



Taking sustainable rural water supply services to scale: where are the bottlenecks?

Jennifer Davis and Param Iyer

What do we mean by scaling up? Should it always cover everybody? What happens when the resources available for a pilot project are not there for wide-scale application? What can be done to combat resistance among field staff to the institutionalization of a new approach? This article looks at the terminology of scaling up and explores some of the obstacles commonly encountered.

The term 'scaling up' is used with a variety of meanings, the most common of which is simply to expand a given initiative to benefit a larger number of individuals. Our conception of scaling up in rural water supply comprises two elements:

- **Inclusion.** The vast majority of the target population is provided with sustainable, improved services within a reasonable time frame. Inclusion should not necessarily be equated with full coverage, however, as will be discussed in the following section.
- **Institutionalization.** A system of actors and institutions (public, private and/or civic) is in place with the necessary capacity and resources to deliver sustainable rural water supply (RWS) services indefinitely.

Clearly each of these criteria has a subjective component, which leaves room for disagreement about the 'scalability' of a particular RWS initiative in a particular context. At the same time, focusing on what is *easy* to measure (e.g. construction milestones) can divert attention from what is *important* to measure. In the case of RWS, this is arguably the extent to which a set of policy, institutional, financial and human-resource supports has been established, such that an effective approach can operate indefinitely and can reach the entire target population.

This article, which identifies some of the bottlenecks in achieving such coverage, is based on a literature review and approximately 50 interviews with

practitioners, decision makers, and other key informants involved in this process.

Who comprises the target population?

Any discussion of scaling up RWS initiatives invokes the notion of a target population, that is the set of persons to whom improved services are expected to be extended. RWS planning often gives scant attention to this issue. Instead, the launch of an RWS initiative typically involves estimating existing service coverage levels and assuming that all unserved rural residents are members of the target population. Setting aside the difficulty of obtaining reliable RWS coverage statistics, this approach employs two problematic assumptions. First, households deemed to have access to some type of improved service are excluded from the target population, whereas they may want (and be willing to pay for) a higher level of service. Second, given a set of requirements for participation in an initiative, not all eligible households will want to participate.

The case of Bolivia helps illustrate these points. At the start of the World Bank-assisted Yacupaj pilot project in 1990, Bolivia's rural population was 2.76 million, of whom 24 per cent (662 000) were considered 'covered' by improved water and sanitation services.¹ The project had a target population of 115 000 unserved rural residents. Of these, roughly 61 000 (53 per cent) received improved services through the

project. How should the remaining 54 000 residents be classified when planning to scale up the Yacupaj project into a national programme?

The typical approach would be to consider them as remaining members of the target population. Yet surveys suggest that the vast majority (about 85 per cent) of these residents did not have effective demand for the project; in other words, they were satisfied with their existing service levels, or were unwilling or unable to meet the project's cost-sharing requirements for service improvements. Effective RWS planning must grapple with the fact that some proportion of unserved households should not be considered part of the target population. Alternative strategies, either within the RWS sector or apart from it (for example poverty-reduction programmes), will be needed to attain the universal service goals so often articulated by government.

Accepting the notion that successful RWS initiatives exist, our interviews and literature review yielded four broad explanations for the failure to take them to scale: resource constraints, a lack of shared understanding, resistance and untested implementation conditions.

Resource constraints

Resource constraints – in particular, insufficient financial resources, a lack of human capital, inadequate institutional and organizational capacity, and weak supply chains – were the most



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commonly cited bottlenecks to scaling up in RWS among respondents we interviewed. In addition, several respondents noted that the considerable amount of 'off-the-books' resources often afforded to pilot communities makes it exceedingly difficult to carry out an accurate analysis of a project's financial 'scalability'.

In El Salvador, for example, the first phase of a national RWS programme, PROSAGUAS, implemented by the NGO CARE provided improved service to more than 130 000 rural residents. Evaluators gave the programme high marks for sustainability after five years, crediting the high degree of community participation and focus on financial management and administration. As one staff member noted, however, PROSAGUAS enjoyed a 'Cadillac' approach to RWS, and its true costs were not captured in the official documentation. 'The costs of making [the water systems] sustainable were prohibitively high to think about taking the approach to any sort of scale'.

No shared understanding

A second challenge for scaling up concerns the extent to which key stakeholders responsible for expanding an RWS initiative share a common view of its objectives and elements, as well as the roles and responsibilities of relevant actors. For example, in launching India's Sector Reform Programme (SRP) the Government of India held

three-day training workshops for key implementation personnel in pilot districts. Despite these efforts, a subsequent assessment of the programme identified a 'lack of clarity' regarding roles and responsibilities of implementing institutions as a key obstacle to progress in the SRP.² 'In many instances, the work on the SRP has come to a standstill awaiting guidance from state- or district-level institutions,' the review notes. Where a shared understanding of programme elements is absent, scaling up will either be slowed, or may proceed without much of what made it effective in the first place.

Resistance

Whereas a majority of our respondents could cite strategies they have used to address resource and knowledge constraints successfully, our third 'bottleneck' category – resistance to change in RWS service delivery systems by key stakeholders – elicited a palpable sense of frustration and far fewer solutions from practitioners and decision makers. Resistance impedes scaling up in rural water supply at two principal junctures: with the decision to adopt a new RWS planning approach and associated policy reforms, and in the launching of new procedures, training and activities during implementation.

