

Water in rural communities

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This note focuses on how the community driven development approach is applied to this problem of getting water to rural communities. A recent review of World Bank water supply projects by OED shows that local community involvement in decision-making about services and in implementing and managing those services is linked to greater beneficiary satisfaction with services, and thus a greater willingness to pay. The Bank’s experience with watershed management has similar findings. Significant involvement by local stakeholders correlates with better replicability and sustainability in outcomes and impacts. A lesser degree of participation is associated with a lower likelihood of sustainability.

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Introduction

This note focuses on how the community driven development approach is applied to this problem of getting water to rural communities. A recent review of World Bank water supply projects by OED shows that local community involvement in decision-making about services and in implementing and managing those services is linked to greater beneficiary satisfaction with services, and thus a greater willingness to pay. The Bank’s experience with watershed management has similar findings. Significant involvement by local stakeholders correlates with better replicability and sustainability in outcomes and impacts. A lesser degree of participation—e.g., only providing materials and labor—is associated with a lower likelihood of sustainability.

However, it is important to note that water is a complex issue that involves multiple stakeholders from the community level to the international level, so community driven approaches are not the only model to use in all circumstances. The roles and responsibilities of each stakeholder will vary depending on the nature of the water service being delivered and on the level of water availability and scarcity in the area. Similarly, community driven development is an approach to development, not a model. The entry point, sequencing, and rules of the game established by the approach vary according to the nature of the society in which work is taking place. Understanding the complexities of both community driven approach and the nature of water services is important to understanding how community water and CDD fit into the broader water picture.

The importance of water

One billion people have no access to clean potable water and nearly 2 billion people have no access to sanitation. Over 5 million deaths per year are contributed to water related diseases according to WHO estimates, so better water management can certainly contribute to the health MDGs. Additionally, forty percent of the world’s food supply comes from irrigated agriculture, and that percentage will increase as populations grow and arable land resources decrease. Agriculture is the single largest user of fresh water on the planet and it is also the largest economic activity of the rural poor. With 75 percent of the world’s poor living in rural areas and relying on agriculture for at least part of their income, improved water management for agriculture can improve the livelihoods of a great proportion of the impoverished.

Learning from the past

The experience of development organizations and industrial countries exemplify the complexity of achieving success and ultimately achieving scale in water services.

The period from 1981 to 1990 was officially deemed International Drinking Water Supply & Sanitation Decade (IDWSSD), during which an estimated \$133.9 billion dollars was invested worldwide. Approximately 1.6 billion people were served with safe water and close to 750 million with adequate excreta disposal facilities. At the end of the decade—according to WHO estimates—1 billion people still lacked access to safe water and 2

billion lacked sanitation services. Moreover, only about 25% of the \$133.9 billion went to rural areas, where 75% of the poor in developing countries reside.

According to some experts, the IDWSSD did not achieve its intended goals because it was largely supply-driven and did not respond to demand, and it did not focus on sustainability. Evidence gathered from India toward the end of the IDWSSD showed that while many rural systems had been installed, maintenance of those systems was either assigned to overburdened state agencies, to local governments with little technical and financial capacity, or not assigned at all. The government estimated that “inattention to maintenance [cut] the useful life of water supply systems in rural areas by 50 to 75 percent.” The same survey found that “only about one-half of the villagers ostensibly served by handpumps were actually using them.”¹

Additionally, the global initiative was not able to overcome the weaker voice in policymaking that has plagued rural populations due to their poverty, their distance from policymakers, and their wide dispersion across a large area, which inhibits them coming together as a unified lobby.²

The experience of industrial countries provides interesting lessons on programs that have worked and good intentions that had unintended results. The Ruhrverband (the Ruhr Water Association founded in 1913 in Germany) is an example of an institutional arrangement that included all stakeholders in decision-making—communities, districts, public and private sector; charged fees and levies to cover its costs; and treated water as an economic resource by weighing the costs and benefits of proposed actions. Its management principle was essentially the rule of subsidiarity — assigning responsibility for managing water infrastructure to the lowest appropriate level—i.e., Ruhrverband managing trunk infrastructure and municipalities managing feeder infrastructure. This model was successful and was gradually adopted by neighboring jurisdictions. France applied the principles of the model, but included a much larger role for the private sector, which better suited the country’s situation. Through the rest of the century, as environmental issues grew in prominence in Europe and the European Union formed, new uniform standards were applied across Europe. Germany and the UK have adhered most closely to these uniform standards — The UK privatizing all water services and Germany remaining largely public. In both systems, costs have risen, the public has been distanced from the providers, and consumer dissatisfaction has grown.

