



BPD RESEARCH SERIES

# Adapting regulation to the needs of the poor: Experience in 4 East African countries

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*Throughout the developing world, water utilities face a major challenge when it comes to serving poor citizens. The poor are frequently unable to afford a water connection and often find tariffs too high. They may lack the legal documentation they need to apply for service or live in hard-to-reach areas. Often the urban poor get their water from 'informal providers' such as neighbours, water vendors or semi-legal standpipes.*

*A common theme running through this state of affairs is regulation. Governments are making decisions about how high tariffs are, what connection charges should be, or which documentation is required to apply for one. Laws and regulations make many water practices 'informal' or even 'illegal'. These decisions and laws all fall under the guise of the 'regulatory framework', a framework that guides the actions of utilities and providers, citizens and customers. Clearly this framework has a huge direct and indirect impact on what service the poor eventually receive.*

*This note looks at regulation through the lens of four African case studies. Through a BPD-led initiative with financial and significant substantive support from GTZ and the World Bank Institute, four regulators worked together with local partners over the course of a year to clarify how their action or inaction impacts upon the poor. Each came up with an action plan to address specific challenges they face. While the work is ongoing, this note presents a timely overview of how regulation impacts the poor and the role that partnerships involving the regulator can play in improving the service that poor people receive.*

## Why read this note?

Pro-poor regulation is not a well-established discipline and findings from empirical research on the subject have only marginally trickled down to influence regulatory practice on the ground. Only recently has the notion that regulation should benefit the poor come to the fore and become more widely accepted. There has been relatively little practical work on the subject however (as the literature review carried out for the companion World Bank note demonstrated).

The objectives of this note are therefore to suggest an approach that lays bare the critical challenges of pro-poor regulation and discuss what this has revealed in four different regulatory settings. The note aims to provide a platform for future cross-learning and benchmarking of pro-poor regulatory activities in the four countries and beyond.

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Ultimately, it is hoped that this approach will provide inspiration for others' activities – the report could be of interest to many stakeholders, including regulatory agencies, regulated companies, NGOs, consumer groups and donor agencies.

*Additional details on the case studies (including the evaluation reports and the detailed action-programmes) may be obtained on request from [info@bpdws.org](mailto:info@bpdws.org).*

## 1. An African programme of action-research

In numerous countries, a major feature of water sector reform consists of defining a regulatory framework that may or may not include the creation of an autonomous regulator. Once in place, the institutions in charge of carrying out regulation often face difficulties in establishing their legitimacy and in proving that they can make a real difference in the sector, especially by acting as an arbiter and protecting the interests of all consumers, including the poor (who are often the majority). This may be because 1) they are solely focused on regulating the main service provider, which typically covers less than 50% of the population and principally serves the richer segment, and/or 2) because they are perceived to be politically influenced.

**Previous research initiatives** – In 2002, Building Partnerships for Development (BPD)

commissioned research on the impact of regulation on eight tri-sector partnerships that the organisation had worked with for three years in Senegal, South Africa, Colombia, Argentina, Bolivia, Indonesia and Haiti (see: Trémolet and Browning, "Research and Surveys Series: The Interface between Regulatory Frameworks and Tri-Sector Partnerships", [BPD 2002]).

The results of the analysis were edifying: finding that regulation (as defined in the box on the next page) can play a decisive role in making water and sanitation services more accessible to the poor and in providing private operators with the right incentives to serve them. But it also found that regulation can introduce obstacles to serving the poor, for example when small-scale private providers are relegated to illegality and are thereby not encouraged to further develop services to fill the gap opened by insufficient coverage by the main operator.

The paper focused on the specific roles that partnerships can play to help make regulation more pro-poor. It showed that not only did the regulatory framework have a substantial impact on 'shaping' the partnerships but also that, in return, the partnerships had played a significant role in making the regulatory framework more responsive to the needs of poor people. In other words, when the customers were given a say, often through community based organisations (CBOs) or non-governmental organisations (NGOs), and when the rule-makers were willing to listen, they were able to establish rules that would be more enforceable, better enforced, and more likely to meet the needs of poor customers regardless of who is responsible for conducting regulation.

**Current action-research** – This previous research raised the question of how the findings could be applied in practice. This led to the design of an action-research programme with regulators in East Africa. BPD linked up with other institutions (including GTZ, the World Bank Institute (WBI) and The World Bank) to undertake practical research into how institutions that regulate water services can adapt their regulatory methods and approaches to better meet the needs of poorer consumers. The objective of this action-research was to assist the institutions in charge of regulation in selected countries to identify practical actions to improve the pro-poor focus of their work, preferably

### This Note...

**Section 1** describes the activity;

**Section 2** discusses the circumstances in the four countries that joined the programme;

**Section 3** debates whether regulators are presently responding to the needs of the poor and where they may need to focus their attention;

**Section 4** proposes initial conclusions, evaluating what has been learned and where additional research may be required.

In addition, Annex A sets out a methodology for evaluating existing regulatory frameworks and critically reviews the results garnered in the four different countries.

Annexes B, C, D & E present a summary of the analysis undertaken and proposed action plans in each of the four countries – Kenya, Mozambique, Rwanda and Zambia.

These annexes can be found at [www.bpdws.org](http://www.bpdws.org)

informed through partnership mechanisms with other stakeholders (including civil society and the private sector).

### Putting theory into practice

The research was conducted simultaneously with four water regulators in East and Southern Africa, including:

- Zambia – (National Water Supply and Sanitation Council, NWASCO),
- Mozambique – (Water Regulatory Council, CRA),
- Kenya – (Water Services Regulatory Board, WSRB)
- Rwanda – (Rwanda Utilities Regulatory Agency, RURA).

