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Proceedings

# Managing Karachi's Water Supply and Sanitation Services

Lessons from a Workshop



## Background

Water services in Pakistan's major cities and urban centers remain fragmented and intermittent—no city currently has 24 hours of water supply for seven days a week. This impairs the ability of cities to support economic growth and meet basic needs.

Faced by this challenge, the Nazim of the City District Government of Karachi (CDGK) suggested in mid-2004 that the Water and Sanitation Program – South Asia (WSP-SA) help to arrange a discussion about lessons for Karachi from Water & Sanitation (W&S) services reform in large cities and urban areas elsewhere in the world. In follow up discussions, it was agreed that although Karachi would be the entry point, the workshop should also include discussion of similar challenges elsewhere in Pakistan. Key W&S stakeholders from major cities in Pakistan, the central government and the provincial government of Sindh (where Karachi is located) attended a two-day workshop in Karachi on February 23-24, 2005. WSP-SA facilitated participation by several resource persons, including practitioners from Manila, Johannesburg, Phnom Penh and from the national water utility in Uganda.

The formal presentations and delegates' inputs all emphasized the institutional—rather than technical—nature of the challenges around water and sanitation in Pakistani cities. This message also came through in a number of keynote addresses:

**THE GOVERNOR OF SINDH, DR. ISHRAT-UL-IBAD**, highlighted the impact of W&S on quality of life and combating deaths and diseases across the world. It is crucial to find ways to use scarce resources properly, which requires innovation, efficiency, partnership with the private sector and international institutions and accountable arrangements. The challenge, he said, is one of enduring institutions.

**IN A PRESENTATION READ BY MR. TARIQ HASSAN, NAIB WAZIM, CDGK, ON BEHALF OF THE NAZIM OF KARACHI, MR. NIAMTULLAH KHAN**, it was explained that as the city continues to grow, service demands will grow. The vast service expansion needed requires major financial skills, finance and new management experiences. Devolution provides a favorable context, but there are still many issues at stake. KW&SB is a key delivery mechanism that can provide lessons for other utilities as well create efficient, accountable and self-reliant service providers and authorities.

**THE HEAD OF THE WORLD BANK IN PAKISTAN, MR. JOHN WALL**, said that W&S is crucial to poverty reduction and intractably linked to education, health and other services. He pointed out that Pakistan is booming, GDP is growing, and economic indicators are improving. But basic services need to improve, and the challenges are primarily about 'getting organized' for this. In his view, people are willing to pay for these services, but they want value for money. The key thing right now is to change the way the city is governed and to ensure better cooperation between key public institutions on land and services management. There is 'fiscal space' as revenue has become more available. But it is necessary to work 'smarter', and this workshop is about that primarily.

**MS. CATHERINE J. REVELS, THE REGIONAL TEAM LEADER OF THE WSP SOUTH ASIA**, said that the key issues are institutional arrangements and incentive frameworks. While every context is different, all issues are not unique. The workshop provides an opportunity to learn from different experiences and different approaches to assist Karachi and others define and take forward reform agendas.



## Pakistani Cities in the Urban Millennium

### The Urban Challenge

Improving water and sanitation service delivery in South Asia's growing cities is not about fixing the pipe—it is about fixing the institutions that fix those pipes<sup>1</sup>.

As cities grow and compete in the region and globally, different urban services can no longer be dealt with in isolation. Services must come together to enhance the economic productivity and credit worthiness of urban centers. This requires better management, driven by sensible policy, effective structures, and quality skills.

The current devolution process in Pakistan provides an opportunity to empower the country's rapidly growing cities to become internationally and regionally competitive and meet the increasing demand for basic services. However, at present Pakistani and other South Asian cities find this challenge daunting. Their population growth has been phenomenal—by 1998, 40 percent of the country's population was already urbanized, and predictions are that this will move to over 50 percent by 2015. But they have not managed to secure the levels of service this requires. On average, unaccounted-for water in the region is over 40 to

50 percent, and only 20 to 30 percent of operations and maintenance cost in the water sector is being recovered.

No city or town in South Asia has water supply for 24 hours a day, seven days a week. In Hyderabad (India), water is provided for only two hours every second day; even in Delhi, supply is a mere five hours a day.

Box 2 (on page 4) shows that in Pakistan, Lahore is best off—its consumers can expect access to water for 16 to 18 hours a day in summer and for 12 to 14 hours in winter. Consumers in Karachi, Peshawar, Faisalabad and Multan have access for only around eight hours per day, with some variation between access for industrial and domestic users.

### Box 1: Waterborne Diseases Harm Many Pakistanis Per Year

More than three million Pakistanis become victims of waterborne infections annually, of which 1.2 million die. Among them 250,000 are children under five years of age, who succumb to diarrhoea and vomiting.

According to recent research by the Pakistan Council for Research in Water Resources (PCRWR), more than half of the population of Pakistan did not have access to clean drinking water. The World Health Organization (WHO) has warned Pakistan of possible dangers from infectious and waterborne diseases. According to WHO, one hundred million cases of diarrhoea are being registered for treatment in Pakistani hospitals every year. A survey conducted by PCRWR showed that 81,996 cases of water-related diseases were registered in Rawalpindi division alone. According to the United Nations Children's Fund

(UNICEF), in Pakistan 40 percent of hospital beds are occupied by patients suffering from water-related diseases.

Doctors and chemists warn that chemical compounds can cause severe health hazards, including cancer, diabetes, kidney and heart diseases, high blood pressure, irritation, headache, as well as congenital and dental and bone diseases. Bacterial contamination in water is very common through mixing of sewage, as the required distance between the water supply-line and sewerage-line is not kept.