A similar trend has happened in the U.S. where federal environmental standards for water were legislated and handed down to local jurisdictions. Dissatisfaction at the local level eventually led to a court case where the federal requirements were deemed to be “wasteful, unrealistic and unworkable”. To find a workable model, the federal government commissioned a study, which recommended developing institutions for stakeholder involvement and considering the costs and benefits of actions within each local context.³

The experience the IDWSSD and of the industrial countries has shown the importance of local and client involvement in the determination of what services are delivered and how they are managed. This principle is firmly embedded in both the community driven approach generally and in the principles guiding the water sector. Today donors, development agencies, and developing countries and NGOs have achieved a high degree consensus on how to manage water resources; however the nature of water services and community driven development lead to additional complexities in the implementation of reforms.

Water services

Supplying water to communities is not a simple issue. It is important to note that water services are not limited to rural water supply and sanitation. There are actually numerous competing interests for water—drinking, sanitation, irrigation, energy, and navigation. Communities have a significant role to play in managing and even the delivery of water services, but the complexity and cost of the issue requires new roles for government, civil society, the private sector, and donors as well.

Water supply and sanitation (WSS) is almost always discussed together, which belies the fact that it takes two different sets of institutional arrangements to effectively deliver the services. In rural areas, water supply is more of a communal good, whereas sanitation is handled more as a private good at the individual household level. Additionally, WSS alone is not sufficient to get the health impacts needed by so many communities. Hygiene education links the two services into a health-benefiting package for communities, but it also leads to the complexity of projects and the need for a longer-term presence during implementation. The experience of

the Bank and other donors has shown that a community driven development—referred to as the demand responsive approach—results in more equitable and efficient management and a greater likelihood that water points will be maintained, user fees will be collected, and the water resource will be sustainable.

Agriculture is still the primary economic activity undertaken by rural people, and it's also the largest user of freshwater resources in the world—comprising 70 percent of freshwater withdrawals in 2000. In water scarce areas the need to balance agriculture and drinking water can be severe. The Bank's strategy for irrigation and drainage (I&D) emphasizes the need to manage irrigation water more efficiently to limit waste of a scarce resource. Based on experience—which shows increased efficiency and sustainability of infrastructure—the strategy calls for empowering communities (water user associations) and realigning the government to better manage the resource.

Beyond CDD, in both rural water supply and sanitation and irrigation, additional issues such as technical quality, supply chains for parts to maintain water points, concessions for service providers in some instances, and land and water rights are equally important to successful interventions that can be scaled up to a national program.

A watershed is a coherent geographical unit covering the whole area from which water drains into a river, from its source to its mouth. *Watershed management* is concerned with sustainable development based on the use of all the natural resources of a watershed. Regardless of the chosen micro-level investment—drinking water borewells, schools, health centers, roads—using watershed management principles to plan investments forces communities and government to incorporate conservation practices for maintaining natural vegetative cover to help control erosion, thus reducing downstream sedimentation and flooding and regulating stream flow.⁴ Effective planning by using watershed management principles helps stakeholders evaluate the potential and limitations of these land resources and to resolve conflicting issues that arise during their exploitation. Since most decisions about how to use natural resources are taken at the community level, empowering communities to manage these resources in a watershed is a critical element of success. A recent review of watershed management programs showed that the most successful ones empowered communities to make decisions about the use of resources and to manage the resources themselves. However, given that a watershed usually covers multiple local jurisdictions and requires knowledge from a variety of technical areas, linking with decentralized government systems and technical line ministries is critical for overall management success.

International basin management addresses the need to manage water resources across national boundaries; the critical interaction necessary between national governments that share a primary water source—such as the Nile River Basin, Lake Victoria, the Baltic Sea and others.

As the Finance, Private Sector, and Infrastructure Group of the Bank pointed out in their strategy for Africa:

All countries in sub-Saharan Africa share at least one international river basin, leading to growing interdependence between states. As future improvements and expansions to WSS services are planned, the water resources context will become increasingly important.⁵

This situation is not unique to Africa. In fact, “the United Nations estimates that two-thirds of the world's population will face severe shortages of freshwater by 2025.”⁶ The experiences of the Global Environment Facility provide insight on how to link local actions to global frameworks for cooperation on water resources.