The programme was designed to be forward-looking and action-oriented in order to help the regulators identify practical actions to improve the pro-poor focus of the regulatory frameworks under which they operate. A second objective was to raise awareness of how regulatory issues can undermine service to poor customers in each country and establish a common understanding of ways to address them. Finally, it was hoped that working with regulatory agencies in neighbouring countries would provide opportunities for ongoing cross-learning.

To provide conceptual background to this research, the World Bank commissioned a companion note entitled “*Taking account of the poor in water regulation*” by Trémolet and Hunt (2006). Based on an extensive review of the existing literature, this background paper clarified notions of regulation and regulatory functions and discussed how water regulation can benefit poor customers. This note will soon appear on The World Bank’s website.

#### Defining regulation and regulatory frameworks

Regulation can be defined as a set of functions that ensure that water and sanitation service providers comply with existing rules and allow for those rules to be modified in order to cope with unforeseen events. In the water and sanitation sectors, regulatory functions can be broadly divided into three categories: economic (focusing on price and service quality), environmental, and public health regulation (focusing on drinking water standards). The way in which these functions are performed can have a significant impact on whether or not the poor have access to the service, and at a price they can afford.

A regulatory framework consists of the set of rules and processes that bind the water and sanitation service providers, including formal rules (laws, contracts, by-laws, etc.) and informal rules (personal commitments, financial incentives, reputation, etc.). It also defines how the main regulatory functions are allocated to various institutions, which can include an autonomous regulatory agency, a Ministry, an asset-holding company, a customer group, an independent expert, etc.. As the poor often suffer from limited access to services, regulatory frameworks should generate increased access to water and sanitation services and improve the nature of this access with regards to the availability, affordability and sustainability of these services.

The action-research proceeded in two steps: first, local consultants, recruited by the BPD-led team in coordination with the regulators, evaluated the existing regulatory framework in each country. To help them do this, a thorough and innovative methodology was developed that identifies the constraints various stakeholders face, both in the formal and informal service markets (see Annex A for details of this). On the basis of the country evaluations, the regulator and other stakeholders in each country held meetings to define an action plan that would improve the pro-poor focus of the regulatory framework. The intention was that such an action plan could then be used by regulatory agencies or others as the basis for budgeting and funding applications.

Following the preparation of the evaluation reports, a three-day workshop was held in Nairobi in October 2005 to enable regulators and their consultants to exchange ideas, identify common lessons and further refine their action plans. Participants gained exposure to each other’s problems and solutions, which fostered constructive criticism on each country’s draft action plans. Before and after the Nairobi workshop, the regulators held consultative workshops in their respective countries. While the workshops varied in their openness and degree of participation, in general

### Points of departure

Countries were selected based on the interest expressed by the institutions in charge of regulation. To develop a common learning agenda, regulators were asked to identify the critical issues they were facing. The following key questions instigated this discussion:

- Should, and how can, regulators (with the help of civil society groups) regulate the market for small scale, typically informal providers that lies outside the realm of the formal (urban) operator?
- How can regulators rely on civil society groups (NGOs or CBOs) to monitor the performance of private operators, particularly with respect to coverage targets and quality standards (for example, standards relating to hours of supply, pressure or customer service)?
- What role can regulators play in supporting regulation in more marginalised areas that fall outside of their direct remit (for instance rural areas, peri-urban areas or secondary towns)?
- How can consumer groups be better organised in order to relay consumer voice to the regulator and alert regulators to critical issues for services to the poorest consumers?

they have helped build momentum for thinking about and acting on pro-poor regulation issues.

## 2. Four contrasting cases

The four regulatory agencies face different challenges and have different motivations for getting involved in the research. They have all been created at the central government level to regulate urban water services, even though the actual coverage of their activities varies depending on the circumstances that led to their establishment. (Additional information is presented in the Annexes.)

In Mozambique and Rwanda, the regulatory agencies were established while privatisation contracts were being let; the areas they regulate are the same as those served by the private operator (although in Rwanda it has also been given a broader sectoral mandate). By contrast, in Zambia and Kenya, the agencies were created in the context of broader sector reform; they are responsible for regulating all urban service providers (once they have been officially licensed), irrespective of whether they are public or private.

The regulatory agencies can be grouped into two categories: the ‘mature’ regulators who have been in existence for some time and have already established their mainstream regulatory practice, and the ‘nascent’ regulators who have been set up more recently and are still in the process of defining their broader regulatory role.

*The ‘mature’ regulators: NWASCO (Zambia) and CRA (Mozambique)* – The regulators in Zambia and Mozambique have been established for longer and are comparatively more ‘mature’ in the sense that they have accumulated good data on the sector and have a history of regulatory decisions. Both have been exposed to the pro-poor regulation debate for some time and had already participated in or led a number of pro-poor initiatives prior to getting involved in this research. Their engagement was primarily to benefit from cross-learning opportunities and access resources to focus on certain aspects that remain unsolved.