On average, only 2-4 percent Pakistanis use bottled water (mineral water), 7-10 percent have a water-filter facility available in their houses and the remaining 86-91 percent use regular tap water.

Source: *Weekly Independent*, March 17-23, 2005, Lahore.

<sup>1</sup> This point was the focus of a presentation by Junaid Ahmad and David Savage on *Making Water Services Work: An Institutional Agenda*, and affirmed in most discussions throughout the proceedings.

## Box 2: Defining the Delivery Gap and Benchmarking: Perspectives from Group Discussions

The patchy services impose a heavy cost burden on cities and their people, financially and in health and environmental terms. Poor people pay the highest price. According to the World Health Organization approximately 25-30 percent of the diseases in Pakistan are gastro-intestinal in nature; 45 percent of the country's infant deaths are due to diarrhoea and 60 percent to overall infectious waterborne diseases such as typhoid, polio and hepatitis A and B. Moreover, lack of regular access to water costs households income as they need to assign more time to obtain water for daily usage<sup>2</sup>.

Yet, it is possible to perform better, as the experiences of Johannesburg in South Africa, Phnom Penh in Cambodia, Manila in the Philippines, and the corporate water utility at central state level in Uganda have shown. In all these cases, service problems were systematically reduced and 24/7 water supply has become the norm. The approaches in these locations have varied, from local-level corporatization in Johannesburg and Phnom Penh to a centralized corporate structure in Uganda, and to a private-public partnership in Manila. But they have in common the fact that improvements were not primarily about more bricks, mortars or pipes, or about getting more resources. Instead, they all have managed to improve water services by getting organized through creating institutions

Officials from all the cities present at the workshop—Karachi, Lahore, Peshawar, Faisalabad and Multan—were able to reflect on current service indicators and how these differ from

their medium- and long-term visions. While these indicators are not official, they offer a useful starting point and perspective on the state of WSS in Pakistan's major cities.



<sup>2</sup> World Health Organization ([www.who.int/countries/pak/en](http://www.who.int/countries/pak/en))

and incentives that rewarded providers and offered consumers reason to pay for services.

**Devolution Offers Opportunities**

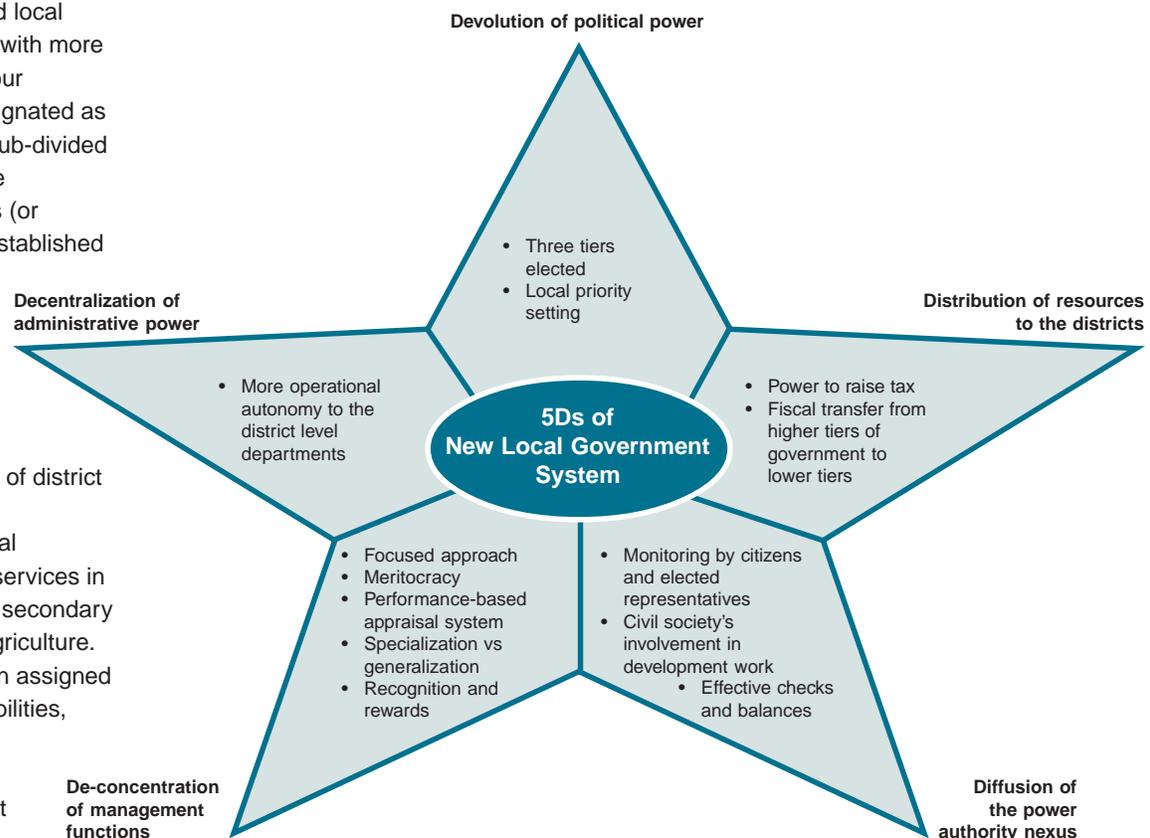
In Pakistan, devolution offers new opportunities to improve services (see Figure 1). The creation of three tiers of local government (District, Tehsil and Union Councils) since 2002 opens the door to improve service delivery through appropriate local-level policies and institutional arrangements. In total, 6,473 indirectly elected local governments were created, with more than 120,000 councillors. Four provincial capitals were designated as City Districts, each further sub-divided into Towns. New governance arrangements make Nazims (or Mayors) accountable, and established Citizen Community Boards (CCBs) are supposed to facilitate citizens' participation in local-level decision-making. Administrative reforms include the creation of district governments with their own departments, given functional responsibility for delivering services in sectors like elementary and secondary education and health and agriculture. Towns and tehsils have been assigned 'municipal service' responsibilities, although in practice their responsibilities have been relatively unchanged, except for two provinces where water supply has been

