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Participation in Water & Sanitation

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Participation in Water & Sanitation

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Acronyms and Abbreviations

AGETIP	Agence d'Execution des Travaux d'Infrastructures Publiques
CBO	Community Based Organization
DANIDA	Danish International Aid Agency
FINNIDA	Finnish International Aid Agency
NGO	Nongovernmental Organization
RWSS	Rural Water Supply and Sanitation
SIF	Social Investment Fund
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
WSSLIC	Water Supply and Sanitation for Low-Income Communities

Contents

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Executive Summary

The participation of users—in designing and implementing projects and managing water and sanitation services— is now being built into Bank funded projects with the aims of increasing efficiency, equity and cost recovery and facilitating the extension of service coverage to poor communities. Success depends on identifying and securing the necessary institutional arrangements for participation and project delivery. In addition, TMs have to spend more time in the field, and adapt Bank procedures to support appropriate models for financing and procurement.

Challenges for the Sector

Prior to the last decade, the business practices of water and sanitation (W&S) utilities virtually never involved consumers in decision making or management. More recently, amidst concern that agencies are still failing to reach more than a billion of the poorest in developing countries, moving people center stage in W&S projects is a theme that has become important.

Despite massive investments between 1980 and 1990—the International Drinking Water Supply and Sanitation Decade—the needs of the rural and urban poor are still largely unmet by formal public services while, in many areas, private vendors charge 10-1,000 times official tariff rates. Pervasive inefficiency on the part of overstaffed agencies providing subsidized, conventional, urban services has resulted in financially unsustainable services that benefit only a small portion of the population.

At the same time, competing user needs have not been balanced well and many water resource interventions—large dams and irrigation projects in particular—have resulted in significant misallocations in water use, and in social and environmental disruption.

For the sector to increase responsiveness to user needs, improve cost recovery and service management, and incorporate financial, environmental and social concerns into project design and management, services should be based on demand.

The Role of Participation

Participation plays a central role in meeting these challenges. Involving users in the design and management of water and sanitation services provides a means of revealing demand, and of ensuring that services match what people want, are willing to pay for and will strive to maintain.

- User participation makes services and service providers more responsive and accountable to beneficiaries.
- Cost recovery and sustainability of services improves when technology choices and services correspond with what users want and are willing to pay for.
- Management of services is more effective when institutional arrangements are tailored to local practices.

Demand based approaches are also advocated in helping to resolve conflicts over water resource allocation between competing sectoral uses. Increased participation by primary stakeholders

—whether through consultation or through the purchase of water rights in regulated water markets—helps ensure that choices are anchored in demand and are not unduly influenced by contractors, consultants and other secondary stakeholders.

Most of the experience with participatory W&S projects so far has been by NGOs and, with a few notable exceptions, mostly on a small, experimental scale. While stakeholder participation has a clear mandate in the Bank's work in this sector, and is seen as especially vital in extending services to the poorest communities, participatory W&S projects are relatively new—mostly either still under implementation or under preparation. Much has yet to be learned about the ways to optimize participation in large scale projects but a number of important lessons can already be drawn.

Conditions for Success

Promoting the participation of beneficiary communities is not equally appropriate and feasible in all W&S projects. Adverse political and institutional conditions may make it very difficult. It is better suited for feeder infrastructure and for rural communities than for trunk infrastructure, where the transaction costs of consulting all stakeholders and foregoing bulk procurement would outweigh the benefits from consultations. And in the poorest countries where local capacity is very weak, the cost of expatriate facilitators to promote institutional intermediation may be very high.

The critical question is to understand what rules and institutional arrangements are useful in promoting stakeholder participation in the sector, and under what circumstances they are appropriate.

Working with Governments and Sector Agencies

Support from higher levels of government is essential to the success of demand driven projects. Cultivating national level support for participation in W&S can be tackled from two ends: by country economic and sector work, through which support is generated before projects are begun; or by demonstrating the advantages of participation through individual projects and letting the lessons change sectoral policies at the national level. Where consensus or political support at the national level is weak, it may be easier to begin by demonstrating the move from projects to policy work. Most of the demand driven projects reviewed in this paper, however, emerged from earlier sector work that laid the basis for, and created the interest in, trying this new approach.

Developing sector agencies capable of carrying out participatory projects is difficult. Several strategies have been implemented in cases where the sector agency is not qualified or interested in involving primary stakeholders more actively: involving multiple agencies in project implementation; cultivating reformers within the larger resistant agencies; bypassing the agency by creating a new agency or fund; and designing the project to include an expanded range of secondary stakeholders as partner organizations, to prevent capture of project benefits by water utility staff and contractors.

Each of these approaches has its own drawbacks and, in all cases, the challenge remains to convince engineers trained in applying industrial country standards to consider alternative technologies, leave their drawing boards and consult with primary stakeholders. Investment in training staff in community participation by itself cannot remedy the situation unless career rewards are linked with success in implementing demand based projects. Lower level staff have more accepting attitudes toward community involvement and are better equipped to interact with poor beneficiaries. Staff with experience from other agencies involved in extension work can adapt easily to play an intermediary role between consumers and W&S service providers; in Brazil, for example, responsibility for rural water has been placed with the public health agency, with good results. In Bank funded projects where existing sector agencies have had few qualified community mobilization staff, specialists have been hired as project consultants, adding up to ten percent to total project investment costs. The best outcome, in terms of

both per capita costs for water and sewage and of beneficiary satisfaction, resulted from having the detailed engineering design done jointly, under one bid, by consulting teams consisting of engineers and community participation specialists.

Designing Stakeholder Participation

Most projects set up community councils or water users associations through which beneficiaries can exercise influence over decisions concerning the type of service to be provided, play a role in project implementation, and channel their contributions of cash, labor and materials. Long term community participation in operation and maintenance of systems may also be sought, although this is more difficult and experience is still limited.

Project design must allow time to discover workable structures. Flexibility in community level project design allows institutional arrangements to be adjusted as needed to match what community members feel comfortable with. And it allows for changes proposed by beneficiaries during the course of project implementation—in rules and procedures, in management structures, in the assignment of responsibilities between alternative organizations or firms, or in the type of service to be provided.

Demand driven projects allow beneficiary communities choice over the type and level of water and sanitation service they want (if any), based on their needs, priorities and financial situations. To make informed decisions, they must receive sufficient information about options, their respective costs, and other implications. The range of service options may be limited by settlement density, resource availability, hydrological or geographic factors. Typically, however, a number of options exist and the key factor is motivating the engineering staff to be innovative in searching these out.

To limit the influence of local elites, effective beneficiary participation also requires accountable leaders who make decisions on the basis of transparent rules. In Paraguay, for example, the combination of easily understood program rules and clear information about costs and benefits, has produced a very effective rural sanitation program for larger villages.

Recurrent Themes for Task Managers

Especially at this learning stage for the Bank and borrower countries, preparation and supervision of participatory W&S projects require more financial resources, staff time and personal field visits by TMs than conventional projects. Procurement procedures have to be modified to meet the needs of demand driven projects. And monitoring, evaluation and fine tuning of project design becomes an iterative, consultative process, involving TMs, sectoral counterparts, project managers and beneficiaries.

1. Challenges for the Sector

The water and sanitation sector must improve its performance in nearly all areas of activity. The principal challenges facing the sector are:

- *To provide wider coverage.* The needs of the urban and rural poor largely are unmet by formal public services and are met poorly by private provision (vendors, etc.) and self-provision (including self-dug latrines and wells), despite massive investments during the International Drinking Water Supply and Sanitation Decade between 1980 and 1990. Sanitation coverage lags far behind water coverage in all areas.

- *To provide sustainable services.* Where new services have been provided, they often break down within a short period. Fees charged are insufficient to support operation and maintenance services, let alone expanded service and replacement of aging equipment.