<b>Key facts for Zambia</b>	<b>Key facts for Mozambique</b>
<p>NWASCO was created in 1997 as part of an overall sector reform. It was established at the national level to regulate 39 service providers, most of which are publicly-owned and managed. LWSC (Lusaka Water Service Corporation) is the commercial utility (publicly-owned) holding an exclusive license to provide water services to both urban and peri-urban areas in the capital city of Lusaka. However, LWSC is currently supplying only 43%</p>	<p>CRA has been in place since 1998, on the back of an overall reform initiated in 1995 to introduce private sector participation in water services. Established at the central government level, it only regulates the areas under private management, including Maputo (under a lease contract) and four secondary cities (under a management contract). The private company AdeM (Aguas de Mozambique) provides ser-</p>

<p>of the city's population and the service is described as erratic and unreliable, particularly for poor customers. Community-managed schemes, referred to as Water Trusts, serve 37% of the population. The remaining 20% get no service at all, relying on private wells and streams.</p> <p>The Water Trusts currently operate in a legal vacuum: their services are not regulated even though they provide crucial support for a large portion of the population. A key objective of the research programme was therefore to analyse how regulatory arrangements for the Water Trusts could be defined and implemented. Other key aspects included regulating the main provider, LWSC, in order to foster service improvements and coverage extensions, and broadening the remit of existing customer representation bodies, the Water Watch Groups, which function well but are limited in scope.</p>	<p>vices in the capital city Maputo whilst the public asset-holding company, FIPAG, is responsible for investments in the same area.</p> <p>Despite recent investments, AdeM serves only 20% of the capital's population directly via domestic connections and an additional 20% through standpipes (managed by private standpipe operators). An additional 20% buy water (illegally) from their neighbours, 30% obtain water from rapidly expanding alternative providers and 9% get water from their own wells. Both the providers managing their own networks and water resellers currently operate illegally. An upcoming FIPAG investment is about to displace existing alternative providers. This means that defining a regulatory framework for alternative providers has become more urgent to avoid discouraging such crucial investments for the poorest customers.</p>
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*The 'nascent' regulators: RURA (Rwanda) and WSRB (Kenya)* - By contrast, the regulators in Kenya and Rwanda can be seen as 'nascent' regulators. They have both been established more recently and have had limited human resources at their disposal to regulate the sector effectively. They became involved in order to gain more exposure to the issues, share learning with more experienced regulators and undertake a survey of current issues affecting service delivery to the poor.

<b>Key facts for Rwanda</b>	<b>Key facts for Kenya</b>
<p>RURA was established by law in 2001 as the multi-sector regulatory agency for water, solid waste, electricity, gas transport and distribution, telecommunications and transportation. The agency started operating in 2003 but a legal framework defining its responsibilities in the water sector has yet to be defined. RURA is in charge of supervising Electrogaz, the water and electricity company which provides services to the main urban centres under a private management contract.</p> <p>Electrogaz supplies approximately 64% of the population in the capital Kigali but the service is unreliable and a rationing system is in place. Residents on hills (40% of those served) may see water for 2 days a week or less. Standpipes, owned by Electrogaz and managed by private customers, serve a substantial portion of the market. They are currently unregulated and many of them have fallen into disrepair, pointing to potential management problems. Independent providers with their own source of water do not seem to exist or have not been identified. A key objective of the research was to assist RURA to form a comprehensive picture of factors affecting services to poor customers. Defining a management model for standpipe operators became a key objective for the action plan, as did formalising ways to relay customer voice.</p>	<p>WSRB was created by the Water Act in 2002. It was formally established in 2003 but remains a relatively fragile institution, as there have been frequent changes at the top. It is responsible for overseeing water services provision throughout the country and for licensing seven Water Service Boards (WSBs). Those WSBs are themselves responsible for contracting and supervising Water Service Providers (WSPs) within their area of responsibility.</p> <p>The main water service provider in Nairobi is NWSC (Nairobi City Water and Sewerage Company) which has an estimated coverage of 88% in the capital, although this figure is most probably an overestimate. Some estimates place coverage as low as 23% with some informal settlements getting no service at all or receiving badly contaminated water due to broken pipes and seepage.</p> <p>A key objective of the research was to raise awareness of factors affecting services to the poor at the level of the regulatory agency and other stakeholders and to initiate a dialogue on these issues. As the overall institutional framework is still being implemented in practice, it was relatively difficult to go much beyond this initial assessment.</p>

### 3. Key challenges of pro-poor regulation

As discussed on page one there are many ways in which the regulatory framework has an impact on the way that poor people receive services and on the ultimate price they end up paying for them. As the methodology in Annex A sets out, it is crucial first to understand the specific context of poor customers, the nature of poverty and the market for services where they live. From there, one needs to disaggregate the regulatory framework, analysing who performs what function and how this relates to the specific regulatory issues that constrain services to the poor. Naturally this varies substantially from one country to another.

Yet common recurring themes underlie this analysis.<sup>1</sup> This section looks at what these themes are and how they play out in each of the four countries. Five of these themes address specific aspects of the market for water and sanitation services. The sixth theme has less to do with the market and more to do with the regulator itself. It is perhaps the most important and so we start there.

At issue is the motivation that regulators themselves have to address the issue of services for the poor. The incentives for them to do so can express themselves in many ways, from the official mandate given to the regulator to the make up of its board, from the way that contracts with service providers are framed to the openness of the regulator to advocacy from groups that work with or represent poor communities. Clearly if a regulator (or those decision-makers who comprise the 'regulatory framework') is to take steps to improve the way that the poor receive water and sanitation services, then we need to understand what will motivate the regulator to do so in the first place. We call this '*Regulating the regulator*'.

The further five themes include:

- Regulating the formal provider: the regulatory framework is usually better defined for the formal provider but the institutions in charge of regulation may have difficulties enforcing it in a way that is pro-poor, particularly when coverage targets are ill-defined and not adequately funded;
- Regulating the 'other market': alternative service providers usually operate in the informal market and are not regulated. Trying to establish or to apply a regulatory framework for this market can prove extremely challenging because there is limited information on these providers, they are used to operating in the informal market and they are very numerous;
- Regulating price: setting tariffs is a key regulatory task. To do so, regulators must comply with broad tariff-setting principles set in law or policy principles. But the equity principle is often ambiguous and so-called 'pro-poor' tariffs may end up having the opposite effect than that which was intended, i.e. they may harm poor customers;
- Regulating quality: thinking creatively about how to define and enforce quality standards can sometimes bring significant benefits for poor customers as cost reductions can cut connection prices by a significant margin;
- Protecting consumers: poor consumers may have neither appropriate means of recourse nor clear channels for communication with the regulator, which means that the regulator may not be aware of their concerns.