decentralized to Tehsil Municipal Administration (TMAs). Union administrations have not been assigned any major service delivery responsibilities. Fiscally, local governments have been given the powers to raise some additional revenues and Provincial Finance Commissions (PFCs) have been established to direct the distribution of resources between the province and

local governments and ensure distribution among local governments.

But devolution has also introduced a new set of challenges, among others in the management of water and sanitation services. First, the scale and costs of delivery challenges has increased in urban areas where populations have grown and economic demands increased, and in rural areas

**Figure 1: Devolution in Pakistan**



Source: [http://www.nrb.gov.pk/local\\_government/figure\\_1](http://www.nrb.gov.pk/local_government/figure_1)

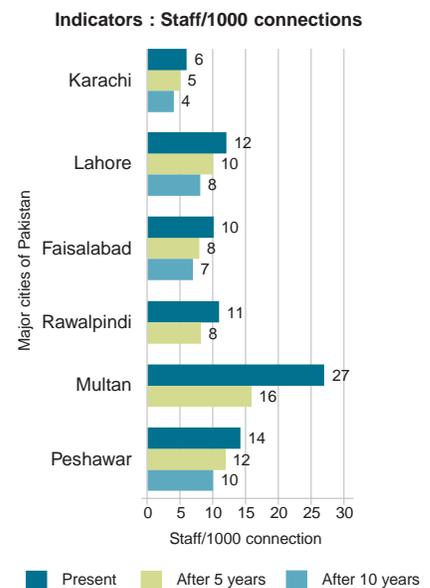
Political and operational accountability lie at the heart of dealing with the institutional challenge.



where tehsils are poor, with scattered populations. Second, the management and institutional complexities of devolving responsibilities from provinces to districts and tehsils and clarifying their new roles have been daunting. Issues include blending staff from diverse departments; defining the role of WASAs; equalizing delivery;

and overcoming deep-rooted fiscal weaknesses in most local institutions.

In the urban areas, some municipal authorities have been quite innovative in their approaches to service delivery, experimenting with new options like contracting out and finding ways to improve their revenue. But in many tehsils, technical skills are in short supply. Many posts remain unfilled, or filled by staff without the skills to carry out their designated duties. Even in relatively attractive areas such as Faisalabad, one tehsil is operating with 50 percent of posts unfilled. Anomalies are widespread with relatively junior, unskilled staff now responsible for other staff of a higher professional status and seniority. And even in urban areas, no one has yet come near 24/7 supply. Clearly,



institutional systems are not up to the challenge.

Making use of the opportunities that devolution offers requires a different mindset from the past emphasis on technical issues. It simply cannot be business as usual—institutions must be made politically and operationally accountable.

## Accountability: The Heart of the Matter

Although local context is always important and necessitates local responses, there has been great consistency in the institutional rules and principles that have guided reforming cities across the world. Political and operational accountability lie at the heart of dealing with the institutional challenge.

### Political Accountability

Political accountability requires that the responsibilities between different tiers of government are clearly defined, and that the right tier of government is chosen to ensure the service is duly delivered. This is about who owns the assets and shares in the utility and how they hold the providers accountable.

For example, political accountability can be devolved to local institutions,

such as in South Africa, the Philippines and Uganda, where the principles of decentralization were actively enshrined in the constitution and local government legislation.

For service providers the test lies in who owns their assets. There are different options, but it is crucial that the choices made are very clear. In Uganda, for example, the water utility still is a national entity, although local government has become stronger. In Chile, accountability was kept at national and regional levels and in India at state and national levels. In principle there is nothing intrinsically wrong with making different tiers of institutions politically accountable, provided it is clear who is accountable for what.

In Pakistan, devolution since 2001 has set a supportive context for local-level accountability. However, there still are several uncertainties. In some of the city-focused group discussions at the workshop, for example, some delegates were distinctly unclear about their roles in relation to provinces, and continued to assume a great deal of provincial control over key decisions. In most cases, they seemed to assume that higher tier authorities would need to retain shareholding in water utilities, if not fully control them. But the ownership issues have not really been thought through yet, and need to be considered in future reforms.

