



# **Scaling Up Community Management of Rural Water Supply**

**Thematic Overview Paper by Harold Lockwood**

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IRC International Water and Sanitation Centre

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Please note that the TOPs are a web-based series. However, we feel that those who don't have access to the Internet should be able to benefit from the TOPs as well. This is why we have also made them available as paper versions.

The structure of the TOP web pages is different from that of the paper documents. We have tried to accommodate that by placing the links in footnotes of this document and also by placing information that is not part of the running text of the web version, in the annexes of this paper version.

However, you may still come across some sentences or paragraphs that seem a little strange in this paper version. If you do, then please keep in mind that the TOPs are primarily intended to be web pages.

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## **Thematic Overview Papers (TOPs): an effective way to TOP up your knowledge**

### **Do you need to get up to speed quickly on current thinking about a critical issue in the field of water, sanitation and health?**

Try an IRC TOP (Thematic Overview Paper). TOPs are a new web-based initiative from IRC. They combine a concise digest of recent experiences, expert opinions and foreseeable trends with links to the most informative publications, websites and research information. Each TOP will contain enough immediate information to give a grounding in the topic concerned, with direct access to more detailed coverage of your own special interests, plus contact details of resource centres or individuals who can give local help. Reviewed by recognised experts and updated continually with new case studies, research findings, etc, the TOPs will provide water, sanitation and health professionals with a single source of the most up-to-date thinking and knowledge in the sector.

### **Contents of each TOP**

Each TOP consists of:

- An Overview Paper with all the latest thinking
- Case studies of best practice
- TOP Resources:
  - links to books, papers, articles
  - links to web sites with additional information
  - links to contact details for resource centres, information networks or individual experts in your region
  - a chance to feedback your own experiences or to ask questions via the Web.

To help those who have little or no access to the Internet, the TOPs will be available in hard copy format too. IRC will produce printed copies at intervals, and the website will contain a .pdf version of the most up-to-date version, so that individuals can download and print the information to share with colleagues.

The TOPs are intended as dossiers to meet the needs of water, sanitation and health professionals in the South and the North, working for national and local government, NGOs, community-based organisations, resource centres, private sector firms, UN agencies and multilateral or bilateral support agencies.

Not all the information will be of interest to everybody. The strength of the TOPs is that you can easily find the parts that matter to you. So, if you want to be up-to-date on what is happening in this important sector, don't search around aimlessly; go straight to the TOP!

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## **How to make the most of this TOP**

IRC's Thematic Overview Papers (TOPs) aim to give their readers two kinds of help:

- Easy access to the main principles of the topic — in this case Scaling up community management of rural water supply — based on worldwide experiences and views of leading practitioners
- Direct links to more detailed explanations and documented experiences of critical aspects of the topic on the world wide web

You'll find the main components of this TOP in the menu. If you want to read the TOP from start to finish go to the Introduction and click on 'continue' or 'read on' at the bottom of every page. This will take you through the whole TOP. If you wish to short-circuit the full read, the menu on the left allows you to hop to any special area of interest you may have within the TOP.

As you read, you will find various temptations to link to other documents with useful and more detailed advice or experiences. In most cases, the underlined link will take you first to an abstract on this website telling you more about the linked document. You may then decide whether to let your browser take you to the full reference for reading, printing or downloading.

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## 1. Introduction

### *The people's way to progress*

Among the United Nations' Millennium Development Goals (MDGs) for the year 2015 is a commitment to “*reduce by half the proportion of people without sustainable access to safe water*”. There is little doubt that community management will be the predominant model for those striving to reach that goal by bringing sustainable water supplies to hundreds of millions of rural people in the next twelve years. Two decades of experience with participatory approaches, decentralization, cost sharing and technological adaptation mean that donors, NGOs and national governments have all the evidence they need that demand-driven community-led approaches delivers better results than the supply-driven government-led models that prevailed up to the 1980s. There remains a place for public and private utilities to deliver rural water supplies in the right circumstances, but it is community-managed systems that will best meet the needs of the vast majority.

### *The scale of the challenge*

Knowing the right way forward is one thing, but achieving the rate of progress needed is quite another. The MDG translates into a target of 280,000 new water users every day for twelve years. That is an awful lot of projects and programmes under way, all demanding human, financial and technical resources. So far, community-management projects have been mainly small in scale and highly repetitive in the essential elements of mobilisation, participation, needs assessment, willingness-to-pay surveys, capacity building and, eventually, project implementation. We simply do not have the time and resources to continue with this intensive approach to building new systems. We must also address the need to provide on-going support to the many existing systems, which may otherwise fail prematurely. As well as “replicating successes”, which has been a rallying call in the last decade, we need to concentrate on “scaling up” the community-management model to bring concurrent successes to many communities at one time.

### *From bottom-up to worldwide*

Having spent two decades learning how to bring decision-making and implementation down to the community level, it may seem inherently contradictory to advocate for scaling up community management. This is not necessarily the case. Shared experiences, common support structures, streamlined financing, and multi-level institutional linkages are among the mechanisms that can be part of the scaling up process. Some countries and some agencies have made bold attempts to go to scale with community-managed RWS programmes. Their experiences hold valuable lessons for others. In this TOP, we draw on those experiences to identify the main challenges and some hopeful ways of addressing them.

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There is still much to learn about scaling up and it is not the aim of this TOP to provide in-depth analysis or detailed guidelines about how to implement scaled up community management in practice. We do not attempt to provide all the solutions to the challenges of scaling up. Rather, the objectives of this TOP are:

- To provide an introduction and overview of the topic of scaling up, with a particular emphasis on community-management approaches.
- To provide a guide to the current status of the topic and highlight some of the more important work that still has to be done in the near-term to promote scaling up.
- To serve as an advocacy tool, or resource, for those individuals and organisations interested in promoting the scaling up of community management of rural water supply.
- To provide details of the institutions and individuals currently working on the topic and links to the main websites, reference documents and resource materials.

The potential audience includes a range of individuals from a variety of organisations and institutions, engaged in either direct implementation or broader policy development, such as:

- Planners working in national level agencies, ministries or institutions responsible for RWS provision;
- Staff from national and international NGOs working on RWS programmes that operate at national or significant regional levels;
- Policy makers working at national level on the development of sector reform and legislation for the RWS sector, from relevant line ministries, planning and finance ministries or local government institutes;
- Staff from bilateral donors supporting and shaping the design of RWS programmes;
- Officials from multilateral lending institutions, such as the World Bank, responsible for the design of RWS loan packages;
- Members of research organisations and specialist institutes working in areas relating to RWS.

#### *What do we mean by “scaling up”*

Meeting the MDG targets in the given time frame presents two key challenges to the rural water sector:

- To expand coverage rates rapidly to meet the needs of the millions of people who currently go without safe drinking water; and
- To make sure that the successful, sustainable approaches to providing water supply services that are currently “islands of success” can be maintained at this expanded scale.

With so much ground to make up it is clear that something has to change in current approaches and practices; it is time to re-assess the way in which we do business to meet the demands of those living without proper access to safe drinking water. Although it is not

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the only model, community management is now well established and is strongly advocated by IRC and a range of other institutions involved in the sector. Community management is therefore the central focus of this TOP.

Regardless of the preferred route to scaling up, there are many common objectives and it is useful to consider from the outset what we mean by this concept. Box 1 draws on definitions from a number of sources:

Box 1: Scaling up of community management of rural water supply means:

- Maximum coverage within a geographic area to serve the entire population; this implies setting strategic targets at 100%.
- Improved, sustainable services are provided to the vast majority of the target population within a reasonable timeframe.
- Ensuring adequate, sustained capacity is built up at the community level to effectively manage water supply systems.
- Scaling up of institutions and frameworks which support community-management as well as simply expanding physical coverage.
- Changing the focus from implementing discrete water supply projects to the provision of indefinite water supply services.

Sources: IRC; [www.irc.nl/scalingup](http://www.irc.nl/scalingup); Davis and Iyer; 2003

The challenge is to translate the successful, but limited, experiences in providing sustainable RWS to hundreds of thousands into ways of reaching the hundreds of millions of rural people who currently do not have access to adequate services.

#### *Focus on rural populations*

This TOP relates specifically to the rural sector. The United Nations Population Division defines a rural population as: “the difference between total population and urban populations” where *urban* is classified according to the criteria used by each area or country<sup>1</sup>.

This definition is complicated by the fact that non-urban areas often include towns, which can have urban characteristics. In assessing the rural context for scaling up, we argue that definitions should be flexible and should be prescribed locally. This can vary from country to country from an absolute population level (i.e. all communities with less than 5,000 people are considered to be rural), to a much more open-ended definition, where all communities outside the principal municipal or district town are considered to be rural.

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<sup>1</sup> <http://esa.un.org/unpp/glossary.html>

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## **How the TOP is organised:**

The rest of this TOP consists of five main sections. Each can be read as a stand-alone piece, or they can be read in sequence, or by dipping in and out of those sections which are of greatest interest by following the links below:

**The Community Management Model:** provides some of the background and past trends in management models in RWS and considers the significance of the community management approach, as well as its limitations and the importance of long-term institutional support (read on).

**The Theory of Scaling Up:** in this section we consider the basic concept of scaling up, drawing on lessons from other sectors and explain some important principles and trends which are seen to affect the process of going to scale. We look at the main elements of scaling up and also consider the critical question of financing (read on).

**The Practice of Going to Scale:** this section looks at the practicalities of scaling up. To do this we examine a number of case studies and try to draw out a number of early lessons as well as identifying some of the key challenges. We then put forward some suggestions about how the process of scaling up might look, the potential models and the time frames involved (read on).

**The Road Ahead:** here we map out where we are in the sector in terms of scaling up, which institutions are doing what, and what more can be done to promote scaling up as a reality in the near future. We review current research and advocacy efforts, look at the development of case studies and highlight the issue of cooperation between stakeholders at all levels (read on).

**Resources and References:** this final section provides a “top ten” listing of literature, websites, individuals and organisations that have been working on scaling up and also includes the full list of references from which we have drawn the material in writing this TOP (go to Resources and references).

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## **2. The community management model**

### **Summary points**

- Community management has become the leading concept, or model, for implementing water supply projects in rural areas in developing countries.
- The model has developed over the last two decades and is a direct result of the broader transition from centrally planned, or supply-driven, approaches to those based on demand.
- The basic principles of community management include participation, control over decision-making, ownership and cost sharing. Community management is viewed as central to long-term operation and maintenance.
- Implementing projects using the community management model is generally more time-consuming and complex than traditional approaches in which there is minimal community participation.
- The benefits of adopting the community management approach are well documented and tend to result in better performing water supplies which benefit a greater cross-section of the population.
- In spite of the many positive examples of community management there are still problems in sustaining services over the long-term and it is now accepted that the model has its limitations.
- It is increasingly recognised that the majority of communities cannot maintain their systems alone, and that they require some form of external assistance over the longer-term.
- Support for communities can be provided by a range of institutions, from national and local government, to the private sector, NGOs or self-help associations.
- In order to be effective, institutional support to communities also requires supportive sector policies and regulations, clearly defined roles and responsibilities and consistent financing.
- The focus of investment in RWS projects has so far been almost exclusively at the level of the community itself for implementation.
- There is an important “intermediate level” of actors between the community and national level, which is now seen as the key to supporting the community management model. These actors require investment and capacity building along with efforts at the national level to reform sector policies.

### **The community management model**

Community management (CM) of RWS is now in its second decade as a leading paradigm for water supply development and management. CM approaches did not appear spontaneously, nor do they exist in a vacuum. They emerged from a history of trial and error in the rural water supply sector and are linked to, and affected by, developments in many other sectors particularly those related to more general rural development. The rural

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water supply and sanitation sector itself gradually emerged in the two decades prior to the 1980s International Drinking Water Supply and Sanitation Decade (IDWSSD).

*From supply-driven to demand-led approaches*

During the 1960s and 1970s, international and national efforts focused largely on increasing coverage through so-called “supply-driven” approaches. These assumed that governments knew what was needed and could provide the maintenance and management capacity required (Nicol, 2000:9). In most cases, the only solutions international donors had to offer were complex and only affordable to an elite minority, leaving a large majority of people without services of any kind: *“The vast majority of those without water and sanitation services were poor, and the countries in which they lived were frequently water short and had little to spend on public infrastructure”* (Black 1998:4).

During the IDWSSD the concepts of community participation and the promotion of appropriate technologies became established as part of efforts to meet the optimistic targets of “water for all”. Although the IDWSSD failed to meet these targets, the concept of community participation was extended to include operation and maintenance and, most importantly, cost-sharing of water supply systems. This idea marked an important step towards basing the provision of services on *demand*, rather than the conventional supply-driven model, and complemented efforts to create ownership of services on the part of communities (Nicol, 2000:10). During the 1980s and 1990s a variety of different actors, with very different agendas signed up to community management concepts:

- **Governments** saw community involvement as a way of reducing demands on over-stretched resources and making up for lack of capacity. As one commentator states: *“government’s inability to build and maintain water supply infrastructure has been (one of) the major factors leading to the promotion of community participation”*(Carter et al, 1999:12).
- **Donors** saw an opportunity to stretch development budgets and expand implementation of water supply and sanitation facilities, and to bypass the problems posed by inefficient and often corrupt governments.
- **Non-governmental organisations** became the voice of the community and happily seized an opportunity to increase their role, becoming in many countries a parallel provider of services and, in that respect, a kind of parallel government.
- **Multilateral lending institutions** such as the World Bank saw CM as an ideal vehicle for their messages about reduced government involvement, and increased private sector and civil society roles.

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The general transition from supply to demand-driven approaches also fits with broader trends towards decentralisation of government services and transfer of responsibilities to lower levels of government and ultimately to communities themselves (Nicol, 2000:10). This is most applicable in countries where the decentralisation process is at a more advanced stage and where local tiers of government have greater capacity. At the same time, community management is also seized upon as a solution in countries where government is weak or non-existent, or where communities are forced to be more self-reliant because of on-going conflict. In these cases, water supply is delivered by projects in which full responsibility for management falls on the community by default.

### *Community Management is not the only model*

Whilst CM in one form or another is now the most practised model, it is important for us to recognise that it is not the **only** model for rural water supply. Other options do exist and may become more relevant as demand for more sophisticated systems and higher service levels increase. More complex systems may well build on and include aspects of community control and management, but they will probably also include combinations of management responsibility: private sector, public sector and community. The choice of management model will also depend on other factors, such as governance structures and population densities. In some instances, CM may not be the most appropriate option, for example in small countries, island states or water supply systems based on large and complex networks serving many communities.

### **Defining the community management model**

In practice, the CM concept means different things to different people. At one level it can be used as a means of valorising labour inputs or locally procured materials in project budgets, with no corresponding transfer of authority or decision-making power devolved to the community itself. At the other extreme, the community management model can enable people to take control of the operation and administration of their own RWS system completely and indefinitely. So what do we mean exactly by community management and how do we define the essential components that make up this management model?

In the new IRC book on scaling up service delivery for community management, Schouten and Moriarty propose a key distinction between strategic decisions about how a service is developed and the “nuts and bolts” of day to day operational issues. They go on to say: *“We believe that community management is..... about communities making strategic decisions: what level of service they want, how they want to pay for it, where they want it. The community may also be involved in day-to-day operation and maintenance, in collecting money from users and in buying spare parts, but they do not have to be. They may choose to hire a professional to do this for them. Community management is about power and control”*. (Schouten and Moriarty, 2003). Although different organisations propose slightly varying definitions of community management, many share the same elements and we can identify a number of common principles, described in the box:

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Box 2: Common principles of community management:

**Participation:** for effective CM to be in place, a cross-section of the community must participate in the development process; there must be broad community support for the implementation of CM models. Community participation must continue indefinitely.

**Control:** the community must be in direct or indirect control over the operation and management of its own water supply system, where control is understood to mean the ability to make strategic decisions about the process, from the design phase to long-term O&M.

**Ownership:** although formal legal ownership of physical infrastructure is highly desirable, it may not always be possible in existing legal frameworks. Of equal importance is the perception of ownership by the user community.

**Cost sharing:** closely linked to the question of ownership, is the need for some element of contribution to the recurrent costs of running and maintaining the system; depending on individual circumstances, contributions need not always be financial in nature.

Sources: IRC <http://www.irc.nl/manage/whatisit/elements.html>

WEDC <http://www.lboro.ac.uk/wedc/conferences/23contents.htm>

If there is general agreement on the principles of CM, what does this model of management aim to accomplish and why do we consider it to be so important? Again, there are a number of different interpretations when considering the CM goals, but they share three broad objectives:

- **Empowerment:** for many organisations, and particularly the NGO community, one of the underlying aims of CM is broader community empowerment and self-improvement. Water supply projects are often seen as the entry point into building up capacity more generally.
- **Efficiency:** CM also serves a utilitarian function and is viewed as a means of increasing the efficiency of service delivery. By leveraging the resources of literally millions of communities around the world, through the use of human capacity, volunteer time and material inputs, financial resources go further.
- **Sustainability:** lastly, and for some people most importantly, the aim of CM is to guarantee the sustainability of RWS services. The principal argument in this case is that by being in control of the process of service delivery, communities will have a vested interest in seeing that the service, and its commensurate benefits, continues indefinitely.

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*All communities are not equal*

Whilst we may be able to identify a generic definition of CM, the reality of this model, and indeed of communities themselves, is far more complex. To begin with we must recognise that communities vary enormously according to country context, culture, religion, history and population. Economic factors, such as temporary migration and other external forces such as administrative definitions will also shape the make up and identity of communities. In short, there is no single definition of “the rural community”. For example, a comparison between a community in rural India and one in rural Costa Rica is useful to illustrate the differing nature of communities: are we considering a village of 500 or 5,000?

Differences exist not only between rural communities, but also within them. Differences and inequalities within communities can be based on wealth, gender, age and on grounds of ethnicity or religion. It is only logical that such differences will be reflected in the composition and hierarchy of CM structures. These trends need to be understood on a context-specific basis, especially where government does not provide or enforce guidance or legislation to address the inequalities.

*Delivering the community management model in practice:*

The CM model has now been adopted as standard practice by many donor organisations, NGOs and national governments. This has meant a shift away from prescriptive or blueprint project planning towards a process-orientated and flexible approach, in which the community is a major stakeholder, rather than a passive subject. For many practitioners, and especially government officials and staff, this has been and remains a major and difficult change in mentality.

Many different methods are used during project implementation to strengthen the capacity of communities to manage their own systems. They include:

- use of participatory approaches in planning, decision-making and construction;
- involvement of all community members, both men and women;
- establishment of new management structures, or strengthening of existing ones;
- a continuous process of training and skills transfer throughout the project cycle.

Many of the principles of the CM model are encapsulated in the Demand Responsive Approach, or DRA, which is now widely accepted in planning and executing RWS projects (see box 3 below). Implementing CM demands new skills of project field staff, particularly in areas such as facilitation, communication and training in non-technical areas. The whole process is generally more time-consuming than traditional supply-driven approaches, in which there was minimal involvement of the community. Above all it requires a change in perspective about the way governments and other outsiders interact with rural communities.

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## **Benefits and limitations**

The CM model brings many benefits. It has been seen as an answer to the failure of previous, supply-driven approaches to providing RWS services, which often did not meet the real needs of users and resulted in systems which broke down far earlier than the end of the design life. There is now a growing body of evidence to suggest that better quality participatory planning and management leads to better performing community water supplies. (Narayan, 1995; Gross et al., 2001; Wijk, 2001).

However, CM is by no means problem free. Despite strong investment in capacity building in many projects, a significant number of systems still run into problems. Widespread evidence suggests that after a number of years of operation (less in some cases), many rural systems will face a variety of problems and obstacles if they are to maintain services, even under the CM approach.

Broadly speaking we can identify two sets of factors that can lead to problems for community-managed RWS:

- Limitations within the community: community dynamics, political or social conflict, failure to generate sufficient tariff revenue, lack of preventative maintenance, lack of cohesion and lack of capacity (technical, managerial, financial etc).
- Constraints external to the community: poor designs, poor implementation, political interference in planning and resource allocation, lack of spare parts supply, lack of supportive policies and legislation and, very importantly, the lack of long term support to help communities through major repairs, conflicts and other problems with extension and upgrading.

