

Water & Sanitation Regulatory Reform

Key Concepts and Emerging Best Practice

2008 USAID Infrastructure Workshop

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Key Concepts

Regulation: the rules applied by government to influence the behaviour of participants in a market

Regulatory activities:

- setting rules or standards
- monitoring compliance
- enforcement

Why regulate infrastructure markets?

- natural monopoly, information failures, externalities, social concerns

Different characteristics dictate regulatory response

Key Concepts

Roles:

- Policy making: formulating government policy regarding competition, PPP, nature of the regulatory framework, social assistance
- Regulation: developing, monitoring and enforcing rules for suppliers and customers
- Ownership: provider of equity, commercial oversight of managers
- Operations: management of service delivery

Traditional public sector models involve substantial overlaps between these roles

Most sector reforms are aimed at introducing some degree of separation among these roles

Key Concepts

Regulatory Goals:

- Promote universal access through pricing that balances social equity with economic efficiency
- Create incentives for investment
- Encourage fair competition
- Promote innovation
- Protect the health and safety of the public
- Where the private sector has taken on obligations, ensure reliable services

Key Concepts

Types of Regulation:

Economic

- Regulation of market structure: facilitating or promoting competition
- Regulation of market conduct: regulating market outcomes e.g. prices and quality

Social

- access to and affordability of infrastructure services

Other forms of infrastructure regulation

- technical standards
- health and safety regulation

Regulatory Considerations in Water

- Water as a natural monopoly
- Social mandate versus cost recovery
- Service levels - household connections/network provision
- Public participation and political costs

Emerging Best Practice in Regulating Water and Sanitation

The 2005 USAID Study helped identify practices to deal with three conditions:

- Transition to cost recovery
- Decentralized environments
- Public participation

Under the Study, nine countries were selected for study on the basis of

- (1) clear evidence of significant progress in water sector reform;
- (2) geographic representation,
- (3) alternative approaches to tariff setting; and
- (4) recommendations from experts concerning good regulatory practices.

Country Regulators participating in USAID Study

Abu Dhabi - Regulation & Supervision Bureau *

Chile - Superintendent of Sanitation Services (SISS)

Colombia - Water Regulatory Commission (CRA)

Laos - Water Supply Authority of Lao P.D.R.

Lithuania - National Control Commission for Prices *

Mozambique - Water Regulatory Council (CRA)

Senegal - SONES - Contract Regulator and State holding Company

Ukraine - No central regulator

Zambia - National Water Supply and Sanitation Council (NWASCO)

* Multi-sector regulator

Emerging Best Practice in Regulating Water and Sanitation Regulating a Natural Monopoly

Providers must be controlled and accountable - whether publicly or privately owned and operated.

- Private providers are often regulated by autonomous agencies or contracts, or both.
- Public providers can be controlled and made accountable through ownership and governance.

A variety of regulatory approaches can be used across the range of operating models.

Emerging Best Practice in Regulating Water and Sanitation Balancing a Social Mandate with Cost Recovery

The USAID Study found that:

- All regulators used a form of economic cost recovery as a basis for regulation of the sector.
- Most regulators allow transition arrangements that allow utilities to move toward cost recovery
- Progressive improvement targets appear to have a direct effect on reducing revenue shortfalls during the transition period.
- Most countries in the sample have a strategy of reducing cash transfers to water companies.

Emerging Best Practice in Regulating Water and Sanitation Balancing a Social Mandate with Cost Recovery:

