a decentralization strategy derives from both its mobilization of creative capacities at all levels of society, and its more productive use of available capacities and potentials.

Applying Participation

ix. A review of case studies demonstrates the particular strengths and weaknesses of each strategic approach. It also reveals a complementary relationship between them; the strengths of one approach tend to counteract the weaknesses of another. In practice, an evolution of one approach into another is frequently observed. This evolution may go in either direction, and it is possible to begin with any suitable approach. Due to their complementary nature, it can be beneficial to employ all approaches simultaneously.

x. Opportunities exist for improving service delivery through user participation in each infrastructure management function. For example, users' direct financial contribution to the **implementation** of facilities has proven to be quite feasible. Furthermore, user involvement in supervising the implementation of infrastructure improvements may significantly increase the value for money achieved. Careful attention to the links between public, informal, and private facilities may increase the effectiveness of implemented systems. User participation may likewise enhance **operation and maintenance** by making better use of existing infrastructure facilities, reducing maintenance requirements, and mobilizing user contributions to maintenance functions. The willingness of users to contribute to both implementation and operation and maintenance may be promoted through user participation in systems planning, public information, and the choice of appropriate technical solutions.

xi. Only after users acquire a real voice in the **investment programming** phase will the decisionmaking process reliably reflect the real benefits of anticipated investments to society. **Long-term planning** requires the involvement of the public as a whole, as well as the direct participation of interest groups and the communities concerned. The role of participation in demand-oriented service planning is particularly crucial in the case of poverty. Careful consideration must be taken, not just of the "willingness and ability to pay" but also of the specific conditions under which low-income service users are able to express and exercise their demands. Often it is not just people's inability to pay that is crucial, but the inability—and sometimes, the **unwillingness**—of municipal government to supply services that address the actual level of demand and conditions of service access. Informal solutions are often more successful because they adapt service supply processes to the prevailing **demand characteristics**.

Organizational Requirements

xii. Participatory strategies must determine whether development activities should be channelled through existing organizations or whether new organizations need to be established at the community and/or government levels.

xiii. The *community-based approach* relies largely on community initiatives, and existing CBOs are clearly at the center of the strategy. The **area-based approach** encompasses a wider range of partnerships and divisions of authority; the need for new organizations will depend upon the tasks and responsibilities to be assumed by the community, and the form and capacity of existing local organizations. Because correspondence between the responsible social group and the relevant infrastructure system is particularly important, existing organizations appear less appropriate to the **functionally-based collaboration strategy**. The **decentralization approach** is concerned with the relationship between all types of user and community organizations and government authorities. In principle, the strategy may apply to all forms of existing organizations. Where specific inputs to government planning processes are anticipated, appropriate organizational capacities may have to be established at the community and/or district levels.

Conclusions

xiv. To increase the capacity for demand-oriented service delivery, governments must become less bureaucratic, more flexible, more incentive-driven, increasingly decentralized, and more accountable to service users. User and private sector participation are important to each of these requirements. To contribute effectively, infrastructure users must be provided with the basic right to self-help improvement, better security of tenure, organizational and technical support, an environment conducive to enabling and supportive policies, and a larger voice in the process of infrastructure service planning and management.

xv. In many cases, participatory strategies depend on bottom-up processes whereby successful public-private partnership models, which have evolved out of trial and error activities at the most local level, are progressively elaborated and institutionalized. To promote this process, governments should adopt policies that enable and facilitate the participatory activities of infrastructure users and community-based organizations. Participatory approaches require time, resources, organizational procedures, and skills, and these factors need to be made available where appropriate. In some cases, special purpose organizations may be used to carry out pilot programs for participatory infrastructure development. Responsibility for infrastructure management functions should be decentralized, and the scaling-up of successful models of participatory management actively promoted.