#### 3.1 Regulating the regulator

**The challenge** – Regulators are typically entrusted with a wide range of tasks. Many of these concern oversight of the formal utility that provides a networked service. Yet in many developing countries more than half of the population falls outside this framework. If regulators are to tackle the problems of the sector as a whole they need to address this gap. A key question though centres on the incentives such regulators have

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<sup>1</sup>The companion World Bank note by Trémolet and Hunt (2006) gives additional examples of good practices in similar areas and discusses approaches to address such regulatory constraints. The country Annexes give more details about how these themes have materialised in each of the country reviewed.

to adapt their regulatory practices to the needs of poor customers. Do they have the mandate to tackle this? Are they willing to commit human and financial resources to the issue?

The incentives for them to get involved are varied. Regulators may be acting on the basis of policy directions emanating from policy-makers, with the legal framework giving each regulator more or less of a pro-poor mandate. Regulators could potentially have representatives of the 'unserved' on an advisory board, pushing them to tackle the problem. Representatives of poor communities may be lobbying the regulator to act. Even an individual's own temperament and motivation can be crucial – an influential person within the regulator's office may have a pro-poor agenda. At heart we are asking, what it is that incentivises the regulator to engage with how poor consumers receive services?

*In the four countries* – This action research programme was self-selecting – the four regulators all showed some commitment to the pro-poor service agenda by merely participating. Indeed analysis of each regulator reveals that they all have a pro-poor mandate in more or less explicit terms.

The pro-poor mandate is perhaps strongest in Zambia, as NWASCO was created under a policy and legal framework that clearly recognises the needs of the poor. Besides, NWASCO is supervising the Devolution Trust Fund, a special fund in charge of subsidising services to the poor (this is an unusual set-up, however, which may have created some confusion of roles). The head of NWASCO, Oswald Chanda, has taken a strong interest in those issues and special assistance particularly from German donors has focused on conducting analysis of the pro-poor aspects. Although CRA's mandate is not as clear and the policy framework is less well defined, its President, Manuel Alvarinho, has taken a strong interest in the pro-poor agenda and has been able to harness its strong leadership in the sector to focus particularly on a pro-poor agenda.

Both RURA in Rwanda and WSRB in Kenya have more difficulties asserting their leadership in those areas. They have both received a mandate to consider equity issues, but their limited staff means that they have not been able to dedicate appropriate time and resources to those issues so far.

**Critical review** – Despite these varying degrees of clarity and strength in their pro-poor mandate, no regulator seemed to think that it would be necessary to seek clarification of their mandate. For example, none of them is planning to formulate recommendations in order to modify the legal framework or prevalent policies. This being said, if some of the changes considered to the existing regulatory framework were to require policy decisions, regulators would need to convince policymakers of the necessity of such changes. For this reason, regulators need to cultivate relationships with policymakers (whilst making sure to avoid 'capture' by the political process).

### 3.2 Regulating the formal provider

*The challenge* – One of the most efficient ways to benefit poor customers may be to extend access to the formal provider's services, as customers could then benefit from economies of scale. However, even if there are coverage targets in the formal provider's contract or license, these may be difficult to enforce because they have not been adequately defined or are not adequately funded. This is particularly the case when the formal providers are publicly-owned and managed, as it is in several of the cases under review. In such cases, it can be very difficult for a regulator to enforce coverage targets if policymakers are not willing to allocate sufficient resources to the utility, either through tariff increases or subsidies.

*In the four countries* – In both Zambia and Kenya, NWASCO and WSRB are regulating essentially public service authorities through a licensing regime. This in theory gives them the ability to modify the licenses unilaterally and to withdraw such licenses in the

event of non-performance. However, as both entities are in full public ownership and management, this limits the regulator's leverage and its ability to provide strong incentives for improved importance. In Zambia, LWSC is theoretically responsible for extending services on an exclusive basis in all areas of the city but lack of allocated public funding makes such an obligation unenforceable. In Kenya, WSRB's leverage over service provision is limited by the fact that there is a two-tiered system of regulation: whilst WSRB regulates the WSBs (Water Service Boards), it is the latter that regulate the WSPs (Water Service Providers) via Service Provision Agreements (SPAs). WSRB has been working together with the WSBs on drafting SPAs that would take the needs of poor customers into account but this is still under development and would take time to be reflected in practice.

Even though private participation has been introduced in Electrogaz (via a management contract) and AdeM (via a lease contract), the capacity of RURA and CRA respectively to enforce the obligations included in the contract is also limited by the fact that investment has remained a public obligation in both cases. In Mozambique, the asset-holding company FIPAG is in charge of investment and tends to regulate itself (based on contractual investment obligations). The separation between investment and operations and maintenance makes it more difficult to allocate responsibilities in the event of sub-standard service, particularly in the case of low pressure (which affects poor areas in particular) which can be addressed through better leak detection on the operations side but ultimately by network rehabilitation and replacement.

In Rwanda, the management contract contains performance targets in terms of the number of new connections per year but the regulator has no power to enforce them. Unless public financing is found and allocated to making such connections, RURA will not be in a position to enforce such requirements on the management contractor, even though such a target drives part of its performance-based remuneration. In order to make marginal improvements, however, RURA plans to work on improving the definition of the coverage targets together with the management contractor.