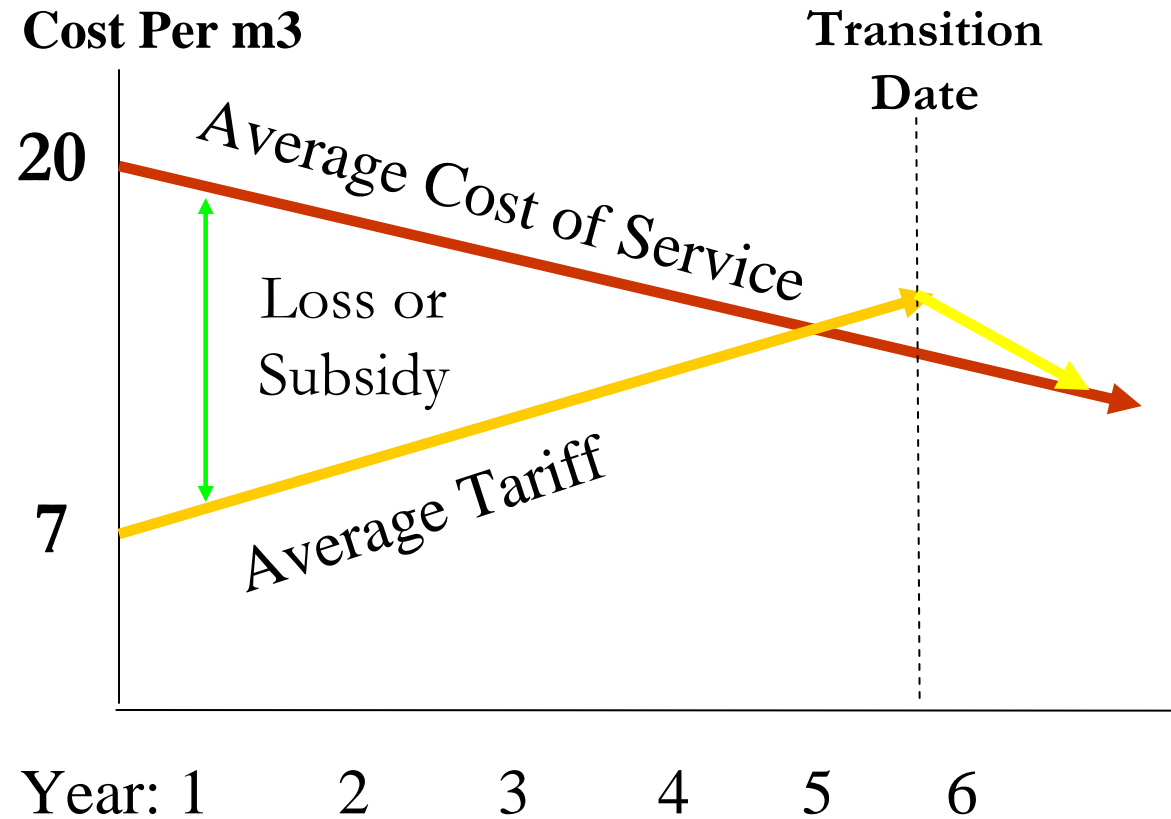
- It is often important to fix corporate governance problems before good regulation is effective.
- During transition, regulators can function in an advisory role to help water utilities.

Governments have a range of tools they can use to achieve social objectives including subsidies (such as output-based payments or extending service to poor households) and tax incentives.

BEST PRACTICES IN WATER REGULATION

Transition to Cost Recovery

FULL COST RECOVERY
TRANSITIONAL METHODOLOGY
BENCHMARKING, BUSINESS
PLANS, GLIDEPATHS



Emerging Best Practice in Regulating Water and Sanitation Balancing a Social Mandate versus Cost Recovery – Country Practice

- In Abu Dhabi the subsidy is based on the difference between willingness to pay and total revenue requirements.
- In other countries the interim approach is to recover O&M expenses and required debt service charges and forgo recovery of depreciation.
- In most respects, Chile and Laos have already achieved full cost recovery but marked differences exist in service levels.
- In Senegal and Lithuania the transition period included significant capital investments to improve water and sewer services.

Emerging Best Practice in Regulating Water and Sanitation Balancing a Social Mandate versus Cost Recovery – Country Practice (Cont.)