### Operational Accountability

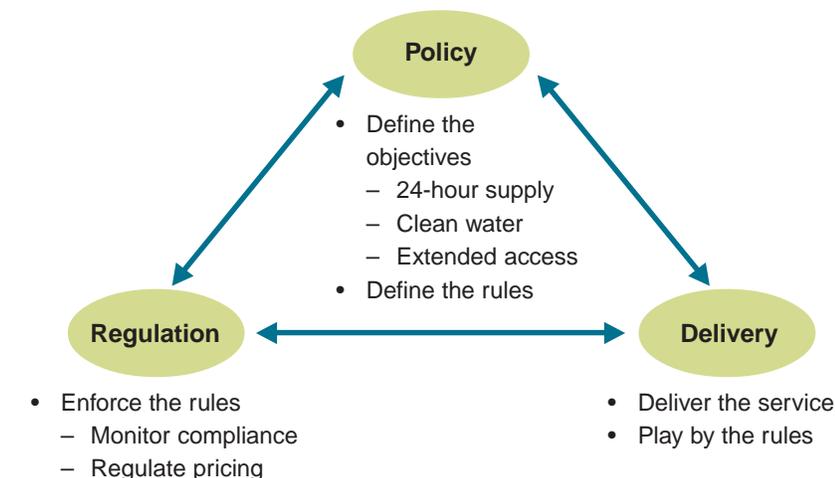
Operational accountability demands that owners, operators, and regulators all clearly know their responsibilities and are empowered to execute them, independently or in partnership. Resources should be commensurate with responsibilities. This requires clear separation of policy, regulation and provider roles and clear ownership and regulatory structures (see Figure 1).

Such separation and clarity of roles can be achieved in the following ways:

- The operating agency should have an independent board, able to hire its own Chief Executive Officer (CEO), to whom it can delegate management functions;
- Operational decision-making should be within the power of the responsible institution. The CEO should be empowered to take flexible and operationally relevant decisions about human resources (HR) and to mobilize resources for capital investment, for example, through borrowing;
- The full costs of service provision should be borne by the responsible institutions. Those that failed should not be bailed out through end-of-year transfers or other means. Information and planning must ensure upfront knowledge of costs of collapse;

## Separation and clarity of roles is the point of departure to ensure accountability.

**Figure 2: Separating Roles to Ensure Accountability**



- Measures to ensure universal access to services should be transparent and predictable—for example, through multi-year grants to municipalities. The key issue is to price water properly and to be clear about subsidies. Concerns that this will exclude the poor are ill-founded: as paying customers the poor are already paying for inefficiency. They will benefit from pricing that reflects true costs, especially if they can also participate in making key local-level service choices; and
- Monitoring of service delivery outcomes should include independent assessment, for which sound information is essential.

## The Challenges in Pakistan

As Pakistani cities began to disentangle their own experiences at the Karachi workshop, the pivotal importance of institutional change became confirmed. This is a new way of thinking that will take time to become established, but there can be no doubt that it paves the way for accelerated reform.

### Karachi at the Crossroads

The Managing Director (MD) of the Karachi Water and Sanitation Board (KW&SB) said his organization is at the crossroads and that ‘not reforming is not an option’.

First, the demand for services continues to grow. The population is now estimated at over 12 million, which means basic domestic services have to be expanded consistently. This is difficult, as 60 percent of the population is estimated to live in informal settlements. Knowledge about these consumers is fragmented and it is difficult to reach them through water connections. On average, household consumers receive water from KW&SB for only three to four hours per day.

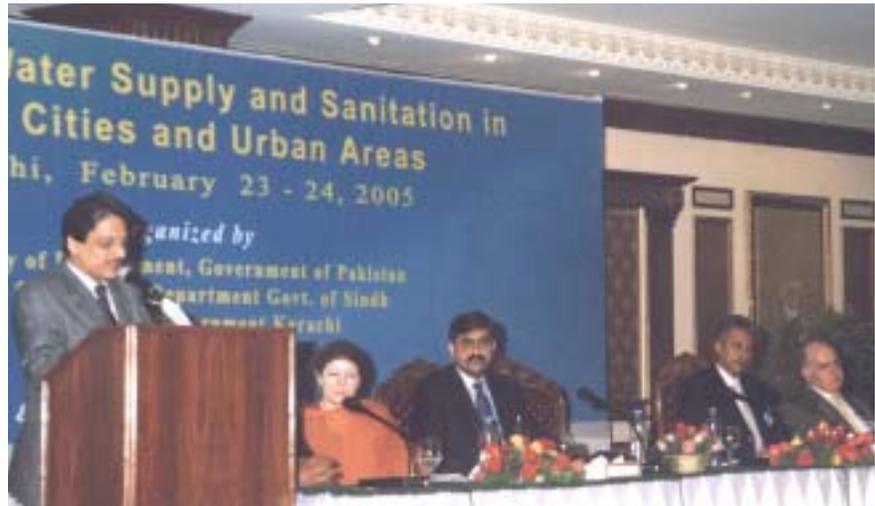
Moreover, Karachi is the largest metropolitan city and major business center in Pakistan, contributing almost 50 percent of national revenues. It has to compete with other cities in Pakistan and South Asia for investment, which adds to the demand for reliable water supply. It is nowhere near its goals in this respect, as business and industrial clients can currently expect at most eight to 10 hours of water supply per day.

The city does not only need new infrastructure to cope with this demand—its existing systems have deteriorated for long, due to inadequate maintenance. For many years, the KW&SB was simply an executing agency for the regional authorities, closely controlled without any significant powers to make its own investment and operational decisions. There was no independent and robust monitoring of its performance—it was neither politically nor operationally

held accountable. It therefore lacked incentives to keep its infrastructure up to date, keep in tune with its customer base, keep water losses under control or respond rapidly to customer requests. It still takes at least three to four days to respond to major customer requests, although the current management has at least ensured that minor issues are dealt with generally on the same day. Water losses also are still high—at an estimated 35 percent in transmission points where it has not been able to effectively detect and plug leakage, theft and illegal connections.

No systematic information was built up over the years. As a result, the KW&SB does not have a complete network map that shows connections and that makes it possible to monitor water supply and total billing. It is well known, for example, that water is filled in private tankers tapped into broken water mains and/or by installing illegal pumps on the water supply lines.