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### Box 3: Demand Responsive Approaches

In recent years DRA, has become a widely accepted conceptual tool that has been put into practice by many national governments and NGO implementing partners; the development and dissemination of DRA has been heavily supported by the World Bank. The DRA framework is predicated on strong community management and everything that goes with it: internal capacity, decision-making powers and the ability to articulate needs. The key characteristics of DRA can be summarised as:

- Community members make informed choices about: whether to participate in the project; technology and service level options based on willingness to pay (based on the principle that more expensive systems cost more); when and how their services are delivered; how funds are managed and accounted for; and how their services are operated and maintained.
- Government plays a facilitative role, sets clear national policies and strategies, encourages broad stakeholder consultation and facilitates capacity building and learning;
- An enabling environment is created for the participation of a wide range of providers of goods, services and technical assistance to communities, including the private sector, and non-government organizations; and
- An adequate flow of information is provided to the community, and procedures are adopted for facilitating collective action decisions within the community.

The increasing adoption of DRA as an approach to planning and executing RWS has consequences for efforts at scaling up. As an approach based explicitly on demand, DRA will, by its very definition, exclude those who cannot easily articulate this demand or who are unable to contribute towards an improved service, or who simply do not want the service (Deverill et al 2002). The exclusion of these groups under DRA has significant implications for achieving the maximum coverage targets for scaling up – especially because in most instances it is the poorer and less able communities that will be excluded. Demand has clearly become a leading concept in the implementation of RWS, but whether it is the most useful concept for scaling up requires further research and investigation.

*Source: [www.worldbank.org/watsan/rural\\_dra.html](http://www.worldbank.org/watsan/rural_dra.html)*

It is now increasingly recognised that the majority of communities will be unable to manage their own water supply systems without some form of external assistance. Even with improved approaches focusing on increasing management capacity, it is simply not realistic to expect rural communities to be completely self-sufficient, especially in the first years after the systems have been constructed (see box 4 below). This growing recognition of the limits to CM is based on field-based experience from a wide variety of practitioners and organisations around the world (Blackborough, V. ed, WaterAid, 2001; Rosensweig F., 2000; Lockwood H., 2002; Schouten and Moriarty, 2003).

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Box 4: The limits of Community Management: a lesson from Nepal

“When the system was completed we were happy. We thought that the system would remain in the same condition for our whole lives. We never thought this (failure of the system) could happen. We were never told by the implementing agency that it could happen. The implementing agency just told us ‘now it is yours’, you must look after the system yourself.” Nani Babu Silwal, Chairperson, Lele Water Users’ Committee, Nepal.

*Source: Schouten and Moriarty, 2003*

This issue was widely discussed in the electronic conference on scaling up community management of RWS hosted by IRC in 2002 and a useful concept emerged for explaining the limits of CM and the need for external support to community-managed RWS systems. This considers the limits of the CM model in the following way: rural communities can be expected to handle about 80% of what is required to sustain their systems, but will always need assistance with the remaining 20% of tasks. The percentages are arbitrary and the split will vary by country and region and will depend upon the technology and general levels of organisation within communities, amongst other factors, but this is a useful way of conceptualising the problem.

Rural communities should be able to carry out tasks such as regular preventative maintenance, tariff collection, book-keeping and sanitary inspections. However, when there are major repairs, when specialised tools or major system components are required, or where there is a breakdown of the management structure, some level of external assistance will usually be required.

### **Institutional support for community management**

The idea that long-term support is required to enable the CM model to function effectively has received increasing acceptance over the last few years. Many observers use the phrase “institutional frameworks”, or “institutional support mechanisms” to describe this type of support, which addresses the tasks and activities that the community cannot always be expected to fulfil; i.e. the 20% referred to above.

A recent discussion paper commissioned by the Bank Netherlands Water Partnership (BNWP) also refers to the issue of institutional support to RWS service provision (Davis and Iyer, 2003<sup>2</sup>). Although the World Bank’s approach described in the paper is not predicated on the CM model, it advocates “institutionalization” of capacity and resources able to deliver sustainable RWS services indefinitely (regardless of management model). The institutions that provide such services will vary according to the specific roles and capacities of the different players in RWS in any one country, and will also depend on legal

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<sup>2</sup> [http://www.wsp.org/publications/scaling\\_up\\_press\\_20\\_03\\_03.pdf](http://www.wsp.org/publications/scaling_up_press_20_03_03.pdf)

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mandates and legislative frameworks. The following range of organizations will normally be involved in providing support to rural communities:

- national government line ministries operating either centrally or through regional offices;
- lower levels of local government operating at municipal or district level;
- private sector operators, sometimes small companies, but more likely to be individuals with specialist technical skills or local shopkeepers stocking spare parts;
- national NGOs that have a more or less permanent presence in a region and work in support of rural development initiatives;
- associations of water committees which pool resources and provide support services to member communities and also possibly to neighbouring areas.

In practice it is common to find a number of the above institutions working together to provide support to rural communities. For example, central government may devolve responsibility to local government or may delegate it to a group of NGOs or private sector operators. It is important to recognize that long-term support to communities relies on more than just institutions. It also requires certain mechanisms to be in place to allow these institutions to function properly. These include effective sector policy and legislation, regulation, clearly defined roles and responsibilities and financing mechanisms to support the framework itself, such as central budgetary support, cross-subsidies or user contributions (Schouten and Moriarty, 2003).

We can describe in practical terms what types of tasks may be provided by the right institutional frameworks. A recently published document addressing institutional support mechanisms in Latin America identifies four main functions (see box 5 below). There are a number of different examples of existing institutional frameworks, or support mechanisms, but it is important to note that the design of such frameworks will depend on choices and conceptual entry points. For example, an institutional framework designed in support of CM systems will look quite different from one designed to support a household management model or a rural system managed by a private contractor or local government.

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Box 5: The main functions of institutional support mechanisms for community managed RWS systems

**Technical Assistance:** providing advice and guidance on a range of topics in support of the CM structure, as well as providing independent advice in cases where some form of arbitration may be necessary.

**Training:** on-going training of relevant committee members in a variety of disciplines from physical operation and maintenance to bookkeeping and hygiene promotion; capacity building at the community level.

**Monitoring and Information Collection:** regular monitoring of system performance and feedback of information for remedial action.

**Coordination and Facilitation:** helping to establish linkages between community management structures and external entities, either from the state or private sector.

Source: Lockwood 2002:22; EHP <http://www.ehproject.org>

*The intermediate level – the missing link?*

Many countries have successful RWS programmes established at grass-roots level using the CM model and participatory techniques. Government, NGOs, donors, or in many cases a combination of all three, have pushed these types of approaches forward and they are now considered part of the “best practice” for project implementation. An increasing number of countries are reforming sector policies and putting in place legislation and regulations which seek to support this new way of working.

While national level policies and legislative frameworks are important to support the CM model, it is equally clear that in a decentralising world it is not national level actors who will be involved in day-to-day interactions with communities. The people who do that are those who occupy the intermediate level between national and local. The intermediate level includes all organisations that in some way or other interact directly with a community in the implementation of systems and, perhaps more importantly, in the longer-term process of supporting operation, administration and system renewal.

Generally speaking, in the design of RWS projects, this intermediate level has received limited attention. Now, it is increasingly seen as the “linchpin” between rural communities managing their own systems and national governments, perhaps with sound policies, but too far removed to provide the required institutional support. In the last few years, a variety of actors from the World Bank to NGOs are starting to place more emphasis (and resources) on the capacity building of the intermediate level as box 6 illustrates from the recent work of Plan International in Ecuador.

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Box 6: NGO support to the intermediate level in Ecuador

As part of its commitment to the development of the southern region of Ecuador, Plan International is joining forces with other NGOs and government departments in order to build the capacity of provincial and local agencies responsible for the delivery of water and sanitation services at municipal level. Plan International is part of a recently formed **provincial consortium** which is intended to coordinate actions and manage technical and financial resources in support of the planning and execution of water and sanitation strategies, both at provincial and municipal level.

To date the consortium has managed to achieve the following:

- Maximise limited resources for the design and execution of community-managed water and sanitation projects;
- Unification of the technical design criteria used by a number of different institutions across the province;
- Strengthening of local governments in the execution of their strategic development plans as well as in technical back-stopping;
- Facilitating exchanges of experience and cross-learning between different institutions working in water and sanitation related fields;
- Creation of a provincial survey and design unit, which offers services to member agencies of the consortium, principally the municipal authorities.

*Source: Plan International, Ecuador, 2003; [www.plan\\_international.org](http://www.plan_international.org)*

Given the emphasis on sustainability, the most important intermediate level actors are local-level state agencies, local-level private sector, and local (grassroots) NGOs and CBOs. Because of the short-term nature of projects run by international NGOs and donors, their interaction will usually take place in the implementation phase, or possibly as capacity building agents over the medium term.

Want to find out more about community management? Further information and insights into CM, DRA and long-term institutional support can be found at the following websites:

- IRC International Water and Sanitation Centre: [www.irc.nl/manage](http://www.irc.nl/manage)
- EHP The Environmental Health Project: [www.ehproject.org](http://www.ehproject.org)
- The Water and Sanitation Programme: [www.wsp.org](http://www.wsp.org)
- The World Bank: [www.worldbank.org/watsan/rural](http://www.worldbank.org/watsan/rural)
- Discussion group on DRA: <http://www.jiscmail.ac.uk/lists/dra.html>
- WaterAid: [www.wateraid.org.uk](http://www.wateraid.org.uk)
- Plan International: [www.plan-international.org](http://www.plan-international.org)
- Water, Engineering and Development Centre, WEDC: [www.lboro.ac.uk/wedc/](http://www.lboro.ac.uk/wedc/)

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### **3. The theory of scaling up**

#### **Summary**

- Scaling up is a concept which has been studied and defined in sectors other than RWS; it is not limited to merely expanding size or coverage, but also encompasses scaling up of functions and strategic approaches to service delivery.
- Although the momentum for scaling up is relatively new in the sector, some definitions already exist for RWS, these state:
  - That scaling up must include the majority, if not all, of a target population;
  - That services should be provided in a reasonable time frame; and
  - That there is a corresponding scaling up of institutions and frameworks that support services indefinitely.
- Scaling up of RWS is context specific and there are no blueprint solutions.
- One of the key concepts in scaling up RWS is the transition from a water supply project approach, which is limited in time and space, to a water supply service approach which supports full coverage over an indefinite time period.
- Various benchmarks or targets already exist for RWS service provision; often these reflect political decisions and choices about social equity. Maximum coverage, or 100% coverage, is an explicit target of scaling up, used for strategic purposes.
- Planning for scaling up must start at a level above the community. The district level, or equivalent, is seen as the minimum building block for scaling up; this corresponds to a minimum target population range of between 100,000 and 500,000.
- Scaling up of RWS may also imply an expansion of function to include sanitation and hygiene promotion. The decision to include these elements will be based on management levels, demand, technology and existing institutional responsibilities.
- CM is an appropriate vehicle for scaling up; it is proven to result in more sustainable and better-utilised services. Institutional support is an integral component of the CM model, which is also compatible with the water service approach to scaling up.

#### **The theory of scaling up**

Scaling up is emerging as one of the key issues of the day. The World Bank recently identified scaling up as one of the main challenges to its investment in development programmes (Davis and Iyer 2003:4). But what do we really mean by scaling up and what does it aim to achieve?

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If we consider a generic definition of scaling up, such as that provided in any common dictionary, we see that it refers to increasing the size of, or expanding, a particular process or initiative. However, this type of definition is limited and rather one-dimensional; it does not tell us about how this expansion might occur, or whether it refers to the process, the impact or the scope of the activity.

One of the earlier and more systematic treatments of the concept of scaling up was carried out in relation to the work of NGOs in the mid-1990s (Uvin and Miller, 1996). Researchers considered ways in which NGOs can scale up by increasing the size and number of their programmes, referring to the process as “quantitative” scaling up. However, we can view scaling up not only from a quantitative perspective (expanding the size of a programme and thereby doing more of one activity), but also from other points of view, such as scaling up the functions of an organisation (expanding the range activities that are being done). The authors describe four main types of scaling up relating to NGO activities as presented in box 7.

Box 7: Four types of scaling up

**Quantitative scaling-up (structure).** A programme or an organization expands its size by increasing its membership base, its geographic area, or its budgets. This occurs when participatory organizations draw increasing numbers of people into their realm.

**Functional scaling-up (programmes).** A community-based programme or a grassroots organization expands the number and the type of its activities. Starting in agricultural production, for example, participatory organizations move into health, nutrition, credit, training, literacy, and so on, when they add new activities to their operational range.

**Political scaling-up (strategy).** Participator organizations move beyond service delivery and toward empowerment and change in the structural causes of underdevelopment, that is, its contextual factors and socio-political-economic environment. This will usually involve active political involvement and the development of relationships with the government.

**Organizational scaling-up (the resource base).** Community-based programmes or grassroots organizations can increase their organizational strength so as to improve the effectiveness and efficiency of their activities. They can do so financially by diversifying their sources of support and increasing the degree of self-financing.

*Source: from Peter Uvin and David Miller, "Scaling Up: Thinking through the Issues," World Hunger Program Research Report 1994-1; <http://www.globalpolicy.org/ngos/role/intro/imp/2000/1204.htm>*

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Academics and researchers have built upon this early taxonomy of scaling up and applied it to other sectors. A more recent publication looking at scaling up strategies for research in natural resources management adopts a useful framework for assessing scaling up which consists of two main axes, “vertical” and “horizontal” (Gundel, S. et al, 2001:7):

- Vertical scaling up is expansion higher up the ladder. It is institutional in nature and involves other sectors/stakeholders – from grassroots organisations to policy makers, donors, development institutions and international investors.
- Horizontal scaling up is the geographical spread and expansion to more people and communities within the same sector or stakeholder group. Achieving geographical spread is also realised through scaling-down – increasing participation by decentralisation of accountabilities and responsibilities.

### **Scaling up community management of rural water supply**

In light of the definitions and types of scaling up from the broader literature provided above, we face a number of critical questions when considering the rural water supply sector:

- Do we simply seek a quantitative, or horizontal form of scaling up - the expansion in numbers of physical water supply systems based on current approaches?
- Do we apply the concept of scaling up only to the construction of new systems, or do we also seek to scale up the capacity to support those projects over time?
- Do we try to scale up in functional terms and expand other aspects of service delivery, for example, by scaling up water, sanitation and hygiene together?
- Or do we seek to go to scale in a more strategic way, by expanding “higher up the ladder” and thereby fundamentally altering the approaches and processes by which water supply services are delivered?

#### *Some early definitions of scaling up of rural water supply*

It is important that we recognise that there is much work being done by a variety of organisations that is very relevant to the debate on scaling up RWS, but which is not necessarily being labelled as such. Consequently, although scaling up is still a relatively new focus for the rural water sector, there is already a body of knowledge and it is useful to consider some existing definitions. The most complete definitions on scaling up of RWS have recently been put forward by two organisations, IRC and the World Bank; these two visions are set out in box 8 below.

There are differences between these two definitions, the principal one being that whilst IRC views scaling up from the perspective of a favoured management model (CM), the World Bank presents a generic definition of how we may understand scaling up. Another

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significant difference is the treatment of coverage, with IRC stating that complete 100% coverage must be an explicit goal of the process and the World Bank arguing that it is not feasible to provide services to the entire population.

Box 8: Definitions of scaling up of rural water supply

IRC has been considering the issue of scaling up for some time, with a particular emphasis on scaling up of the CM model. The following definitions represent a summary of IRC thinking on the issue:

- Scaling up CM can be divided between scaling up in space, or increasing coverage; and scaling up in time, or making RWS services more sustainable.
- For CM to be 'scaled up' requires attention not only to the community but also, and as importantly, to the enabling environment in which the community exists: the laws, policies, institutions and actors who support and build on the community's own capacities.
- Scaling up requires different approaches to implementation, especially a move away from projects towards a service delivery approach.
- Scaling up has the intention of reaching 100% coverage within a geographic area with sustained services.

The recent discussion paper commissioned by the **World Bank** presents a conception of scaling up with two basic elements (the WB definition does not advocate in favour of any one management model):

**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.

**Institutionalisation:** a system of actors and institutions (public, private, and/or civic) is in place with the necessary capacity and resources to deliver sustainable RWS services indefinitely.

*Sources: "From System to Service – Scaling Up Community Management", IRC, 2001 and Davis and Iyer 2003:5*

In spite of the differences, both definitions highlight the important point that scaling up is more than just expanding physical implementation. Scaling up therefore should not just be considered as the "technical" task of increasing coverage in the short-term, but should also address the necessary institutional frameworks which must be in place to support expanded coverage indefinitely. Scaling up can be considered as an expanded level of coverage of services in both space and time. With the latter comes the specific requirement to make water supply services sustainable and this implies supporting action at both community and higher levels, notably capacity building of intermediate institutions.

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To build capacity at intermediary levels implies sharing more resources with them, and inevitably a greater degree of power and autonomy; therefore there is a political dimension to scaling up. While financing will be required at lower levels of government, this can often run counter to the interests of politicians and decision-makers inside central government agencies.

Finally, in trying to define scaling up, we must recognise that this will always be a context specific process, addressing the unique needs and constraints of the particular country or region in question. Therefore, whilst we can put forward a generic definition, it is important to avoid promoting a blueprint approach for scaling up that is overly prescriptive.

*The crucial difference between water supply projects and water supply services*

One of the most important implications raised in these early definitions relates to **how** we approach scaling up of RWS; in this regard there is a fundamental difference between the execution of water supply **projects** and the provision of water supply **services**.

Under conventional approaches water supply infrastructure is generally provided by executing discrete projects or groups of projects in stand-alone programmes. The vast majority of such projects have a limited time frame which, depending on the technology and scale, normally lasts between one and three years. By taking this discrete approach, these types of programmes essentially take a “slice” out of time and tend to ignore past and future needs and activities.

In most instances, conventional project approaches also have a limited perspective in space: that is to say they operate in some communities and not in others. This is due to resource constraints, or to criteria which include some communities and exclude others. In many cases, projects choose not to work in particular areas because they are just too difficult (poor water sources, bad access, on-going conflicts and so forth).

Water supply projects are often implemented or driven by donors and international NGOs who tend to work with an emphasis on their own particular concepts and objectives. For example, some donors put a lot of stress on gender, others on environmental aspects of water supply. Unfortunately, these types of projects often do not coordinate well and there is the tendency to create a parallel structure to government, especially where government capacity is weak. Ultimately of course, (foreign) donors will pull out of a particular sector or country, or will decide to re-direct assistance away from service delivery projects such as RWS. All of these factors contribute to a patchwork of implemented systems in many countries.

The conventional project approach contrasts with the perspective of providing a **water service** which has both a longer time frame and is broader in terms of geographic coverage. Because communities and individuals will always need a water service the time dimension increases from a finite number of years (linked to the project cycle) to the

indefinite future; this implies building service structures not only for execution, but for follow-up support as well.

Although there is a role for NGOs, the private sector and others, service delivery structures cannot be planned and sustained without the leadership and commitment of governments. Active involvement of government is critical both to provide political will and to ensure the creation of an enabling policy environment and supportive legislation, among other aspects. This is a particularly important issue for international NGOs and donors, who often see government as an obstacle to efficient implementation; yet even their long-term presence is no substitute for trying to develop local capacity.

Taking a water service approach does not only change the time dimension. It also changes the space dimension. By this we mean that a service approach looks beyond the focal point of the individual community (or groups of communities) in which a system is being planned and constructed, and instead addresses the support structures needed to cover complete areas. These areas will perhaps be defined at the district level, or municipalities or provinces, depending on the country context.