- *To foster efficient service provision and resource management through the development of healthy utilities.* Sector agencies are over-staffed, overly focused on conventional urban services to the exclusion of rural and urban poor populations, contractor driven in service approach, lacking in responsiveness and accountability to users' needs, and accustomed to providing politician driven subsidies for services. Such pervasive inefficiency results in financially unsustainable services and resource management benefiting only a small portion of the population.

- *To develop sustainable water resource management.* Multiple and often competing user needs have not been balanced well, and many water resource interventions, including large dams and irrigation projects in particular, have resulted in significant misallocations in water use and social and environmental disruption.

In sum, the sector must increase responsiveness to user needs, improve cost recovery and service management, and incorporate financial, environmental, and social concerns into project design and management.

Participation plays a central role in meeting these challenges. First, user participation makes services and service providers more responsive and accountable to beneficiaries. Second, cost recovery improves when technology choices and services correspond with what users want and are willing to pay. Third, the institutional arrangements, or service management arrangements, can be tailored to the practices of each country or region. By involving users, the private sector, nongovernmental and community based organizations, and governmental agencies in various combinations, the management of water resources can (to use the words of the Bank's Water Resources Policy paper) follow the principle "that nothing should be done at a higher level of government than can be done satisfactorily at a lower level."

Moving people center-stage in water and sanitation projects is a theme that has become increasingly important in the last decade because of several operational considerations. To begin with, earlier business practices of water and sanitation utilities virtually never involved consumers in decisionmaking and led to disappointing sectoral

performance in terms of coverage, service reliability, equity, and efficiency. Given these inadequacies, concerns are being raised about how organizations possibly can reach more than a billion of the poorest in developing countries, who are without adequate access at present, with safe water supply and sanitation infrastructure. Finally, at a more macro level, new institutional methods of managing and resolving disputes between sectoral users of water resources are being explored and tested. In these situations, involving the users or primary stakeholders has been identified as a critical part of proposed solutions.

What is a Participatory Approach?

Key ingredients of participatory work by Bank staff include careful listening and dialogue, informed decisionmaking, transparent rules, and flexibility in project design, subproject site selection, site specific technology choices, and service provision arrangements. The design of a participatory project must be anchored around demand, the principle that people should be provided water and sanitation services they want and are willing to pay for. People do not maintain things they do not own or in which they do not have equity interest. In many poor communities, participatory mechanisms and processes are useful means of revealing this demand. The substantive question then is understanding what types of rules and institutional arrangements are useful and under what circumstances they are appropriate.

Demand Based Approaches, Institutional Arrangements, and Stakeholder Participation

A demand based approach envisages individuals and organizations with interests in different facets of water resource management making key investment and operational decisions. The institutional arrangements under which demand can be revealed often are crafted best when stakeholders have a say in the design and management process. The implications of this can be discussed separately for traditional water and sanitation projects and for a new class of water resource management projects.

In traditional water and sanitation sector work, consultations ranging far beyond the key stakeholder or the borrowing government are warranted. These require reaching out and listening to a variety of groups and individuals having economic, social, or political stakes in the proposed investments. However, many developing country governments find it difficult to maintain equity institutionally among the competing and conflicting interests of stakeholders. For example, while the primary stakeholders could be the urban or rural poor, key water and sanitation project decisions relating to service levels, quality of services, and pricing are made by water utility staff who have no incentive to find out what the poor beneficiaries want or are willing to pay for. Consequently, many secondary stakeholders including other institutions and individuals with interests in a policy or project exercise influence disproportionate to their interests. Increased participation by primary stakeholders is an institutional mechanism by which demand can be revealed.

The Bank's recently published Water Resources Policy paper has advocated extending demand based approaches from the micro level of water and sanitation service consumers to the regional level. The idea is that water resource allocations between sectoral uses (for instance, agricultural, domestic, and industrial consumption) also are guided by demand based considerations. The challenge is figuring out institutional mechanisms which permit all stakeholders to exercise voice. The obvious choices for such a mechanism are a decentralized, consultative, and participative process, or buying and selling water rights in regulated water markets.

Stakeholder participation is a significant means of achieving two sectoral objectives: ensuring a demand focus in developing institutional arrangements that can ensure sustained provision of services, and helping manage water resources better.

Bank Experience Promoting Stakeholder Participation: The Need for a Learning Approach

While stakeholder participation has a clear mandate in sectoral work, the case law on when and how it can be put to practical use in Bank projects still is evolving. Participatory water and sanitation projects are relatively new, with most projects either still under implementation or under preparation. The key point is that while there have been successful efforts at promoting demand based approaches through stakeholder participation by nongovernmental organizations (NGOs) and community based organizations (CBOs), their micro level, slow paced, experimental approaches are at odds with Bank projects driven by time bound project cycles. Because the Bank works with governments rather than around them or despite them, as do smaller programs and philanthropic organizations, there is the challenge of working out practical methods of preparing and implementing demand driven projects.

The Bank operates on a scale so large that it is almost impossible to plan how stakeholder participation can be designed best. However, there are clear indications of where stakeholder participation can be supported. Most sectoral investments consist of two parts: the large, capital intensive trunk systems (bulk water treatment, conveyance, bulk wastewater conveyance and treatment); and the feeder systems that actually deliver water and remove wastewater and sewage from communities. The poorer or more isolated the community, the greater a utility's institutional costs to reach consumers with services. In most developing countries, this means that remote rural areas, and low income periurban areas are the last to receive services, even though local residents pay very high costs (varying from 10-1,000 times official tariff rates) to private vendors for water supply and waste disposal. These are areas in which involvement of beneficiaries in the design and implementation process obviously is vital before service provision investments can be extended.

How best to do this is still not very clear. There is, for example, a recognition that project design should take flexible and adaptive approaches. Further, there is a recognition that NGOs and CBOs have significant intermediation roles to play between the engineering bureaucracies controlling project investment funds and communities. However, there is also the realization that these NGOs and CBOs may have limited technical and managerial capacity with which to assist projects on a large scale, and that flexible projects have costs of their own too.

The challenge is how, within the project cycle, an adaptive process can optimize stakeholder participation in deciding what services to provide, how to provide them, and for whom. Newer sectoral projects targeting the poor have begun meeting this challenge by trying out different institutional arrangements through which participatory approaches can be promoted. In the process, they are moving away from the traditional "blueprint mode" in which all project details are worked out during project preparation. The new approach emphasizes listening, piloting, demonstrating, and mainstreaming ideas on participation. Task managers overwhelmingly indicate that:

- there are no simple "road maps" by which to encourage participation;
- a balance must be struck between existing rules and bureaucratic structures and innovative mechanisms to enable new roles for women, NGOs, community based organizations, and other constituencies;
- projects provide the opportunity to learn about what works and what does not; and
- extra supervision support is needed, far exceeding Bank norms, in order to make mid-course corrections in response to information about how participation is or is not working.

Documenting best practices and learning from successes and failures are thus central

features of sectoral policy work at this point. The Bank's interdisciplinary and cross national experiences provide an ideal laboratory in which to test and confirm the potential and limitations of participation.

Non Bank Experience

NGOs probably have the most extensive experience with participatory projects and most of the advocacy for participation comes from them. Yet NGOs generally work on a very small, experimental scale which makes them good at innovating and tailoring projects to each location but not proficient in the broad impact sought by governments and donors. Among the large-scale experiences, the Orangi Pilot Project in Karachi, Pakistan stands out as an example of how and when participatory approaches succeed in improving sanitation infrastructure in low-income urban areas. The basic lessons from Orangi are generic, and are elaborated below. CARE Indonesia also has achieved notable successes in promoting community financed water supply infrastructure in rural Indonesia.

