

Rawalpindi Water and Sanitation Agency, Punjab, Pakistan

Laying the Blueprint for a Model Water Utility

Rawalpindi Water and Sanitation Agency, located in Punjab province of Pakistan, is a public utility that has made impressive strides in functional viability. It now aims to serve as a role model for others, and script a success story on how a public water utility can achieve optimum performance within a politically, technically, and administratively constrained environment.



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Executive Summary

Water utilities in Pakistan face a number of challenges as they struggle to provide efficient and reliable water and sanitation services to their consumers. Lack of sector policy, poor governance, weak institutional framework, a nonexistent regulatory regime, and a lack of political commitment for reform are the major factors hindering service delivery. The impacts of poor governance are most sharply felt in the effectiveness of development projects and their benefits on the lives of the poor. Issues such as technical incapacity, lack of trained personnel, political tensions, no clarity in roles and functions (for instance, overlaps with other civic agencies), and lack of social accountability are some of the many hurdles that inhibit the efforts of public water utilities in Pakistan to achieve functional viability. However, Rawalpindi Water and Sanitation Agency (RWASA), located in Punjab province of Pakistan, is a public utility that has made impressive strides in reversing this downward spiral. It now aims to serve as a role model for others, and script a success story on how a public water utility can achieve optimum performance within a politically, technically, and administratively constrained environment.

Documented in this Field Note are the processes, and the resulting achievements and outcomes, which enabled this transformation. Also presented are the initiatives that have since broken new ground in Pakistan. The impacts serve to further enhance the utility's potential to sustain its growth as it aims to rub shoulders with well-performing utilities at the international level.



Background

Rawalpindi is the fourth largest city of Pakistan with a population of 2.1 million. The RWASA (serving a population of 1.1 million people and 0.1 million water connections) was created in 1992 under the Government of Punjab City Development Act to meet the requirements of the rapidly growing population of the city. It took over the operation of the filtration plant from the Public Health Engineering Department (PHED) in July 1996, and the water supply and sewerage system from the defunct Rawalpindi Municipal Corporation in April 1998.

Rawalpindi (the twin city of the federal capital, Islamabad), relies on both surface (Rawal and Khanpur Dams) and ground water (tubewells) to meet its needs. Since its inception, the utility had been facing a number of challenges that could not be tackled effectively due to the absence of reliable utility data, as well as a coherent planning and implementation strategy and effort. The findings of a water quality survey in 2007 revealed that 61 percent of the surveyed samples were found unfit for consumption at source, while 64 percent were found unfit for consumption at the consumers' end. Revenue generation stood at 53 percent and water coverage at about 70 percent. However, since 2006, a new vision and framework of action, by a new administration, has guided a process of reforms and service improvements. Among other achievements, Rawalpindi's WASA has succeeded in converting previously illegally connected households into regular paying customers and expanded coverage to unconnected

Box 1: Tracking performance improvement: Performance benchmarking in urban water utilities in Punjab (Pakistan)

The Water and Sanitation Program (WSP) launched its benchmarking and performance improvement initiative in South Asia as a regional program in 2005. In Pakistan, the performance benchmarking project, 'Institutionalization of Performance Benchmarking in Urban Utilities of Punjab', started in late 2006. The project was initiated through the Housing, Urban Development and Public Health Engineering Department (HUD&PHED) in all the five water and sanitation agencies of Punjab Province. Later, the Urban Unit of the Planning and Development Department, Government of Punjab, also joined the WSP and HUD&PHED partnership.

neighborhoods with the provision of improved services at lower prices.

This performance improvement, however, did not happen out of the blue. It was the outcome of a comprehensive process of stock-taking, brainstorming, and formulating of intricate strategies and plans to reverse the fortunes of a utility.



A Government Intervention that Worked

The Government of Punjab (GoP) introduced a results-based management system and benchmarking of key performance indicators (Box 1), with technical assistance from the Water and Sanitation Program, in 2005 to identify areas for improvement in urban water utilities. At that time, as a result of a GoP initiative and as part of the urban utility reforms process, Managing Directors (MDs) had been appointed in all the five Punjab WASAs (that is, Lahore, Rawalpindi, Faisalabad, Multan, and Gujranwala) after a competitive process from the market and had been given performance-based contracts.

Around the same time, the newly-appointed MD of the Rawalpindi WASA had initiated an internal transformation process linked with this government initiative, which was then in its early stages. Subsequent to a request from the GoP Housing Urban Development and Public Health Engineering Department (HUD&PHED), the Rawalpindi WASA collected utility data and submitted it not only to the HUD&PHED, but also to the Urban Unit, Planning and Development

Department, and WSP. WSP assisted Rawalpindi WASA officials in the analysis of this data which led, in turn, to the prioritization of three performance improvement targets:

- Decreased water losses.
- Increased payment collection.
- Strengthened consumer orientation.

WSP also facilitated the process of change in the WASA from the conceptualization phase itself. At a World Bank and WSP sponsored and organized Global Dialogue Learning Network course, the WASA's MD underlined the importance of conducting a comprehensive consumer survey to update the WASA's database. The survey questionnaire, focused mainly on enhancing revenue generation and collection, was developed with WSP assistance; a survey was conducted with the help of a local nongovernmental organization, Human Resource Development Society. As a result, Rawalpindi WASA now has updated information on legal connections; illegal connections have been detected and legalized. Some visible indicators of positive change include coverage extending from 70 percent to 90 percent (Rawalpindi WASA served area) and an increase in revenue collection from 53 percent to 80 percent.

An organizational restructuring strategy was set in place to transform Rawalpindi WASA into a sustainable, efficient, vibrant, and user-friendly organization with clear social and commercial objectives.