**Critical review** – Even though enforcing the formal provider's coverage obligations or targets could prove a powerful way to extend services to the poor, the regulators in the four countries lack the formal tools to do so. Changing this would require policy interventions to increase funds allocated to the sector and also, in most cases, to initiate a license or contractual change. In most cases, this was deemed to be outside the scope of this initiative or too difficult to achieve. Besides, it requires carefully balancing the expansion of the 'other market' (i.e. alternative providers) with that of the main provider. As discussed below, the 'other market' has been steadily growing in all countries under review (except Rwanda) and has made it a more pressing issue to address. Ultimately however, there is no denying that expanding coverage of the main provider will provide the greatest economies of scale and regulators should not avoid confronting this issue.

### 3.3 Regulating the 'other market'

**The challenge** – Regulators are increasingly conscious that alternative service providers provide services to a very significant percentage of the population and that they have become impossible to 'ignore'. Where direct coverage by the main operator is less than 50%, regulators' attention should really be on regulating the markets for water services as a whole so as to ensure that customers have access to the service, from whichever provider it may be, at acceptable levels of quality and price. But regulators are often at a loss when trying to define an adequate regulatory framework, one that would lead to a more organised development of the sector as a whole, yet not stifle private sector drive or eliminate currently available service options. They have difficulties getting an accurate picture of the market; small scale providers are often numerous and little information exists on their activities. They also fear that the monitoring and enforcement costs of regulating them will be prohibitively high.

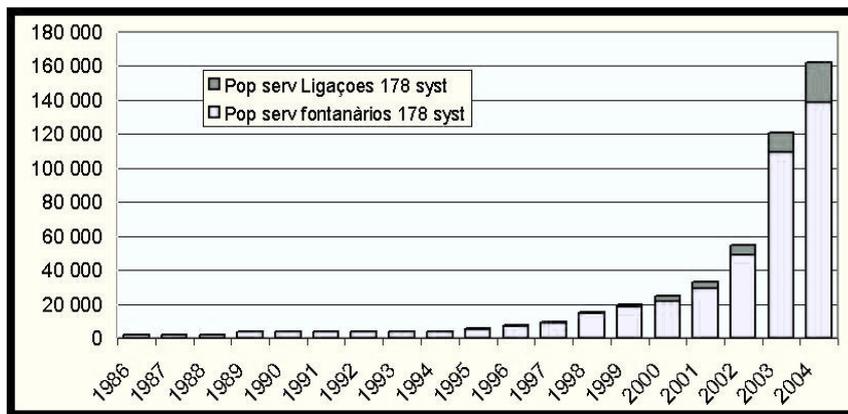
*In the four countries* – The share of alternative providers has been growing substantially in recent years in Zambia and Mozambique, as new, better organised providers have emerged to fill the gap left open by growing urban areas and under-invested formal providers.

In Zambia, the development of the ‘other market’ has been driven by foreign donors, which established about 12 systems providing services to about 625,000 people since 1998. Six of these were handed to the formal provider, LWSC, whilst six are managed by Water Trusts,

Even though such Trusts are technically operating illegally, they have well-defined governance arrangements with a 9-member Board of Trustees representing members of the community. This Board is in charge of supervising the service provider and determining tariffs, following a substantial consultation process. NWASCO has made previous attempts at incorporating these Trusts into a more formal regulated regime by relying on provisions in the existing regulatory framework. Yet even though the Trusts recognise the urgent need for them to be regulated, they have been very cautious about moves to incorporate them into LWSC as they believe their performance would decline as a result. The consensus solution was for the Trusts to sign a Memorandum of Understanding (MoU) with LWSC and to operate under its license. NWASCO is working on drafting an MoU in close collaboration with LWSC and the Trusts that will then need to become part of the License agreement between LWSC and NWASCO, referring to the obligations and responsibilities of all partners. NWASCO will be responsible for inspecting each Water Trust prior to the signing of such agreements to verify service levels and later on, for ensuring that the Trusts operate according to their own community participation and management principles, including on the issue of

tariffs. This is likely to result in a significant increase in NWASCO’s workload as a result.

In Mozambique, defining an appropriate regulatory regime for alternative providers is likely to be more difficult because they are much more numerous. According to some estimates, there are over 200 informal private operators selling water to 200,000 people (to which must be added approximately 400 standpipes and more than 3,000 households engaged in reselling activities). Those operate illegally (apart from the standpipe operators) as AdeM



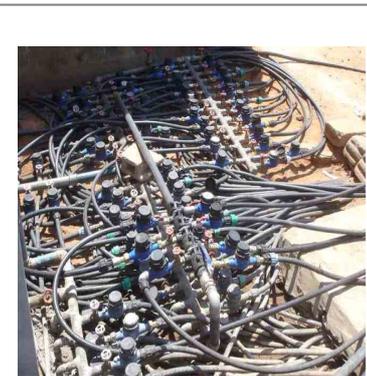
The graph above shows the explosion in the number of independent providers (*178 syst*) in Maputo, Mozambique, either offering connections (*ligações*) or standpipes (*fontanários*).

has exclusivity rights over the whole urban perimeter of Maputo. It is only recently that they have organised themselves through the creation of an association. CRA has identified this lack of regulation as an urgent problem to be addressed but is less clear about the most appropriate institutional model for doing so. Because they do not have the capacity to regulate so many providers at the same time, they are in the process of identifying key aspects of the service that call for regulation. They also want to establish ‘local relays’ for regulating key aspects of service performance at the local level, which could take the form of Water Committees (as were established during an attempt to formalise a ‘standpipe management model’) or through municipalities, community-based organisations, etc. The definition of the most appropriate institutional model is likely to take time and require extensive consultation; CRA is attempting to build a multi-sector partnership to facilitate this. Consultation will also be needed to identify

the most suitable regulation model for independent providers with their own source of supply. This likely would need to be done under the auspices of FIPAG (the public asset-holding company), which would delegate authority to either AdeM or municipalities who would further sub-delegate service provision to those small-scale independent providers.