The Ford, Inter-American and other foundations, and Nordic and other bilateral donors, have shown a growing desire to effect broad impact while retaining the notions of locally appropriate, grassroots development. These funding sources, which have a long standing tradition of working with intermediary NGOs to reach grassroots groups, are now turning their attention from small scale projects to strengthening the relationship between NGOs and government. Larger donors, such as the United States Agency for International Development (USAID), other bilaterals, and development banks also have begun to work with NGOs in the water and sanitation sector to develop alternative institutional arrangements, such as privatization, as improved methods for reaching the poor. As foundations and donors arrive from different directions at the confluence of NGOs and government, the Bank is in a position to engage governments to build capacities and commitments to broaden stakeholder participation.

2. Working with Governments

Gaining support from higher levels of government is essential to the success of demand driven projects, as is cultivating implementing agencies with the capacity to work in participatory ways. Capable and cooperative local governments are also necessary as decentralization policies and Social Adjustment Funds expand their roles in the sector. The biggest challenge in designing demand driven projects is the crafting of institutional arrangements which facilitate effective inputs from beneficiaries and permit agencies to respond in timely and appropriate ways. Confounding factors, such as political interference or resistance, nondemocratic structures within agencies and communities, and logistical delays in procurement and service provision, must be taken into account or they inevitably will derail an otherwise well intentioned project.

Policy Work: Cultivating National Level Support

Country economic and sector work has been a vehicle for cultivating allies within the government and bringing them on board with the community based approach. It can serve as a kind of constitution for the sector; if it is done well and if the policies that emerge from it are adopted genuinely by implementing agencies, this work can have wide impact in how projects are structured. Most of the demand driven projects reviewed in this paper emerged from earlier sector work that laid the basis for, and created the interest in, trying this new approach.

In the Tanzania Water Resource Assessment project, for example, the government drafted and secured consensus on the sector documents. The task manager provided technical guidance based on his knowledge of other country experiences, but he did not draft the documents as is often the practice. Although the final documents might not have had the same polish as those prepared by the Bank or a consultant, the new policies are much more likely to be implemented, since they have emerged from negotiations and policy dialogue among the various stakeholders within the Tanzanian government.

When stakeholders ranging from governmental agencies to individuals are involved, they may become reluctant to accept new concepts if they see them as threats to their traditional ways of doing work. Participation allows some people the opportunity to let off steam, while others perceive it as a genuine threat to bureaucratic survival. The problem can be tackled from two ends: by policy work, through which national level support is cultivated before projects are begun, or by demonstrating advantages through individual projects and letting the lessons change sectoral policies at the national level.

From Policy to Project, or from Project to Policy?

Task managers must recognize the links and opportunities that both project experience and policy work provide, rather than considering each in isolation. In Tanzania, sector policy work led to project development. But in the PROSANEAR project in Brazil, the change came the other way around. An existing Bank-funded project design shifted key decisions on service levels, service quality, and operations and maintenance to a consultative process involving low income communities. The successes reported have led multilateral agencies including the

Box 1
Contrasting Experiences Promoting Participation in Water Resource Management

Engendering participation in some countries is extremely difficult because it is alien to the traditional ways decisions are made. In one former Soviet Republic, a small group of representatives of government agencies was convened to meet with a Bank mission as the government's response to the Bank's request for participatory project design. At the meeting many of the views of these representatives were rejected out-of-hand by the strong willed group leader. At the conclusion of the meeting, the group leader announced that he would write up his ideas for the project's design and clear them with his leaders! He made no mention of any role for the others of the participatory group. The Bank's project team is still trying to work its way through this difficult environment.

By contrast, in one Latin American country with a tradition of centralized decisionmaking efforts are being made to increase stakeholder participation in water resource management. Although the initiative for improving water resources management originated from the government, implementation is taking place in an incremental, participatory manner. A new water resources management agency recently was established with only some key functions defined at the outset. Representatives from other public agencies traditionally active in the water resources sector (such as irrigation, water supply and sanitation, and meteorology) have been invited to participate in seminars, voice their opinions, and provide detailed suggestions on the new agency's future role. A first seminar, held in March 1994, generated an enthusiastic discussion among these stakeholders and illustrated the importance of the process. Further efforts are now under way to create water users' associations on a river basin level.

Inter-American Development Bank and several state water companies to adopt similar strategies. A national level seminar held in October 1994 evaluated the project experiences and paved the way for major sectoral policy changes in the way low income community projects are supported. Where consensus or political support at the national level is weak, and adequate localized national experiences exist, it may be easier to demonstrate the move from projects to policy work. Where high level political receptivity already exists, yet there is little national experience on the ground, it may be better to begin with sector work.

Identifying and Fostering Participatory Agencies

Developing sector agencies capable of carrying out participatory projects is difficult, and how to go about it is not clear. In some countries, task managers have built on existing local capacity and interest in participatory projects previously developed by bilateral agency projects. This has facilitated project development and implementation in some cases. In Uganda, for example, bilateral assistance projects over the previous ten years had introduced sector agencies to participatory approaches and the government had become convinced of their effectiveness. Therefore, introducing a large-scale, demand driven project was relatively easy in Uganda. In other cases, however, the lack of existing institutional capacity is exacerbated by actual resistance from a water sector which is bloated, inefficient, engineering oriented, and contractor driven.

A number of strategies have been implemented for cases in which the sector agency is not qualified or interested in taking on a demand driven approach or involving the primary stakeholders more actively. The approaches range from those that work through existing administrative structures to those that work around them or create new and independent structures. Examples of such strategies include:

- Structuring a multiagency project implementation arrangement so that all agencies within the bureaucracy with "stakes" in project outcomes are involved. In the

Indonesia Water and Sanitation for Low-Income Communities (WSSLIC) and Philippines rural water projects, for example, community mobilization, health and hygiene education, and facility construction involve three Ministries (Home Affairs, Health, and Public Works). The project design has involved all three agencies in key operational decisions of the project.

- Locating and cultivating reformers within resistant agencies and working with them to forge alliances with other supporting sectors such as municipal governments and health agencies. In the PROSANEAR project in Brazil, this approach has worked well. A team of twelve, led by a national project manager who supports participatory work, administers an innovative national program for urban sanitation projects despite the disinterest of other professionals in the national agency (Caixa Economica Federal, a national development bank) within which the team is located.

- Completely bypassing the sector agency by creating a new, parallel agency or fund with the blessing of high level government officials. In the Nepal rural water project, for example, the national sector agency was not interested in small, dispersed rural water projects. The solution was to work around the sector agency altogether by proposing Bank funding for a Rural Water System and Sanitation Fund that disburses funds based on a set of transparent criteria agreed with the government of Nepal.

- Designing the project so that benefits are not captured easily by water utility staff and contractors. This can be done when project design expands the list of secondary stakeholders to include NGOs, village level informal groups, and small informal sector enterprises as partner organizations for design and construction activities (as in the Sri Lanka Community Water Supply and Sanitation project).

Each of these approaches is not without its drawbacks. The multiagency approach poses inherent problems because each agency tends to guard its "turf" in terms of bureaucratic responsibilities. This is not a bad outcome if project rules allow the more entrepreneurial agency to actually take over project implementation. In many situations this is not feasible, and there is a serious risk of bureaucratic wrangling and poor coordination destroying the project spirit.

In the second approach, communicating positive lessons from the project to peers within the sector is the challenge. In the last two approaches there are two concerns. First, creating new institutions rarely works, and it generates considerable resentment and the potential for sabotage from agencies which are bypassed. Second, not working with existing sectoral agencies does nothing to improve institutional capacity building or project sustainability and replicability.

Encouraging Sector Agencies to Work with Communities

Enhancing the capacity of public agencies to implement projects is one of the more difficult challenges of demand driven work. Most public works and sector agency staff are engineers and economists who are not trained or experienced in direct community contact, or in adapting technical designs and implementation schedules to community needs. Task managers sometimes are confronted with sector agencies that work primarily in urban water and sanitation in large cities, mainly in middle and upper income neighborhoods. The tasks which such agencies like to perform do not always include those associated with rural water and sanitation or poor urban communities. Even where improvements have occurred, as in some developing countries over the past decade, solutions have been over designed and costly.