Community Driven Development

As stated above, CDD is an approach to development, and it is one of many that donors and countries will use to manage water services. The experience of the Bank and other donors has shown that there is no one-way to use the CDD approach. The examples discussed later in this case illustrate the number of entry points and institutional arrangements that can be used and facilitated by donors and countries. With this being the case, it is impossible and unadvised to have a blueprint. Rather, practitioners can draw on a set of general principles learned from experience and apply them within the specific local context.

Box 1. Community Driven Development principles

1. Empower communities: participatory decision making, resources and authority to implement, PME;
2. Empower local governments: fiscal and administrative decentralization;
3. Re-align service delivery of central government: policy and enabling environment; information to communities for decision making;
4. Ensure transparency and accountability at all levels; and
5. Make it a learning by doing process and build capacity along the way.
6. Commit to long-term reform for the institutional development to take hold and be sustainable.

At the heart of CDD is the need to *empower communities* to take charge of their own development. Tools such as participatory decision-making, participatory monitoring and evaluation can be used to bring community views into decision-making. Experience has shown that when development interventions align to the priorities of a community, the sense of ownership increases, as does the likelihood that a community will work to maintain the results, thereby increasing the chance of sustainability. CDD also advocates *empowering local government*. To build sustainable institutional arrangements, the CDD approach must ultimately link with the system of governance and be accepted by the government as an integral part of their system. Introducing communities and decentralized local government as active stakeholders in service delivery makes it critical to *realign the role of the central government and line ministries* to set policies and regulations, provide oversight of the system, and provide technical information and assistance as needed. The new institutional arrangements implied by the CDD approach require trust among the stakeholders in the new system, along with mechanisms for *ensuring accountability and transparency*. CDD works to increase reliable flows of information down to the community and up to the national government. It fosters civic engagement—through tools and mechanisms like:

- social audit of the district assemblies common fund in Ghana;
- community audit of public resources in the Malawi Social Action Fund;
- the proposed Performance Tracking Facility in a Local Government reform program in Ethiopia;
- community based monitoring of the Poverty Fund in Uganda.

At the heart of the CDD approach is fostering a *learning by doing* system for the beneficiaries and practitioners of development throughout the project intervention and beyond. A CDD project must have an intensive monitoring system that collects a range of information and feeds it back to all the stakeholders in a timely manner so adjustments can be made to correct mistakes and understand and repeat successes. Finally, countries, communities, and donors need to understand that this kind of systemic reform takes time. They need to *commit to a long-term and sustained* presence to embed the reforms into the system.

Practitioners and policymakers need to remember that community driven development is not a one-size-fits-all model. Rather, its an approach based on some shared principles that can and should vary depending on the context in which it is applied—working directly with communities, with line ministries, with NGOs, with local elected government, with the private sector. The combination of stakeholders, their roles and responsibilities, and sequence that they are brought into the project is determined by the country and local context. The principles of inclusion and ownership; capacity building; intensive monitoring, learning, and communication; and long-term commitment to the reform process play an obvious role in whether community driven development is successful or scalable.

The examples discussed in the next section illustrate how the goals of the water sector and the principles of community driven development can be combined to achieve effective programs with positive impacts for rural communities. These programs have also been scaled up to the national level or are in the process of scaling up. The following section summarizes the lessons from these experiences that should be considered by other programs that wish to reach a national or international scale.

What is working

The Bank is currently applying the lessons of the past to a new generation of water projects. Results from initial projects were good, and the follow-on programs are building on the successes and lessons of their predecessors.

Rural Water Supply and Sanitation in India: the Impact of Swajal⁷

Ongoing rural water supply and sanitation projects have been very successful in India, especially in their demonstration that the community-driven, demand-responsive approach works. The Bank-assisted Uttar Pradesh Rural Water Supply & Environmental Sanitation project (Swajal) has been acknowledged nationally and internationally as a best-practice example in implementing a community-driven approach.

Uttar Pradesh has a population of 160 million, with about 80 percent living in rural areas. It is one of the poorest states in India and the two project areas selected, the Hills and Bundhelkhand, are the most water-scarce in the state. The two areas feature vastly different levels of social capital, which allowed for comparison of impacts based on the initial level of social capital development.

The existing system for delivering rural water service operated through UP Jal Nigam (UPJN), a highly-centralized, excessively-staffed public sector organization. UPJN's top-down approach rarely takes consumer preferences into account. There is no capital cost recovery, and operation and maintenance (O&M) costs are rarely collected. Poor O&M is a major problem, with about one-third of schemes non-functional at any one time.