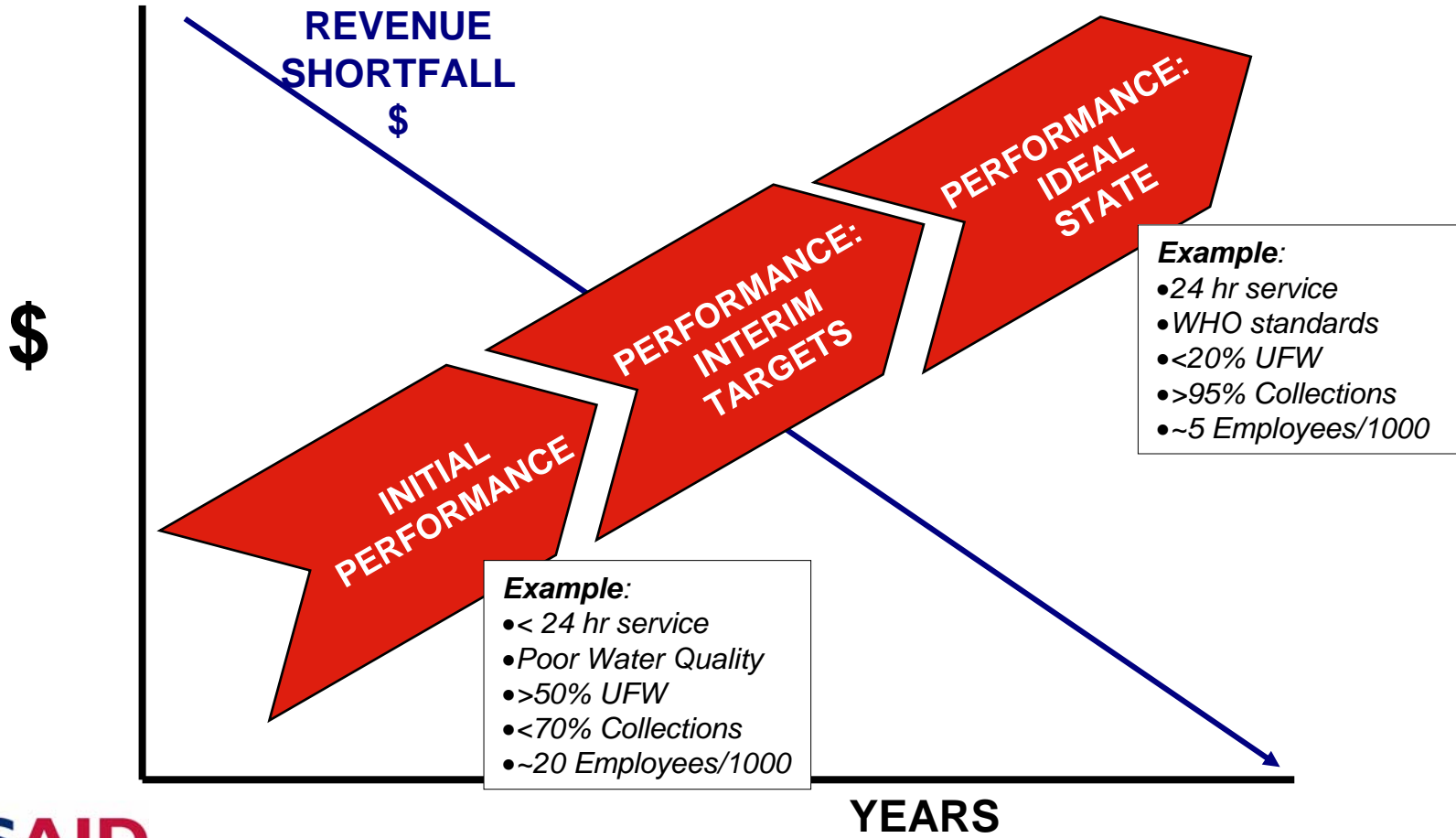
- In Zambia the initial concept was to provide water companies with sufficient working capital at the date of reform. This was unsuccessful and debt swaps with the electric company and continued financial transfers were needed.
- In Ukraine local governments (owners of water companies) are required to increase tariffs to achieve economic cost recovery; if they do not, the difference must come from local government sources.
- In Senegal the private operator was able to obtain deficit financing from local sources to finance the transitional period revenue shortfall.
- In Mozambique and Zambia (both low GDP/capita countries) donor funds also were used to finance a portion of operating expenses.

Emerging Best Practice in Regulating Water and Sanitation Balancing a Social Mandate with Cost Recovery – Getting to the Right Performance Targets

The USAID Study found that:

- Limiting the number of targets appears to result in clearer signals, sharper management attention, and more meaningful improvements. Targets may be set in a contract or in regulations. A mechanism may be needed for resetting progressive performance targets.
- Financial incentives must be significant, relative to baseline expectations, to be effective.
- Tariff and subsidy design can be powerful incentives for improved performance by directing financial rewards to specific outcomes that affect performance targets, monitoring, and reward/penalty systems.
- If allowed under civil service rules (or perhaps with changes) regulators can function as technical auditors to authorize bonuses based on results.
- It may be effective to create incentives to meet or exceed performance targets resulting in additional compensation to the water operators.

Progressive Performance Targets Need to be Embedded in the Glide Path to Economic Cost Recovery