Devolution has meant greater autonomy, and the current management sees this as a golden opportunity and incentive to deal with these problems. But it has also meant a much enlarged and more diversified jurisdiction. Spread over 2,600 square kilometers, the KW&SB jurisdiction now covers 18 towns and union councils. It is in the process of decentralizing its structure to these levels to enable it to adapt to the range and variety of demand.



The MD's reform plan focuses first on improved customer relations. He hopes to become more proactive in dealing with customers, gain their support and willingness to pay by offering better services, and ensuring them better access to senior management. Second, he wants improved revenue by dealing with illegal connections, improving recovery systems and offering better incentives for people to pay. A number of project-related reforms are also necessary: speeding up the implementation of mega projects that cut across local government boundaries; institutionalizing the capacity to undertake development works and speed up their execution; start new projects; undertake a sector master plan study to improve the strategic approach to project selection and management; and improve the use of seawater for daily purposes. Several management reforms are required: streamlining

systems and management levels; redeploying staff and managers; improving technical skills; and, improving the use of private providers, such as water tankers.

While there are many technical challenges, the senior management sees institutional reform as the fundamental challenge—and have received encouragement from their political leadership (such as the Governor of Sindh province and the City Nazim of Karachi) to make the most of devolution to achieve such reform. KW&SB is viewed as a key delivery mechanism that can have lessons for other utilities wanting to improve efficiency and becoming accountable and self-reliant.

#### **Institutional Challenges for Delivery in Pakistani Cities**

The group discussions and role-playing at the Karachi workshop focused on

KW&SB is viewed as a key delivery mechanism that can have lessons for other utilities wanting to improve efficiency and becoming accountable and self-reliant.



technical and institutional assessments of the current state of water supply in the major Pakistani cities, setting longer term benchmarks and goals and exploring institutional options to get each city to achieve those goals and benchmarks. Options considered included that of a line department, a public water board and a corporate utility (either with or without private sector participation). In choosing options, groups focused on:

- *Political accountability* of the national, provincial, city district, town and union level, clarifying which tier of government is owner or policymaker, regulator and operator, what their contribution is to development and O&M expenditure, how they can avoid overlap and achieve consistency between technical, economic and political jurisdictions; and
- *Operational accountability*, focusing on separation of policy, regulator and provider roles, integration and independence of provider functions, composition of the board (if applicable), transparent pricing and subsidies, access to services and monitoring and regulation.

The assessments enabled all groups to develop a sense of the gap between their current situation and what they would like to achieve. Although the indicators developed in the course of discussions (presented in the figures in

Box 2 on page 4) were not official, they provided a basis for self-reflection on reality and ideal. All the groups swiftly moved from a technical emphasis to a focus on institutional challenges in Pakistani cities. This provides a starting point from which to take the debate about options in Pakistan forward. Table 1 (on pages 14-15) provides an insight into international experiences discussed in Karachi that could help inform these discussions.

## Key Lessons: Making Things Work

There is no single solution or model for water management that can be applied everywhere: One size does not fit all. However, international and Pakistani city experiences all highlight a number of factors crucial for effective reform in most contexts:

### Information

- *Reliable information:* Internationally and in Pakistani cities, the importance of information as a management resource is very evident. Without information, utility managers are not able to keep track of their customers or of problems in delivery, or to plan roll-out of connections and other technical

and reform initiatives. Officials from every Pakistani city present said that they lacked such information, and many believed it was perhaps the most critical area to address.

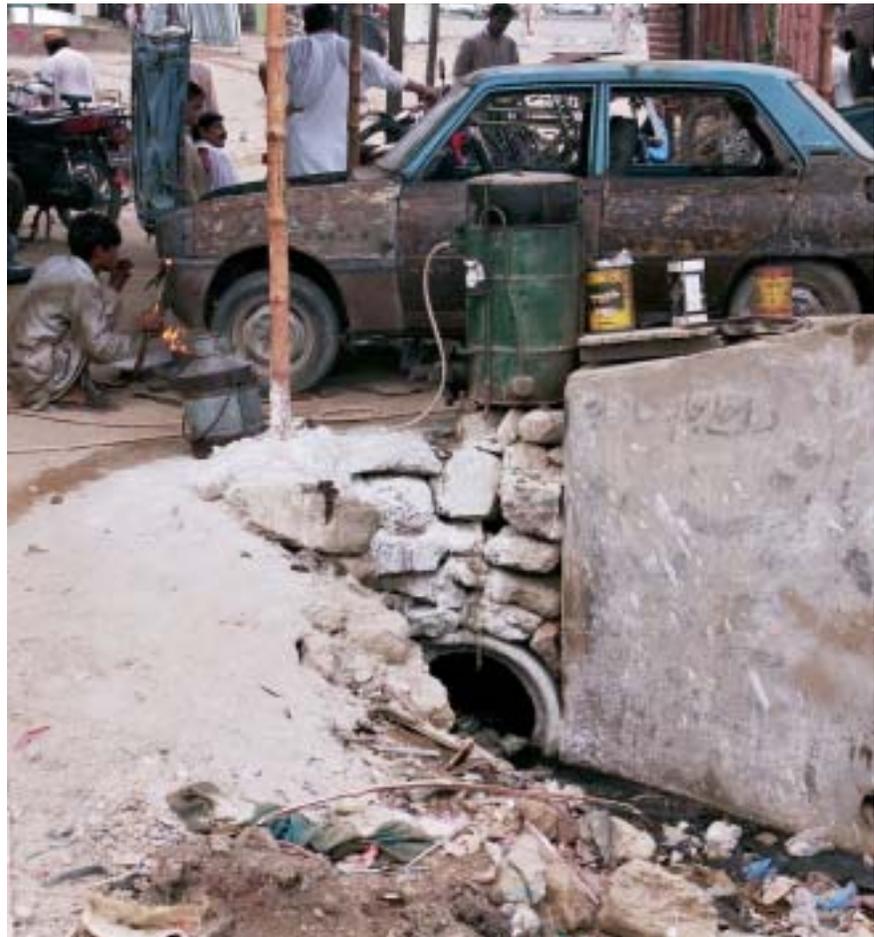
- *Performance benchmarks and monitoring:* In the absence of sound information, Pakistani cities have not been able to monitor the performance of service providers. In the international cases discussed, baseline data comparisons made it possible for the institutions involved to monitor their own operations, and for independent evaluators, political supervisors and the public to judge their performance and hold them accountable. Defining such benchmarks provides incentives to improve information, which in its own right becomes an important driver of change.