Swajal is testing the demand-responsive approach in collaboration with NGOs as an alternative service delivery mechanism that will strengthen the capacity of rural communities to plan, implement and maintain their water supply and sanitation schemes. In this arrangement, the project management unit (PMU)—an autonomous agency facilitates, coordinates and monitors activities. NGOs provide an integrated package of engineering and community development support to the project villages and serve as a link between communities and the PMU. Village Water Supply and Sanitation Committees plan, implement and manage the water and sanitation schemes.

The Swajal project is delivering sustainable health and hygiene benefits to the rural population by improving water supply and environmental sanitation services; and promoting the long-term sustainability of the rural water supply and sanitation sector by helping government of UP identify and implement an appropriate policy framework and strategic plan. The ultimate goal is to scale-up service delivery.

When Swajal began, it essentially bypassed the sector line ministry and local governments (PRIs) and went straight to communities. The first option was not seriously considered because the UPJN did not have the experience or capacity to implement a community-driven, demand-responsive approach in rural water supply (RWS). The second option was taken more seriously because the PRIs in rural areas were set up to manage all rural development activities. This option was finally ruled out because it was felt that the PRIs in UP, despite being elected bodies, did not yet have the capacity and inclination to facilitate a demand-responsive approach.

The project has reached 1206 villages since it began in 1996, 1112 of the village water supply committees are still functioning and over 90% of water infrastructure in the villages is well maintained. More importantly the success of Swajal has influenced the GOI sector reform agenda, and as of 2002 the reforms are being implemented at some scale in 63 districts in 26 states in India targeted to cover a population of 70 million. The government of India has set aside about \$400 million for the sector reform program.

New RWSS projects in Karnataka and Kerala include a central role for rural local governments (called Panchayat Raj Institutions—PRIs), and aim at providing PRIs and community organizations authority and control over decisions and resources, the direct responsibility to manage internal and external resources, and the ability to make allocation decisions. These should make allocations more responsive to the poor, lead to more sustainable outcomes, and increase the power of poor communities to negotiate. The participatory evaluation methods of sustainability monitoring using the village immersion process that was pioneered in Karnataka has become an integral part of the borrower's implementation supervision.

Given India's vast RWSS needs, scaling-up is important. Joint sector work and dialogue with GOI have helped in influencing government policies and in moving towards a common approach, irrespective of funding source. GoI launched its own Sector Reform Pilot Project in 2000, following the same reform principles. This covers 64 districts in 26 states covering 70 million people, with total commitments of about US\$400 million. 20% of the total GoI funds provided to the states for RWSS are allocated for implementation using the reform

approach. One state viz., Maharashtra has taken a policy decision to implement the reform approach statewide; and a project is under preparation for proposed Bank support.

Further scaling-up is necessary and various options are being pursued/explored: (i) continued demonstration of the decentralized service delivery model in more states; (ii) encouraging statewide implementation of the reform approach in selected states, irrespective of funding source; (iii) building GoI/States/PRIs' capacity to manage reforms; (iv) possibly Bank-GoI co-financing to further reforms; (v) partnerships with other development partners who are active in the sector e.g., DANIDA, Dutch, DFID, KfW, UNICEF, and Water and Sanitation Program (WSP).

Ghana community water & sanitation

In the early 1990's the Government of Ghana created the National Community Water and Sanitation Strategy and Action Plan (CWSP), the product of a national policy reform to which all donors signed. The first Ghana Community Water Supply & Sanitation project was intended to support the reform program and complement the existing activities of the central government water authority, which would focus on building larger systems.

The program evolved out of a set of national workshops on improving water supply and sanitation in Ghana. These workshops, which involved stakeholders from all sectors of society, produced a strategy and action plan for reorganizing the development of rural water supply and sanitation (the CWSP). It used the community-driven, demand responsive approach where rural communities identified their needs and the level of services they could manage and for which they were willing to pay. The new institutional arrangements included all levels of government, NGOs, communities, and the private sector to provide and co-manage services.

In terms of impacts, the rural water supply program more than achieved its physical targets. Beyond that, it increased the capacity of NGOs, so that they could provide technical assistance for water supply. It also built capacity of small entrepreneurs to supply equipment for the infrastructure. The increased competition, created in response to increased demand from communities, led to a 50 percent reduction in the price of boreholes. The project also made specific achievements in gender representation with women comprising 50% of water and sanitation committees (WATSANs). In addition, the WATSANs began diversifying into other areas – such as environmental services.