The reality remains, however, that it is often difficult to convince staff trained in applying engineering standards based on industrialized country norms to consider alternative technologies and delivery mechanisms. It is often difficult to motivate staff to leave their offices and drawing boards, go out to villages and poor urban neighborhoods, and consult with the primary

stakeholders. Paraprofessionals, social workers, and public health workers serve useful intermediary roles between consumers and service providers, particularly in low-income communities. Staff with experience gained in other agencies involved in extension work, such as public health and urban housing agencies, adapt easily to filling this niche, provided the right incentives are offered. Some of the more successful cases, such as that of Paraguay, have placed responsibility for rural water in the public health agency rather than in the sector agency. In Paraguay, social workers with practical water and sanitation training are based in district health centers. They are very accessible to town water committee members who call on them for technical assistance with their water systems. Many of these workers are low paid and do not have college educations. Yet they are highly motivated and have a great deal of prestige in their towns because they provide needed and timely assistance. These social workers enable the various Paraguayan water committees to function well.

The decision to change agency culture is not free of cost since considerable investment in institutional intermediation by extension workers is required. As suggested earlier, water and sanitation utility staff feel their career opportunities are greater in the traditional engineering functions involved in designing and constructing large, capital-intensive projects. Investments in training staff in community participation by itself cannot remedy this situation unless career rewards are linked with successes in implementing demand based approaches. The experience of the first large-scale, participatory water and sanitation project of the World Bank, PROSANEAR, indicates that, unlike high level engineers and agency administrators, lower-level staff have more accepting attitudes toward community involvement and are equipped better to interact with poor beneficiaries.

As most projects are now in the "doing and learning" phase, most have resorted to hiring consultants to handle the participative or software aspects. In Sri Lanka, Brazil, Indonesia, Pakistan, and elsewhere, existing sector agencies have had few qualified community mobilization staff. As a result, additional social workers and community participation specialists have been hired as project consultants and assigned to specific project tasks. The resultant costs of institutional intermediation by qualified consultants can add up to 10 percent to total project investment costs.

Design of operational tasks divides labor between the utilities and consultants in varying ways. In Pakistan, for example, certain tasks such as procurement for drilling equipment and pipes, remain with engineers. Community mobilization and local procurement have been decentralized to village CBOs, which get technical assistance from NGOs. In the PROSANEAR project in Brazil, by contrast, the detailed engineering design was done jointly by consulting teams consisting of engineers and community participation specialists, with much

Box 2
The Risks of a Multi Agency Approach: The "Tail" Wagging the Dog

In a rural water project in a country in Asia, the central government did not provide adequate resources to the Department of Local Government, the agency responsible for setting up rural water associations with community involvement. The Public Works Department, however, received its budgetary allocations on schedule, and procured well-drilling materials before communities had been consulted on what types of facilities they wanted and were willing to pay for. In response to political pressure from provincial politicians, the Public Works Department distributed budget allocations evenly over all the provinces. This spread project investments too thin. The project was driven by drilling companies and politicians, rather than by the community based Rural Water Associations, as envisaged in the original project design. With the wisdom of hindsight one might conclude that these pitfalls could have been avoided if attention had been paid to the participatory aspects before the hardware was procured.

better outcomes in project costs and beneficiary satisfaction. Per capita costs for water and sewage, for example, have averaged about one half of what a traditional "blueprint" approach typically costs the utility.

Local Governments

The role of local governments can be crucial to successful projects. Local governments traditionally are thought to be closer to beneficiaries and therefore more knowledgeable about, and responsive to, beneficiary needs. But local governments typically have very limited technical and fiscal resources. In addition, where local governments are nominated from above rather than locally elected, or where electoral procedures are less than free and fair, accountability to local interests also may be limited. While task managers cannot control these variables, they can be aware of them and work with them in designing projects. Providing ample information and transparent "rules of the game" can engender accountability by enabling beneficiaries and support organizations to take fuller advantage of project benefits while limiting politicians' opportunistic use of program funds. Structuring project benefit allocations to target specific beneficiary groups can limit local and national politicians' discretionary use of funds and reduce the opportunity to present programs as government "largesse."

Planned Adaptability

Because how to optimize stakeholder participation is quite unclear during project preparation, most task managers working on participatory sector projects report that their supervisory roles can be described best as a constant process of learning and adapting. Most of these projects are first time ventures into rural and low income urban water and sanitation provision for national agencies. It cannot be assumed that existing institutions will take on these new tasks easily or that a newly created institution will perform as hoped. Many demand driven projects envision some form of co-financing and joint responsibility with the communities taking on new responsibilities for technology selection, implementation, and operation and maintenance.

The best way to structure this new involvement may be unclear at the outset of the project, though designers may have ideas based on what has already happened in the sector and what has worked well elsewhere. Task managers, unaware ahead of time of what will make sense on the ground, can take an "enlightened agnostic" approach, which provides opportunities for institutional arrangements to emerge as needed without binding the project to pre-set designs. For example, a number of projects focus on the role of women in water and sanitation. But in many places where women are primarily responsible for household duties related to water and sanitation, they do not have traditional roles in community decisionmaking. Asking women to take lead roles in project implementation may be difficult in such situations. This must be prepared to recognize that some of the assumptions of project design may very well turn out to be wrong, and that major adjustments may be necessary.

Dry Runs and Pilot Start-ups

Nearly all task managers use smaller, bilaterally funded projects, start-up projects, or dry runs to work out logistical, administrative, and design issues before projects begin. Pilot projects provide empirical information about how different community arrangements work. For example, in Ghana, bilateral agencies have among them about fifteen years of experience in different parts of the country, and a recently appraised Bank project is building upon the successes and failures of their efforts. In Kenya, the experience of the DANIDA-funded sanitation project in Maina has provided valuable insights to the government and the Bank in three areas: the importance of paying attention to community needs; the potential for conflicts between the community or primary stakeholders and local government officials; and the critical intermediary role played by experienced NGOs.

Demonstration Effect and Bringing Agencies on Board

Pilot or start-up projects can serve the additional purpose of cultivating support for, or at least diminishing opposition to, a project. A pilot project funded by the UNDP-World Bank Water

and Sanitation Program in Nepal has served this function. The Ministry of Housing and Physical Planning, ordinarily responsible for sector work, was not immediately receptive to the idea of implementing a rural water supply. Although the project will not be run directly through the Ministry's Department of Water Service and Sanitation, representatives from the Ministry have been asked to sit on an advisory board for the pilot project. This modest step has served as a bridge of sorts, exposing Ministry staff to the proposed project. The task manager reports that Ministry representatives, who are beginning to respond favorably, find the advisory board discussions to be relevant to sector reform issues on which they work.

Flexible, Phased Project Implementation

Building discrete phases or batches of sub-projects into project design allows task managers and implementing agencies to pause, adjust, and further improve project performance. Most task managers find that if they take midterm reviews seriously, their agency counterparts will as well. Some task managers, who see one midterm review as too limited to handle all the small changes required, have scheduled yearly project workshops to increase the amount of review and readjustment of project design. Ideally, this iterative review process should go a step further to involve both in-country project leadership and a broad range of stakeholders in the process. NGOs, lower-level agency staff, and community representatives have valuable insights into project implementation which can improve performance. Project staff typically have an interest in reporting successes, even when where there are a number of failings, in order to preserve the status quo. Involving more stakeholders in this process brings correctable problems to light and ensures that the implementing agency is accountable to all stakeholders and beneficiaries.