### Strategy

- *Knowing the choices:* There have been very different experiences in the specific application of institutional models. Uganda has a central government owned corporate utility and Manila a centrally driven public-private partnership; Johannesburg and Phnom Penh have opted for corporatized entities owned by the city, but managed in terms of own

benchmarks and with clear accountability. Phnom Penh has also used the private sector in some areas, but pragmatically where management needs required that, rather than as a matter of principle. The point is that these different institutional models can be used either on their own or in combination. For example, although private sector involvement is still quite controversial in Pakistan, the international experience shows that the involvement of the private sector was mostly not an ideological choice, but a strategic one. The private sector does not always offer a solution, but private operators may add useful innovation. The more critical issue is keeping policymaking, regulation and provision separate, and therefore ensuring a robust accountability framework.

- *Strong political leadership:* In successful cases, like Johannesburg, the initial drive for reform and the degree to which it has been sustained came from political support at the highest level. Currently, for example, initial plans to move towards a water concession in Johannesburg are wavering, largely because the top political leadership is not quite sure that is the direction they wish to follow.
- *A comprehensive plan:* Where local utilities were established, they



all formed part of a broader vision of urban service delivery and reform, and water planning was carefully crafted into a broader plan. In Manila the need for very practical step-by-step arrangements was emphasized, and there is reason to take care that the whole reform process is not merely a broad vision statement, difficult to achieve in practice. But it is still necessary to

have the overall framework within which the specific steps can then be driven. Incrementalism without a plan does not work.

- *Stick to the principles, while being pragmatic in strategy:* Managers come under many pressures—for example, to make ‘politically friendly’ appointments or renege on key initiatives because they are perceived as too risky. Those who

### Box 3: What Delegates Wanted to Know: Some Prominent Questions at the Karachi Workshop

Question	Perspectives from the Discussions
<p><b>How does one decide the direction and rate of change, and how do you prioritize to avoid being swept away by change?</b></p>	<ul style="list-style-type: none"> <li>■ Ensure you remain functional and not overtaken by big ideas at the cost of practical delivery.</li> <li>■ Plan ahead: analyze the situation technically, institutionally and politically and develop a sequence of actions.</li> <li>■ Remain flexible: have a plan, but do not allow it to prevent innovation.</li> <li>■ Structure political accountability carefully to balance the interest of owners, providers and consumers.</li> </ul>
<p><b>Is reform enough: is what is needed not radical change?</b></p>	<ul style="list-style-type: none"> <li>■ There can be no doubt that it cannot be business as usual and that far-reaching change is needed. It is crucial to understand the issues and trends and to pace reform or change accordingly.</li> <li>■ Devolution has set a platform on which sensible reform could be built – but this is not to deny the need for far-reaching change.</li> </ul>
<p><b>What about the poor: does cost recovery not mean they will lose out even more?</b></p>	<ul style="list-style-type: none"> <li>■ The poor already carry the burden of inefficiency more than people with resources, because they cannot buy their way out of the bad services.</li> <li>■ Involve the poor.</li> </ul>
<p><b>Do we have adequate data to base reform upon?</b></p>	<ul style="list-style-type: none"> <li>■ All Pakistani cities lack good data and this is a major problem; that is exactly why one of the key reforms has to be improvement of data.</li> <li>■ In international case studies, efficiency and accountability improved as data improved, and the converse is also true. You cannot wait for data before you reform; but you should ensure it remains integral to the process.</li> </ul>
<p><b>Are we not being hooked into a preconceived privatization agenda?</b></p>	<ul style="list-style-type: none"> <li>■ Privatization is not the solution to all problems, or the only solution. It is crucial to analyze the options, choose between them or combine them on the basis of good information and rational thinking.</li> </ul>
<p><b>What next?</b></p>	<ul style="list-style-type: none"> <li>■ Reform requires local ownership. The ideas generated here could now be taken forward in each locality, and where appropriate and agreed, the WSP-SA may be able to render advice or help mobilize expertise.</li> <li>■ It is not just a local process: the restructuring of WSS is a matter that cuts across the levels of government, and from formal government structures to dedicated structures and utilities.</li> </ul>

have succeeded have been able to recount cases of resisting these pressures. Simultaneously, being principled does not mean not being pragmatic: it is crucial to adapt to the demands as they arise, and to be able to change course if the situations demand it.