The follow-on project is helping the government scale up the approach to a national program. Progress began slowly with the first 18 months spent working with the government agencies and communities to learn and accept their new functions in the reformed system. Now two years into implementation, the project has taken off and is working simultaneously in 1000 rural communities. The program is also piloting community contracts (currently the local government contracts) based on lessons learned at a World Bank international conference on CDD held in April 2002. District level agencies manage the program and now handle most of the procurement for infrastructure – now decentralized from the national level, and many districts are now supporting the operating costs for water supply themselves.

Irrigation rehabilitation in Albania

While Ghana shows how government reform programs create the conditions for using the CDD approach, Albania shows how learning from success on the ground can influence reform at the national level. Albania is currently the poorest country in Europe. As 50% of its GDP relies on agriculture, much of which is irrigated, effective and efficiently managed irrigation systems are necessary for economic growth. This is especially true, given the limited land resources available for agriculture, and the unreliability of rainfall. The Albania Irrigation Project reflects principles advocated globally by water professionals—bringing in the local level by working with water user associations and realigning the roles and responsibilities of various stakeholders to make a more efficient system.

The project is an irrigation modernization program that deals with reforming institutions by changing the roles of governments, users and private sector: communities operate and maintain the irrigation and drainage systems at the farm through secondary network level; governments invest mainly in headwork infrastructure, provide regulation and emergency assistance; and the local private sector is contracted to do the work on most of the activities.

The program began when the World Bank sponsored a study tour of Albanian officials to Turkey to see Turkey's reformed irrigation management program. This experience convinced the Albanian government to try the approach for its own system. Senior Albanian government officials helped introduce the reform by disseminating the concept of WUAs to farmers.

The first step was to establish trust between farmers and the project, by first rehabilitating canals and then gradually empowering farmers. Water Users' Associations (WUAs) were started on a pilot basis; however, once there were 'results on the ground,' they were provided with the autonomy to determine irrigation charges themselves and to manage O&M at the farm and then secondary canal level. Over time WUAs have taken on increased responsibility, so that they now manage primary networks—through federations of WUAs.

The impacts of the project reinforce the findings of the water sector—increasing the community role in managing water resources leads to better investment performance, cost recovery, and increased efficiency. The first irrigation and drainage rehabilitation project (1994), had as objective to (a) help emerging small private farms to increase agricultural production through rehabilitation of critical irrigation and drainage facilities; and (b) ensure the long-term sustainability of irrigation through the introduction of participatory irrigation management.

By 1998, the irrigation intensity had increased from 20 percent in 1993 to 60 percent. The scope of WUA responsibility far exceeded what was planned. More than 200 water user associations (WUAs) had been established over an area of 100,000 hectares involving 50,000 families, and 42 secondary irrigation canals covering about 98,000 hectares had been transferred to these WUAs. The WUAs collected funds from members for operation and maintenance of the secondary canals. Staff numbers in the public water enterprises were reduced within the project by 40 percent and 6 federation of WUAs (FWUAs) had been established to manage irrigation canals.

Before the approval of the second project in April of 1999, the progress was satisfactory, with 65 percent of the total irrigation and drainage area rehabilitated two years ahead of schedule, on budget, with satisfactory quality, using national, private engineers, contractors and supervisors. A follow-up investment project is now under implementation that aims to strengthen WUAs and establish a national legal framework for them. The government is also reforming the Water Code based on this experience.

Community water in a multi-sector setting: Northeast Brazil

Northeast Brazil is the largest pocket of poverty in Latin America. It has a rural population of 16 million, with 7.5 million people living on less than US\$1/day. The need for social, infrastructure, and economic services is considerable.

The Rural Poverty Alleviation Program was actually 8 projects in 8 states of NE Brazil, which resulted from reformulating a program that was not working. It drew on the lessons from a small, successful community-driven component in the previous project. This is an example of a fully multi-sector CDD project, where communities propose subprojects and manage the implementation process and subproject funds.

Based on evaluations, 77% of the subprojects were for infrastructure --- including rural water supply and small-scale irrigation. To date, communities in NE Brazil have implemented over 50,000 subprojects, and the results are impressive: 7,000 communities have water systems that they operate and maintain; 600,000 families now have access to good quality water; and the cultivated area has increased by 85,000 hectares. There were also efficiency gains to the government from water subprojects. For instance, the CDD approach proved to be 30-40% cheaper than traditional models, which freed government funds for other priorities. There were also US\$39 m./year saved by not having to use water trucks to supply families with drinking water in this dry region; and US\$42 m./year saved from improved health and time savings.