Box 3
Community Mobilization for Sanitation in Kenya

The village of Maina is an informal settlement within the municipal boundaries of Nyahururu town in Kenya, where DANIDA executed a sewerage house connection project between 1988 and 1991. In the first year of the project, a trunk sewer and a few lateral sewers were constructed without any participation by the residents. The consequences were predictable: villagers did not understand the project motives, and therefore resisted collaborating with project teams when the plans indicated that the layout of some plots would be altered to make room for roads, storm drains, and toilet units. Villager apprehensions were based on a valid concern that engineers' plans would result in large-scale alterations to existing structures and houses.

A DANIDA review mission in 1989 recommended that the physical plan be revised with community participation before any further investments were made. A site committee was formed, involving residents in the process of determining what the project components would be. Extension workers from government ministries and staff from a leading Kenyan NGO (KWAHO) were enlisted as facilitators. The results were strikingly different. Communities began mobilizing internal resources, both labor and materials, and also began participating in the operations and maintenance of constructed facilities.

By the time the project came to an end, the community groups, with support from KWAHO, had charted a completely different course for the project, and were able to engage the Nyahururu Municipal Council in a productive dialogue on where and when other infrastructural facilities, such as roads, a police station, and a post office, could be located within Maina village.

3. Designing Stakeholder Participation

Conflict and Negotiation

In the water and sanitation sector, the preferred option among most sectoral professionals is a command-and-control process, with decisions being made through centrally organized departments and planned ahead of time. In a participatory process, the contrast couldn't be more striking: rules and procedures can change during the course of project implementation, beneficiaries might demand services different than those originally envisioned, and the management structures for resources and services might be altered substantially. Participation thus introduces an unpredictable element to the well-planned "supply-driven" processes so typical of water and sanitation projects. For effective participation, mechanisms for negotiation and conflict resolution must be introduced. During negotiations, stakeholders learn the feasible service options and the cost of each while service providers learn beneficiary needs and are able to develop additional options based on the new information they receive. This sounds fairly straightforward but, in order to arrive at the optimal outcome, the parties typically pass through a period of conflict.

During the PROSANEAR project, inhabitants of a neighborhood in the city of Fortaleza questioned the technology options initially presented to them by state water company officials. The initial negotiating positions of the beneficiaries and the water company were polarized. The former rejected the operations and maintenance responsibilities which the service provider intended for them to undertake because they wanted a level of service equal to that provided in wealthier neighborhoods. The latter was unwilling to budge from its position as long as communities were paying subsidized social tariffs for water and sanitation services. The ensuing negotiation with the service provider, facilitated by consultants with credible records as community participation specialists, took approximately two months and involved interventions by high-level agency officials, consulting engineers, and politicians. The resolution of the initial conflict has been very positive, however. In the process, the community formed a project monitoring committee as its representative, thus taking on a role that the project designers had not necessarily anticipated during project design. This resulted in a level of service for which the community committed to pay. The new operational arrangements are more likely to be sustainable than those originally proposed by the agency, and the community has developed a representative mechanism that is well suited to mediating between the project team and residents.

Beneficiary Participation Grows with Transparency in Rules and Clarity of Information

Stakeholders who have sufficient information to make informed choices, and who are aware of their rights to influence collective decisions, can make efficient service and resource investment decisions. Effective beneficiary participation in project design and implementation requires accountable leaders who make transparent decisions. Without this, decisions more likely will reflect the interests of local elites than of the rest of the community, and the sustainability of the investment may be jeopardized. While there are no guarantees that decisionmaking will be democratic in all cases,

Box 4
Learning About Participation Models: The Experience of PROSANEAR

During the implementation of the PROSANEAR project in several states in Brazil, each state water company has been free to incorporate participation, using its own procedures. In practical terms, what have emerged are models of participation that differ depending on how the water company and the project design consultants worked out the "rules of the game." Depending on how rules of negotiations were set up for service levels, prices, and assignment of operational responsibilities, community participation took different forms:

- In the **engineer activist model**, the engineering consultant was also a dedicated social activist. The rules permitted beneficiaries to negotiate with the state water company a wide range of issues, such as levels of service, physical layouts, sequencing between water supply and sanitation investments, prices, and billing.
- In the **participation specialist model**, professional community participation facilitators work jointly with design teams led by engineers. In one variant of the model, the water company decides on engineering design in advance, and allows communities to negotiate the organization of billing, assignment of operational responsibilities, and group contributions of labor. In the other variant, negotiations are restricted to assigning operations and maintenance responsibilities only among the beneficiaries, user groups, and the water company.
- In the third, **hygiene education model**, health educators focus on a more conventional set of interventions aimed at changing knowledge, attitudes, and practices rather than iteratively working out or negotiating any aspect of service provision. The assumption in this model is that there is no need to build any explicit negotiation mechanism into the choice of service level.

The extent of conflict and its subsequent resolution has varied among the three variants, being highest in the participation specialist model and nil in the hygiene education model (which had highest per capita investment costs). The project will provide an opportunity to evaluate each of these models' effects on service sustainability when project construction is completed in 1995.

open access to information can level the playing field and encourage beneficiaries to press their leaders to reflect their interests.

In Paraguay, the combination of forthright program rules and clear information about costs and benefits has produced a very effective rural sanitation program for larger villages. The Ministry of Health sanitation agency offers the program to any community that can set up a *Junta de Saneamento* (Sanitation Committee) and supply 15 percent of the investment costs. The community repays another 15 percent in cash or labor and materials at the time of implementation, and a further 30 percent over ten years, contributing to 60 percent cost recovery for capital costs. The committees are expected to be completely autonomous, covering 100 percent of recurrent operational costs and any future repairs or expansions. The sanitation agency provides financing, technical support, and construction assistance to all who are willing and able to comply with the program requirements. Communities are able to make sound decisions because the rules for inclusion and each party's responsibilities are straightforward. Capital cost recovery has been good, recurrent costs have been covered and the juntas function well. In Indonesia's WSSLIC project, budget "ceilings" of government investment support have been fixed in advance, and communities are asked to exercise a choice between technologies. Preliminary data indicate that most communities choose service levels that cost considerably more than the

ceilings, mobilizing their own resources in the process.

Stakeholders and Representative Structures

It is important to distinguish nominal participatory structures from genuine stakeholder involvement. For example, most projects establish a community council or users' group as the entity through which beneficiaries participate. The question is not whether a community can set up a group—most will if they must in order to get new services—but whether or not there are real mechanisms through which stakeholder concerns affect decisions.

In Indonesia, the water committee is managed by traditional village leaders who are appointed from above. Ideally, the traditional checks and balances in the relationship between a leader and village will ensure that the committee makes decisions which represent the interests of the whole village. But in at least one project village, household connections were allocated to water committee members exclusively. The rest of the village was left to use standposts. The national agency staff did not want to change the structure of village water committees, so the task manager had to devise methods of neutralizing the dominance of village heads. He decided to use public advertisement of the project to provide financial and program information with which villagers could gauge water committee fairness. Adjustments of this kind are necessary parts of all participatory projects, since information comes back from the field subsequent to project start-up. Project design which does not delimit the roles of any agency, support organization, or community entity too narrowly, allows for such changes.

A users' group or committee provides an institutional mechanism to elicit community views and collect and manage up front contributions to capital costs. However, rarely does enough accurate information about local community practices and management structures exist ahead of time to define the village or community project design at the outset. Rather than taking a rigid approach which assigns responsibility for operation and maintenance to communities or which stipulates that NGOs or local private firms should take on predefined tasks, task managers should allow for sufficient flexibility in organizational design so that institutional arrangements can take forms with which communities are comfortable working. Further, task managers should provide sufficient support to accommodate flexibility. Support from anthropologists, sociologists, and local field workers who develop working knowledge of local practices will help to make these later adjustments and will improve project performance significantly.