- *Change processes have to be managed:* In every successful international case, care was taken to involve stakeholders—management and staff in utilities and municipal departments, trade unions, consumer groups and individual consumers, private sector clients and possible providers, other tiers of government, and all other relevant parties. The message from the cities of Johannesburg, Phnom Penh, Manila, and from the central state model in Uganda was: “Consult but be decisive; communicate at all times; prepare to meet resistance, especially from unions and incumbent management.”

### Rewards and Incentives

- *Incentives:* It is important to remember that change becomes possible only if key stakeholders see it as in their interests to support it. The most evident incentives are challenge funds, such as in South Africa where cities like Johannesburg have been assisted to restructure. But the

arrangements around ownership, debt management or relief and other management issues could provide powerful incentives as well. Making the roleplayers clearly responsible for specific aspects of governance, management and service delivery is a way of building incentives into the system for better performance.

- *Sustainable revenue:* Reform plans and initiatives fall flat if the resources are not there to sustain them. Ideally, local revenue generation—based on economic pricing of water—is the approach to follow, but in the interests of universal access, higher tiers of government sometimes have to provide support to local institutions. This needs to be calculated when reforms are planned, and the support must be clearly identified and targeted.

## The Way Forward

The current devolution process in Pakistan provides an opportunity to empower the rapidly growing cities to become competitive and meet the increasing demand for basic services. But this needs a focus on institutional issues first, not on technical matters primarily. Important as technical capacity and fiscal resources are, they will only work in the interests of consumers and cities if they are managed well.

At the core of this is political and operational accountability. This demands effective links between services and institutions, clear designation of roles and the right incentives.

The Karachi workshop facilitated important dialogue between key stakeholders in the WSS in Pakistani cities. With important perspectives gained from international presentations, it is now possible for Karachi and other cities in Pakistan to look at their own situations and the considerable institutional challenges they face. The workshop was a step in a process though, and the challenge would now be to take forward this dialogue on reform within each province and city. Therefore:

- Important political, technical and civil society stakeholders need to be consulted and informed of options;
- Involvement of city and utility leaderships will move the agenda forward on the basis of a more systematic understanding of issues and options; and
- The WSP-SA is well placed to continue to provide access to global experience and expertise—from different agencies—to assist Pakistani cities and water utilities design a way forward. Karachi provides a difficult but possible starting point that could well be extended to other cities.

It is crucial to adapt to demands as they arise, and to be able to change course if the situations demand it.

**Table 1: International Experiences**

	<b>Johannesburg, South Africa</b>	<b>Phnom Penh, Cambodia</b>
<b>The Challenge</b>	<ul style="list-style-type: none"> <li>■ WSS reform part of broader reform drive;</li> <li>■ Started 1999, sparked by financial and institutional crisis;</li> <li>■ Institutions fragmented, performance not measured and policy not implemented; and</li> <li>■ Infrastructure and service coverage in decline, backlogs growing, staff morale and productivity low.</li> </ul>	<ul style="list-style-type: none"> <li>■ In 1993, daily water supply less than 10 hours;</li> <li>■ Only 25 percent coverage;</li> <li>■ Collection rate of water charges 48 percent;</li> <li>■ 300 cases of illegal connections every year and annual water loss 73 percent; and</li> <li>■ 12 percent metering.</li> </ul>
<b>Key Reforms</b>	<ul style="list-style-type: none"> <li>■ Reform covered all services;</li> <li>■ Privatizing gas; corporatizing recreational facilities; public health management;</li> <li>■ Utilities formed for water and sanitation;</li> <li>■ Electricity and waste management PSP; and</li> <li>■ Water utility with a performance-based contract.</li> </ul>	<ul style="list-style-type: none"> <li>■ Considered privatization but lack of political acceptance; and</li> <li>■ Focus on greater autonomy in the management, within a public sector model.</li> </ul>
<b>New Arrangements</b>	<p>Policy, regulation and operational roles separated:</p> <ul style="list-style-type: none"> <li>■ Elected council sets policy; holds provider accountable;</li> <li>■ Contract management unit is independent regulator outside policy and operations; and</li> <li>■ The provider charges a base fee and takes profit share.</li> </ul>	<p>Separation of roles:</p> <ul style="list-style-type: none"> <li>■ Policy role with Board of Directors;</li> <li>■ Operations with Managing Director and five departments, able to use private operators;</li> <li>■ Credible billing, information are incentives for payment; and</li> <li>■ Accurate and transparent, financial systems.</li> </ul>
<b>Service Outcomes</b>	<ul style="list-style-type: none"> <li>■ 24/7 water service now the norm;</li> <li>■ By 2004 the company showed first profits;</li> <li>■ Service more flexible;</li> <li>■ First six liters of water free of charge, advancing universal access; and</li> <li>■ Customer care center largely functional, but turnaround time can improve.</li> </ul>	<ul style="list-style-type: none"> <li>■ 24/7 water supply;</li> <li>■ High levels of billing and low non-revenue water;</li> <li>■ 100 percent metered connections with high accuracy metering and leak detection;</li> <li>■ 24 hours leak repairs and almost full elimination of illegal connections; and</li> <li>■ Customer satisfaction helped by education, incentives, enforcement, and responsive services.</li> </ul>