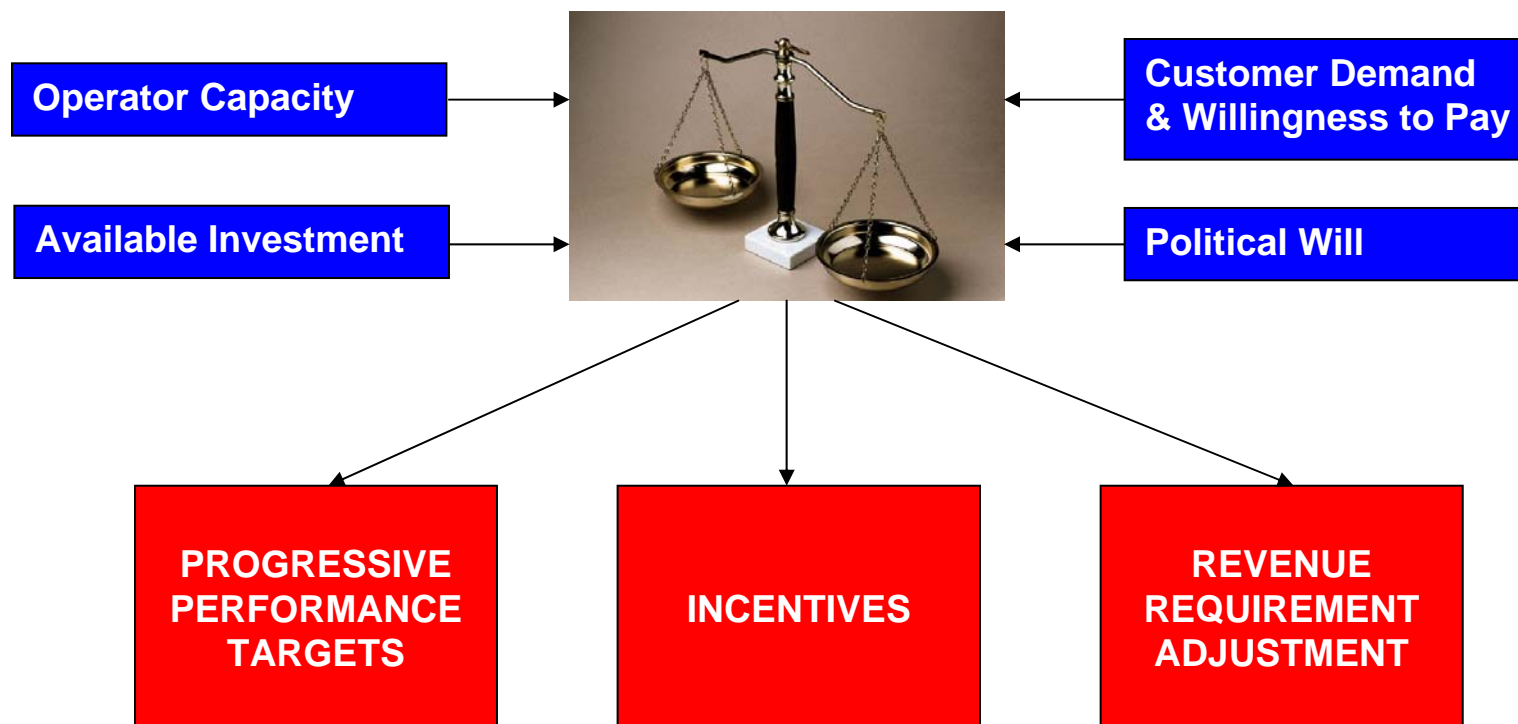


Emerging Best Practice in Regulating Water and Sanitation Balancing a Social Mandate versus Cost Recovery – Country Practice

- Most countries in the sample use some form of benchmarking to set and measure progressive performance targets.
- Chile uses a competitive utility approach and sets performance targets based on multiple measures of a best-in-class utility.
- All other countries in the sample use a phased approach that provides for improvements to be made in increments.
- In Senegal and Mozambique, regulators focus on a few performance measures (collection % and UFW) which focus management attention and have a ripple effect.
- In Senegal the private operator has a significant financial incentive to improve UFW and has invested needed time and money to address the problem. In Mozambique, the UFW incentive was not perceived to be significant and results have not been as dramatic.

Emerging Best Practice in Regulating Water and Sanitation

Several Factors Must be Considered When Designing Interim Performance Targets



Emerging Best Practice in Regulating Water and Sanitation Regulating Multiple Providers and Service levels

There are different scenarios under which a regulator may have to deal with multiple providers and/or multiple levels of service:

- Multiple utilities exist at a national or decentralized level (Colombia, Laos, Lithuania, Mozambique and Ukraine from USAID Study)
- Small scale providers fill the utility service gap in a formal or informal capacity
- In order to reach a range of customers with different needs and income levels, providers may offer a variety of service options.

Emerging Best Practice in Regulating Water and Sanitation Regulating Multiple Providers and Service levels

The policy, legal and regulatory frameworks are often biased against service to the poor—either implicitly or explicitly:

- There may be a tendency to focus on the service provided by the main utility(ies) rather than the smaller providers on which the poor depend.
- Levels of service and standards may be based on information established by, and appropriate to, developed countries or higher-level income groups.