Phases of Stakeholder Participation in Service Provision

If beneficiaries and other stakeholders are to be involved effectively in decisionmaking, project design must allow time to discover workable structures including the process of conflict and negotiation for stakeholder participation. Project experience shows that discrete phases of the process can guide project design. The phasing of participation depends on the type and sophistication of existing community management structures, project location (urban or rural), and the nature of project tasks entrusted to the participatory process. Successful projects have organized their phasing according to general concepts of problem identification, information assimilation and interpretation, and action. For example, urban projects in literate, mobilized communities in Brazilian cities follow the trend of project dissemination and promotion in neighborhoods, assimilation of technical and financial information by beneficiaries with an interactive conflict/negotiation/agreement process between residents, their representatives, and project implementors, and project implementation.

Technology Choice, Design Standards, and Participation

Demand driven projects allow people to choose the level and type of service that is most appropriate for their needs and financial situations. Each beneficiary need not be involved in the intricate

design of manhole placement or in choosing from twenty different pump designs. However, beneficiaries must have some choice over service level, based on their willingness to pay. They also must receive sufficient information about options, their respective costs, and other implications to make informed decisions. The range of service options may be limited by hydrological, geographic, settlement density, and resource availability factors. Typically, however, a number of options with varying costs and levels of service exist, and the key factor appears to be motivating the engineering staff to be innovative and proactive in searching these out.

In Brazil, for example, high density urban neighborhoods with water service are not generally well suited for on site sanitation because lots are too small, households already have exhausted available space for self-dug pit latrines, and high water consumption makes the lack of sanitation a serious health problem. Brazilian engineers have developed a range of technical options for water-borne sewers, including several variations on the "condominial" system, the cost of which is 30-60 percent that of conventional sewers. Residents might choose the full cost of conventional sewers, but they also can opt for the less costly condominial sewage service with shallower pipes of smaller diameter and increased resident involvement in implementation. The range of options allows residents to tailor their investment decisions to their own tastes and pocketbooks.

The "No Intervention" Option

When technical options are so constrained that a community's only choice is to "take it or leave it," the "no intervention" option should be explicit in project design. Rather than preselecting subproject sites, the project should structure a process through which interested communities, made aware ahead of time that they are being offered only one type of service, can opt into the project. Leaving the "no intervention" option available to communities ensures, at least at this gross level, that community participation reflects, rather than induces, demand.

Implementation versus Operation and Maintenance

Task managers must recognize that beneficiary involvement in project implementation does not necessarily ensure their inclusion in operation and maintenance. Because local and national institutions are often too weak to assume operational responsibilities, projects are estimated to be much more sustainable if the beneficiaries themselves perform this task. Yet collective management arrangements are much more difficult to structure and sustain than are simpler one-time tasks, such as participation in construction or collective decisionmaking.

For example, requirements for successful self management of irrigation systems include:

- clearly delimited physical boundaries;
- candid rights, responsibilities, and rules for inclusion;
- beneficiary accountability;
- beneficiary representation in rule making bodies;
- a graduated system of penalties;
- a rapid, easy process for conflict resolution;
- outside mediation of larger conflicts by a neutral party;
- external recognition of the group; and
- organized management at the lowest appropriate level which functions within a graded management system (Ostrom 1992).

Well maintained water or sewer systems do not follow from community labor contributions alone. Task managers must realize that it is unrealistic and irresponsible to presume that self management structures will emerge spontaneously.

4. Recurrent Themes for Task Managers

The Challenge of Procurement

Standard procurement procedures are rarely appropriate for demand driven projects which typically involve a large number of small subprojects in several villages or urban neighborhoods, spread out both over a large area and over time. Thus, using large contractors and bulk procurement may not be practical and intermediaries may be necessary. Within general parameters, subproject design and timing emerge as communities define the services they want. The timing of each subproject implementation also is unknown, as some communities will get ready quickly while others take quite a long time. Consequently, the packaging together of subprojects to attract larger and better qualified contractors is almost impossible. Large contractors may not be the best option for these projects anyway, because most of the projects are small-scale and utilize low technology. Bulk procurement of materials and services is also problematic because it may impose unwanted or unaffordable technical choices on communities. For example, bulk procurement of drilling equipment and pipes at project start up might allow construction to proceed as soon as subprojects are approved, but procurement procedures should be driven by the beneficiary communities as much as possible.

Smaller, local contracts permit flexibility in timing and technology, which is important when each subproject has differences in design and preparation time. While the transaction costs of supervising many small contracts can be high, advances in project management software now provide opportunities for close supervision. In the PROSANEAR project, for example, the task manager is able to keep track of the procurement status of more than sixty subprojects with only a week's lag time. However, at the project execution level, local administrative authorities and CBOs do not always have the capacity to develop project proposals, undertake engineering design, hire contractors, and procure materials and services. Generally, intermediaries such as NGOs and consulting engineers can help with this process. However, if they become the sponsors of subprojects, the demand driven approach will be distorted. Also, prompt payment must be available for the services of small contractors, NGOs, and local governments who often lack the working capital or locally generated revenues to weather long delays.

The challenge for task managers is to determine which players should be involved and how to structure their respective roles in service delivery. The success of any one program depends on region specific traditions of infrastructure production, the capacities of local governments, the availability of qualified local contractors and consulting engineers, and the experience of national-level government agencies in working across widely dispersed areas.

Financing and Procurement Models

Different procurement approaches, based on demonstrably feasible financing arrangements, fall into three broad categories (that are not necessarily mutually exclusive):

- *Direct procurement by communities or sponsoring agencies.* In these cases, project approval is the responsibility of a centralized entity. Small construction firms and consulting

engineers are prequalified, and a schedule of standard materials and labor costs is used to simplify procurement operations, as in the Social Investment Funds (SIFs) in Latin America and, in francophone Africa, *Agence d'Execution des Travaux d'Infrastructures Publiques* (AGETIP).

- *Multiple procurement arrangements*, varying by subproject scale. Direct procurement or local commercial practices can be used for smaller projects. More formal, structured procedures are reserved for more expensive and complex goods and services.
- *Geographic clustering*. Subprojects are clustered to allow limited packaging of specific elements, such as NGO technical assistance services or materials, while permitting differentiated designs for each subproject or region.

Social Investment Funds and AGETIP

These approaches aim to produce large amounts of small-scale infrastructure, but are not necessarily designed to accommodate beneficiary participation in service design, implementation, and management. The SIF/AGETIP model can be useful if modified to allow for more direct

Box 5
Nepal's RWSS Fund

In the Nepal Rural Water Supply and Sanitation Project (RWSS), an autonomous RWSS Fund has been proposed to finance water and sanitation facilities in project villages. Any organization fulfilling the eligibility criteria will be allowed access to the fund.

The fund has emerged in parallel with two interesting developments. First, local governments, newly empowered by the Nepal government's policy of decentralizing administration, are demanding improved performance from and a greater say in the activities of line agencies which traditionally deliver services. Second, the government has been reviewing the general performance of the line agencies responsible for developing water and sanitation services in rural areas.

A pilot project, funded by Japanese trust funds and executed by the UNDP-World Bank Water and Sanitation Program, currently plays a key role in developing and testing procedures for the RWSS Fund. These include selection of support organizations and schemes; contracting and procurement, the level of assistance and training required by support organizations, and monitoring and evaluation of performance, process, and impact. Initial results suggest potential for developing rural water supply schemes with participation of beneficiaries and support from NGOs, provided fund channeling rules are kept simple and free from bureaucracy. The proposed RWSS Fund will be administered by an autonomous statutory authority. The establishing legislation contains rules enabling the fund to preserve its functional autonomy and reduce political influence on management, pay competitive salaries and attract high calibre professional staff, enter into tripartite agreements with support organizations (such as NGOs) and communities (selected according to established eligibility criteria) for implementation of community based RWSS projects, have its own financial procedures for timely release of funds to communities and support organizations, and adopt procurement procedures that are flexible and efficient.