Communities have diversified into a wide variety of activities, including income-generating endeavors. Some have even begun exporting goods to Europe. They are organizing to leverage funds from other sources – state, federal, and other donors. Some have even graduated from the program and now access private credit.

Over 1000 municipalities have adopted the participatory approaches used by the program. State and Federal programs are now adopting the approach as well. The next generation of projects has expanded to 10 states. This has been one of the Bank's learning projects, with many groups from other countries visiting to see how the project works.

The project showed how the CDD approach can be affective for delivering water services. It also illustrates the multiplier impacts that these services can have. Two lessons from this project are that involving local government contributes to improved institutional reform. Also, in terms of community water projects, the management units have recognized the need to coordinate water management at a higher level, to make sure that the cumulative affect of community projects doesn't damage the availability of water.

The next project illustrates the complexity of water services and the need for community and government cooperation even better.

Eastern Anatolia Watershed Rehabilitation in Turkey

The Eastern Anatolia Watershed Rehabilitation Project illustrates how the rule of subsidiarity can apply as activities move up the water resource chain. The project sought to restore sustainable land-use management to degraded watersheds in three provinces of the Upper Euphrates River Basin; and increase the incomes of the local population living in these areas, which are among the poorest in Turkey. To do this it had to help restore sustainable range, forest and farming activities, reduce soil degradation, erosion and sedimentation in reservoirs.

A major component of the project focused on the need for institutional and behavioral changes among communities and government. It promoted inter-sectoral agency cooperation at the provincial level (agriculture, forestry and small-scale irrigation); and the local population was involved in creating watershed rehabilitation programs.

The project has reached about 400,000 people living in over 50 watersheds. Integrated management plans were prepared including improved management and cultivation of fodder, reforestation, soil conservation, improved arable farming and fruit farming, construction of ponds for supplementary irrigation, bee-keeping, and gully protection.

The project has strong support at both local and national levels. After a successful beginning, the approach was extended to six more provinces in southern and southeastern Turkey and will now be adopted in up to 20 more provinces in a follow-up operation. This is just over 1/3 of the country's 80 provinces. The project has benefited from a high degree of local commitment (it increased local empowerment). It improved opportunity and access to resources through targeted interventions, was cost-effective and could be maintained despite a difficult macro-economic environment. A natural resources and poverty reduction project using a similar participatory approach is under preparation in Armenia, and the follow-up project under preparation for the Turkish Black Sea and Mediterranean region will also support nutrient reduction programs.

The project was modest in its initial objectives and this may also have contributed to its success. The design was flexible and the menu interventions could be adapted as new technologies were developed and to suit changing socio-economic circumstances and variations in geography and ecosystems. Experience also shows, however, that a long-term commitment by government and donors to interventions of this type is necessary, as has occurred in Turkey.

International Basins: the Nile Basin

What does a village water user group in Tanzania have in common with a farmer's group in Lower Egypt? Both communities—although separated by 6700 kilometers—compete for drinking water, sanitation, irrigation, drainage, energy, navigation, and environmental services from the Nile river basin. The Nile is world's longest river, with 10 riparian countries competing for its resources. Half of those countries are among the world's ten poorest: Burundi, DRC, Egypt, Ethiopia, Eritrea (observer of NBI), Kenya, Rwanda, Sudan, Tanzania, and Uganda. The river basin is home to about 160 million people, while the total population of the riparian countries is around 300 million, and population is expected to double by 2025.

This situation presents the potential for scarcity and hardship. However, the 10 countries have turned it into an opportunity for ‘win-win’ gains in energy availability through power interconnection; food production; transportation; trade and industrial development; and environmental conservation. In 1997, they formed the Nile Basin Initiative where, for the first time, all riparian countries are working together to establish a legal and institutional framework for sharing water resources equitably.

There are two sub-programs being formulated: the Basin-wide program is the Shared Vision Program (SVP) that will build trust, capacity and an enabling environment for investment; and the sub-basin investment programs include Eastern Nile Strategic Action Program (ENSAP) and Nile Equatorial Lakes Strategic Action Program (NELSAP).

Donors are organized in the International Consortium for Cooperation on the Nile, chaired by the World Bank, but it is important to note that the donors are *facilitators* in this initiative. It is driven by the countries.

Since the primary interaction with natural resources—such as, water—happens locally—on the farm, in the household, etc. —community subprojects that promote sustainable resource management and build the capacity of communities and local authorities to plan their resource use can be an invaluable contribution to the larger water management continuum within the Nile Basin.