In Rwanda and Kenya, regulating the other market is also an issue but the regulators have much less knowledge of the market and hardly any contact with such providers. It therefore appears that an initial phase of data gathering would be required to form a better understanding of the market so that both regulators can formally recognise the contribution made by such providers. At present, such information is very limited. In Rwanda, alternative providers do not seem to be operating, apart from the standpipe operators that resell Electrogaz water. Rather than examining the market more broadly, RURA would prefer to initially focus on improving the contractual arrangements between Electrogaz and standpipe operators to increase the number of functioning standpipes.

In Kenya, a variety of alternative water supply methods include kiosk vendors, water carts or water tankers. Mafia-like business practices have been reported by several community-based organisations, making regulation of these providers an even more urgent requirement. The solution being contemplated is for Water Service Providers (WSPs) to enter into third-party agreements with those small-scale providers. This would allow WSPs to delegate their service obligations to smaller (and perhaps more flexible or better adapted) operators. However, this model has yet to be tested in practice and it is likely that existing small-scale providers would require quite a lot of persuasion (from WSRB or other stakeholders) in order to contemplate a sub-delegation agreement with WSPs. Once WSRB is more firmly established, it should urgently switch its attention to these issues.



In Maputo, around 200 private providers, all of them 'illegal' were counted as part of a recent study. They provide water to an estimated 200,000 peri-urban residents, some of them quite poor. These providers level of technical sophistication can be higher than is often appreciated – the customers of the provider above are all metered at source.  
Photo © Hydroconseil, 2006

**Critical review** – Regulating the 'other market' has emerged as the most pressing regulatory issue at this stage in the countries that were part of the research programme. This is also a dominant preoccupation elsewhere, but as the literature review carried out in the context of a background note for The World Bank shows, there is comparatively little guidance in this area and experimentation is still very much ongoing. Throughout this project, it became clear that regulators need to get involved in this issue, largely because such providers often represent a very substantial share of the market. Regulators need to get involved even if those providers are operating outside the service area for the formal operator (as in Mozambique, for example). Such involvement can help foster competition as this may actually be more effective than seeking to regulate service quality or tariffs for the main utility.

Detailed action plans prepared by NWASCO and CRA have shown the importance of dealing with different types of alternative providers in different ways and of being extremely attentive to their conditions on the ground.

All regulators thought that it was already part of their mandate to deal with small private providers with no need to obtain additional support from policymakers. However, legitimising small providers may have policy implications (by 'regularising' informal settlements, for example) which would need to be clearly understood.

### 3.4 Regulating prices

**The challenge** – There is a common belief, amongst policy-makers, customers and even regulators that charging the lowest possible tariff is the more direct way to benefit the poor, even though this is often not the case. Politicians often take this as an excuse to charge low tariffs for all connected customers, especially given that it is usually difficult to target low tariffs to benefit the poor specifically (except via the connection charge). They often seek to impose low tariffs on regulators (directly or indirectly, depending on the degree of autonomy awarded to the regulator). However, if low tariffs mean that



Although taken in Mauritania, this photo shows how providers can often lower costs by not adhering strictly to norms and standards, yet still provide an affordable quality service.

Photo © Hydroconseil, 2006

the revenues generated by the service are not sufficient to cover costs, this risks jeopardising the financial health of the entire sector and limits the potential for investment in coverage extension and service improvements.

In fact, accessibility is often more important than price for poor customers, but few regulators are willing to acknowledge that. Extreme care should therefore go into the implementation of so-called ‘pro-poor’ tariff-setting principles: this should not run contrary to the objectives of cost-recovery and financial sustainability, as in the long-run, financially healthy utilities are the best guarantee of sustainable services to the poor. In particular, low tariffs should not make ‘serving the poor’ an impossible business proposition. Even though high connection charges and low volumetric tariffs are an overarching constraint for the poor to access services, it is one that regulatory agencies could theoretically address.

***In the four countries*** – All four countries have in place a tariff structure that is intended to help the poor. However, closer inspection shows that tariff regulation does not necessarily achieve its objectives and can even penalise poor customers rather than benefit them.

Tariffs in Zambia are generally low, especially when compared to other countries in the region (particularly in West Africa). For a variety of reasons, NWASCO has been reluctant to allow many tariff increases. First, because it may be difficult for a Commercial Utility (publicly-owned) to implement tariff increases due to political interventions at Board level. Second, because most Commercial Utilities (including LWSC) have remained very inefficient and NWASCO deems that allowing tariff increases would amount to asking customers to pay extra for such inefficiencies. The drawback of this position is that low tariffs make it very difficult for commercial utilities to mobilise sufficient financing in order to improve and expand the service. In addition, NWASCO’s policy on setting tariff structure has strong roots in the so-called equity principle and the idea that “the poor should not pay more”. For example, they estimate that kiosk customers, who have to carry the water home, should not pay more than those who receive water from the tap. This ignores the fact that the costs of kiosk operators may be higher due to their small size (less potential for economies of scale) and that charging equal prices could make such businesses much less attractive to operators, although they are a crucial supply option for poor customers.

In Kenya, current tariff structures are also having the opposite effect to that intended. Low-income households are often not connected and when they do have a connection, sharing of connections is common. As a result, subsidies embedded in the rising-block tariff structure often do not reach their intended beneficiaries and the current tariff structure effectively favours the better-off.

In Rwanda, the regulator is looking to regulate connection charges but these are difficult to monitor because of unclear rules for the setting of such charges and a lack of transparency in cost allocation. As connection charges are particularly high, this represents a significant constraint for access to the service for poor people. This is an area that RURA is looking to explore in the next few months.