Box 9: Differing approaches to providing scaled up RWS:

<b>The Water Supply Project Approach</b>	<b>The Water Supply Service Approach</b>
<ul style="list-style-type: none"> <li>• Plans for construction of more RWS projects over time</li> <li>• Operates within a time frame linked to the finite project cycle</li> <li>• Works within defined geographic boundaries and may not seek full coverage</li> <li>• Different donors often work bilaterally and fund parallel projects</li> <li>• Investment is aimed at community level and work executed by temporary project structures or staff</li> <li>• Often no linkages with national level policy development or sector reform</li> </ul>	<ul style="list-style-type: none"> <li>• Plans for construction of more RWS projects over time, in conjunction with investments in support services and frameworks</li> <li>• Operates within no fixed time frame – takes infinite perspective</li> <li>• Always works to achieve full coverage within defined geographic/administrative boundaries</li> <li>• Encourages donors to work collectively and support coordinated efforts</li> <li>• Investment is aimed both at community and intermediate levels and is executed by permanent local structures</li> <li>• Seeks to establish linkages with national level policy development or sector reform to support community-level project implementation</li> </ul>

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Making this distinction between the project approach and a water service perspective is an important conceptual step and represents a strategic dimension to scaling up; it shows that we can no longer only aspire to doing more (a quantitative scaling up), but that we must also do things in a different way. We must seek both “horizontal” and “vertical” scaling up. This has far-reaching consequences, not just for the planning and execution of CM projects, but also for the institutional frameworks which will support them in the long-term, and for policy development, regulation, legislation and approaches to financing the entire process.

#### *The scale of scaling up*

To achieve scaling up we must look beyond individual communities and groups of communities, to consider the broader institutional frameworks to sustain CM over time. This implies the need for capacity building of actors at the intermediate level, such as local government, decentralised offices of line ministries, private sector companies or user associations. These types of organisations typically operate at the “district” level. Although the definition of a district can vary considerably between countries, taking the district as a building block for scaling up is a useful starting point.

In translating this concept of the district level as the basic unit into real numbers, we would consider a population of between 100,000 and 500,000 as the minimum for scaling up efforts. This rough population range provides us with an order of magnitude that is great enough to provide viable investments in capacity building of intermediate organisations, as well as economies of scale.

Regardless of the exact population figures, planning for scaling up should always respect and work within existing administrative boundaries. The “district” containing several hundred thousand people, may equate to a municipality, province or region depending on the absolute population and population densities. The level at which scaling up is attempted will be determined by other factors such as institutional and governance structures and financial aspects, which determine the lowest administrative level to which implementation and operation and management funds are disbursed.

#### *Water supply or sanitation or both?*

Many sector practitioners argue that improving water supply should not be separated from efforts to provide safe excreta disposal facilities and to improve hygiene behaviours. From a health perspective there is ample evidence to suggest that there is a need for all three to be in place together to maximise potential impacts and benefits ([www.ehproject.org/Pubs/GlobalHealth/hif-bw.doc](http://www.ehproject.org/Pubs/GlobalHealth/hif-bw.doc)). So, when we talk of scaling up RWS, do we assume a functional change in focus by automatically including scaled up sanitation services and hygiene promotion activities as well? A number of important factors influence this decision:

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- **Different levels of management:** Water supply is normally (although not always) communally managed, or managed on behalf of a community, whereas sanitation is almost always controlled and managed at the level of the household. This is an extremely important distinction, implying the need for different strategies and approaches when going to scale.
  - **Demand for improved services:** In many instances, water is already demand-driven; it is a social benefit that people want or have a strong felt need for. On the other hand, for a variety of cultural, social, environmental or historical reasons, many people do not regard safe excreta disposal as a priority. This implies the need for quite distinct approaches and greater emphasis on communication and demand creation at an early stage of efforts to go to scale.
  - **Technology** selection can also make a difference when considering the question of linking water and sanitation in scaling up efforts. Are we considering wet or dry sanitation solutions in the particular case in question? If wet sanitation systems like pour-flush latrines or small-bore sewers are to be scaled up, then there is an obvious need for a parallel scaling up of access to water supply. If scaling up of sanitation services does not require large quantities of additional water, then there is less urgency to scale up water supply.
  - The **institutional and policy frameworks** of the country in question should be considered carefully. In some countries sanitation falls under the mandate of the Ministry of Health, and the water authorities do not have a great deal to do with sanitation. Obviously any attempt to take both services to scale in this type of scenario, would be more complex than working with a single line ministry.

There is no right or wrong answer as to whether or not the components of water, sanitation and hygiene promotion should be scaled up together or separately. Certainly hygiene behaviours relating to the handling, storage and use of water for human consumption would be part of a best practice RWS project design. Regardless of the final decision, it is important to examine carefully the factors that determine this decision as part of the scaling up process.

Another issue that plays a role in the question of what to scale up is *productive water*. So far, domestic water and productive water have largely been addressed as two separate disciplines. Agriculture and agricultural production is a major interest in many countries, and water is often a critical resource for both subsistence and commercial production. The process of scaling up water supply for domestic purposes should always take into account other demands on the water catchment. An in-depth assessment of the productive use of domestic water supplies and livelihoods issues is given in another IRC TOP.

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### *Scaling up using the community management model*

So far we have looked at the definition of scaling up in general and considered some attempts to define the scaling up of RWS, but in this TOP we advocate scaling up of RWS using the CM model. Hence we must also take into account all aspects of the model required to work at scale. These include the requirements and costs of institutional support mechanisms.

Box 10 illustrates how scaling up the CM model and building more systems must go hand in hand with efforts to scale up institutional support. In practical terms this means having trained people in place to support rural communities, to provide advice, on-going training and conflict resolution services. In turn, this means having the resources to maintain such services, and a policy environment and legislative framework that clearly delineates who should provide which services and at which levels; these are all necessary elements of scaled up CM.

#### Box 10: Sustaining scaled-up services under the community management model

“Scaling up coverage is pointless unless sustainability is improved at the same time. Coverage issues are mainly related to implementation ability: the capacity to get concrete poured and management committees trained more quickly and effectively. But simply implementing more projects that fail after a few years is not an answer. Sustainability issues are related to the ability to backstop the new community capacities indefinitely, to retrain people who leave their positions or die, to bring legal accountability to financial management by auditing water committees, to facilitate disagreements and resolve conflicts. Scaling up community management requires different actors with different capacities for the different phases of system development.”

*Source: Schouten and Moriarty, 2003*

Want to find out more about scaling up? further information and insights into issues about the theory of scaling up and rural water supply can be found at the following websites:

- IRC International Water and Sanitation Centre:  
<http://www.irc.nl/manage/facil/scalingup.html>
- The Water and Sanitation Programme: [www.wsp.org](http://www.wsp.org)
- The World Bank:  
<http://www.worldbank.org/transitionnewsletter/aprmayjun03/boxpg12.htm>
- The Bank Netherlands Water Partnership:  
<http://wbln0018.worldbank.org/bnwp/portfolio.nsf/WindowWSSRuralAreas>
- WaterAid: [www.wateraid.org.uk](http://www.wateraid.org.uk)

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## **Important principles for scaling up**

### *Summary*

- Historically there has been a continuing debate in the RWS sector about the balance between quantity and quality of outputs. Scaling up has raised this issue to the fore, with some commentators arguing that the pressure to scale up will lead to the return of less sustainable practices.
- Other views counter this position by arguing that there have been fundamental shifts in approaches – the increase in CM, a changing role for government; a move towards the water service delivery approach - all of which are likely to mitigate the risks of unsustainable practices. Large-scale should not necessarily equate with lack of sustainability.
- Standards, or targets, for physical coverage are often a reflection of political choice and of concerns for social equity in access to basic services for the rural (poor) population. There is on-going debate about setting high targets for scaling up: full coverage may be an important goal in terms of equity, but it may not be a realistic option in many developing country contexts.
- Decentralisation of service provision is a reality in many developing countries and is the institutional backdrop against which scaling up efforts must take place. Decentralisation can work in favour of scaling up with a water service delivery approach; however, in practice many lower tiers of government may be ill-equipped, under-resourced and in need of significant support.
- Reform of the water sector is another on-going reality in many countries, but is often driven by the needs of the urban sector, with rural populations being left without clear frameworks for responsibility or with vague regulations.
- There are no easy answers to reform of the rural (sub)-sector; most institutional options have significant constraints or limitations. A key part of the scaling up process is in identifying the most appropriate focal point for the rural sector and in providing support to this institution or agency.
- There is a role for private sector providers in RWS in all phases from design, to construction and in the long-term provision of back-up services; whilst some goods and services are provided by larger, formal companies in many cases private sector involvement is in the form of individuals, such as artisans or trained pump repairers.
- Private sector participation (PSP) has been promoted by many organisations and there will be an increasing role to play in scaling up efforts; however, there are also doubts about whether or not PSP can meet the needs of the poorest groups in society.

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There are a number of important conceptual issues that should be considered when planning for a scaled up approach to RWS; these include the compromise between sustainability and scalability, and issues of social equity and poverty.

### *Sustainability versus Scalability*

For longer than the use of the term “scaling up” in the RWS sector, there has been a continuing debate about the balance between attempts to reach more people and build more systems on the one hand, and the need to maintain minimum levels of sustainability of services on the other. In its simplest form, this balance can be presented as one between higher unit costs with higher quality outputs versus lower unit costs and lower quality outputs. Planners and project practitioners alike have been struggling with this dilemma for many years and debating how far along the spectrum towards greater quantity and speed of implementation we can go without compromising quality, and therefore better and longer sustained benefits.

In their discussion paper on scaling up Davis and Iyer consider this same dichotomy between going to scale and achieving sustainability. They argue that conventional notions of scale have often been associated with the push for large-scale systems, with a bias towards big physical construction targets and “cookie-cutter” planning. Such systems and approaches have proved unsustainable. Therefore, a renewed emphasis on scale runs the risk of contradicting the principles of sustainability, even though this is now interpreted as expanding coverage by supporting larger numbers of smaller projects (Davis and Iyer, 2003:7). This is a valid concern, but we must be clear that a call for increased scale does not automatically mean a return to unsustainable approaches. A number of important lessons have been learned since the days of supply-driven RWS with its engineering solutions to technical problems. The fact that CM has been adopted as the formal model in many countries is testimony to this progress.

The increasing trend for governments to take the role of facilitator *vis a vis* rural communities is another step towards ensuring that large scale does not automatically mean unsustainable. The question therefore ceases to be one of *either* community *or* government, but rather one of identifying and matching the capacity and potential of communities to manage, with the capacity and potential of government agencies for planning and support. Capacities have to be matched against each other and linked to an appropriate water supply system to ensure long-term sustainability (Schouten and Moriarty 2003: 117). The transition from a project approach to a water supply service delivery approach is a crucial next step in balancing between large-scale on the one hand (i.e. expanding coverage to meet the MDG challenges) and meeting needs in a sustainable manner on the other.

### *Coverage and Social Equity*

Physical coverage and the concept of broader social equity are closely related. There are often high and ambitious targets set in international conferences and country strategy

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documents, but in reality there is rarely a systematic approach put into practice to achieve these targets. Coverage is defined differently in each country and is based on broad agreements of local norms or standards. Physical coverage can be assessed on the basis of numbers of communities “served” irrespective of whether all people in the community actually benefit, or on the basis of individuals or households that actually receive the service directly (or even indirectly). In practical terms this is measured by indicators such as the volume of water available per person per day or in access within a maximum walking distance.

However, coverage can also be used as a measure of social equity, by indicating which individuals (or groups of individuals) receive access to services within delineated areas and which do not. Social equity looks to ensure that coverage is applied to all groups, not only addressing differences in access between men and women, but also children (as future community managers), the elderly, the less well off and in certain societies specific religious or ethnic groups.

What then does coverage and social equity mean for scaling up? IRC argues that setting 100% coverage targets for scaling up serves a political function and that they are strategic targets, because successful community-managed RWS carries with it the implicit assumption of social equity. In practice, operational targets must be grounded in reality: financial resources, water resources and absolute population numbers will mean that 100% coverage is rarely possible in most developing country contexts at present.

The rationale behind pressing for 100% coverage targets that we know are almost never attainable in practice is precisely to highlight this issue of social equity and inclusion. We already know that those groups which fall away first will almost always be the most socially and economically marginalized. Therefore, to attain equity of service it is imperative to start out with the aim of complete coverage from the beginning. Other organisations such as the NGO WaterAid share this view, as they state in a recent paper on financing the MDGs:

*“WaterAid maintains that the new international targets for water and sanitation are necessary to focus domestic and international resources to where they are most needed – to provide access to poor women, men and children to basic water and sanitation services in low-income countries” (Terry G. and Calaguas B, 2003:7)*

Many countries have existing definitions of coverage and these are already an expression of political choice: for example, South Africa’s commitment to a minimum amount of “free water for all”. Therefore, the need for setting high targets for RWS provision, with the aim of social equity and inclusion, is as important politically as it is in practical terms.

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## Important trends affecting scaling up

In considering the process of going to scale, we should be mindful that any new attempts will always be carried out against the backdrop of a dynamic sector. Trends such as decentralisation, sector reform and the drive towards privatisation will all impact upon the process. It is important to think through these broader trends and try to predict what their impact will be, in both positive and negative terms.

### *Decentralisation*

For some considerable time, central governments around the world have been decentralising fiscal, political and administrative responsibilities to lower levels of government, and in some cases to the private sector. Worldwide political pressure to increase local control has largely been the driving force, with the potential for increased efficiencies as one of the spin-offs of the process.

Much has been written about experiences in industrialised countries. But, most developing countries have very different institutional frameworks and governance structures and it is not possible to superimpose lessons from one context to another. Decentralisation is an extremely important trend because it can have significant repercussions for resource allocation, (social) service delivery and equity. (Litvack, Ahmad and Bird, World Bank, 1998).

The delivery of many basic services has been directly affected by the trend towards decentralisation. In most cases, responsibility for these functions has been devolved to local governments at municipal level, while in some sectors (e.g. electricity distribution), national governments have passed legislation aimed at increasing the role of the private sector. In the water sector, decentralisation has been largely driven by government fiscal constraints, low revenues from tariffs and the lack of capacity of centralised institutions.

In the late 1980s, a decentralisation paradigm developed that recognises a number of stages or levels of decentralisation (Rondinelli *et al*, 1987). This framework is useful when considering the rural water supply sector and a transition from supply-driven, centralised operations:

- a reorganization of government operations from centralised to regional or sub-regional structures, referred to as **deconcentration**;
- the transfer of authority and decision-making to lower level institutions often, but not exclusively, local government, known as **devolution**;
- the complete hand-over of authority to an autonomous institution, often to a non-public entity or private sector contractor, known as **delegation**.

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The trend towards decentralisation has propelled local government to the fore both in delivery of new water supply systems and in providing post-construction support to CM systems in the long-term. But even where the legislative process of decentralisation has been formally completed and local government has the legal mandate for service delivery, there may be many constraints and problems facing local governments in taking on their new responsibilities in practice. They may lack finances (often central governments are reluctant to pass on the resources as well as the mandate), or be limited in the extent to which they can raise funds through local taxation. They are also often weak in terms of technical and managerial capacity. An example from Colombia, in Box 11, describes the formation of a water users association, known as AQUACOL that has stepped in to provide support to member rural communities in a part of the country where the municipal authorities are ill-equipped to carry out their mandate.

What then does this trend towards increasing decentralisation of service delivery mean for scaling up of CM? As we have seen, scaling up requires a focus on the intermediate level – the institutional layer between communities and central government. The decentralisation process is serving to highlight the importance of this intermediate level and may therefore have both positive and negative consequences. The decentralisation process must be well understood and local government should be one of the primary targets for capacity building under any scaling up initiative. Efforts to scale up CM will depend on national support for decentralisation and the extent to which clearly defined policy, legislation, financial resource allocation and regulatory frameworks are in place for the rural sub-sector (Rosensweig, May 1998)

Box 11: Legal reform, decentralisation and meeting the needs of rural communities

“The Colombian constitution and the Public Services Law number 142, allow for community organisations to administer public services, whilst the state exercises regulatory, oversight and control functions. However, the law does not clearly define the responsibility for assistance and training in support of communities with problems that they cannot solve themselves. In this sense the process of decentralisation has created a vacuum for the provision of technical assistance to rural communities. This is precisely why the Association (AquaCol) was proposed, as an alternative to cover this gap”.

“For example, the Municipality of Cali has drawn up a decree that grants the responsibility for technical assistance to rural and peri-urban communities to the Public Service Municipal Company of Cali. But this company only has two people to attend to 164 rural water supply systems. Other municipalities haven’t even yet considered how to resolve this situation.”

*Source: Association of Community-based Organisations Providing Water Supply and Sanitation Services in South-western Colombia (AQUACOL), July 2002*

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### *Sector reform*

Over the past 10 to 15 years, many governments have initiated reform of the water sector. In the majority of cases, initiatives have included a strong push towards private sector participation (PSP), as a means of increasing efficiency. Although the new policies adopted in many developing countries have shown promise for improving services in urban areas, where there is a greater chance of profitability, there are serious concerns about service delivery to rural populations. The shrinking role of central government in service provision has left a void in rural areas in some countries or regions, where conditions have generally not improved significantly (Rosensweig and Perez 1996).

The interests of the urban sector have clearly driven the reform process forward. Consequently, there are cases where the newly reformed laws have little if anything to say about the fate of the rural sector. This can lead to ambiguities and confusion among institutions about who exactly is responsible for service delivery to rural communities over the long term. From past experience, we know that it is often very difficult to guarantee support of the rural sector during the broader process of water reform. This is because:

- Urban utilities, or highly centralised line ministries are generally not successful at serving the needs of dispersed rural populations.
- Most local governments do not have the capacity or resources to support the rural population. Also, there may be pressure to focus scarce resources on more politically articulate and valuable town-based populations in the district or municipality.
- The private sector is for the most part not yet a realistic option to take over many of the important support tasks without adequate profit incentives.

What appears to work in a number of settings is a specialised national agency dedicated to the rural sector, which builds up real expertise in meeting the needs of the population in activities such as planning, O&M support, regulation and perhaps financing. Several countries in Central America have such agencies, for example the Directorate of Rural Works within the National Water Supply and Sewage Institute (AyA) in Costa Rica; further details about the work of AyA can be found at <http://www.netsalud.sa.cr/aya/>.

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Box 12: Sector reform and scaling up – experience from India

**Government of India – Reform Initiatives**

The Government of India (GOI) Eighth Five Year Plan (1992 – 97) outlined key principles for the sector: water being managed as a commodity and not as a free service; adopting a demand responsive and participatory approach to service delivery; users being fully responsible for operation and maintenance.

The Ninth Five Year Plan (1997 - 2002) continues to promote the same principles and is now concentrating on operationalising them in the field. The strategy to achieve the plan revolves around accelerated coverage – particularly of the not-covered and partially covered habitations; institutionalising water quality monitoring systems; and promoting sustainability of systems and sources.

The Rajiv Gandhi National Drinking Water Mission has initiated a number of steps to implement the new GOI policy reform package. Rural water supply pilot projects adopting demand responsive approaches will be implemented in 58 districts across the country.

*Source: WSP South Asia Region, 2000:2*

The critical point for sector reform, and for efforts to scale up, is that there must be a focal point of responsibility for the rural sector. This would allow for coherence in any planning for scaled up approaches, for oversight, monitoring and for any policy modifications which may be deemed necessary along the way.

*Private sector participation*

Private sector participation is a topical issue in the water sector generally and there is certainly the potential for private companies and individuals to be involved in a range of functions in the rural sector, such as:

- contracting and provision of materials, design services and skilled personnel during the construction phases of project implementation, either with government, donors or directly with communities;
- the provision of specific technical tasks and consumable materials for long-term O&M support, such as chlorine, water quality testing, pump parts and repair services;
- transport and other logistical support services such as borehole drilling;
- the provision of credit or loans for system repair, expansion or upgrading.

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Whilst there is a place for large-scale, formal private companies in some of these areas (most notably in the manufacture and/or distribution of spare parts), the RWS sector is generally served by many informal and small-scale private service providers. Very often these are individuals who, for example, are able to repair pumps and operate within a limited geographical area and charge a small one-off fee or work under a maintenance contract arrangement.

For some time the major lending institutions such as the World Bank have been advocating (and financing) an increased role of private sector companies in RWS. There would be benefits too in involving private sector operators in any scaling up strategy. In theory, when markets reach a critical mass, there are added incentives for PSP and economies of scale to benefit consumers.