Most of our respondents agreed that new approaches to RWS planning must be championed by one or more influential decision makers for them to be

adopted at the national level. This was felt to be true irrespective of the extent to which empirical information indicates that the approach is successful on the ground. 'Information from the pilot is used by your champion to convince others, so it is definitely essential,' one bilateral staff member working in South Asia explained. 'But without the champion, no amount of data from the pilot will convert other decision makers.' An advocate is important for increasing awareness of and negotiating co-operation with a new RWS initiative among key stakeholders; she or he also serves as a scapegoat in the event of programme failure.

Respondents expressed less consensus regarding resistance from stakeholders responsible for implementing a new RWS approach. Some felt that the greatest challenge is to encourage rank-and-file staff to accept new responsibilities. Others felt that greater resistance emerges among senior staff facing a reduction in their scope of work. 'It is equally as challenging to help an institution to do less as it is to help another do more,' a government official in Kerala, India, observed regarding the Kerala Water Authority (KWA). Whereas KWA has managed both urban and rural water and sanitation services in the state since 1984, it is now expected to withdraw from RWS service delivery and provide technical backstopping to district governments who are assuming responsibility for service delivery. Leadership of the KWA is now grappling with the changes that this new relationship to local government implies for staffing and skill development requirements.

Untested implementation conditions

It is often the case that, when extended to new areas/communities, a successful RWS initiative encounters difficulties because of unique features (for example, technical, social, policy, user demand) not confronted in the pilot communities. When selecting communities for the pilot stage of a large RWS initiative, programme architects ideally choose a set that is fairly representative of the entire target population with respect to: technical challenges; the socio-cultural profiles of communities; priorities,

preferences, and demand for improved services among residents; and the capacity of key institutions.

Representativeness, however, was not named as an objective in first-stage RWS planning by any of our respondents. Instead, decision makers and practitioners said that the areas selected were chosen because 'that's where we knew [the approach] would work,' or where 'we could negotiate political commitment' to the approach. In India, for example, the Water and Sanitation Programme advised that 'sector reforms will be easier in single source villages, and districts should be encouraged to select habitations with this in mind.' This strategy of 'picking the low-hanging fruit' can be effective in garnering support for scaling up a new RWS approach. At the same time, that approach is tested in places where technical, financial, political and social challenges are minimized, rather than against a range of conditions that better reflect the 'real world' circumstances of the target population.

Many RWS pilots are also carried out in an insulated institutional and policy environment as compared to that of their target populations. Pilots are often granted policy exceptions (for example, with respect to subsidy limits and technical standards) that allow progress to be made quickly, without the lengthy negotiations that typically accompany policy changes. In order to scale up, however, a national policy framework that addresses ownership of systems, authority for planning and budgeting, tariffs and cost sharing must eventually be established and aligned with provincial, state and local policies. This unified policy framework is often slow to emerge. As a result, scaling up is regularly impeded by a new RWS approach co-existing with other strategies that place different requirements on users or implementing personnel.

In South Africa, for example, staff of the Mvula Trust felt that their policies of using low-tech, inexpensive approaches and requiring 5 per cent of capital cost-sharing by users were undermined by the newly created government Department of Water and Forestry, which installed more costly systems with no user contribution. One former Mvula associate recalled that 'there were . . . cases in which we were

asked why we were charging more to deliver less. . . . It is not a very satisfying answer to say "Just wait, and in the long term you'll see why this approach is better".'

It is important to note that the 'artificial' conditions under which many first-stage RWS initiatives are carried out are often created in response to resistance, resource constraints, or the need to develop a shared vision regarding a new approach to service delivery. Many respondents we interviewed felt that supports such as donor-organized supply chains and 'policy holidays' are needed to establish early success with, and generate support for, a new RWS service delivery approach. Others were sceptical that government officials will follow through with lasting policy reform once a new approach is demonstrably successful. A consultant working in Brazil remarked: '[The government] wants the funding and will agree to anything as long as it's small enough to be off the political radar . . . The pilot could be very successful, but it will never go any further than that.'

Recognizing that the choice may be one between an 'insulated' first-stage RWS initiative and none at all, it seems clear that the likelihood of scaling up is inversely related to the degree of artificiality of institutions and organizations, as well as to the extent of non-representativeness of communities involved in the pilot phase.

The way forward

Whereas these challenges are clear with hindsight, the rural water sector is in need of guidelines in advance for building 'scalability' into project and programme design. At present, scalability appears to be an objective that is distinct and secondary to making a pilot initiative successful, rather than a design criterion receiving consideration from the start. As one World Bank respondent noted, 'Most of these [rural water supply] projects didn't expand because they were never designed to.' Most practitioners we interviewed expressed a pressing need for concrete suggestions about addressing many of the obstacles to scaling up, particularly those related to generating political consensus and overcoming the resistance of implementing organizations. Many noted that



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the 'best practice' literature gives scant attention to such challenges, while the prescriptive literature is too general to be of practical use. Developing a series of case studies that focus on issues of scalability – including candid and detailed discussion of both successful and failed strategies – would be a valuable contribution toward the development of guidelines for planning more scalable RWS initiatives.

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About the authors

Jennifer Davis is Assistant Professor of Urban Studies and Planning in MIT's Department of Urban Studies & Planning (jd@mit.edu); Param Iyer is Senior Water and Sanitation Specialist, Energy and Water Department, The World Bank.