**Critical review** – Despite its importance, no regulator in the group was willing to consider the issue of tariffs as a key feature of their action plans. This is potentially because they fear the political implications or know in advance that they would not get political support for such regulatory changes. By doing so, they have foregone an important lever (perhaps the most important one) to actually make the regulatory framework more favourable to poor customers. Additional effort should go into determining what tariff level could foster investment in the sector (by all providers, not only the main provider) whilst taking account of affordability constraints and defining an optimal tariff structure in order to allocate subsidies to those who most need them.

### 3.5 Regulating quality

*The challenge* – Service quality standards are a key determinant of costs and therefore drive tariff levels. One way of keeping tariffs at affordable levels whilst recovering service costs is to adapt quality standards to local needs.<sup>2</sup> Quality regulation therefore needs to be flexible and to consider the trade-offs between service quality and price, so that quality standards and requirements can be adapted to the circumstances in different service areas and to the type of customers and service providers. In addition, the right type of monitoring and enforcement mechanisms should be in place so that quality can be monitored even in areas that are more difficult to reach.

*In the four countries* – In Mozambique, the regulator CRA has had difficulties enforcing quality requirements, particularly with respect to pressure and this has affected the poor in particular as many of them live in areas with fluctuating pressure. This is clearly not an issue to do with high standards, but more with the lack of monitoring mechanisms for the type of performance indicators that have been retained in the contract. If such a problem is to be addressed, this would require strengthening the mechanisms for relaying customer complaints and giving community representatives tools for monitoring such standards. This has not been explicitly discussed during this work however, as it was not perceived as one of the primary constraints in this country. The experience with local level quality monitoring developed by the Water Watch Groups in Zambia (see next section) might provide an interesting example that could be adapted to address similar problems in Mozambique.

In Rwanda, the issue of high standards leading to high costs of service and therefore high tariffs was raised, as high connection charges represent a significant obstacle to poor customers gaining access to the service. A potential way to lower such costs could be to modify service standards by adopting condominal water and sewerage systems, for example. This possibility was debated for Rwanda but did not constitute one of the main components of RURA's action plan.

**Critical review** – On the whole, the issue of quality regulation did not attract much interest in the countries under review, although it had been one of the key topics that triggered the design of this research programme. This perhaps reflects the fact that such changes would require a policy intervention, as the setting of standards is often the remit of policymakers within Ministries or municipalities and more rarely that of regulators (which would more likely have an advisory role in this area or have the ability to modify only more detailed customer service standards). The regulators should ideally undertake a more comprehensive review of the impact of quality standards on costs (and therefore on revenue requirements) in an attempt to reduce costs for poor customers. Stronger monitoring mechanisms for existing quality standards should also be established to ensure that poor quality is not discriminating against poorer customers (i.e. that existing rules are primarily benefiting the rich).

### 3.6 Protecting consumers

*The challenge* – Poor consumers often lack a formal mechanism to relay their complaints and to obtain redress. This may be because the regulators themselves do not have the necessary social intermediation techniques or links with local communities via community based organisations. As a result, some regulators regret that they are getting very little feedback from customers, even though they are not systematically seeking or stimulating customer feedback. Some regulators fear communicating with customers because they feel that they have little to say and that they should only communicate once a proposed strategy has been formalised internally. This approach is often inappropriate because the definition of regulatory strategies would often benefit from early involvement of different stakeholders in their design, including customers.

*In the four countries* – Some of the countries are more advanced than others in the area of protecting consumers. The more established regulators, including NWASCO in

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<sup>2</sup> Quality standards here refers to quality of service and not water quality.

Zambia and CRA in Mozambique, both have established mechanisms for acting as relays with customers and particularly the poor. The system of Water Watch Groups (WWGs) in Zambia is the most developed. These are voluntary consumer groups responsible for ensuring that water consumer rights are protected and that consumers are aware of their rights and responsibilities. As mentioned above, they are also in charge of monitoring the utility's technical performance on directly observable parameters, such as service hours, pressure, billing, water quality or sewer flooding. A total of four WWGs have been created since 2001 and NAWASCO is currently planning to create others. They are staffed by volunteers from the public but supported by NAWASCO. Yet their remit is focussed on areas served by LWSC and they are not particularly involved in the areas served by the Water Trusts where most poor customers reside.

CRA in Mozambique has established a system based on placing CRA representatives (referred to as 'CRA delegates') closer to customers in order to improve feedback and increase links between the regulator and customers. At present, these are limited to the secondary cities where AdeM is providing services on the basis of management contracts, but such a system could potentially be extended to the capital Maputo in order to act as local regulation relays for alternative providers as well as for the main provider. Apart from this mechanism, CRA appears well known by customers, who expect it to play a significant role in dealing with their complaints. Indeed many customers would send their complaints to CRA before they send it to AdeM, which means that CRA is often overwhelmed by a higher number of complaints than it can actually accommodate.

The 'nascent regulators' RURA and WSRB have yet to make full contact with the consumers they have been set up to protect (both rich and poor). This is largely because their human resources are limited and they prefer dedicating available resources to establishing a functioning institution prior to reaching out to the public.

**Critical review** – Organising customer voice was deemed very important by all participants in this action research programme. Consumer groups can be better organised to relay consumer voice to the regulator and alert regulators to critical issues for services to poorer consumers. Rwanda chose to focus on this issue as part of their action plan, largely because the organisation of customer voice is so deficient and because they recognise that stronger mechanisms for relaying customer voice would improve the relevance of the regulatory regime they are seeking to put in place. Rwanda could learn much from the Water Watch Groups experience in Zambia. The issue of customer voice is also important for the definition of the regulatory regime for small scale water providers and is therefore implicit in the other action plans concentrating on those aspects (especially those looking at creating relays for carrying out regulation at the local level).