However, we should also be mindful of protecting the interests of potentially vulnerable rural populations. As one commentator observes, the key with private sector participation is that reasonable profits should be achievable, while consumers or purchasers retain appropriate rights, protection and real choice (Carter *et al*, 1999:13). There is a need for effective government involvement to stimulate PSP, but also ensure adequate protection against poor service and unreasonably high prices.

Despite the potential benefits that PSP can bring, there is a growing controversy about the heavy promotion of the single strategy under many water sector reform efforts, and questions about whether PSP can really meet the needs of the poorest groups in society in both urban and rural populations. (Geraldine and Calaguas, January 2003).

Want to find out more about the issues affecting scaling up? Further information and insights into issues concerning sustainability, coverage, decentralisation, sector reform and PSP can be found at the following websites:

- EHP The Environmental Health Project: [www.ehproject.org](http://www.ehproject.org)
- IRC International Water and Sanitation Centre:  
<http://www.irc.nl/manage/facil/scalingup.html>
- The Water and Sanitation Programme: <http://www.wsp.org/english/activities/policy-reforms.html>
- The World Bank:  
<http://www.worldbank.org/transitionnewsletter/aprmayjun03/boxpg12.htm>
- WaterAid: [http://www.wateraid.org.uk/site/in\\_depth/current\\_research/157.asp](http://www.wateraid.org.uk/site/in_depth/current_research/157.asp)

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## **The main elements of scaling up community management**

### *Summary points*

- Calculating the full costs of implementing the CM model is a necessary first step towards effective advocacy. In many cases these full costs are not known, especially those associated with long-term institutional support.
- The selection of technology is very important for scaled-up CM. Higher levels of complexity and service will generally demand greater management capacity, higher tariffs, and perhaps the need for imported spare parts.
- Scaling up at the local or district level cannot happen in isolation. Efforts are also required at national level to support positive enabling environments, to influence and modify sector policies, legislation, regulations and to develop planning mechanisms in favour of this approach.
- Political support to the scaling up process is vital and it is necessary to open a dialogue and identify influential “champions” who can push forwards the scaling up agenda. This is particularly important in countries where the institution with responsibility for RWS is politically weak.
- Capacity building is another crucial element of scaling up. It must be carried out at all levels, from community to intermediate institutions like local government, and in national government.
- Financing is the greatest challenge to scaling up efforts. Financial resources are needed to address several groups of costs: capital costs for increased system construction and the costs of servicing debt; operation and maintenance costs at the community level; the costs of creating a positive enabling environment and providing capacity building; the costs of creating and sustaining the institutional support mechanisms at intermediate levels which can provide indefinite back-up support to communities.
- Meeting the challenge of financing for scaled up approaches will require renewed efforts on the part of all actors: communities will be asked to contribute more as end-users; local and national governments can be pressured into spending more, and spending more effectively; bilateral donors will be asked to increase spending on RWS as a means to addressing broader development agendas; multilateral agencies can use the volume of their lending to leverage other sources of funding; and in some cases there is an increased role for private sector financing in RWS.

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- National governments must take a leading role in setting out realistic financing strategies for the rural sector that are based on transparent decisions about resource allocation, subsidies and social equity principles. Financing strategies should consider sector investments in terms of a water supply service approach, rather than from the conventional water supply project approach.

Based on collective experience, research efforts and documented case studies we already have some knowledge about the main elements required for efforts to scale up. Some of these components have already been flagged in the preceding sections of this TOP and we now look at a summary of five key elements: costs; technology; enabling environment; institutional arrangements; and capacity building.

## **Costs**

### *Implementation costs*

We already know that the costs incurred in taking more participatory approaches to RWS are normally higher than in the earlier supply-driven approaches. For example, in order to provide an understanding of the process and benefits, as well as generating demand for services, more time is needed to work with individuals and target groups in the community (women, men, youth etc.). Staff time and training materials are required to impart new knowledge and skills and in efforts to modify behaviours, particularly those associated with hygiene practices. All these costs (commonly referred to as “software” inputs) are above and beyond the basic engineering costs: the material inputs, design requirements and time for the technical staff to construct the systems.

The true costs of developing CM models are usually not fully calculated or properly understood. Cost-benefit analysis is often not done in rural water supply, although this situation appears to be changing somewhat. Donors and implementing agencies often do not know the full implementation costs: what does it really cost per system or per household when all the extra costs are included – the staff salaries, *per diems*, transport costs, social benefit payments, the development of training manuals and materials and all the time and resources that go into designing, developing and piloting those materials and then reproducing them?

In many cases, some or all of these are written off as “off book” costs and the actual cost of constructing the systems are expressed in much more easy to quantify inputs (material costs, the value of sub-contracts etc.). The example from El Salvador given in box 12 illustrates this point very well. It is often difficult to disentangle these off-book costs from the more quantifiable aspects, especially where different activities are carried out at the same time by sharing “contact time” in the community.

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### *Long-term support costs*

In addition to costs required for the implementation of new community-managed RWS systems, there are the costs associated with providing support and assistance in the long-term – the costs of establishing and maintaining a support mechanism for CM systems in any given geographic area. From recent work in Latin America we know what types of costs are likely to be incurred (Lockwood 2002), but there has been little or no work done which quantifies these costs in more detail.

For example, how much would it cost per year to provide support services for a given number of communities? And how much would it cost to build the capacities of intermediate level institutions and maintain them? This is a complex matter to consider, as it involves inputs from a variety of different actors at different levels, including local government, with perhaps some limited inputs from central government ministries and the private sector.

#### Box 13: Counting the costs of community management in El Salvador

In 2000, the Environmental Health Project (EHP) carried out a mid-term evaluation of a large USAID-funded RWS programme implemented by CARE in El Salvador, looking at systems built from 1993 onwards. The evaluation team found that the majority of the projects had been well executed and that they continued to have positive benefits, in large part due to the participatory approaches taken during initial implementation and the capacity of communities to continue to manage their own water supply services over time.

This generally positive conclusion was counter-balanced by the fact that the implementing agency was not able to quantify all the costs of taking this (successful) approach. In spite of a new and sophisticated financial information management system, there were still off book costs that were not accounted for. One of the key recommendations was as follows:

“The evaluation team recommends that (the implementing agency) configure the new system in such a way that it will allow calculation of costs per system and costs per beneficiary by system or latrine type. This calculation should be able to differentiate between direct and indirect program costs, other cash contributions and in-kind (materials and labour) inputs. This level of detail is critical for CARE if the organization is to engage in the sector policy reform” ....“Transparent and credible financial data will be an important part of informing this debate at national level”.

*Source: Perez et al, EHP, 2000:21*

Before we can think about scaling up the CM model, we need to know what the **full costs** of the model really are. A more complete cost-benefit picture is also critical to decide who pays for what (community, government, donor, etc.) and where subsidies will be needed.

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Ultimately, these are political decisions and must be taken by governments. These issues have typically not been thought through systematically in the past, though this is starting to change (see case study from Ethiopia: planning for scaling up). Detailed assessments of the full costs is one of the first steps in planning to go to scale.

### *Technology*

Problems which we know often beset CM systems include: lack of spare parts; faults in design; poor construction quality; and technology that the community simply cannot afford. Implementing the “right” technology is a central challenge in scaling up of service provision where there is the danger of simply scaling up the same problems. The more complex the technology, the greater the demands on the scaling up process in terms of capacity building, establishment of viable tariff mechanisms and supply chains for spare parts, amongst other issues. All of these must be considered against the context of the particular country or district in question and the capacity of the institutions and CM structures to manage and maintain the technology over the long-term.

By simplifying the technology used in water supply delivery, a number of challenges are mitigated, if not avoided completely. Less income is required, spare parts may be more easily available and less (technical) back-up support might be needed. In the e-conference on scaling up organised by IRC the case of the rope pump was raised as an example of a very robust and low maintenance technology (see <http://www.irc.nl/manage/debate/emails/cmup35.html>).

Another technology factor that may be of concern for scaling up is that of bulk water supplies. Where systems are large enough, or where a number of smaller systems rely on one primary source, it may be necessary to supply larger volumes of water to a primary distribution network. In such cases, there is the need for relatively more sophisticated and costly systems, which will require financing, construction and maintenance.

### *Enabling environments*

The phrase “enabling environment” is commonly used in RWS sector literature. It refers to a range of conditions and policies which should be put in place to enable an approach to be carried out successfully. In scaling up CM, the enabling environment includes the following elements:

- Sector **policies** which support the key CM principles, working with demand responsive and participatory approaches and the promotion of long-term support mechanisms. Sector policies should also include guidelines to support the provision of water supply services rather than project approaches.
- Clearly defined **regulations, norms and standards** for the rural sector defining the range of technology options, service levels, cost-sharing rules and long-term requirements for both technical and non-technical aspects of O&M.

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- Established **legislation** clearly outlining institutional arrangements and delineating the roles and responsibilities of the main actors in RWS, including communities, local and national government and even the private sector; frameworks and procedures for the efficient transfer of project assets to community ownership.
  - Effective **financing** and **planning mechanisms** which support investment in both the expansion of coverage and in capacity building of intermediate level organisations which will have the long-term responsibility for back-up support provision.
  - Generation of **political support** by winning over influential “champions” at central level who can push forward the agenda for scaling up RWS. These individuals may or may not be part of specific sector ministries or agencies. In fact, to have a greater chance at success, the agenda for scaling up should ideally be embedded in strategic locations in government, for example in ministries of external cooperation or finance and planning.

In almost every developing country, perhaps excepting those which have been in a prolonged state of conflict, some or all of the above elements of the enabling environment will already be in place, although they may or may not be supportive of a scaling-up vision. The elements are complex; they require an in-depth understanding of each country context; and, above all, they are not easily modified without significant effort and influence.

International NGOs and research institutions, and even many bilateral donors, rarely have the capacity and leverage to encourage changes in the enabling environment in favour of scaling up. International lending institutions such as the World Bank or the regional banks do have such influence and often include activities aimed at modifying sector policy, alongside large-scale investments in physical infrastructure as part of the design of loans. The pro-active participation of institutions such as the World Bank in advocating scaling up is a valuable ingredient in any future success.

Even if there is progress in the creation of an enabling environment, the development of specific RWS sector policies, must also be in line with broader policies and trends, such as decentralisation. In the discussion paper on scaling up, Davis and Iyer highlight the potential for conflict between sector-specific policies and those of broader government with an example from Uganda (see box 14).

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Box 14: Conflicting policies – an example from Uganda

“As one UNICEF officer observed, “All policies relating to communities must be in harmony – the national constitution, the water policies, local government laws etc.” He noted that, in Uganda, the Water Act of 1995 gives rural communities the ownership of water development projects, while the Local Government Act confers ownership to local government of all development within its jurisdiction. Elected officials will point to the policies that serve their needs at any given moment, thus creating an uncertain environment for scaling up”

Source: Davis and Iyer, 2003:20

### *Capacity building*

Improving capacity and everything this entails (providing training, skills transfer, logistics and equipment), is a key element of any scaling up effort. Capacity building is required for scaling up efforts at various levels and with differing objectives:

- The **community and water committee structures** must acquire the necessary skills and capacities to participate in demand-responsive projects, to articulate their needs, to make decisions and, to be able to operate and maintain their systems in the long-term. CM does not only require technical and managerial capacities, but knowledge of areas such as hygiene behaviours, communication, conflict resolution and environmental protection.
- **Local government** in many cases may have the mandate to provide support for planning, construction and maintenance of RWS services, but will often lack the capacity (financial, managerial, technical) and often will not be aware of best-practice approaches such as participatory techniques and DRA.
- **Private sector** service providers are important actors in long-term O&M efforts, especially small local enterprises or individual community-based artisans. They may require training in new designs, use of new materials or manufacturing or repair techniques. In some instances, they may need some form of financial subsidy to encourage their participation in local markets for the supply of goods and services.
- **Other intermediate-level actors** such as multi-community associations of water committees or NGOs can provide long-term support, but may require training and capacity building in many of the areas outlined for local government and/or community management structures.

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- **National government** line ministries responsible for RWS may be unfamiliar with aspects of scaling up, and possibly with the concepts and requirements of the CM model. Training and orientation may be required in any of these areas. In cases where central ministries are poorly equipped, inputs such as computers, plotters or GIS systems may also be necessary to bolster the capacity for effective monitoring, strategic planning and resource allocation.

### **Financing scaling up**

Although financing is not the only challenge when considering scaling up, limited funding is clearly a major factor in deciding what type of activities to invest in, the level of involvement that will be possible, the length of time that can be spent and how far to extend these activities in geographic terms. For the majority of developing countries, any attempts to go to scale will be constrained by lack of adequate resources (financial and human) and in this case it will be necessary for policy makers and planners to “balance the process quality with the limited resources and capacity available” (Deverill, P. *et al*, 2002:33).

It has been estimated that current annual investments in water supply and sanitation must double if we are to meet the MDGs by the target date of 2015 (Winpenny, 2003). Put in simple terms, the critical question is, where will this money come from if we are really to make an impact at scaling up RWS?

#### *Identifying the costs*

Before trying to address this fundamental question, it is first necessary to identify the full range of costs that are likely to be incurred. We have already identified most of the costs associated with the CM model. However, these are only part of the story and going to scale requires that we work to identify all costs to be met in a particular context. These will normally be included in the following three groups of costs, as categorised by IRC:

- **Financial costs:**
  - The capital to invest in the construction of RWS systems, including personnel, logistics, materials, design and software costs required to adopt a CM approach.
  - The costs of operating and maintaining RWS services at community level, including system management and costs for repairing and replacing system components and expansion to keep pace with population growth.
  - The costs associated with servicing capital; i.e. interest on borrowing which must be repaid by central governments.
- **Economic costs:**
  - The environmental costs, in terms of pollution, contamination of groundwater or over-abstraction of groundwater.
  - The opportunity costs of developing a water resource for human consumption as opposed to other (potentially productive) uses in the same watershed.

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- **Costs of sustaining the service:**

- The costs required for capacity building at the intermediary level (equipment, training, etc.), to create institutional support mechanisms.
- The recurrent costs required by the institutional support mechanisms for monitoring and providing back-up to rural communities over time.
- The costs associated with developing new policies and enabling environments to support a scaled up approach based on the CM model.

A much fuller explanation of these types of costs can be found in the Thematic Overview Paper on Financing and Cost Recovery<sup>3</sup>.

*Identifying sources of financing*

Different possible sources of financing need to be matched with the different actors involved. As end-users, the householders, or community, can be expected to make a financial contribution to some of the costs outlined above. However, in the rural context it is often unrealistic to expect householders to pay the full costs of a water supply service. A summary of the different potential sources of financing is provided in the following box:

Box 15: Potential funding sources for scaling up RWS

Sources of Funding	Financing Mechanisms
<ul style="list-style-type: none"> <li>• Household users</li> <li>• Local NGOs/CBOs</li> <li>• Local/regional government</li> <li>• Central government</li> <li>• Private sector investment</li> <li>• External support agencies (includes donors and international NGOs)</li> <li>• Multilateral financial institutions</li> </ul>	<ul style="list-style-type: none"> <li>• Tariffs, taxes and in-kind contributions</li> <li>• Grants, credit and soft loans, donations, institutional support costs</li> <li>• Grants, loans, cross-subsidies from urban users, institutional support costs</li> <li>• Grants, loans, cross-subsidies, from urban users, institutional support costs</li> <li>• Loans, credit, financing to end-users</li> <li>• Grants and loans</li> <li>• Loans, credit, financing to governments</li> </ul>

*Source: Fonseca, 2003; adapted*

A recent policy briefing paper issued by WaterAid<sup>4</sup> indicates that capital investment for water and sanitation in low-income countries comes from four main sources:

- the domestic public sector, estimated to provide 69% of financing;
- international external aid sources, estimated at about 20%;
- international private sector investment at about 8%;
- domestic private companies investing around 3%.

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<sup>3</sup> <http://www.irc.nl/page.php/15>

<sup>4</sup> [http://www.wateraid.org/documents/looking\\_back.pdf](http://www.wateraid.org/documents/looking_back.pdf)

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Given that these figures are for urban and rural populations combined, it is probably the case that the level of external aid investment is considerably higher when disaggregating for the rural sub-sector (Annamraju, Calaguas and Gutierrez 2003). It is unlikely that huge increases in external aid financing for CM of RWS will become available in the short-term, therefore funding for scaling up will require different approaches and strategies, including those outlined in box 16.

Whilst it is true that the Highly Indebted Poor Country Initiative (HIPIC) has the potential to increase funding for water supply generally, it is important to note that this mechanism is targeted at the very poorest countries, many of which are located in sub-Saharan Africa<sup>5</sup>. Financing for the next tier of countries, for example in Latin America and many parts of South East Asia, will depend on other sources, including the country's own resources, better taxation and tariff policies, lower cost solutions, and private sources. There is a clear need for advocacy work at both national and international levels when it comes to securing an increase in funding for RWS. In order to carry this out effectively, we must have a much better idea of the (total) costs involved and be able to show the cost effectiveness of investing in the sector.

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<sup>5</sup> <http://www.worldbank.org/hipc/>

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Box 16: Potential strategies for financing of scaled-up rural water supply

- Increased and sustained political pressure on donor governments to increase development assistance funding in line with the UN target of 0.7% of GDP.
- Advocacy for a reallocation of resources, with greater proportions of developing country budgets and donor funding to be spent on RWS, by highlighting the social and economic benefits of improved services.
- Improved cost-effectiveness of existing funding sources, by adopting low-cost technologies and promoting local management structures that ensure the sustainability of systems.
- Investigating innovative ways of community financing for capital costs, such as low-interest credit mechanisms (based on the experience that many poor people are willing to pay for a service, if it is properly designed and desirable).
- Prioritise RWS on the poverty reduction agenda, by engaging with policy makers and government officials and advocating the case for inclusion of water supply as part of poverty reduction strategy papers (rather than merely infrastructure), thereby potentially unlocking resources from both domestic governments and donors as part of the Highly Indebted Poor Country (HIPIC) initiative.
- Development of more transparent and effective cross-subsidy mechanisms that enable RWS to be supported by profits from other (urban) users.

*Source: Adapted from Annamraju, Calaguas and Gutierrez 2003*

#### *Cost recovery*

Given that funding from governments and international development agencies is limited, and unlikely to increase at a sufficiently rapid rate in the near-term, there is an increasing trend towards mobilising funds from end-users through cost recovery mechanisms. This approach is in line with the logic that increased user “ownership” of a system is likely to result in greater (financial) sustainability.

In reality, most developing countries have a full subsidy approach to RWS, or use very low cost recovery models, under which communities are responsible for only a limited range of recurrent costs (World Bank, Water Week, 2003). Very few countries have managed to successfully implement cost recovery strategies that actually contribute to the “higher level” costs such as system replacement, expansion or even capital repayment and servicing of debt. China is one country that is adopting a public-led service delivery mechanism with very high levels of cost recovery (WSP, 2002). Vietnam and Cambodia are both

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encouraging the growth of small but vibrant private sector companies to deliver RWS services to the rural population<sup>6</sup>.

Cost recovery for the rural sector raises issues of social equity, and the question of whether (poor) rural communities can be expected to pay for any of the capital costs of service provision. Many rural household economies are seasonal in nature and may operate with very low levels of cash in circulation. Therefore, it is perhaps unrealistic to expect such households to meet costs on the basis of “urban” or developed country tariff systems (i.e. making regular payments in cash). To date, very few rural communities are able, or willing, to pay for support services provided by external institutions.

This is a topical issue and there is much discussion about which components of service delivery should be covered by rural users and which by government funding or by on-going cross-subsidies from other users. These issues are discussed in detail in the TOP on Financing and Cost Recovery.

In relation to scaling up of community-managed RWS, we can conclude by highlighting a number of key issues relating to financing:

- Planning for financing must include the full range of costs associated with a water supply service approach (as oppose to the conventional water supply project approach).
- Financing should not be limited to community interventions, but must also include support to intermediate agencies, to policy reform and to promoting an enabling environment.
- In developing financing strategies, all potential sources of financing should be considered, including an increased share for users; strategies should be context-specific and realistic given existing financial constraints.
- Government must take a leading role in developing sustainable financial strategies for RWS service delivery, including decisions about how responsibility for meeting full costs should be distributed.