Cooperation on water resources management might also serve as a catalyst for greater regional integration, both economic and political, with benefits far exceeding those derived from the river itself.

What it takes

These experiences and many others with CDD and community water services provide great learning opportunities as governments and international organizations work to achieve the millennium development goals.

Water specialists and CDD specialists have been examining results from past efforts and applying lessons learned to create new approaches to solving difficulties in getting efficient, effective water services to rural communities. The result is that we know what to do, and we know that there is no blueprint for doing it. Success is formulated by a mixture of investment, policy and institutional reform; capacity building and learning that will vary with each country and even with each region within a country. This section breaks down the CDD principles and Rio/Dublin principles into specific “ingredients” for a successful community driven water program.

- *Ensure client ownership of the process.* Whether or not water or community empowerment is used in Bank programs should be determined in the stated goals of the government—through the PRSP or CAS, for instance. To use the community driven approach requires powerful political champions to support the legislative and bureaucratic changes that CDD entails. At the community level, it is important to include community groups early in the project design, so they have a sense of ownership of the development process.
- *Adapt program design to local conditions.* It is impossible to achieve sustainable outcomes and impacts if the communities do not see the result of a program – water pump, irrigation canal, or other - as useful. *Rural Water Projects: Lessons from OED Evaluations* (March 2000) stresses that “great care must be taken to base projects on local practices and traditions rather than internationally generalized models that specify how villages ought to behave.”
- *Shift from top-down to bottom-up, demand-responsive approach.* Studies and reviews of water supply and sanitation, irrigation, and watershed management have shown that community involvement in the design and management of water systems leads to greater satisfaction with the water service and greater sustainability of the service.
- *Involve multiple stakeholders to co-manage programs and services.* The high cost of scaling up suggests a continued sharing of costs; no one entity can shoulder the cost burden of providing water services to rural communities. Rather, pursuing a co-management model that involves a mixture of private and public funds from local, national, and international sources can diffuse the cost burden and make water supply more stable—not linked to just one source. . Currently developing country governments,

- communities, and the domestic private sector cover 64% of the cost of supplying water services globally on average, while donors contribute 12%. A similar distribution of costs is likely to continue.
- *Support an enabling government policy environment for delivering water to the community.* The enabling policy environment should support the institutional arrangements and resource management necessary for good investment, operation, and maintenance of water services. First, the legal environment should allow entities like community groups, local NGOs, and local government to be effectively involved in management of local water sources. This may require popular participation, legal reform, decentralization reform, and the reform of intergovernmental fiscal systems, among other actions. Similarly, the private sector—local and international—should have the freedom to operate in the country, which could require changes to the legal and regulatory environment affecting investment. Second, the policy and regulations governing water resources should reflect good management practices—on user fees, tariffs, water rights, etc.—and provide guidance on attainable and maintainable technical standards to ensure quality services to all.
 - *Link water and its management up the resource chain and the chain of government.* Commonly referred to as the rule of subsidiarity, both community driven development and water professionals advocate managing resources (e.g., water) at the lowest appropriate level. Therefore, water user associations may manage and maintain a community water pump or a section of an irrigation system. Local government may maintain or collect fees for a group of communities or farm systems in its jurisdiction. Decentralized subnational government may monitor water usage and arbitrate on water conflicts within its jurisdiction. The national government may set water policy and an operating framework for the country as a whole, in addition to negotiating with other national governments that compete for a water source—such as in the Nile river basin.
 - *Approaching monitoring & evaluation as a management and learning tool.* The Bank and its donor partners are focusing more on the need for effective monitoring and evaluation systems to measure progress toward corporate and the Millennium Development Goals, as well as to measure project and policy results in order to guide needed changes. M&E is coming to be seen as a management and learning tool that allows all project stakeholders to be flexible and quickly improve as problems arise. Many projects are focusing on appropriate benchmarking to accurately measure the impacts of operations on physical targets and outcome goals. It is critical to spread the monitoring system to all levels—donor, country, subnational government, and communities using participatory M&E techniques.
 - *Focus on capacity building of all stakeholders.* When the Bank began using the community driven approach, most projects focused on the need for capacity at the local level. This often meant a mismatch of expectations and practices between communities and government officials, especially line ministries. The CDD approach means a realignment of the duties from the local to the national level; it does not mean that governments take a hands-off attitude.
 - *Plan for a long-term presence.* As stated earlier, while the CDD approach to get water to communities is effective, it is not a short-term approach. Developing and strengthening institutions and organizations is a long-term process that can fail if due attention is not given over the long run. Audits of Bank projects have found few community groups enduring beyond the life of projects when support to organizational capacity ended with the delivery of water service with the completion date of the investment project.
 - *Harmonize approaches between the Bank, other donors, and NGOs.* One of the biggest challenges for Bank projects using the CDD approach is to coordinate their activities with other donors and NGOs. Too often, each actor has its own analysis tools, rules for participation, flow of funds, etc., which results in a burdensome and confusing process for communities and local governments. One quick solution is to have each donor or NGO focus on a different geographic area within a country, but that still does not present a clear process for the government to adopt and institutionalize. Harmonization efforts between donors, NGOs, and governments must be seriously addressed.