While support organizations will be primarily NGOs, private firms and government agencies also can be contracted if they meet the eligibility criteria. The department responsible for rural water and sanitation initially opposed the idea of such a fund as an infringement on what it considered its traditional responsibility. However, with the pressure for reforms being exercised from the policy level, it accepted the idea of testing new strategies and approaches through the pilot project. Participation in the advisory board of the RWSS Fund's pilot project appears to have assisted this process. One sign of change is the decision of the department to disengage its staff from implementing schemes serving populations less than 500. This policy shift is in line with lessons learned from the pilot project in which communities with NGO support appear to have implemented small schemes efficiently.

beneficiary control over the contractor selection process. The basic idea behind these approaches is that local contractors (small construction firms, NGOs, or communities) execute projects, eliminating the need for centralized procurement and coordination of multiple and diverse subprojects.

Both SIF and AGETIP rely on prequalification of subcontractors and schedules of standard costs to assure that project costs do not exceed market levels. Because small firms often lack sufficient technical experience to submit bids, they typically work with standard bidding documents, standard designs for a variety of project options, and some training of contractors. Although direct contracting has dominated in the SIFs, AGETIP has worked with competitive bidding arrangements fairly successfully. The central entity approves projects, maintains the book of standard costs, supervises projects, and disburses funds. The RWSS fund in the proposed Nepal Rural Water Project is adapting the social investment fund idea to the Asian context.

Centralized Fund Channeling and Scale Based Procurement

Breaking procurement into functional groups by project scale permits a substantial amount of autonomous local-level contracting and is the favored method when fund channeling is routed through government budgetary procedures. This approach also can provide flexibility if a threshold is defined below which communities can perform their own contracting. This decision is based on community size, distance from available materials and services, and physical characteristics determining viable project options. Once projects exceed the first threshold, procurement goes to standard procedures for local competitive bidding and then international competitive bidding for the largest components. Some restrictions can be imposed, such as using locally and nationally registered contractors, using local labor, and timing construction so as not to conflict with the harvest season.

Beneath the first threshold, contracting is treated like a force account, with the community responsible for all aspects of the project from labor to materials acquisition. If they so choose, communities may use their own labor or contract for it. The logic behind this is that distant communities are often "price takers" because there is only one contractor and only one place to acquire materials, so competitive bidding is not feasible. As long as project costs do not exceed market rates (by setting standard prices for different types of projects), leakage is kept under control. If the community wishes to expand on the approved project (at the predetermined price) it will need to mobilize additional resources. If the community is able to finish the project for less than the set price using volunteer labor or donated materials, it can use the net savings for other community investment, such as improving the system or starting a revolving credit fund.

Supervision is either performed by independent engineers who certify that the work has been completed, stipulate the value of the works, and submit requests for reimbursement for community expenses, or by utility engineers on a random supervision basis. Community water group members also sign the document, certifying project completion.

The difficulty lies in actually preventing the "tail from wagging the dog." This is often the case once contract values for major equipment such as treatment plants, large pumps, pipes, and drilling rigs become very high. When this occurs, project managers, often with the active complicity of other secondary stakeholders such as supply contractors, have the perverse incentive to achieve disbursement targets by purchasing bulk items before they are required. Often, project potential disbursement windows lead to unnecessary expenditures. New drilling rigs, for example, may be purchased without taking stock of whether existing equipment could be efficiently repaired. Clearly, bulk purchases and an adaptive, participative design could be at odds with one another.

One solution is to make bulk purchases of only a portion (say, one quarter) of the expected total project need. This initial procurement can be

based on a preliminary assessment of what the demand will be. After the project starts, reordering can be based on what the actual demand has been. This prevents projects from becoming supply driven, as they can do when agencies press communities to select a solution based on what has been procured already. If the types of projects communities prefer are mismatched with procurement, the next bulk bidding batch can be adjusted appropriately. As long as procurement responsibilities remain with water utilities, there is a natural reluctance to listen to what communities want. In many cases, as the Philippines illustration showed, the consequences could be disastrous for project design. The challenge is to minimize centralized procurement without increasing the transaction costs of piecemeal purchases of goods and services. This is an area in which more case law needs to be documented.

Centralized Fund Channeling with Geographic Clustering

Clustering subprojects, a hybrid of packaging and community based procurement, is an option that can be exercised through centralized fund-channeling arrangements. Clustering allows certain economies of scale in project implementation. In projects that have relied on NGOs for all or part of the community mobilization process, clustering subprojects has allowed them to be contracted for several villages in a local area. This allows NGOs to build on their comparative advantages of detailed local knowledge and ability to work well with communities, and to develop innovative, differentiated service approaches while broadening their impacts. In working with a number of communities, they are able to develop links among the various villages, identifying regional development issues they share and networking among them to disseminate successful experiences. In the WSSLIC project in Indonesia, large NGOs with proven track records have been contracted on the basis of a geographic division. For the six provincial project secretariats implementing the project, it is much easier to deal with one NGO counterpart than with 100 village water committees. This NGO counterpart provides technical support to a number of smaller NGOS which work at the village level as well as to local government officials.

Making Room for Participation in the Funding Cycle

Pressure to disburse funds within specific time periods, or before elections, often pushes project implementors to speed up or bypass the community mobilization part of subproject implementation. This undermines projects which require communities to absorb substantial new information to arrive at decisions. Conversely, delays in materials and services due to procurement logistics also present problems. Delays in construction resulting from slow procurement or contractor selection pose the risk that communities will become discouraged or distrustful and therefore less willing to collaborate with implementation and operation.

Ideally, procurement and disbursement should be driven by project beneficiaries rather than by the Bank's lending cycles, national budget cycles, procurement time frames, or electoral cycles. But these cycles must be taken into account. For example, an argument can be made that if initiation of projects coincides with the beginning of local and regional political terms, politicians will find it advantageous to support them and take them on as their own. The politicians will have stronger incentives to play along with the rules of the project if they can achieve tangible outcomes within their terms of office rather than trying to subvert the rules for their immediate electoral interests. If elections are scheduled subsequent to project start-up, politicians have very little incentive to take the time needed for genuine community participation in decisionmaking.

Project Preparation and Supervision

An essential part of project preparation is the time spent by task managers in the field talking to villagers, neighborhood residents, local and national government staff, and other stakeholders. This familiarizes task managers

with existing types of community institutions and indicates how projects should be structured accordingly. In Indonesia, the task manager hired two local community specialists to accompany him in surveying pilot experiences in the field. While the task manager engages in his more "official" activities of talking to village heads and project unit staff, his associates talk to villagers to get the "unofficial" report on how the community participation process has been working. Armed with such detailed and nuanced information, the task manager can verify the information he receives and ensure that no serious problems go unaddressed.

Sector work can clear the way for participatory projects. Yet even where a solid policy foundation exists, sector agencies and local implementing entities are not likely to know how, and are even less likely to have the built in incentive, to execute such projects. Especially at this learning stage for the Bank and borrower countries, participatory projects will be more expensive, more time consuming, and require more resources than conventional projects for supervision of implementation. Participatory projects require more intensive supervision and adjustments. Task managers often find they need to mobilize additional resources beyond project funds to do this well. In addition, some monitoring, evaluating, and fine tuning of project design features becomes an iterative, consultative process involving task managers, national sectoral counterparts, project managers, and beneficiaries. Learning how to address design issues, such as structure of community involvement, assigning roles to agencies, procurement design, and selection of subprojects is a participative process involving all stakeholders.

Mobilizing Additional Resources

Entrepreneurial task managers have mobilized extra funding for preparation from such sources as the Japanese Trust Fund, Japanese Grant Facility, Project Preparation Facility, and other "first generation" projects. For operational support, task managers have worked closely with the UNDP-World Bank Water and Sanitation Program both at headquarters and in the field, and with the Water and Sanitation Division. Bilateral agencies, UNICEF, regional development banks, and local and international NGOs working in-country have been useful sources of experience, innovative approaches, and basic information on service coverage, beneficiary needs, and NGO capacity. In Nepal, the task manager drew on previous studies by international NGOs, FINNIDA, and UNICEF. He then contracted an NGO to assess the capacity of the various NGOs operating in the sector. This additional survey revealed that NGOs were a richer resource than he or national government planners initially had realized.