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<sup>6</sup> <http://www.worldbank.org/watsan/waterweek2003/Presentations/Session%2028%20-%20Financing%20of%20RWSS/Experiences%20with%20Private%20Sector%20in%20RWS%20in%20Vietnam%20and%20Cambodia.pdf>

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Want to find out more about the elements of scaling up? Further information and insights into issues concerning costs, technology, enabling environments and financing can be found at the following websites:

- EHP The Environmental Health Project:  
[http://www.ehproject.org/PDF/Strategic\\_Papers/SR4INAPAFinal.pdf](http://www.ehproject.org/PDF/Strategic_Papers/SR4INAPAFinal.pdf)
- IRC International Water and Sanitation Centre: <http://www.irc.nl/page.php/15>
- The Water and Sanitation Programme: <http://www.wsp.org/english/activities/policy-reforms.html>
- Water, Engineering and Development Centre, WEDC:  
<http://www.lboro.ac.uk/wedc/specialist-activities/ws/water-supply.htm>
- The World Bank: [http://www.worldbank.org/watsan/topics/tech\\_supply.html](http://www.worldbank.org/watsan/topics/tech_supply.html);  
<http://www.worldbank.org/waterweek/>; <http://www.worldbank.org/hipc/>
- WaterAid: [http://www.wateraid.org.uk/site/in\\_depth/current\\_research/](http://www.wateraid.org.uk/site/in_depth/current_research/)

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## **4. The practice of going to scale with community management**

### *Summary points*

- In practice there are no “blueprint” plans to apply to scaling up; efforts must be made to address each specific context and to avoid duplication, by building on existing progress and knowledge.
- Although there are still many gaps in our understanding of going to scale, there are a number of important experiences and documented cases studies that can illustrate the potential way forward and underline lessons and key challenges.
- The case studies reinforce the theory of scaling up and highlight: the need for flexible approaches; the importance of building on sector reform and decentralisation trends; linking pilot lessons to dialogue about policy; and the need for political support along the way.
- We can already identify some of the main obstacles to scaling up. As well as the obvious challenges of limited financial and human resources, these include: a lack of knowledge and shared understanding about principles and goals; resistance to change and political interference in the way water services are delivered in a scaled up model; and the failure of seemingly successful pilot projects to be replicated due to untested implementation conditions.
- Lack of coordination among (international) donor organisations and poor financial planning strategies for the RWS sector are further obstacles that can impede the process of going to scale.
- Although we already know about many of the main components, we are not yet in the position to put forward a strategy, or “road map” for scaling up; further thinking and research is required to develop guidelines and test them in practice.
- Nonetheless, we can indicate what steps might be included in such a strategy. These are likely to include: in-depth sector assessment; formal dialogue and advocacy; action research linked with the development of enabling policies; demand creation and capacity building; improved coordination and strategic planning.
- Many of the tools required for these scaling up activities have already been established and tested or are in the process of development; there is no need to re-invent new tools and guidelines for these types of activities.

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- In many countries some or all of these steps and activities will be on-going, and it is likely that simultaneous actions will be required at both district and national levels. There is no explicit time-frame for scaling up, but we know that these activities will require a number of years, perhaps as many as ten or so, before the right set of conditions are in place to work at full capacity.

### *Scaling up in practice*

Although there has been relatively little work done on scaling up in a systematic or premeditated fashion, there are a number of documented examples from around the world that address some aspects of the process. These cases, and other experiences, can help us to understand how going to scale might look in practical terms. When considering putting scaling up into practice we must recognise that such efforts do not take place in isolation and that in all cases there will be parallel activities going on both at operational and policy levels.

In short, there is never a “clean slate” scenario from which to start scaling up in RWS, therefore we must be mindful not to impose a “blueprint” and always seek to build on existing experiences and achievements wherever possible, rather than duplicate on-going efforts.

In this section we look at some of the practicalities of scaling up community management of RWS, by examining a range of case studies that include diverse experiences from a number of countries around the world. Using the outputs from these case studies, we then attempt to draw out more generic lessons and explore some of the main constraints and challenges to scaling up in rural water supply.

### **TOP Case studies**

The five case studies illustrate a range of experiences across the spectrum of scaling up community-managed RWS:

- Case Study 1 Ethiopia: Approaches to planning a strategy for scaling up;
- Case Studies 2 and 3 Bolivia and Tanzania: Examples of countries where significant efforts towards scaling up system construction have been recently carried out or are in progress;
- Case Study 4 Honduras: Examples of long-term institutional support mechanisms have been taken to scale;
- Case Study 5 Switzerland: A case where scaled up coverage of 100% has long been achieved.

Each case study is presented in a summary format and includes a brief description of the main aspects of scaling up, the achievements, the institutional actors involved and the most important reasons for successes and failures. Where possible we include a reference or link to the source material, with greater detail about the overall experience.

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*Case study 1 Ethiopia: Interim national water supply and sanitation master plan*

**Description of Scaling Up**

This is a summary of the approach to planning a national level strategy for rural water supply (and sanitation) in Ethiopia. Even though this interim, or draft, master plan has yet to be put into practice, the case study provides some important indicators for the process of planning to go to scale and highlights some of the key constraints, especially those relating to funding and staffing. The national plan was finalised in January 2003 by the Ministry of Water Resources of the Federal Democratic Republic of Ethiopia, with long-term technical assistance provided by the Dutch consulting firm, DHV. The plan presents a framework for the attainment of the government's overall goal of improved public health in the rural population through the provision of safe water and sanitation services. The conceptual premise of this plan is that service management will be carried out by user communities. However, from the outset the plan also recognises that because of the realities of the rural sector, a "support structure is required to assist the community in planning, implementing and operating its scheme".

The master plan for the rural sector reviews a series of issues in rural water supply that are seen to influence the process of scaling up access to sustainable services. These issues include: a definition of what constitutes a "safe water source"; the quantification of coverage in the Ethiopian context; the particular challenge of providing services to semi-nomadic pastoralist communities; the issue of high levels of fluoride (which affects approximately 5% of the rural population); the incorporation of demand-based approaches; the principles of CM; and the likely composition of the support services required to assist rural communities managing their own systems over time.

**Scale and Time Frame**

Existing coverage levels for the rural population in Ethiopia are extremely low, at around 16% as a national average. With this coverage data as a starting point, the master plan analysed three target scenarios for the period ending in 2025 as follows:

- A high target aiming at 60% coverage at the end of the planning horizon, which would result in a very modest decline in the unserved population from 46 to 42 million;
- A medium target aiming at 40% coverage in 2025 – the unserved population increases from 46 to 65 million.
- A low coverage target of 16%, representing an effective stagnation of coverage growth and a growth in the unserved population to about 87 million by 2025.

**Technology and Water Resources**

The master plan includes a full range of technology options based on the varying nature of water resources across the country. These include spring and surface sources with gravity-fed piped systems; pumped piped systems; hand-dug wells; and boreholes fitted with handpumps. Interestingly, the master plan includes a discussion of the definition of safe water sources and concludes that, contrary to an engineering perspective, "traditional"

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sources can be improved at relatively low cost and therefore may have the potential to improve RWS coverage significantly.

### **Main Institutional Actors**

The interim master plan clearly sets out an institutional framework for the delivery and support to sustainable water supply services. Community users are at the centre of this framework, as those with the primary responsibility for management and operation. There is also a recognition of the need to then support communities, which can come from the government (through the Regional Water Bureau or lower level representatives – this aspect is not yet well developed in the master plan), NGOs and small private service providers.

### **Links to Sector Reform**

The interim master plan for water and sanitation is a product of the recently developed Water Sector Development Programme, which has been drawn up by the government of Ethiopia in response to the very low service levels (in both urban and rural areas). This plan has been used to develop WSS inputs in the Poverty Reduction Strategy Paper (PRSP) document for the country. In so doing the government is giving clear recognition of the importance of developing WSS as part of broader efforts to achieve socio-economic development. Given the fact that Ethiopia recently became the 4th country to benefit from the HIPIC, it is significant that WSS has been given such a high profile in the PRSP. This development may lead to the release of increased funding for the scaling up of water supply, amongst other social development initiatives.

### **Financing**

The interim master plan addresses the issue of financing in some detail and concludes that in order to increase safe water supply coverage in any meaningful way, very large investments will be required. Basing the forecast on historical investment trends in the sector, the master plan compares a number of possible scenarios:

- The conservative financing forecast (i.e. 3% growth per year) would only allow for maintaining coverage at a more or less stagnant level of 16% - this is in fact what has happened over the past decade.
- The 60% coverage target seems out of reach, even with a very optimistic forecast in the financing potential (i.e. a 6% annual growth rate).
- A 40% coverage target seems achievable, provided that investment rates double within the coming years and triple by the year 2015.

*Sources: Ministry of Water Resources, Federal Democratic Republic of Ethiopia "National Water Supply and Sanitation Master Plan" Interim Master Plan, Volume I Main Report, DHV Consultants BV in association with DHV Ethiopia Plc. April 2002; Ministry of Water Resources, Federal Democratic Republic of Ethiopia Paper prepared for the Regional Workshop on Water Supply and Sanitation in Poverty Reduction Strategies, WSP-AF held in Nairobi June, 2002.*

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*Case study 2 Bolivia: The Yacupaj pilot project and prosabar national project*

**Description of Scaling Up**

This is one of the few examples of where a pilot project has been designed with the specific intention of going to scale in a subsequent phase. The Yacupaj pilot project was initiated in 1991 with the objective of designing and testing strategies for delivering services to the dispersed rural population of the Altiplano region and to use these lessons to prepare a national project. Prior to the Yacupaj project, services had been provided on the basis of a supply-driven approach managed by central government. The project worked successfully via intermediary organisations, with responsibility for implementation and (much) higher levels of participation by communities in the process from planning to post-construction O&M. In 1993, following on from the initial pilot phase, the Bolivian government asked the World Bank to fund a much larger rural WSS project, PROSABAR. From the outset of the Yacupaj project, a coordination unit in La Paz had been set up to support national sector policy development and to apply lessons from the pilot at national level.

**Scale and Time Frame**

The original Yacupaj pilot project was implemented in four provinces between 1991 and 1994. It provided 61,000 people with water and sanitation services. The national PROSABAR project started an initial preparatory phase from mid-1992 to 1995, followed by a five-year implementation period ending in 2001. The original preparation team decided that PROSABAR should aim for coverage levels of 70%, which was ambitious given the actual coverage levels of around 24% in rural areas. By the end of the project period, services were delivered to 894 communities in 186 municipalities of the country benefiting some 800,000 rural residents with both water supply and sanitation.

**Technology and Water Resources**

Under the pilot project, each community was offered a choice of technical options and a range of possible service levels. The project originally allowed wells with handpumps and latrines, but in response to demand expanded the range of choices to include more handpump options, as well as gravity systems. The PROSABAR project included a much broader menu of technical options, including gravity and pumped piped systems with household connections. Communities were able to select levels of service based on such criteria as population density, willingness to pay, quality and quantity of water source.

**Main Institutional Actors**

Responsibility for management and implementation of the Yacupaj pilot project was divided among different stakeholders, including the National Director of Water and Sanitation (DINASBA), the National Directorate of International Cooperation, the Netherlands Technical Mission in Bolivia, regional development corporation agencies, the Ministry of Health, the United Nations Development Program, and the WSP. The project worked with “intermediary” organisations (either NGOs or, in one case, a regional

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development project) which were responsible for actual implementation, as well as municipal governments and with the full participation of the communities themselves.

The national level project, PROSABAR, worked with many of the same actors, with DINASBA having overall responsibility for the project. One of the crucial differences with the pilot was that the Bolivian government's decentralisation reforms required the involvement of the state Social Investment Fund (or FIS). FIS does not implement projects directly, but appraises, finances and monitors proposals submitted by municipalities.

### **Links to Sector Reform**

To a large extent, the whole Yacupaj-PROSABAR experience has been driven by sector reform. In 1991, Bolivia initiated a major institutional restructuring of the water and sanitation sector to improve service delivery to the poor in rural and urban areas. The government declared improvement in water and sanitation coverage a national priority and reorganized the sector's institutional structure. Most activities related to construction, human resources development and service administration were transferred to the private sector, local communities, and NGOs.

### **Financing**

The original pilot project cost around \$2.8 million. Significantly, under the Yacupaj approach, communities contributed more than 50% of the costs through a combination of labour inputs, materials and cash. Communities also accepted responsibility for long-term O&M costs. The national PROSABAR project had a total investment cost of around \$48 million. Community contributions under PROSABAR were lower than those under the pilot, running on average between 20 and 25%.

### **Factors in Success or Failure**

- One of the principal factors in the success of moving from a pilot project to a national level initiative was in having institutional linkages from the outset, which enabled both successes and failures to be fed into national policy debate at the highest possible levels.
- Clearly defined, but flexible, rules that provide the framework for financial policy, eligibility criteria, service levels and technological options; ability to make adjustments on an iterative basis as the pilot project progressed.
- Scaling up from pilot to national project took account of, and worked within, the broader reform of the sector and decentralisation policy, for example, by giving a greater role to municipal government in the scaled-up approach.
- The (enforced) involvement of FIS brought significant drawbacks to the programme due to poor coordination with other sector bodies, its "institutional incentives" which favour the disbursement of funds over the quality or sustainability of investments, and the fact that it is seen as more responsive to the demands of private contractors than those of the communities themselves.

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Source: World Bank Water and Sanitation Programme, Focus Areas: Rural and Small Towns Water Supply and Sanitation; Sara J. et al "Rural Water Supply and Sanitation in Bolivia: From pilot project to national program" UNDP-World Bank, Water and Sanitation Program, May 1996; Ministerio de Vivienda y Servicios Básicos, República de Bolivia; Proyecto de Saneamiento Básico Rural (PROSABAR)<sup>7</sup>.

*Case study 3 Tanzania: The Wamma integrated community water supply, sanitation and health education programme*

### **Description of Scaling Up**

This is a system of integrated long-term support to community managed water supply, sanitation and health education in the Dodoma Region of Tanzania, supported by a partnership between the Government of the Republic of Tanzania and the INGO WaterAid. The WAMMA concept is based on district teams of middle level staff from the Departments of Water, Health, Community Development and Education, the name WAMMA being derived from the initials of the participating departments. There are five district WAMMA teams who in addition to working with a number of new village projects each year provide a back up service of support to existing water supply schemes. Associated with this is the pump and engine maintenance scheme or PEMS, which provides a partly subscription-funded service of technical advice and support to the schemes requiring this assistance.

### **Scale and Time Frame**

WAMMA has been operating since 1991. The population covered by WAMMA-supported water supply systems has risen from 200,000 to 1,300,000 over this time frame, providing safe water to 76% of the rural population, from 487 schemes distributed across the five districts of the Dodoma Region in central Tanzania.

### **Technology and Water Resources**

Because of the great depth of aquifers, often in excess of 100m, the technology utilised for community water supply in the Dodoma Region is predominantly deep boreholes equipped with either rotating mono or reciprocating climax pumps driven by diesel engines with gravity pipeline systems being sited where springs of sufficient capacity exist. There are also a number of TANIRA hand pumps sited where groundwater is shallow enough to permit their use.

### **Main Institutional actors**

The main institutional actors at district level are the Government Departments of Water, Health, Community Development and Education. At Regional Level, the Regional Water Engineers Department has provided much of the lead, in concert with the other Regional Heads of Department. The Country Offices of the INGO WaterAid continuing to provide logistical and financial support to the programme.

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<sup>7</sup> <http://www.wsp.org/english/focus/bolivia/part3e.html>

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### **Links to Sector Reform**

The WAMMA programme, as a Government / INGO partnership, has linked to the National Water Policy since its inception, participating in national debate and discussion over the reform of the sector. The ending of the Government policy of free water in the early 1990's is fundamental to the WAMMA approach of community management of water supplies, including paying for O&M costs.

### **Financing**

The financing for the WAMMA programme has come from both Government and external sources principally through the INGO WaterAid, with further financing support being provided through IFAD from the Belgian Survival Fund and, more recently, the World Bank. As part of the Demand Response Approach (DRA), communities raise 5% of the capital costs and raise a community water fund to pay for operation and maintenance costs.

### **Factors in Success or Failure**

- At Community Level:  
Ownership of the installations by the communities who use them, generated by involvement from planning through implementation to the management of operation and maintenance, plays a major part in the success of the schemes. Memories of the very real hardship faced by communities prior to the refurbishment of the schemes has also been an issue promoting sustainability, as the value of the scheme is appreciated. Where water from alternative sources has been more easily available however, there seems to have been less incentive to raise funds for repairs when these have been required.
- At Strategic Level:  
Six key factors have lead to success with WAMMA. These are: 1) New Government Water Policy favours community management of water systems, 2) Field Workers made available by government departments to form integrated teams that once formed, are committed and take great pride in their work, 3) Backing from senior government officials maintained throughout, 4) Needs-based approach allowed to evolve into a demand responsive approach, with time given to communities to opt in when ready, 5) The acceptance of the importance of community development and the training of staff in the use of participatory methods, 6) Donor resources maintained to allow the integrated teams to continue their work over a long time period.

*Source: Matthews, B. "Insights into Scaling Up from Tanzania and Zimbabwe"*

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*Case study 4 Honduras: Technicians in operation and maintenance (TOMs)*

**Description of Scaling Up**

This case study illustrates attempts to scale-up a system of long-term support to community-managed RWS in Honduras. It is somewhat unusual as it deals with the post-construction aspects of scaling up. It is based on the “circuit rider” concept used in the United States by the National Rural Water Association, which has been adapted in Honduras and re-named the “Técnico en Operación y Mantenimiento” or TOMs (O&M Technicians). The TOMs are employees of the national water and sanitation authority (SANAA) and work from regional offices that have substantial authority to make decisions, independent from higher levels of the national institution. There are currently 86 TOMs operating from six regional offices. Each one is responsible for an average of 50 communities and is expected to visit each system at least twice per year to provide advice, carry out trouble-shooting and monitor system performance.

**Scale and Time Frame**

With support from the U.S. Agency for International Development (USAID) SANAA launched a pilot programme from 1993 to 1995 in one department of the country, Atlantida, with an estimated total population of just over 300,000 in 1995. This pilot was extended in 1995 and is now truly national in scale, providing back-up support to over 4,000 rural water systems servicing more than 2 million people of a total rural population of just under 3.2 million.

**Technology and Water Resources**

Honduras has a wealth of spring and stream water sources in rural areas that are ideal for gravity-fed systems. The TOM model works exclusively with gravity-fed piped systems with household connections. Interestingly, other types of systems, such as handpumps or public standpipes are excluded because the programme concept was designed for systems that provided individual household service and the associated responsibility for payment.

**Main Institutional Actors**

The principal actors at the national level include SANAA itself, the Ministry of Health (MoH), which has overall responsibility for the sector, and USAID as a long-standing donor partner in RWS. Regulation of the sector is the responsibility of a separate national government body (the National Commission of Public Services). There are no formalised, institutional relationships with municipal government; however, there is an increasing level of coordination with both municipal governments and NGOs. At community level, the TOM model is predicated on the existence and functioning of community water boards; in many cases the board will contract a system operator, often a community member, to carry out day-to-day management of the system.

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### **Links to Sector Reform**

The current legal and regulatory framework that applies to SANAA and other institutions working in the WS sector is rather vague; for example, the boundaries between SANAA and the MoH are not well defined. The law governing the sector has been under review for some time and it is anticipated that whilst the main structures in the sector will remain, responsibilities will be reorganised and better defined, especially regarding the role of the state in supervising and monitoring RWS. The rural directorate within SANAA and senior management of the institution are responsible for promoting the interests of the TOM model within this sector reform process.

### **Financing**

The financing for initial set up costs for the TOM pilot was provided entirely by USAID as part of discrete project funding. Following the expansion of the model to national level, the TOM programme has an annual budget of approximately \$1.25 million (2000), of which SANAA now contributes about 65% and USAID the remaining 35%, with the former providing salaries and programme administration overhead costs and the international donor supporting operational costs such as fuel, per diems, equipment, maintenance and technical studies.

### **Factors in Success or Failure**

The TOM experience has benefited from being relatively autonomous in the sense that there is very little political gain to be made from interference in programme management, even at local government level, as there are little or no material resources at stake.