Emerging Best Practice in Regulating Water and Sanitation Regulating Multiple Providers and Service levels

Multiple Providers

- Do not micro-manage
- Recognize limitations
- Make regulation consistent with the political and social culture of the country
- Indirect regulation using guidelines can work
- Rely on citizen's demand for improved service to force political action
- Do not force consolidation
- Promote community based organizations in small communities
- Consider establishing regional regulators.

Emerging Best Practice in Regulating Water and Sanitation Regulating Multiple Providers and Service levels

Different Service Levels

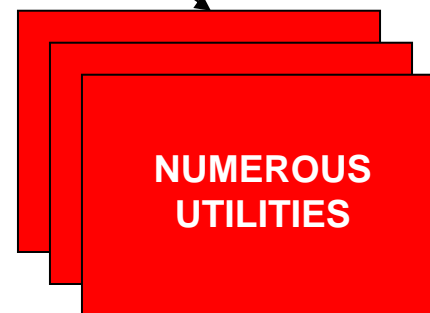
- Is network coverage the most reasonable short to medium term approach?
- Make sure the customers have input on what is acceptable, desirable and affordable
- Establish appropriate definitions of access and coverage
- Allow and develop appropriate regulations for differentiated service levels
- Allow the main service providers to extend coverage indirectly

Emerging Best Practice in Regulating Water and Sanitation

Administrative Capacity Needs Have to be Considered When Regulating Numerous Small Utilities

Regulator Activities:

- *Tariff Review*
- *Monitoring*
- *Standard Setting*
- *Enforcement*
- *Complaint Monitoring*



Emerging Best Practice in Regulating Water and Sanitation Regulating Multiple Providers & Service Levels – Country Practice

- In Laos the regulator only regulates water companies that operate in urban centers but promotes community approaches in rural areas.
- In Mozambique the regulator only regulates water companies that have some PSP. The regulator is considering publishing tariff guidelines for smaller communities to use.
- In Ukraine there is no central regulator but all local governments are required to comply with national tariff guidelines; if the tariffs do not cover costs the local government must provide a subsidy.
- In Senegal and Mozambique, urban standpipes are managed by community members with oversight from the operator. Likewise in Ghana, tankers work with the utility through performance contractors.

Emerging Best Practice in Regulating Water and Sanitation

Regulating Alternative Service Levels – Country Practice

- In Durban, the Municipality allows the water company to give customers a choice of options with varying price/quality characteristics. Including a non-pressurized water system with a roof tank as an alternative to a full pressurized system (expensive) or standpipe supplies (unattractive to users and low cost recovery for utility).
- The regulator in Ho Chi Minh City (Vietnam) adopted a policy of legitimizing alternative providers in order to encourage them to extend and improve services.

Emerging Best Practice in Regulating Water and Sanitation Involving the Public

- The regulator can play a valuable role in conducting willingness to pay surveys, especially in transition. This is a key input to the business plan.
- Regulators should develop a relationship with customers through town hall meetings and other events that provide an opportunity to interact with customers.
- Regulators can ensure transparency by, for example, publishing public-private participation contracts on the Internet, and encouraging public input in the design of PSP.
- Regulators should insist that consumer and NGO participants provide a high degree of scientific evidence to support recommendations, for example, in the form of customer surveys, benchmarking data, or realistic financial assessments.

Emerging Best Practice in Regulating Water and Sanitation Involving the Public – Country Practice

- All the regulators share information with the public. This ranges from posting rights and responsibilities on a website (Abu Dhabi) to publishing service standards in public buildings (Senegal), to utility data in annual reports (Laos).
- Some regulators seek feedback in the form of satisfaction or affordability surveys. Mozambique and Chile have formed partnerships with municipalities to obtain feedback. Laos uses participatory field studies.
- Zambia supports involving water watch groups in setting and monitoring service standards.
- Chile and Colombia involve consumer groups in tariff setting through public hearings. Zambia and Mozambique are working towards this. Progress depends on the development of credible associations and linkages to academic institutions as the ability to analyze cost of service and other financial data is critical.

Emerging Best Practice in Regulating Water and Sanitation

Multiple levels of Public Participation

	Providing Information			Consult/ Surveys	Complaint Handling		Involvement/ Collaboration			Community Management
	Rights/ Legislation	Service Standards	Annual Reports		Customer Contracts	Complaint Mediation	Monitoring Service Standards	Public Hearing /Tariffs	Developing management contracts	
Abu Dhabi	X		X		X	X				
Chile	X	X	X	X		X		X		
Colombia	X	X	X						X	X
Laos	X	X	X	X					X	X
Lithuania	X		X			X				
Moz'bique	X	X		X			X			X
Senegal	X	X						X		X
Ukraine	X	X			X			X		
Zambia	X	X	X	X	X	X	X	X		