#### 4. Conclusions

This report has presented intermediate results of an ongoing process where regulators and other stakeholders in four countries have sought to address constraints that limit the provision of good and affordable services to poor customers. As such, the report does not present ready-made solutions – rather it lays out a methodology for exploring the key challenges that typically limit service delivery to poor customers and discusses what this has revealed in four cases.

This has been a learning experience for all involved about how regulators (and by extension regulatory frameworks) can focus on the poor. Here we draw some conclusions for what this means more generally about regulators' ability to address these complex challenges. Lastly we suggest several areas where more learning is required for a lasting impact to be made possible.

#### 4.1 Overall conclusions

*Nascent regulators have problems setting their own priorities in terms of pro-poor regulation and can quickly be overwhelmed by other concerns. Yet raising such topics early in the regulator's lifecycle can help them mainstream such issues into general regulatory practice.*

The research showed that the ability of regulators to focus on pro-poor regulation issues largely depends on their maturity. 'Nascent' regulators tend to be overwhelmed by the scale of the challenge and find it more difficult to prioritise their actions. However, early identification of such issues can help them mainstream the consideration of pro-poor regulatory constraints in the implementation of the overall regulatory framework, as was perhaps achieved in Rwanda (and much less so in Kenya due to changes in top-level management halfway through the project). Through the present activity, the regulator in Rwanda realised the importance of customer participation mechanisms and learned from the experience in Zambia with the Water Watch Groups, which it is now looking to replicate. It also highlighted its difficulties at regulating the connection charges and the tariff structures, for example, and realised the major impact that this has on poor customers.

*Regulators need to identify local relays in order to perform regulatory tasks and functions that require more involvement on the ground.*

Regulating in a way that benefits poor customers requires gathering detailed information (on where the poor are, how they currently get service, what their preferences are, etc.) and ensuring such information is up to date and relevant. This cannot be achieved only through occasional surveys. It calls for relay mechanisms to represent regulators on the ground. This is true in particular when regulating a high number of alternative providers as they provide important services to poor customers. Yet in most cases the most appropriate institutional forms for such relays still require further experimentation.

*Regulators have an important role to play in promoting relationships between various stakeholders so as to facilitate the development of pro-poor regulatory arrangements.*

Identifying constraints to pro-poor service delivery and potential solutions for these constraints may be the first step. Changing regulatory frameworks, however, will require the collaboration of many actors as well as engagement with consumers. Regulators may play a significant role in motivating other stakeholders to introduce such changes. We noted that to be able to make a real difference in the sector, regulatory agencies must often 'regulate' the relationships with and between other stakeholders. In most cases, this would not be part of their written mandate but will constitute an important part of their activities. Under their mentoring, the relationship between two conflicting or competing parties (such as a main provider and alternative providers) can be clarified and formalised, as the regulator would typically play a role of arbiter. This requires that the regulator be seen as legitimate and impartial, yet having sufficient influence. Such impartiality depends not only on its institutional make-up (such as whether it has been established as an independent regulator or not) but also on the reputation and charisma of its main decision-makers.

*The creation of partnerships is an increasingly accepted way of dealing with regulatory constraints even where the interests of stakeholders may be divergent.*

In each country that defined an action plan, most of the actions called for the creation of partnerships to help resolve matters. Regulators can clearly not address all of these issues in isolation from other stakeholders. Yet they can potentially play a leading role in the establishment of partnerships to address them. This may however entail a conflict of interest. Regulators may have more difficulty establishing themselves as neutral arbiters within the sector when they are simultaneously working in partnership

with other organisations on whom they may depend in forming their views on how the sector should evolve. Regulators should therefore contemplate their various roles carefully. They must consider where it is appropriate to work in partnerships with other stakeholders and where they should stay aloof, being seen as an external party that acts as an arbiter in resolving conflict and disputes.

#### **4.2 What areas require further learning?**

There are still more questions than answers at this stage, especially given that the action plans have yet to be implemented fully or partially in some cases. It would be interesting and important to follow the process of implementation of these action plans at regular intervals in order to assess what can actually be done in practice, which solutions were retained and which were discarded.

The real challenge will be in the implementation phase, especially because initiatives of this kind can easily lose momentum. The issues are often seen as marginal, especially when ‘major regulatory events’ take place, such as the renegotiation of AdeM’s contract in Mozambique. If funds for such initiatives come from external sources, the external accountability introduced may help in maintaining momentum (although this may call for a sustained and intensive external presence). Peer pressure and thirst for cross-learning and exchanges of experience may work as another incentive to maintain momentum. Following the Nairobi workshop, the four regulators have indicated willingness to continue this stream of work through the creation of a working group within the Water Committee of AFUR, the African Forum for Utility Regulation. The purpose of this focus group will be to exchange experience and organise learning visits between regulators (or via the creation of a web-based platform to exchange documents and organise on-line discussions).

Exchanges of experience will particularly be needed on the following issues:

- Ways of obtaining reliable data on poverty and access conditions through rapid assessments or detailed surveys. In particular, regulators need to develop links with other agencies in order to obtain more reliable information on poverty, or to sign strategic partnerships with others, such as municipalities, NGOs, CBOs, who may have more direct access to this information.
- Ways of regulating small-scale providers and water resale, especially regarding the most appropriate institutional models and local ‘relays’ for doing so. The exchange of draft model contracts and service agreements for ‘critical review’ could facilitate such cross-learning.

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*Please note that the opinions expressed herein are those of the author and not necessarily those of BPD or its members.*

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