- Decentralisation of the TOM model to regional offices has improved the efficiency of the programme by making it more accessible to communities and municipalities
- The personal and educational qualities of the TOMs themselves are a major factor in the success of the programme; prospective staff must possess high educational levels and follow a 12-week intensive training course.
- The salaries of the TOMs are generally better than those of other state promoters and they have access to greater resources (vehicles, motorcycles, educational materials, equipment and laboratory services), both of which increase motivation and efficiency.
- Long-term, predictable and relatively high levels of funding from a donor support agency has contributed to success; this is also one of the major weaknesses of the programme, as it is highly sensitive to any decision to reduce or withdraw such financial support.

*Source: Trevett A., in "Case Studies on Decentralisation of Water and Sanitation Services in Latin America", Rosensweig, ed. EHP Strategic Paper No.1, January 2001<sup>8</sup>.*

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<sup>8</sup> [http://www.ehproject.org/Pubs/Strat\\_Papers.htm](http://www.ehproject.org/Pubs/Strat_Papers.htm)

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*Case study 5 Switzerland: The Wittenbach community water supply system*

**Description of Scaling Up**

This case study is an example of a service that has already been scaled up and where there is effectively 100% coverage in the present day. Although the case study is from a developed country and the scaling up process has been going on for over 100 years, it highlights some valuable lessons about the management process and the process of scaling up. Wittenbach is a rural village in the north-east of Switzerland and today has about 8,000 inhabitants served by a modern piped network with multiple in-house connections. This system was originally started in 1897 as a Water Corporation, which at the time was essentially a private club, benefiting a small number of wealthy landowners.

The system is now owned by a Water Supply Group, which is an association of seven rural water supply networks in the region (including Wittenbach). It is managed by a community-based organisation, the Water Co-operative, which all adult members of Wittenbach are entitled to join. This organisation takes all strategic decisions concerning the system as well as reading and checking of meters. Community members receive only very small remuneration for working on the Co-operative, so management costs are very low. The actual operation of the network is contracted out to one private company, which then sub-contracts other companies to carry out specific tasks when required, including maintenance of the system.

**Scale and Time Frame**

The original Water Corporation was established in 1897 by just 26 wealthy landowners out of a total population of only 900 people. Demand for the system continued to increase and by 1932 it was required to become a public body from which any member of the community could benefit. At the present day, 8,000 people are connected to the system in Wittenbach with an average daily water consumption of 270 litres per capita, including non-domestic uses.

**Technology and Water Resources**

Originally the water co-operative relied on nearby spring sources located on high ground. With the development of more efficient pumps, lower-lying sources of water were developed. Today, the system is fully modernised using polyethylene pipes and state-of-the-art treatment facilities.

**Main Institutional Actors**

As well as the Water Supply Group, the community Water Co-operative and the private sector companies, the fire insurance provider plays an important role in the institutional framework supporting the Wittenbach system. The fire insurance provider is a unique stakeholder with its history in the dual purposes of drinking water and fire fighting. Today it funds additional infrastructure costs for fire fighting purposes (e.g. larger diameter mains and street hydrants) and also acts as provider of technical knowledge and supervision. Although the municipality is by law responsible for the water supply of the village it has

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completely delegated this task to the Water Co-operative. The Canton or state, which is in this case the “intermediate level”, provides essential back-up support including laboratory services and monitoring the environmental protection of water sources.

### **Links to Sector Reform**

The development of the sector and legal framework over the years has been a considerable factor in the continuing success of the Wittenbach experience. The right of an individual to own, buy and sell (water) and similar laws for groups of individuals are all part of this framework in Switzerland. It was also a reform of the legal framework that forced the original Water Corporation to transform itself from a private club into a public body. Subsequent modifications to the legal framework, which has evolved over many years, have forced improvements in water quality and technological upgrades.

### **Financing**

Financing for the initial set up of the Water Corporation and the construction of the original system was provided by the wealthy landowners and other private investment in the form of a loan from a regional bank. This was quickly paid back over the first ten years and subsequent income from connection fees and annual charges has met all expenses of the Water Co-operative. Any surplus was set aside for extension projects and to cover depreciation of capital equipment. The system now has an annual turnover of approximately \$1.2 million.

### **Factors in Success or Failure**

- A balanced public-private partnership in which the community retains strategic ownership and control of its own system, but where private companies are able to bring efficiency and improved technical know-how, governed by clearly defined contractual arrangements.
- By involving the local elite from the outset, the system has benefited from a high profile and has mitigated more negative aspects of political interference.
- Reliable and continuous financing from user fees and setting tariffs at high enough levels to cover both routine maintenance costs and larger capital replacement costs has enabled the system to survive as a viable entity over many years.
- The increase in coverage (scaling up) was made possible by the existence and application of central government legislation.

*Source: Saladin, M. “Wittenbach: Where a club for a few evolved into a co-operative for all” Case Studies on Community Water Supply in Switzerland, SKAT Foundation, Switzerland<sup>9</sup>.*

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<sup>9</sup> <http://www.skat-foundation.org/resources/downloads/pdf/ws/Wittenbach.pdf>

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## **Early lessons and challenges to scaling up**

The case studies provide useful insights into the practicalities of scaling up community-managed RWS. We are also able to draw on other experiences and thinking about what works and what does not in a variety of institutional settings. From this body of knowledge we can now identify some initial lessons about scaling up. The points highlighted are not based on any rigorous or comprehensive analysis, nor are they an exhaustive list of concerns, but we can be certain that these are some of the more important issues that should be taken into account when considering scaling up CM of RWS.

### *Lesson 1: Strong community management and participation is a common theme*

In all the examples, CM forms one of the fundamental building blocks for the scaling up process. The management model varies from case to case, but even in modern day Switzerland, it is the community that maintains control over strategic decision-making. One of the explicit messages from the Bolivian experience is that whilst the level of community participation may have to be revised downwards in a scaled-up approach, this should never be to a degree that threatens the primacy of the CM model or to the point where communities lose control over strategic decision-making

### *Lesson 2: Back up support to help community management is vital*

In these practical examples, there is a common recognition of the need for support to the community in managing their water supply services. Again, the composition of this support structure varies and may be taken on by the state, local government, NGOs or the private sector (or a combination of any of these actors). In Switzerland it is still the Canton tier of government that provides these services. The Ethiopia study clearly shows that when planning for a scaled-up level of coverage it is equally important to examine how support services will be scaled up, including the associated costs and human resource requirements.

### *Lesson 3: Efforts to scale up work better when there is a broad menu of technical options, service levels and costs*

It is apparent that going to scale, and thereby reaching out to a greater diversity of population, will inevitably be more successful if there is a broad menu of technical options and service levels available, designed to suit the needs and demands of different users. The early experience of the Yacupaj pilot project was that demand and take-up of services was improved by broadening the range of technologies available. This is supported by recent experiences from Mozambique, which highlight the fact that lower cost options are more sustainable for the poorest communities (Breslin, March 2003)

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*Lesson 4: We should re-consider traditional systems and what constitutes “safe water sources”*

The definition of what is considered as a “safe” water source is important in the scaling up process and has obvious implications for costs and the ability to go to scale in a reasonable time frame. The case study from Ethiopia and experience from elsewhere, including the Mozambique study cited above, support the argument that the definition of safe water sources should be reviewed and include (improved) traditional sources. Where rural communities are relying on very basic unimproved sources, is it realistic to expect that services can be scaled up to highly engineered solutions that cover the majority, if not all, of the population in one step? Adopting the more inclusive approach can run counter to the perspective of technical staff and engineers, who have generally been trained to strive for the most exacting solutions.

*Lesson 5: Flexible rules, guidelines and standards work better*

In order to take successful approaches to scale, particularly when moving from a pilot project to much broader and heterogeneous populations, there is clearly a need for flexibility. In the Yacupaj pilot, flexibility was soon seen as a key to progress in scaling up. Other experiences support this view. For example, the successful La Paz-El Alto peri-urban initiative for community-managed small-bore water supply and sanitation (based on condominial technology), required changes in the regulatory environment to move from a limited pilot to a national standard in Bolivia. As noted by subsequent researchers: “without some degree of flexibility, replication may be impossible or extremely difficult” (Colin and Lockwood, February 2002).

The question of how far we should accept flexibility in terms of lowering standards, as the price for scaling up, is clearly an emotive one. As one South African practitioner remarked, we should be less “hung up” about water quality, and instead of state-of-the-art water treatment that treats the entire supply, we should treat only drinking water and do so with simple technology in order to achieve scaling up (IRC e-conference on scaling up, 2002).

*Lesson 6: The importance of linking scaling up with sector reform and decentralisation*

In almost every case, the process of going to scale has been influenced by, and in many instances benefited from, reforms to sector policy, changes in legislation and the trend towards decentralisation of government functions. For example, in Tanzania, the WAMMA programme directly benefited from a change in the government’s “free water” policy in the early period of its inception. The clear lesson from these case studies and many other similar situations is that an enabling policy environment for the rural sector is needed in any effort to scale up. Therefore, it is important to understand and account for the broader policy environment, whether working at lower (district) levels or at national level.

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*Lesson 7: Linking implementation to national policy – work at both operational and policy levels*

Linked to the preceding point, is the lesson that, wherever possible, efforts to go to scale should attempt to work at both the operational level and the policy level. One of the main reasons why the Yacupaj pilot project in Bolivia was able to prepare the ground for the much larger national level PROSABAR so effectively, was because there was an in-built linkage at higher institutional levels to feed in the lessons of the pilot in “real time” into the national policy debate. This lesson is backed up by a more recent experience emerging from WaterAid’s work on scaling up in Mozambique, which highlights the importance of having a presence in the capital, thereby increasing the advocacy role with “a voice from the field” (Mahon and Sinclair, 2003).

*Lesson 8: Change the nature of pilot projects – begin with the end in mind*

The Bolivia experience is a good example of starting a pilot or demonstration project with the goal of scaling up clearly defined from the outset. In the recent discussion paper on scaling up commissioned by the World Bank, we see a compelling argument for the need to change the nature of pilot projects (Davis and Iyer, 2003). The paper suggests that although there is widespread evidence of successful pilot or demonstration projects that deliver sustainable benefits, very few of these (if any) have been scaled up successfully. This appears to be because many pilot projects of this nature do not fully take into account the needs of scaling up in the design and resourcing phases (Davis and Iyer, December 2002 and Deverill et al, 2002). The World Bank document goes on to suggest that the nature of pilot projects should change to eliminate special features chosen to make them successful in the first place (i.e. the use of “policy holidays”, cherry-picking the easiest communities or districts, or paying over the odds for staff salaries etc.) and that they should concentrate on developing successful approaches based on real-life, or worst-case, scenarios.

*Lesson 9: Involving the private sector can work*

Several of the case studies indicate that there is an important role for the private sector in service delivery, and that this could be extended from the traditional involvement in system construction, to include back-up support services. In more developed scenarios, such as the Wittenbach case study, the successful involvement of the private sector is predicated on the existence of well defined contracts and the presence of an effective regulatory body to protect the interests of the community/consumers. Strategic decisions remain at the core of the CM model, even where private sector companies or individuals are hired in to carry out specific tasks.

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### *Lesson 10: The role of politicians and elites – pluses and minuses*

The involvement of politics is an emotive issue, but clearly a reality in many countries, including those in the North. As illustrated in the Wittenbach case, involvement of local elites from the outset was a positive step in initial efforts to start up a RWS. A positive position is also taken in the World Bank paper, which suggests that political elites can play a vital role in overcoming resistance to doing things differently and can be instrumental as champions of a cause such as scaling up. In the WAMMA case study, support from government officials is cited as one of the key strategic factors for success.

Of course, there is also a chance of running foul of vested political interests. Political and commercial interests can quickly de-rail a process of innovation, especially where this involves large amounts of money or other resources. This has been one of the reasons behind recent problems with the sector reform process in India, where medium and large-sized private companies have been applying political pressure to win large construction contracts.

### **Challenges to scaling up**

We have touched on many of the issues and factors which can act as constraints to scaling up throughout the course of this document. The recent discussion paper produced by the World Bank provides a comprehensive analysis of common challenges to scaling up rural water supply, and it is useful to re-visit these themes and to see that many of the conclusions resonate with what we have reviewed in a more limited number of case studies in this TOP. In the discussion paper, Davis and Iyer propose a taxonomy of common challenges to scaling up and arrive at four broad explanations for the failure to scale up successful but limited pilot RWS initiatives (see box 17).

From the work of Davis and Iyer, and from many other sources, we can see that whilst access to increased funding probably remains the greatest constraint to scaling up, it is by no means the only obstacle. The detailed analysis of staff requirements carried out by DHV in the preparation of the Ethiopian sector plan underlines the importance of human capital in being able to go to scale. Simply put, to achieve scaling up of RWS more skilled people are needed across the board, from project staff, health promoters, masons, pump operators, auditors, design engineers, laboratory staff and administrative personnel to programme managers and planners. In many countries where there is not yet a sufficient pool of people with the right training and skill sets, this shortage of human resources will undoubtedly be a serious constraint to scaling up.

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Box 17: Scaling up: where are the bottlenecks?

**Resource constraints:** inadequate funding, human capital, institutional capacity, supply chains, or other resource limitations render a successful small-scale initiative infeasible on a larger scale;

**Lack of knowledge or shared understanding:** individuals responsible for planning or implementing an RWS initiative do not fully understand its principles and/or the roles they are expected to play in scaling up.

**Resistance:** despite having full understanding of a successful, sustainable approach to RWS service delivery, key stakeholders are unwilling to support scaling up.

**Untested implementation conditions:** when extended to new areas/communities, a successful initiative encounters difficulties because of its unique features (e.g., technical, social, policy, user demand) not confronted in the pilot communities.

Another important barrier to scaling up is the lack of coordination between different programmes working in the same country or sub-national region. Ironically, it is often when national government water agencies are weakest that there is greater potential for uncoordinated actions between donors (Mahon and Sinclair, 2003). At times this can lead to competing and conflicting approaches to implementation, cost recovery and other guidelines imposed in the vacuum left by weak or non-existent national sector policies.

Frequent personnel changes resulting from the successive election of opposing political parties can have a severe impact on capacity building efforts, when individual civil servants can be on the job one day and gone the next. This was identified as a major constraining factor in the attempts at capacity building of the Rural Directorate of the Dominican Republic's National Institute for Water Supplies and Sewerage between 1996 and 2002. In a recent EHP report documenting this process, the authors cite two "*en masse*" staff changes during the period, and the consequent loss of institutional memory and human capital, as one of the major constraining factors to building a positive and enabling environment for community-based approaches to RWS in the country (Johnson and Perez, June 2002).

### **The process of scaling up**

Although pilot or demonstration projects aiming for the provision of sustainable, community-managed RWS services have been developed over many years and in many different countries, we have seen few systematic attempts to go to scale. As the Yacupaj pilot experience shows, perhaps this reflects the largely iterative nature of the process, with many shifts and changes of direction along the way. If we are to strive for scaled-up coverage of sustained services, how do we approach this and is it possible to develop a framework for going to scale, or to define a model to assist practitioners and planners?

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*Some of the main steps towards scaling up*

Development of more systematic approaches to scaling up will require concerted effort and further research, but in order to push the agenda forward, we can suggest some possible ideas about the process of scaling up and look at the development of a scaling up strategy. One of the fundamental lessons to date seems to be that approaches to scaling up must take place both at an operational and at a policy (or political) level. However, proving what works on the ground and engaging with policy makers and winning political support for the process of scaling up will require different approaches. Many of these activities will take place simultaneously and in most countries, some of these actions are already underway. This reinforces the earlier message that the scaling up process should harness existing efforts, rather than duplicating them. A plan for scaling up, or a “process map”, is likely to include the following main elements:

1. assessment of the current state of the rural water supply sector;
2. opening a process of formal dialogue and advocacy at central level;
3. learning from existing pilots, or initiating new action research pilots;
4. establishing linkages between local level and policy development;
5. demand creation at all levels;
6. planning and coordination of resource allocation, especially amongst donors;
7. capacity building of key intermediary level institutions;
8. expanded implementation of water supply systems;
9. expanded delivery of support services to newly completed and existing systems;
10. monitoring of the overall scaling up process at all levels.

#### **1. RWS Sector assessment**

Assessment of the conditions for scaling up at national level is a vital first step. If scaling up is being considered for a particular sub-national level (e.g. province or district) then there should be an additional focus at that level. In any assessment, we would want to look at a broad range of areas, including the following:

- national RWS sector policies, targets and long-term objectives;
- existence, status and likely impact of any sector reform process;
- RWS sector regulations, norms and standards concerning both technical and software aspects of implementation;
- financial resources and strategies for coordination and investment;
- cost recovery policies;
- roles and responsibilities of all institutions involved in RWS; this must consider responsibilities for both system construction and long-term support;
- status of decentralisation and likely impact on roles and responsibilities;
- Legislative frameworks and clarity over legal mandates;
- institutional capacities at all levels, including the availability of skilled and experienced human resources;
- analysis of on-going programmes, sources of financing and likely future investments in the sector;

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- actual and/or potential role of the private sector in RWS service delivery;
  - role of local level NGOs/CBOs and associations in RWS service delivery.

## **2. Dialogue and advocacy**

Opening a formal dialogue with concerned stakeholders at all levels is a key part of the long-term advocacy process to generate political support and momentum. Disseminating the aims of going to scale, making sure that as many different stakeholders as possible are included and anticipating potential conflicts are all helpful in taking forward the process of scaling up. Involvement of key actors must take place at all levels, including district level, and must address the needs of all aspects of service delivery, especially for long-term support after completion of physical infrastructure. This process of negotiation and dialogue is important to develop a core group that can act as a “motor”, to drive forward the scaling-up process and institutionalise some of the important aims and objectives.

## **3. Learning from pilots**

We know that lessons at an operational level from existing pilot projects are a crucial part of scaling up. It may be possible to build upon existing pilots, or it may be necessary to start new projects that include action research components. Research is needed to clearly understand the full costs involved in going to scale and the likely direct and indirect economic benefits, such as poverty reduction and contributions to broader community development.

## **4. Linking pilots to policy**

Successful demonstration projects or pilots are not enough. To move away from the “islands of success” syndrome, we must disseminate lessons and establish mechanisms that facilitate the linkage between operational activities and policy reform in favour of scaling up. To serve as valuable inputs for a policy debate, and to back up advocacy efforts, a new model of pilot projects is now needed, designed to take into account “real world” constraints.

## **5. Demand creation**

From experience with DRA we know that demand creation is an important part of the scaling up process. Depending on existing conditions and levels of interest, action will be required to generate demand for participating in improved RWS activities. Demand creation is likely to be required at all levels, from community, to district and central government agencies.

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## **6. Planning and coordination**

The planning process can only begin when there is political support for scaling up and when there is a clear understanding of costs and other resources that will be required. Partnerships are an important element of good planning, whether at the national or district level and it is crucial to work together with all stakeholders. Developing the planning process for going to scale must focus on the water supply service approach, seek “full coverage” in geographical terms, and look to provide indefinite support to communities. Improved coordination, especially amongst international donors, is a key requirement for scaling up.

## **7. Capacity building**

We know that any serious effort will probably require a prolonged period of preparation and capacity building for scaled-up service delivery. The needs for capacity building will primarily be focused on the intermediate or district levels and include technical and managerial development as well as the clarification of roles and responsibilities. However, capacity building is also likely to be required for central government agencies responsible for the RWS sector. Capacity building efforts must be provided for institutions offering long-term support to communities, as well as those involved in system construction.

## **8. Expanded implementation**

Many countries have already adopted the CM model as the main vehicle for implementing RWS projects. Participatory and demand-based approaches are also increasingly common. Scaled-up, or accelerated implementation, should take place at the district level, but within the broader planning framework set down by the national agency responsible for RWS. This may or may not entail the development of new guidelines and resource materials for CM approaches.

## **9. Expanded delivery of support services**

Expansion of capacity to support communities must occur at the same time as the expansion of physical coverage. In many instances, the primary actor responsible for long-term support will be the district or municipal local government, but in other cases specialised centralised agencies, local NGOs, or associations of water users may take on these tasks. Back-up support should be provided to all rural communities, regardless of whether they have existing or new systems. Support and guidance should be based on agreed standards for the frequency of visits, different types of activities and feedback of information to communities and to higher levels for monitoring and planning purposes.