Manila, Philippines	Uganda
<ul style="list-style-type: none"> <li>■ BOTs resolve national power crisis in the 1990s;</li> <li>■ Top level national political support for reform;</li> <li>■ WSS utility in Metro Manila (11 million people) under severe financial pressure with weak profits, cash flow and revenue recovery;</li> <li>■ Only 61 percent water and 8 percent sewerage connections; and</li> <li>■ Many Illegal connections.</li> </ul>	<ul style="list-style-type: none"> <li>■ Despite large investments only three of 12 targeted towns viable;</li> <li>■ Arrears and deficit high, collection low, 36 staff members for every 1,000 customers, staff and bad office practice;</li> <li>■ Water leakage and sewage spillages;</li> <li>■ 15 to 21 hours supply; and</li> <li>■ Slow response to complaints: one week.</li> </ul>
<ul style="list-style-type: none"> <li>■ Brought private sector into water supply;</li> <li>■ Policy, operations and regulation separated;</li> <li>■ Operations concessioned; and</li> <li>■ Comparative benchmarking.</li> </ul>	<ul style="list-style-type: none"> <li>■ National utility model; and</li> <li>■ Improving performance through internal reforms (PIPs), commercialization and some private sector participation.</li> </ul>
<p>Concession since 1997:</p> <ul style="list-style-type: none"> <li>■ Quasi-independent regulator;</li> <li>■ Implementation in two zones benchmarked;</li> <li>■ Local and international operators owner split of 60:40; and</li> <li>■ Debt servicing through 'concession fees'.</li> </ul>	<ul style="list-style-type: none"> <li>■ New Board and Management appointed;</li> <li>■ Corporate Plan with long and short term goals;</li> <li>■ Some private sector participation and outsourcing;</li> <li>■ Staff consulted on restructuring, incentives; and</li> <li>■ Head Office focus on asset holding and regulation.</li> </ul>
<ul style="list-style-type: none"> <li>■ More than 1.5 million poor people have direct connections; in 2003 alone, 300,000 poor people received direct connections;</li> <li>■ Average monthly consumption per poor household 25 cubic meters, same as system-wide residential average;</li> <li>■ Average cost to poor is US\$5.40 per month, less than four percent of their income; and</li> <li>■ Two-zone approach made comparative benchmarking possible.</li> </ul>	<ul style="list-style-type: none"> <li>■ Most areas have 24-hour supply;</li> <li>■ Response time to complaints improved to 36 hours;</li> <li>■ Total connections up from 50,826 in 1998 to 100,475 in 2004 and billed ones from 31,284 to 83,020;</li> <li>■ New connections per year have risen from 3,317 to about 14,000;</li> <li>■ Staff per 1,000 connections has been reduced from 36 to 10 in 2004; and</li> <li>■ Operating profit increased from 1.9 bn Ugandan Shilling to 12.3 bn in 2004.</li> </ul>

## ABOUT THE SERIES:

Pakistan, like all countries of South Asia, urgently needs to address the growing challenge of service provision to the urban poor. For long, the country has needed viable forums to bring together key stakeholders such as policymakers, municipal staff, and nongovernmental sector all of whom are struggling to find new ways to solve old problems. Water and Sanitation Program-South Asia is one of the leading agencies trying to fill this vacuum by establishing a consultative sector debate at the federal, provincial and local levels in the country. Urban Roundtables organized by WSP-SA bring stakeholders together to discuss operational problems and priority policy interventions. The Roundtables have generated a lively and influential debate with clearly articulated calls for provincial and national policy interventions. There is growing interest in widening the participation and scope of the debate. The proceedings, key issues, and recommendations of these Roundtables are disseminated through the publication of *Shehr ki Duniya* with the purpose of sharing lessons learnt, highlight emerging issues, documenting best practice, and fostering a better operating environment in the sector of water supply and sanitation services.



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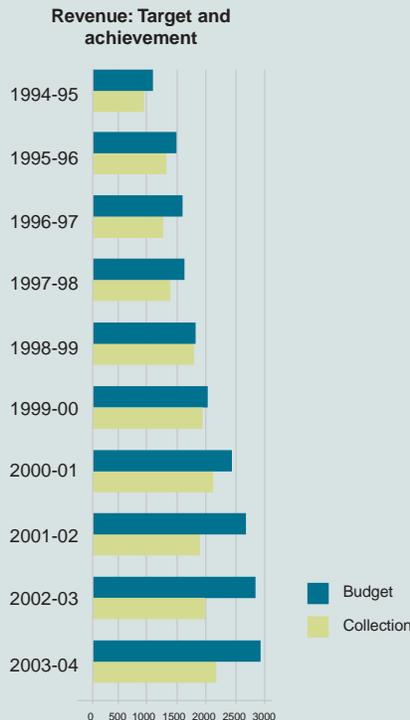
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### Box 4: Karachi's Major Challenges in Water and Sanitation Provision

- A growing demand for services:** The population is now estimated at over 12 million—60 percent in informal settlements. As the country's major commercial center, the city has many businesses and industries. Under devolution, KW&SB has a much larger and more diverse jurisdiction over 2,600 square kilometers, comprising 18 towns.
- Intermittent water supply:** The average household receives water supply for only three to four hours a day.
- High levels of water losses:** An estimated 35 percent!
- A weak knowledge base:** Patchy/inaccurate information about consumers, networks and connections.
- Low revenue collection:** Collection is only about two-thirds of the KW&SB budget (see graph at right).
- Distorted institutional incentives:** KW&SB is an executing agency under regional control; it cannot make its own investment and operational decisions and lacks performance incentives.



- Poor customer relations:** Response times to customer requests range from three to four days.
- Devolution:** The devolution process in Pakistan creates a framework for greater local autonomy and the challenge is to use this to make KW&SB more directly accountable to the City and customers.

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#### WSP MISSION

To help the poor gain sustained access to improved water and sanitation services.

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