Monitoring and Evaluation

This same kind of hands-on role for task managers is crucial during supervision when most of the learning and adjustment take place. Monitoring and evaluation should be seen as problem solving opportunities, not only for the task manager and project unit staff, but for stakeholders at all levels. No task managers reported any standard methods for assessing participation, as there are no measures that are easily collected or quantified. However, there are a number of different approaches that task managers can use to gather information and to cross check sources. Some possibilities offered in the vast literature on this topic, ranging from less to more participatory, are:

- standard monitoring and evaluation techniques;
- participant observation and beneficiary assessment;
- Rapid Rural Appraisal;
- focus groups;
- participatory self evaluation; and
- visitation and peer training.

The key questions appear to be twofold. First, does project design safeguard the economic interests of the primary stakeholders or actual beneficiaries? As discussed earlier, the operative principle is that the design should allow people to receive services they want and for which they are willing to pay. Second, is there sufficient institutional flexibility to learn from mistakes? This requires monitoring and evaluation to incorporate an intermediate feedback mechanism, a process by which lessons learned are utilized to improve project performance.

Regardless of the techniques used, task managers all stressed the necessity of personal field visits to a sufficient number of subprojects to get a sense of the issues facing the primary stakeholders and to find out whether or not implementing agencies are involved fully with the project. Field visits also should include agency staff, consultants, and any other people involved in the project so that evaluations are consensual rather than adversarial.

During field evaluations, task managers observe community meetings and speak with community members, leaders, and government staff with the aim of finding out if people have a basic understanding of the technical and financial aspects of the project. Though there are considerable variations among countries, and even within countries, a few basic questions can help assess whether community members have been involved in decisionmaking, and how representative the decisions are. Questions could include:

- What kind of services are they getting?
- How are decisions on service provision made?
- How much are residents actually paying for system upkeep?
- What are the operations and maintenance arrangements, and the investment costs?
- How are conflicts within the community resolved?
- How are facilities managed?

If community members cannot answer these basic questions, they clearly have not been included in decisions pertaining to the level or type of service.

Monitoring, evaluation, and feedback can succeed when all stakeholders are able to articulate their concerns, priorities, and satisfaction. Learning collaboratively what appears to be working and what is not requires task managers to move away from micro-managing subprojects. At the same time, they must have a good sense for how things are going, especially during the first two years after project start-up when adjustments are needed. In order to do this, task managers should supplement their own field visits with some of the monitoring and evaluation techniques listed above. Most task managers benefit significantly from in-country "strategic" supervisory support, either from UNDP-World Bank Water and Sanitation Program field staff, project consultants, or Bank regional office staff. Staff time for supervision in participatory water and sanitation projects has varied from 20-45 weeks a year, depending on how much outside support a task manager is able to secure.

The Role of Consultants

Almost all projects involve consultants promoting participation in one capacity or another for some or all of the project cycle. Relying too heavily on consultants, particularly expatriate and short-term consultants, is a standard practice for most water utilities at both the design and construction phases. The key issue appears to be how the community participation specialist (the "software") and the engineering design specialist (the "hardware") can be held accountable jointly for their work. One way of doing this is to invite bids proposing the hardware and software together. In Brazil's PROSANEAR project, this process forced the consultants to form consortia of engineers and social activists, and fundamentally altered the quality of institutional intermediation by consultants.

There is an increasing number of qualified consulting firms in many countries that can be

employed alone or in combination with expatriate firms. Local firms have the advantage of more detailed understanding of local political and social nuances, and they are more likely to work in collaboration with government agencies rather than to function independently of them. Also, there is a tendency for expatriate consultants to have no contact with their agency counterparts.

If expatriate consultants are used, they must be encouraged to work with water and sanitation utility counterparts in order to increase the transfer of skills. For example, consulting engineers can include utility staff in supervisory roles during project implementation so that the staff of agencies with little exposure to participatory work become familiar with design issues through exposure to conditions in the field. This is particularly relevant for demand driven projects which serve beneficiaries who have not had service in the past, and whose needs are quite different from those of the agencies' better off customers. First-hand exposure to community reality sensitizes agency staff to the needs of new clients.

5. Conclusion

A recent trend in water and sanitation projects targeting low income communities has been greater attention paid to community participation. This trend arose for two reasons. First, evidence indicates that there are many situations in which consultative processes provide efficient institutional methods of revealing what consumers of services (including poor consumers) want and are willing to pay for. Second, evidence also shows how responsibilities for managing feeder water and sanitation infrastructure can be shared between communities and already over extended water utilities. While there are no definitive "dos and don'ts" on community participation, an emerging consensus is that there is a menu of practical options for structuring institutional rules so that stakeholders exercise voice in proportion to their interests. When this is done, as demonstrated in pioneering projects by NGOs, beneficiaries begin exercising greater voice, and the disproportionate influence of contractors, consultants, and other secondary stakeholders is reduced correspondingly.

Participation works or doesn't work depending on the extent to which project design is transparent and consistent with rational economic principles. Successful participation has been reported when:

- Project selection criteria for communities to receive water and sanitation services are based on demand.
- Local, regional, and national government officials are accountable to their constituents' needs. Accountable politicians often play important roles in urging sector agencies to take on new service provision approaches that are more responsive to the needs of the poor.
- Implementing agencies are flexible, adaptive, and willing to relinquish control over key project decisions and the pace of project implementation. In words attributed to the Duke of Wellington, they should be prepared to exhibit the traits of a good general: "Know when to retreat and dare do it." This requires changes in institutional cultures and in incentive structures within the agencies.
- Beneficiaries and other stakeholders have legitimate forums for negotiating with water utilities on understood sets of service attributes, pricing, and operational responsibilities.
- Sufficient information about costs, technical options, and service management responsibilities is available for the beneficiaries and stakeholders to make informed decisions. This means that good quality facilitation by an institutional intermediary is critical.
- Beneficiaries are given the option *not* to take on a new project, if their needs, priorities, or interests lie elsewhere.
- Flexibility in institutional project design allows for needed midcourse adjustments. Effective monitoring, evaluation, and feedback from all stakeholders is essential for taking informed action to modify ongoing projects.

Clearly, when any or all of these conditions are missing, participation becomes difficult to realize.

Three other limitations are worth highlighting. First, in a Bank-funded project there are many situations in which there is a trade-off between negotiating with the community and engaging in bulk procurement of goods and services. For example, while financing bulk water production and distribution investments, the transaction costs of consulting all stakeholders would outweigh the benefits from consultations. Participatory water supply and sanitation projects thus are suited best for feeder infrastructure (as opposed to trunk infrastructure) and for rural communities.

Second, participation is a costly exercise, involving specific investments in promoting institutional intermediation. In some of the poorest countries, local NGOs, CBOs, and small private firms may be too weak to fill this role, and the recourse to expatriate facilitators may be extremely expensive, perhaps even ill-suited for the purpose.

Finally, short term collaboration is easier for communities and government agencies than long term cooperation. The Bank does not as yet have enough case law on whether or not operations and maintenance through participatory institutions is a sustainable option in the long run. The argument for community self management of new facilities (as opposed to community participation in design and construction) is thus still largely an assertion of faith, and will remain so until evidence from participative projects currently under execution indicates otherwise.

Despite the above caveats, one can conclude that it is wise to structure institutional arrangements so that all stakeholders achieve clear economic gains by cooperating. If this is not feasible, at least the primary stakeholders or targeted beneficiaries should receive their fair share of the economic benefits. Clearly, it is better to try to promote participation rather than have none at all.

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