## **10. Monitoring**

Oversight and monitoring of the scaling up process will verify that milestones are being achieved and feed lessons back into the planning process on a continuous basis. Monitoring is required at a macro-level to determine the expansion of coverage and delivery of support services, as well as at local level to monitor the performance of individual systems and to provide remedial actions as necessary.

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### *The tools for scaling up*

Fortunately, some of the tools and analytical frameworks required for carrying out these types of activities have already been developed:

- The World Bank has developed a useful checklist for the rapid assessment of the RWS sector, highlighting eight important areas, including such components as technology, financing, enabling environment and implementation capacity. It is available at the World Bank's water and sanitation website<sup>10</sup>. This is a generic list, so, depending on the country in question, it may be necessary to add such things as a greater focus on the status of CM models, an assessment of the decentralisation process and the issue of institutional capacity for supporting communities in the long-term.
- As long ago as 1993, the Pan American Health Organisation (PAHO) developed a methodological guidelines for sectoral analysis in water supply and sanitation. These guidelines are viewed as a "tool" for the assessment of WSS and can be applied at national or state (provincial) levels. The guidelines apply to both the urban and rural sector, but include elements aimed at assessing community management and institutional roles and responsibilities. The guidelines are in the process of updating, but are available at the PAHO website<sup>11</sup>.
- Taking capacity assessment a step further, The Water, Engineering and Development Centre (WEDC) in the UK has recently published a document which addresses scaling up and suggests a matrix for assessing existing capacity from national down to community level (Deverill *et al*, 2002).
- There has already been some work done on understanding long-term institutional support models for community-managed RWS. A recent EHP publication provides details about the main components, key areas of support, roles and responsibilities and a framework for establishing such mechanisms in practice (Lockwood, December 2002)<sup>12</sup>.
- EHP has also developed a set of guidelines for the assessment of national sanitation policies. Whilst these obviously do not address RWS specifically, the report provides practical frameworks for putting such assessments into practice, including terms of reference (Elledge, M.F. *et al*, 2002)<sup>13</sup>.

The political dimension of scaling up RWS and the process of generating support is more problematic. It involves keeping a range of key stakeholders on-side and potentially

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<sup>10</sup> <http://www.worldbank.org/watsan/rwsstoolkit/index.htm>

<sup>11</sup> <http://www.paho.org/>

<sup>12</sup> [http://www.ehproject.org/PDF/Strategic\\_papers/SR-6.pdf](http://www.ehproject.org/PDF/Strategic_papers/SR-6.pdf)

<sup>13</sup> <http://www.ehproject.org/Pubs/GuidelinesandTools.htm>

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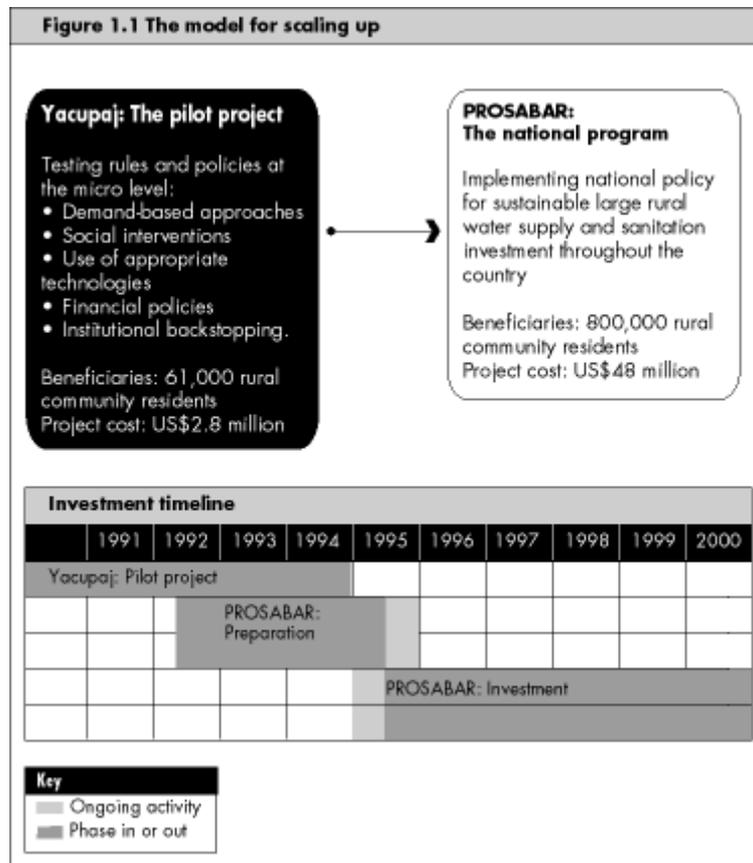
confronting the interests of central government and, in some instances, of big business. The process of advocacy is highly specific to the given context and there are no standard “tools” for this important work. However, from a number of documented experiences we do know that initiatives such as scaling up are successfully established when there is a core group of support at various levels and across institutions. The chances of successful consensus-building and buy-in are often greatly increased when there is a “champion”, or a core group of influential people, able to galvanise support and overcome resistance to change. Champions can come from within institutions responsible for RWS, but they may be more effective if recruited from more influential agencies or ministries, such as finance and planning.

A staff member of a bilateral project working in South Asia reflected on the importance of having a political champion for moving forward lessons generated from a pilot project: “Information from the pilot is used by your champion to convince others. But without the champion, no amount of data from the pilot” (would convert other decision makers)”. (Davis and Iyer 2002:16).

*The time frame for scaling up:*

We have looked at the main issues in going to scale and suggested some of the key stages in that process, but how long does this all take to achieve in practice? The case studies provide some insights. For example, in Switzerland we described a process spanning over a century and one that is still evolving, albeit now through a process of refining something that already works efficiently for all concerned. The Yacupaj-PROSABAR experience, presented in Figure 1.1, may give us a more realistic idea of the sort of time frame required for scaling up in the context of developing countries.

In reality there will be as many answers as there are attempts to take RWS to scale. That is to say, the process will be unique in every context and is likely to be accelerated or delayed by a broad range of factors, some of which will be completely beyond the control of those promoting the scaling-up initiative. At this stage, it is fair to say that we know scaling up is an activity that takes several years to build towards, before the right set of conditions are in place to work at full capacity. In this respect, the Yacupaj-PROSABAR experience of about a decade may be a realistic indicator of how much time it takes to go to scale.



Source: <http://www.wsp.org/english/focus/rws-yuca.html>

Want to find out more about the practice of scaling up? further information and insights about the case studies, challenges and tools can be found at the following websites:

- EHP The Environmental Health Project:  
[http://www.ehproject.org/PDF/Strategic\\_Papers/SR4INAPAFinal.pdf](http://www.ehproject.org/PDF/Strategic_Papers/SR4INAPAFinal.pdf);  
<http://www.ehproject.org/Pubs/GuidelinesandTools.htm>;  
[http://www.ehproject.org/PDF/Strategic\\_papers/SR-6.pdf](http://www.ehproject.org/PDF/Strategic_papers/SR-6.pdf)
- SKAT Consulting: <http://www.skat-foundation.org/resources/downloads/pdf/ws/Wittenbach.pdf>
- IRC International Water and Sanitation Centre: <http://www.irc.nl/page.php/15>
- WEDC: Water, Engineering and Development Centre,  
<http://www.lboro.ac.uk/wedc/specialist-activities/ws/water-supply.htm>
- The World Bank: [www.worldbank.org/watsan/rwsstoolkit/index.htm](http://www.worldbank.org/watsan/rwsstoolkit/index.htm)
- The Bank Netherlands Water Partnership:  
[http://www.wsp.org/pdfs/scaling\\_up\\_press\\_20\\_03\\_03.pdf](http://www.wsp.org/pdfs/scaling_up_press_20_03_03.pdf)
- WaterAid: [http://www.wateraid.org.uk/site/in\\_depth/current\\_research/](http://www.wateraid.org.uk/site/in_depth/current_research/)

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## 5. The road ahead

### Summary points

- Although the momentum for scaling up is relatively new, there has already been much work carried out on related topics by a number of institutions and research bodies. But more still needs to be done in order to understand scaling up better and to push forward the agenda for scaling up at both national and international levels.
- Advocacy is not only needed during scaling up initiatives in countries with low sustainable RWS coverage, but also on a global level; governments of donor countries and officials working in multilateral financing institutions must be made aware that scaling up is needed and how this can be done and direct an increased share of funding to finance scaling up efforts for RWS.
- Activities are already underway to promote scaling up, often promoted by international sector specialist institutions; but international advocacy alone is not enough. To make a real impact on the ground, key decision-makers and those with influence from developing country governments must also be drawn into the process.
- There must be continued advocacy for the water supply service approach and to discourage donors from investing in “piecemeal” projects.
- Action research is a key vehicle for improving our understanding of scaling up issues, whilst at the same time generating interest and momentum on the ground. Several research projects that address aspects of scaling up are either in the planning stages or already underway, with support from the Bank Netherlands Water Partnership, the Thematic Working Group on Scaling Up; WaterAid; Plan International and SKAT.
- In terms of research focus, several critical areas remain to be addressed, including: a better understanding of the true cost-benefit of the CM model; the costs of providing long-term back up support; institutional bottlenecks to scaling up; and how sufficient financing can be identified for increased investment in RWS.
- There is an urgent need to improve stakeholder coordination and move away from traditional scenarios in which donors each support a different agenda and sometimes act in competition with one another with conflicting implementation policies.

### Future actions for scaling up

As we have seen, there has been a considerable amount of work carried out on different aspects of scaling up in the sector by a wide range of actors, from the World Bank to NGOs and from bilateral projects to research institutions. However, it is also apparent that

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the issue has only received more focussed attention relatively recently. There is new momentum, in part because of the MDGs and also due to a renewed commitment by the international community to invest in water and sanitation. The development of this Thematic Overview Paper, and other work such as the discussion paper on scaling up produced by the World Bank, the EHP document on institutional support mechanisms and the IRC conference on scaling up, all reflect this new interest in the topic.

Clearly, we do not yet fully understand all of the issues around scaling up, and in particular why it has apparently been so difficult to move from successful pilot projects to scaled-up, national-level service delivery. More systematic efforts are needed to understand the processes involved better, and to develop workable guidelines to assist efforts on the ground, if we are to make any meaningful impact on improving access to sustainable services for the millions currently without them.

In this section we take a closer look at the key issues of advocacy, research and stakeholder partnerships; we investigate which organisations are doing what and where there may be the need for further work. We recognise that this review has been initiated by sector institutions largely based in Europe and North America, and therefore will focus more on the activities of these same bodies. Inevitably we will not be aware of all on-going work being done on this theme by other institutions around the world. If there are additional contributions to this TOP please contact IRC to share views, experiences and thoughts on the subject of scaling up<sup>14</sup>.

## **Advocacy**

### *Two levels of advocacy: global and national*

Advocacy is not only needed during scaling up initiatives in countries with low levels of sustainable RWS coverage, but also on a global level. Governments of donor countries must be made aware that scaling up is needed and how it can be done. As we have seen, the international fora on reaching development goals frequently call for increased coverage, but they do not always advocate for sustainable services and may not fully appreciate what is involved in scaling up community management of RWS. The mantra of increased coverage seems to be leading the debate at present, without much thinking of what is needed to sustain coverage in the long term (e.g. the institutional support mechanisms which must be in place to provide the necessary “time” dimension of scaled up services)

At global level, advocacy should promote the water service approach, to move initiatives beyond the current project-based approaches. The past several years have seen a growth of interest in the issue of scaling up, as evidenced by some important publications and events arranged by international actors in the sector (see box 18 below). A new range of

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<sup>14</sup> <http://www.irc.nl/>

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materials has been developed by the Thematic Group on Scaling up, including posters, flyers and post cards; these are available free of charge from IRC.

Efforts to support scaling up require advocacy on the part of both national and international actors, but ideally should be carried out by those who have the ability to influence policy and strategic decision-making. Donors and multilateral financing institutions can exert leverage over national governments, but ultimately we should look to move away from (foreign) donor-driven approaches. To start moving the process forward, generic advocacy messages can be developed and disseminated by international water and sanitation bodies, but international advocacy alone is insufficient to lead to the creation of the necessary enabling environment. Therefore, lessons learned at national level need to be fed into the advocacy process and political support needs to be generated on a case-by-case basis in country.

**Box 18: Recent international activities in scaling up**

**IRC:** a mini-conference held in The Hague in December 2001 and a successful e-conference in the following year; publication of a book on scaling up community management due out in 2003; financing of future research into scaling up; development and dissemination of this Thematic Overview Paper on scaling up.

**World Bank/WSP:** scaling up discussion paper released in 2002; scaling up was one of the key "hot topics" in the Water Week 2003; financing of further research into scaling up using Bank Netherlands Water Partnership financing.

**EHP:** publication of a document on institutional support mechanisms for community-managed RWS in January 2003.

**Thematic Group on Scaling Up Community Management:** group established in late 2001, following the IRC mini-conference, has a membership of WSS institutions and NGOs and meets regularly to promote scaling up, initiate research and develop a framework for the scaling up process. The Thematic Group has been incorporated as a formal working group of the WSSCC.

**WaterAid:** has drawn together experiences with scaling up from case studies from four countries and produced a discussion paper; the INGO intends to address scaling up as a strategic issue in its new institutional policy.

**Plan International:** is working together with country offices to explore the opportunities for working on scaling up in at least two locations, with inception visits in 2003/2004.

Advocacy is also needed to improve coordination among donors and between donors and governments in specific country contexts. Lack of coordination can be a major hindrance

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for going to scale, with competing approaches, implementation methodologies and financial policies.

Perhaps most importantly, advocacy is needed among both national governments and the donor community to secure the **increase in funding** for the sector that is going to be required to finance scaling up. Convincing arguments are needed about the costs and benefits of reaching scaled up, sustainable RWS. In many respects, we are still some way from having the inputs needed for that debate.

### **Action research**

There are gaps in our knowledge about the true costs and benefits of scaling up CM approaches. We are able to establish that there is a true benefit to CM, but the next question becomes how “scalable” is this approach in terms of financial and human resources? We need to know **all** the costs for going to scale, not just for system construction, but for capacity building, for setting up the institutional frameworks and for maintaining them in the long-term.

A number of research initiatives are being planned by various actors in the sector. These will provide us with a clearer idea about how to overcome obstacles to scaling up:

- **Bank-Netherlands Water Partnership<sup>15</sup>:**

Further research is to be undertaken that builds upon the discussion paper released earlier this year. The objective of this work is to generate hypotheses regarding the necessary and sufficient conditions for successful small-scale RWS initiatives to be scaled up<sup>16</sup>.

A planned second phase of research will entail testing these hypotheses in field-based investigations. The knowledge generated by this work will enable architects of future RWS initiatives to devote resources toward establishing conditions that will better position a project for successful scaling up (or, in some cases, to acknowledge at the outset that successful scaling up is unlikely to occur).

Work on the related subject of follow-up support to communities is being planned in the near future, also with funding from the Bank-Netherlands Water Partnership. This research will aim to generate more information on what kind of institutional arrangements have been made for the post-project stage, if these are being implemented and whether or not they are really working. The study will look at what types of models exist, the pros and cons, and try to assess the costs of each option.

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<sup>15</sup> <http://wbln0018.worldbank.org/bnwp/portfolio.nsf/WindowWSSRuralAreas>

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<http://wbln0018.worldbank.org/bnwp/portfolio.nsf/1e03853d5752f03e85256c1b007121f6/fbace13a8e6fe44c85256c14007b2e6a?OpenDocument>

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The results of such research will clearly yield important lessons for the scaling-up debate<sup>17</sup>.

- **Thematic Working Group on Scaling Up**<sup>18</sup>

The group has a research agenda and members have already started preparing for research in countries where they are active (WaterAid in Tanzania and Plan International in China). The principal aim is to better understand the real costs and benefits of taking CM to scale at the district level. This will be done by identifying places where people are already attempting to do so, and then monitoring and supporting their efforts (applied research). The products of this research will include clear outlines of the costs and benefits of a scaled up CM approach, outlines of the roles and responsibilities of institutions involved in implementing and supporting CM, and advocacy documents. The activities will take place over a four-year period.

*Future research*

Looking at recent developments in the thinking about scaling up, we are able to identify a number of important areas which require further research; these include the following:

- There is still an open debate on the true costs and benefits of CM models for RWS. Whilst there has been some research already carried out (WaterAid Bangladesh for example) this is an area that requires further investigation.
- Very little is known about the true costs of providing follow-up support to community managed RWS. The recent EHP document points to a number of research agendas for gaining better understanding of institutional support mechanisms, including investigation into the willingness to pay for long-term support on the part of communities and how private sector companies could be integrated into such systems.
- The World Bank paper on scaling up ends with a discussion about possible directions for further research. A key area identified in the paper is in understanding which pilot (or first-stage) project design elements have important positive or negative effects on scaling up. Another important research agenda highlighted is to explore how the policy context and the institutional structures underpinning the delivery of RWS interact and where the scaling-up bottlenecks occur.
- Demand has become a leading concept in the implementation of RWS, but whether it is the most useful concept for scaling up requires further research and investigation,

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<sup>17</sup>

<http://wbIn0018.worldbank.org/bnwp/portfolio.nsf/1e03853d5752f03e85256c1b007121f6/82a52f9d6d4e7f2885256c14007b2e60?OpenDocument>

<sup>18</sup> <http://www.irc.nl/manage/facil/scalingup.html>

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including more in-depth research into DRA experiences and results. This question was raised by a recent presentation at the World Bank-sponsored Water Week 2003<sup>19</sup>.

- Some research and thinking on the main issues around how financing can be increased to meet the MDGs has already been carried out by the UK NGO WaterAid (Terry and Calaguas, January 2003). However, it is likely that further research will be required in this area as part of the broader advocacy process to generate support for RWS among the international donor community.

As we think through the likely focus areas of research into scaling up, it is also important to consider the **process** of such research; that is to say, question not only what type of research is needed, but how to go about it and who to involve. The Thematic Group on Scaling Up promotes the view that action research should include all stakeholders right from the start, in order to prevent “academic solutions” being developed by external actors out of context. Another central question is at what level the research should be initiated, bearing in mind the need to consider the district as the basic building block of scaling up.

Lastly, if research is to be linked to operational pilots, we must carefully consider the nature of such pilots and start to design them with the aim of scaling up built in from the outset.

### **On-going research**

In addition to the case studies summarised earlier in this TOP and the research initiatives described above, there are a number of other documented cases addressing scaling up that have either been recently completed, are underway, or are in the planning stages. These involve the documentation of project activities and experiences of work being done in a variety of countries in an attempt to disseminate the experiences gained, the lessons learned and the factors for success and failure in specific contexts. Some of the most relevant on-going or recent case studies relating to scaling up of CM of RWS are highlighted below:

#### *MANAGE project of IRC*

**India:** This study looks into the issues around scaling up CM as part the broader sector reform process in India. In Ganjam District, in Orissa state, a community-managed, demand-responsive strategy has achieved more in three years than decades of top-down service provision. This study documents the work of UNICEF, NGOs, CBOs, local government and communities working in partnership. Although the case study is about sanitation, there are some important parallels with scaling up of community-managed RWS.

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<sup>19</sup> [http://www.worldbank.org/watsan/waterweek2003/Presentations/Session%205%20-%20Scaling%20up%20sustainable%20RWSS/Scalingup\\_DRA.pdf](http://www.worldbank.org/watsan/waterweek2003/Presentations/Session%205%20-%20Scaling%20up%20sustainable%20RWSS/Scalingup_DRA.pdf)

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**Uganda:** This case study is based on WaterAid's experience of its District Support Programme in Uganda and the institutionalisation of CM approaches that have been adopted by the government as part of its commitment to participatory approaches. While the District Support Programme does not in itself aim to address water supply projects on a large scale, it does show the importance of working with local government and draws lessons from the approach which could then be used by others when designing and implementing projects on a larger scale.

IRC is currently in the process of developing some more systematic case studies which address scaling up of CM in various countries, including South Africa, India, Tanzania-Zimbabwe, Kenya and Colombia. It is anticipated that these will be finalised by the end of this year.