I. SIGNIFICANCE OF PARTICIPATION IN INFRASTRUCTURE MANAGEMENT

Potential and Constraints

Introduction

1.1 The supply of infrastructure services in developing countries is advanced in many ways by service users themselves. User contributions to service provision take many different forms, ranging from the purchase of electrical generators by enterprises to the construction of on-site pit latrines by poor, unserved households. In the conventional sense of participation, users often contribute to the planning and implementation of infrastructure development projects. Even more important than project-based activities are contributions made by residents of informal settlements, who join with their neighbors to construct footpaths and drains, organize community level services, and petition the government for improvements to infrastructure.

1.2 In most cities in developing countries, the dramatic pace of demographic, economic, and social change severely overburdens the capacity of local authorities to provide urgently needed infrastructure services. In fact, the challenge of providing adequate service cannot be met through investment in technical facilities alone; the required funding is just not available and the needs and problems themselves are evolving too rapidly. In these circumstances, service provision depends very much on an efficient organization of service delivery processes and the best possible use of available material and human resources. It is mainly a question of management, which calls for active cooperation between government agencies and infrastructure users, as well as private sector actors.

1.3 Beneficiary contributions to development projects, informal processes of service improvement, and people's cooperation in infrastructure management are all forms of **user participation**. In this sense participation in developing countries is already an important factor in urban infrastructure service provision. However, the potential contribution of participation is not being realized due to numerous constraints and shortcomings in the policy environment.

1.4 The purpose of this paper is to describe and illustrate a range of participatory strategies to assist urban managers in expanding the role and effectiveness of user participation in the provision and operation and maintenance of infrastructure. To demonstrate how participation has been effectively employed in various circumstances, numerous case studies are cited. Finally, measures and steps are outlined that could be instrumental in realizing participatory strategies.

Audience

1.5 This paper is addressed to political decisionmakers at the national, provincial, and municipal levels with responsibility for infrastructure development, and to urban managers and their senior staff with responsibilities for planning, development, and operation and maintenance of urban infrastructure service systems. Other target audience groups include: community leaders; development professionals and non-governmental organizations active in the field of infrastructure development and management; project officers of national and international

development organizations; and the faculty of academic institutions concerned with development issues.

Content of the paper

1.6 Chapter I stresses that participation is already an important factor in the provision and operation and maintenance of urban infrastructure systems in developing countries. At the same time, the chapter describes the constraints that limit its use and effectiveness. The need for improved management of urban infrastructure service systems is emphasized and the role of participation in management reforms identified. The closing paragraphs describe the essential characteristics of participatory infrastructure development as a form of public-private partnership.

1.7 Chapter II outlines the main elements of participatory strategies, beginning with the major groups of participants at the community, intermediary, private enterprise, local government, and external support agency levels. The interests and capacities of each partner group are described. A working definition of participation is then proposed, with particular reference to the question of empowerment. The cost and risks of participation—as well as the potential benefits—are considered. A general management concept, composed of six main management functions, is then outlined as a basis for discussing the relationship of participation to infrastructure service management. Finally, the chapter defines four main strategic orientations as a framework for considering the available options and their requirements and determinants of success.

1.8 Chapter III outlines the main objectives essential to the application of participatory strategies, and discusses the issues that may arise as well as possible responses in the light of available experience. The principle objectives dealt with in Chapter III concern the conditions and forms of participation, the role of participation in each management function, and the organizational basis of participation at the community, intermediary, and government levels.

1.9 Chapter IV stresses the importance of participatory approaches within broader programs for improving and reforming infrastructure management. A general framework for action is outlined, and the essential principles for the application of participation are reiterated.

Potentials of participation

1.10 The concept of participation in development activities is certainly not a new one. In rural development, community participation has been recognized as an essential component at least since the early 1950s. The importance of participation in urban development activities has lagged behind. One reason may be that rural projects are mainly production-oriented, and it is quite evident that the beneficiaries—as producers—must be involved in the development of production systems. In urban projects, beneficiaries have been seen primarily as consumers of services, and their role in developing supply systems has therefore been accorded less importance (Moser 1987:311).

1.11 By the 1970s, however, the dynamic growth of informally constructed urban residential areas and squatter settlements in the cities of developing countries had made it clear