Conclusions: actions for success

Using the community driven approach to reach specific sector objectives requires a new approach to development that is different from the exclusive focus on government as provider. Achieving sustainability and scale in the community driven approach requires; however, new actions from donors and developing countries; otherwise it will not be sustainable.

For policymakers

- Act as political champions for reform. There will be resistance to change. “No matter how inefficient systems may be, there are always those who benefit from these inefficiencies and who therefore oppose change.”⁸
- Combine decentralization of responsibility with decentralization of fiscal resources, so local jurisdictions can feasibly carry out their role.
- Realign incentive structures that reinforce inefficient actions by sector staff and governments.
- Pass legislation that allows communities, NGOs, local government, and the private sector participate equitably in the new service delivery system.
- Policymakers should promote new innovative management approaches and fully adopt the management systems that are best for their country.
- Plan for prolonged effort and gradual change – reform and results will not happen overnight.
- Line ministry staff need training in participatory approaches and demand oriented service provision.
- Empower implementing agencies to coordinate donor activities in a particular sector and/or region. Try to avoid duplication efforts, conflicting approaches, and the administrative burden of too many processes.
- Do not expect immediate results in institutional reform. The community driven approach can represent a rather radical change from the status quo. This is a process that takes time.
- Insist on the creation, and operation, of effective monitoring and evaluation systems, and adjust policy programs based on what is learned in these systems.

For Donors and the Bank

- Allow the client—national to community level— to take the lead establishing the reformed system. If there is no sense of ownership at the local level, sustainability is at risk.
- Harmonize approaches to working with communities and local governments so as not to duplicate efforts or create an administrative burden on the clients. Facilitate the country’s leadership in setting fair “rules of the game” and be flexible enough to work within reasonable rules.
- Include working with local governments and line ministries as part of the long-term vision of a community driven program. Bypassing the government with parallel structures can drain any existing capacity from the system and is antithetical to scaling up. The country – the government – must adopt the CDD principles and make them part of their system in order to achieve scale.
- Provide mechanisms and incentives to work across sectors —streamlining operations through mechanisms like multi-sectoral funding windows, instead of supporting separate sectoral programs that can lead to confusion among beneficiaries.
- Build the capacity and understanding of client countries through training, study tours, and effective communication.
- Facilitate capacity building of staff to learn new ways of doing business – emphasize training, documenting experiences and lessons, and formal and informal knowledge exchange across regional and sectoral boundaries within the organization.
- Emphasize the importance of exchanging information and knowledge between organizations to enhance the learning by doing nature of this approach.
- Plan beyond the typical project timespan. Three of the cases discussed above —Albania, Ghana, and Turkey—all discuss projects in sets of two. The typical life of a World Bank project, and that of other donors, is not long enough to achieve sustainable institutions. In the Bank, APLs are being used more often to stretch the intervention to work at the pace of communities and governments.

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Notes

¹ Briscoe, John and David de Ferranti. 1988. *Water for Rural Communities: Helping People Help Themselves*. Washington, D.C.: The World Bank.

² World Health Organization Fact Sheet No. 112. www.who.ch

³ Briscoe, John. 1994. *Implementing the New Water Resources Policy Consensus: Lessons from Good and Bad Practices*.

⁴ Talib Esmail. Correspondence dated 7/01/2002

⁵ World Bank. 2002. *Water Supply & Sanitation. fpsi Strategies for Africa*.

⁶ Global Environment Facility. 2002. *International Waters Good Practice Note: Using Community-Based Approaches*.

⁷ Summary information provided by SASRD and Parameswaran Iyer, Senior Water & Sanitation Specialist, Water and Sanitation Program.

⁸ Briscoe, John. 1994. *Implementing the New Water Resources Policy Consensus: Lessons from Good and Bad Practices*.