#### *Environmental Health Project*

Case studies on decentralisation of water supply and sanitation services in Latin America (Strategic report number 1, Rosensweig, ed, 2001), including a section looking at institutional arrangements for rural communities in Nicaragua and Honduras (three models). These case studies address the issue of long-term support to CM systems. Although they were not written specifically from the perspective of scaling up, they provide detailed insights into what is required to provide scaled up support to RWS services that are operated and maintained by communities.

A second document produced by EHP (Strategic Report number 6, Lockwood 2002) builds on the work of the first report and uses the same case studies, plus examples from Costa Rica, the Dominican Republic and Colombia, to develop a framework for institutional support mechanisms for CM rural water and sanitation systems in Latin America.

#### *WaterAid*

WaterAid has just finalised a paper for discussion, which draws on experiences of scaling up from country programmes in Tanzania, India, Mozambique and Bangladesh (Mahon and Sinclair, May 2003). All these studies consider the issue of scaling up from the institutional context. The discussion paper includes a brief comparative analysis of the case studies and concludes with some key issues for further discussion. This paper is intended to be used as a resource to move forward WaterAid's own strategic thinking, as well as to contribute to sector knowledge more generally. Find it on the WaterAid<sup>20</sup> website.

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<sup>20</sup> <http://www.wateraid.org.uk/>

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In 2002, WaterAid Nepal developed a financing study of the requirements needed to support that country's stated objective of meeting the MDG by 2015 for RWS. The primary objective of the report is as an advocacy tool to promote discussion within the sector about the additional resources required to meet these targets. However, the report does include a detailed financial analysis of the investment required, taking into account such variables as system type, size of community, topography and implementing agency<sup>21</sup>.

#### *SKAT Foundation*

SKAT has been working with the Swiss NGO Helvetas for many years and they have developed case studies on CM in Cameroon. They are currently considering the possibility of carrying out further research into scaling up in Mali and Benin.

### **Stakeholder cooperation**

As we have noted at various points in this TOP, there is a critical need for stakeholder cooperation and coordination at all levels. Cooperation is required among agencies working in, and advocating for, improved water supply services at the international level. Although there will always be differences in perspective, it is important that the various centres of research and expertise pull together on issues such as scaling up. The growing breadth and diversity of the Thematic Group on Scaling Up is one indicator of such progress in sharing a common platform on this important issue.

There is clear need for the major bilateral donors and global lending institutions to enter into the dialogue about scaling up and to provide complementary support packages and funding that will contribute to the goals of going to scale. This is particularly true of those institutions with the leverage to effect policy reform and decision-making in favour of the rural sector.

It is interesting to note that a global study of World Bank operations from 1997 highlighted inconsistent policy directives in a number of countries, where independent projects were being financed, but had different rules and objectives to build very similar (infrastructure) projects (Sara and Katz, 1997:2). Efforts to scale up RWS will require coherent policies and a supportive policy framework. To achieve these goals, the major players, both national and international, should be encouraged to work together more closely.

More importantly, there is a need for effective national-level stakeholder cooperation. Unfortunately, today we still see examples of individual stakeholders (donors, national governments, large NGOs) pursuing competing, and at times conflicting, approaches to RWS in the same locations. The fact that efforts to scale up include a range of "ingredients", from choices about technology to decentralisation and community support mechanisms to financial policies means that the need for harmonisation of approaches is

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<sup>21</sup> <http://www.wateraid.org.uk/documents/nepal%20sector%20financing.pdf>

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paramount. At the field level of operation (district and below), the need for good communication, cooperation and partnership is essential.

Want to find out more about scaling up? Further information about on-going research and case studies on scaling up can be found at the following websites:

- SKAT Consulting: <http://www.skat-foundation.org/>
- The Thematic Working Group on Scaling Up: [www.irc.nl/scalingup](http://www.irc.nl/scalingup)
- IRC International Water and Sanitation Centre: [www.irc.nl/org](http://www.irc.nl/org)
- The Bank Netherlands Water Partnership:  
[http://www.wsp.org/pdfs/scaling\\_up\\_press\\_20\\_03\\_03.pdf](http://www.wsp.org/pdfs/scaling_up_press_20_03_03.pdf)
- Plan International: <http://www.plan-international.org>
- WaterAid: [http://www.wateraid.org.uk/site/in\\_depth/current\\_research/](http://www.wateraid.org.uk/site/in_depth/current_research/)

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## TOP Resources

### TOP Books, manuals, articles

The most relevant documents and reports used in the preparation of this TOP concerning scaling up of RWS, and CM, are listed below; the list is by no means an exhaustive one (see TOP References for a full list of references):

**Davis J. and Iyer P. (2002). “Taking Sustainable Rural Water Supply Services to Scale. A Discussion Paper”** Bank Netherlands Water Partnership – Water and Sanitation Program

[http://www.wsp.org/publications/scaling\\_up\\_press\\_20\\_03\\_03.pdf](http://www.wsp.org/publications/scaling_up_press_20_03_03.pdf)

This discussion paper commissioned by the World Bank is one of the major pieces of research to specifically address the issue of scaling up RWS. The paper provides a definition of what we mean by scaling up, reviews some of the most important issues and identifies four main categories of constraints which are seen as critical obstacles to taking forward successful pilot projects. This paper does not advocate any particular management model for the rural sector; the paper closes by identifying key areas of future research.

**Deverill P., Bibby S., Wedgewood A. and Smout I. (2002). “Designing water supply and sanitation projects to meet demand in rural and peri-urban communities.”** Book 2, WEDC Loughborough University

<http://www.lboro.ac.uk/wedc/publications/dwss2.htm>

These guidelines are the result of two years collaborative research undertaken by WEDC with partners in Africa and South Asia. They demonstrate how water supply and sanitation projects in rural and peri-urban areas can be designed to meet user demand. The aim is to improve the use and sustainability of the services provided. This book is the second in a series of three and has been written for policy makers and planners responsible for water supply and sanitation in rural and peri-urban areas. Potential readers include government staff at national, state and local levels, senior managers in non-governmental organisations and the private sector, and donor staff and advisers.

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**IRC (2001). From system to service: scaling up community management.** Report of the conference, 12 - 13 December 2001, The Hague, The Netherlands, Report, Unpublished document, IRC International Water and Sanitation Centre, Delft, The Netherlands

<http://www2.irc.nl/pdf/manage/confreport.pdf>

<http://www.irc.nl/content/view/full/667>

This brief report summarises the main discussions and outputs of the mini-conference on “From system to service – scaling up community management” held in The Hague in December 2001. The conference brought together 39 experts from a range of backgrounds and organisations. Its aim was to discuss the future of community management as an approach to providing sustainable water supplies, and particularly ways in which the community management approach could be ‘scaled up’ to greatly increase both coverage and sustainability

**IRC (2002). E-Conference: “Beyond the Community” on Scaling Up Community Management of Rural Water Supplies.** 3 June – 12 July

[http://www2.irc.nl/pdf/manage/cwsm\\_summary.pdf](http://www2.irc.nl/pdf/manage/cwsm_summary.pdf)

<http://www.irc.nl/content/view/full/691>

This document captures the main discussions and outputs of an e-conference held between June and July 2002, on Scaling Up Community Management of Rural Water Supply. The conference was organized by a number of agencies (IRC, WSSCC, WaterAid, Plan International, SKAT and WEDC). During the course of the conference, a wealth of ideas and experiences were shared around the three main themes of the conference focusing on the actions needed to scale up community management; the obstacles to scale up community management; and, lessons learned from good and bad practices with scaling up community management. The conference website hosts summaries of all six weeks of dialogue, along with a background paper explaining the major issues facing scaling up rural community water systems

**Mahon, T. and Sinclair, P. (2003). “Scaling up at WaterAid: A paper for discussion.”**

Scaling up is a major challenge facing WaterAid; this paper outlines four case studies from its programmes in Bangladesh, Mozambique, Tanzania and India. It is intended to generate discussion on the main issues, challenges and approaches to scaling up within WaterAid’s country programmes and UK departments.

**Lockwood, H. (2002). “Institutional Support Mechanisms for Community-managed Rural Water Supply and Sanitation Systems in Latin America.** EHP Strategic Report No. 6

[http://www.ehproject.org/PDF/Strategic\\_papers/SR-6.pdf](http://www.ehproject.org/PDF/Strategic_papers/SR-6.pdf)

This document addresses the specific issue of long-term institutional support to community-managed RWS projects in Latin America, drawing on a number of documented case studies. The report proposes a taxonomy of models and describes the core elements, tasks and functions to be carried out under a support model as well as addressing the

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difficult issue of financing of such support. The document closes with a proposed guideline for the design and establishment of a support mechanism.

**Schouten T. and Moriarty P. (2003). “From System to Service”** - draft The Hague, The Netherlands, IRC International Water and Sanitation Centre and ITDG

This is a new book about community management of rural water supply. The authors argue that rural communities play the key role in water provision, but that governments, donors and ‘experts’ have a responsibility to support communities, beyond helping them to install a system and then leaving them with the sole responsibility for managing it. The book contains many stories, quotes and case studies from interviews with community members and water committees from around the world as evidence for the arguments put forth.

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## **TOP Web sites**

The following links will take you to the websites of various organisations and institutes that are currently active in the scaling up initiative for RWS:

### **IRC International Centre for Water and Sanitation**

<http://www.irc.nl/>

The IRC is a specialist centre based in the Netherlands, providing news and information, advice, research and training, on low-cost water supply and sanitation in developing countries. The IRC website offers access to the new portal pages on the theme of scaling up community managed rural water supply as well as many reports and documents on the subject. There is also a link to the Thematic Group on Scaling Up website and a site dedicated to CM issues, drawing together research lessons and practical experience from around the world (<http://www2.irc.nl/manage/index.html>). The site contains a useful on-line documentation centre.

### **Thematic Group on Scaling Up**

<http://www.irc.nl/content/view/full/111>

The goal of the group is to contribute to the increased impact of water supply programmes on people's livelihoods through increased coverage, greater sustainability and improved demand responsiveness of rural water supply systems. The website provides details about the aims and objectives of the group, news about on-going activities and links to members of the group and key documents on the subject.

### **Environmental Health Project (EHP)**

[www.ehproject.org](http://www.ehproject.org)

The Environmental Health Project (EHP) is a USAID-funded initiative that began a second five-year contract in June 1999. For many years EHP has been one of the leading global centres of excellence for issues relating to water supply, sanitation and environmental health, with a particular emphasis on institutional issues and the Latin American region. This website provides access to a large number of electronic reports, including the recent work on institutional support mechanisms.

### **Plan International**

[www.plan-international.org](http://www.plan-international.org)

Plan is an international, child-centred, humanitarian, organisation dedicated to working with and for children. It works together with children and their families in communities in 45 countries, and includes water and environmental sanitation as one of its core operational activities. Plan has founded over 60 years ago and it has no religious, political or governmental affiliation. The website offers contact details and information about operational programmes around the world.

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### **Skat Foundation**

[www.skat.ch](http://www.skat.ch)

The Skat Foundation is a resource centre promoting exchange of knowledge and experience in development cooperation. As sister organisations, Skat Foundation and Skat Consulting work together towards poverty reduction and sustainable development through professional knowledge sharing and the provision of advisory services in a range of thematic areas including water supply and environmental sanitation.

The Skat website offers access to information and publications covering technological and conceptual developments and best practices. Major projects and activities are available on-line, together with links to partner organisations / networks as well as to the WatsanWeb – a structured and moderated navigational aid pointing to relevant contents of other sector websites.

### **WaterAid**

[www.wateraid.org.uk](http://www.wateraid.org.uk)

WaterAid works in partnership with local organisations in 15 countries in Africa and Asia, to help poor communities establish the sustainable provision of safe domestic water, sanitation and hygiene education. WaterAid also works to influence governments' water and sanitation policies to serve the interests of world's poorest and most vulnerable people. Their site has information on a range of research activities, which currently include work on financing of the MDGs, as well as access to reports and country programme profiles.

### **Water and Sanitation Programme (WSP)**

<http://www.wsp.org/english/index.html>

The WSP is an international partnership of the world's leading development agencies concerned with water and sanitation services for the poor. It is managed through a head office in Washington, D.C. and four regional offices in South Asia, East Asia and the Pacific, Africa, and the Andean Region. The main website offers a comprehensive introduction to many water and sanitation-related topics, including scaling up and demand responsive approaches. The site contains a useful on-line documentation centre.

### **The World Bank's Rural Water Supply and Sanitation Page**

<http://www.worldbank.org/html/fpd/water/rural.html>

This website is part of the World Bank's water and sanitation sector site and offers basic principles for rural water and sanitation services projects, along with some good publications and resources on the topics of demand-responsive approaches, management options and promoting sustainability. It also includes access to a number of useful web-based "tool-kits" which can be downloaded directly.

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**Water, Engineering and Development Centre (WEDC)**

<http://www.lboro.ac.uk/wedc>

WEDC is one of the world's leading institutions concerned with the planning, provision and management of physical infrastructure for development in low- and middle-income countries. This website has a comprehensive section on water and sanitation, including access to research projects and historical documentation from the well-known annual WEDC conferences held every year, either in Africa or Asia, concerning many aspects of water and sanitation in low-income countries.

**Water Supply and Sanitation Collaborative Council (WSSCC)**

<http://www.wsscc.org/>

The WSSCC was formed at the end of the United Nations International Drinking Water and Sanitation Decade (1981-1990) to provide a framework for collaboration between sector agencies in both developed and developing countries. Their website includes listings of selected publications, information on Vision 21 principles (a framework for interventions in the water and sanitation sector) programmatic activities of the Council as a whole and links to other initiatives.

**Institute of Water and Environment, Cranfield University**

<http://www.silsoe.cranfield.ac.uk/iwe/>

The Institute of Water and Environment of Cranfield University is concerned internationally with water for people, water for food production, and water for the environment. It is a multi-disciplinary group of social and natural scientists and engineers. This site offers a full introduction to the activities of the community water supply and sanitation team and includes information on the Community Water Supply MSc course, current PhD projects and research, training and consultancy activities that are being carried out. There is access to full reports and to a brochure setting out these activities in detail.

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## TOP Contacts

The following individuals are actively working on issues relating to scaling up of community managed RWS and are available for comment or consultation:

**Sohrab Baghri:** is the global water and sanitation advisor at Plan International Headquarters based in the UK. (sohrab.baghri@plan-international.org)

**Richard Carter:** is a Professor of International Water Development at the Institute of Water and Environment at Cranfield University, UK. His particular interests are in the institutional issues surrounding scaling up of NGO programmes, those of local Government and of the (indigenous) private sector, in rural water and sanitation in sub-Saharan Africa. (r.c.carter@cranfield.ac.uk)

**Lena Choudary-Salter:** is the regional manager for Asia at WaterAid and is also responsible for research and learning on 'scaling-up'. She is based in London. (lenachoudary-salter@wateraid.org)

**Jenna Davis:** is Assistant Professor at the Department of Urban Studies and Planning at the Massachusetts Institute of Technology in Boston, USA. Jenna has authored two papers on the topic of scaling up, one a discussion paper on scaling up sustainable rural water supply services and the other on scaling up upgrading programmes for low-income peri-urban communities. (jd@mit.edu)

**Jean de la Harpe:** is an institutional and community management specialist with a focus on water services, based in South Africa. Jean prepared a case study for the IRC on scaling up community management for water services in the Alfred Nzo District Municipality based in South Africa. She has also prepared a number of other case studies examining community based institutional and contractual arrangements with a view to influencing policy and legislation in terms of community management in South Africa. (delaharpe@icon.co.za)

**Param Iyer:** is a senior water and sanitation specialist at the Water and Sanitation Programme based in their Washington D.C., USA headquarters. (piyer@worldbank.org)

**Viju James:** is an environmental and natural resource economist based in India, working as an independent consultant specialising in Qualitative Information Systems and Appraisals, which seek to represent, in terms of numbers, qualitative information collected through participatory stakeholder assessments. (ajjames@vsnl.net)

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**Harold Lockwood:** is a consultant based in the UK and manages a private company, AguaConsult, which provides technical support in the fields of rural water supply and sanitation, as well as disaster management. Harold has focussed on institutional aspects of rural water supply, and more specifically the issue of sustainability. His interest in scaling up addresses this post-construction phase and the need to scale up support mechanisms for community-managed models over the long-term, in coordination with the scaling up of physical system construction. (h.lockwood@aguaconsult.co.uk)

**Brian Mathew:** is an independent consultant based in the UK. (brianmathew@onetel.com; bgfmathew@hotmail.com)

**Patrick Moriarty:** is the head of IRC's Knowledge Development and Advocacy section, by profession a civil engineer he specialises in community involvement in integrated water resource management and small scale productive uses of water at the household level. (moriarty@irc.nl)

**Fred Rosensweig:** is an institutional development specialist who works for the Training Resources Group, Inc. in the USA, which is one of the sub-contractors of the Environmental Health Project consortium. (rosensweigfj@ehproject.org)

**Peter Ryan:** is a researcher undertaking a PhD at Cranfield University in sustainability and scaling up rural water supply. He is a member of the Thematic Group on Scaling Up and wrote his MSc thesis on scaling up rural water supply, with Uganda as a case study. Peter currently works with WaterAid in Tanzania on scaling up and commences a PhD on sustainability and scaling up in early 2004. (p.i.ryan@cranfield.ac.uk)

**Darren Saywell:** is the programme manager at the Water Supply and Sanitation Collaborative Council in Switzerland and a specialist on urban sanitation issues. (saywell@who.int)

**Roger Schmid:** is a water and environmental sanitation specialist at the Skat Foundation in Switzerland. He is involved in appraisal, backstopping and capacity development activities in various community managed water supply projects / programs in French speaking Africa. (roger.schmid@skat.ch)

**Ton Schouten:** is a community management and communications specialist, as well as a film maker, working at IRC in the Netherlands. He leads the Scaling Up Focus Area within IRC and participates in the Thematic Group on Scaling Up. (schouten@irc.nl)

**Peter Sinclair:** is an independent consultant based in Toronto, Canada. He is the former Regional Manager for East Africa for WaterAid and has a personal interest in the issue of scaling up. As the WaterAid representative, Peter was one of the original members of the scaling up Thematic Group and continues now to participate in the group in his freelance capacity. (petersinclair@rogers.com)

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**Brian Skinner:** is an engineer who is a programme manager with particular responsibilities for distance learning courses at the Water, Engineering and Development Centre (WEDC) at Loughborough University in the UK. He has a special interest in low-cost technologies and how to sustain these through appropriate community involvement at all stages of the project cycle. As a member of the Thematic Group he liaises with others in WEDC who also have an interest in the scaling-up of community management.  
(b.h.skinner@lboro.ac.uk)

**Mahamadou Tounkara:** is a specialist in water supply and environmental sanitation, working as the Regional Advisor for Asia of Plan International.  
(mahamadou.tounkara@plan-international.org)

**Carolien van der Voorden:** is a programme officer at the Water Supply and Sanitation Collaborative Council in Switzerland (vandervoordenc@who.int).

**Karl Wehrle:** is a senior water and environmental sanitation specialist at the Skat Foundation in Switzerland. He is the editor of the case study series on “Community Water Supply in Switzerland” and is involved in various community managed water supply projects / programs in Africa and Asia (karl.wehrle@skat.ch).

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## **About IRC**

IRC facilitates the sharing, promotion and use of knowledge so that governments, professionals and organisations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and maintain. It does this by improving the information and knowledge base of the sector and by strengthening sector resource centres in the South.

As a gateway to quality information, the IRC maintains a Documentation Unit and a web site with a weekly news service, and produces publications in English, French, Spanish and Portuguese both in print and electronically. It also offers training and experience-based learning activities, advisory and evaluation services, applied research and learning projects in Asia, Africa and Latin America; and conducts advocacy activities for the sector as a whole. Topics include community management, gender and equity, institutional development, integrated water resources management, school sanitation, and hygiene promotion.

IRC staff work as facilitators in helping people make their own decisions; are equal partners with sector professionals from the South; stimulate dialogue among all parties to create trust and promote change; and create a learning environment to develop better alternatives.

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