Reversing the Downward Spiral: Thinking out of the Box

The new management announced that any new initiative for reversing the downward spiral had to be based on authenticated and updated utility data as well as on a thorough assessment of the existing situation, challenges, and opportunities for change. As a first step, a situation analysis was conducted that identified some critical administrative and technical challenges (see Box 2).

A SWOT analysis of major components—such as institutional/management, water supply, sewerage, and revenue generation—was carried out separately to assess institutional capacities and constraints, thereby assisting in developing appropriate strategies and plans to tackle the challenges identified.

Initiatives for Change

On the basis of the results of the situation and SWOT analyses, an organizational restructuring strategy—based on a corporate system—was set in place. It aimed at transforming Rawalpindi WASA into a sustainable, efficient, vibrant, and user-friendly organization with clear social and commercial objectives.

It was realized early on that this would involve changing the philosophy regarding work, including attitudes and ethics comparable to nonstate-owned organizations, by adopting a customer-focused business-oriented structure (Figure 1).

Box 2: Some critical challenges

- Multiple commands; unclear legal and administrative status.
- Incompetence at most of the tiers of management, particularly lower management.
- High commercial and technical water losses.
- High energy losses.
- Cross connections (water distribution lines crossing sewerage lines).
- Low revenue collection.
- Lack of human resource development.
- Low level of customer satisfaction.
- Incomplete database.
- Degradation of subsurface water quality (for example, high levels of bacterial contamination, which may be due, in part, to the fact that some of the network was laid as long ago as 1926).
- Depletion or lowering of ground water resources.
- Lack of ownership on the part of consumers.

Figure 1: Management strategy

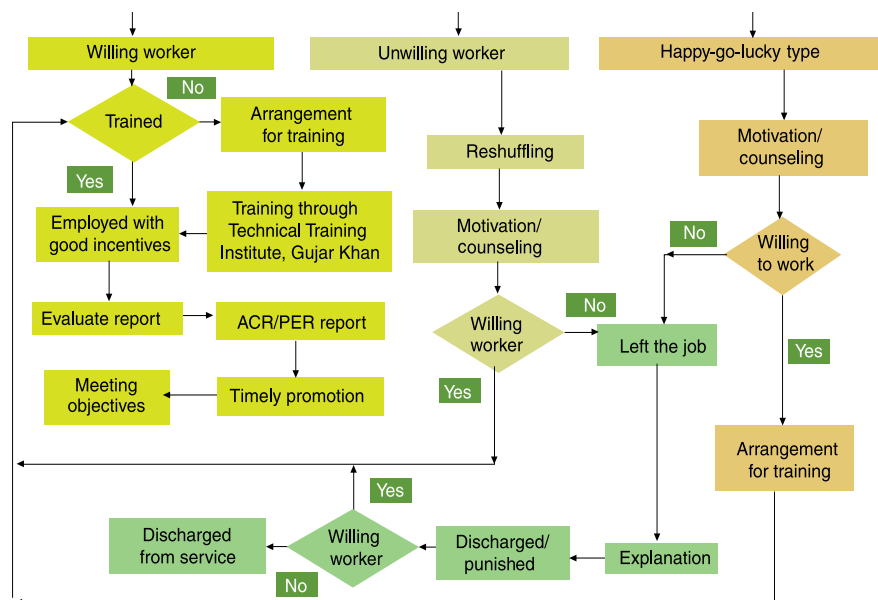


Table 1: Water and sanitation performance benchmarking indicators

	Indicator	Year			
		2004–05	2005–06	2006–07	2007–08
A. Coverage					
1.	Water coverage	63.41%	61.74%	65%	65%
2.	Sewerage coverage	35%	35%	35%	35%
B. Water consumption and production					
3.	Water production (million m ³ /year)	59.64	62.95	62.95	66
4.	Water consumption (million m ³ /year)	37.57	37.50	38.32	39
5.	Metered water consumption (million m ³ /year)	Nil	Nil	Nil	Nil
C. Unaccounted-for water					
6.	Nonrevenue water (percentage)	39%	41%	41%	44%
D. Metering practices					
7.	Proportion of connections that are metered	14%	14%	14%	14%
8.	Proportion of functional meters	32%	31%	35%	38% (approx.)
9.	Proportion of water sold that is metered (bulk); supply to MES, NIH, and so on	22.45%	28.95%	28.95%	29%
E. Pipe network performance					
10.	Pipe breaks	76	61	57	48
11.	Sewerage blockage	15,714	17,918	19,992	20,122
F. Cost and staffing					
12.	Staff/1,000 water and sewerage connections	8.81	8.75	8.64	8.81
	Total staff/1,000 water and sewerage connections	7.55	7.50	7.43	7.40
13.	Salary costs as proportion of operating costs	29.20	28.61	34.42	37.61
14.	Power/electricity costs as proportion of operating costs	43.75	36.81	41.39	47.08
15.	Contracted out service cost as proportion of operation costs (percentage)	Nil	Nil	Nil	Nil

An extensive consumer survey exercise was carried out to upgrade the existing database and expansion of consumer network. The scope of work also included the identification of illegal connections and defaulters.

The visioning, strategizing, and planning exercises (see Box 3) led to the launching of a number of innovative initiatives aimed at turning Rawalpindi WASA into a modern and forward-looking public utility. These included:

- Zoning of the service area for decentralized services.
- Creating water districts/offices and complaint centers.
- Bulk water (at source and at nodal points for unaccounted-for water), and commercial and domestic water metering.
- Plans for installing a sewage treatment plant (at present, there is no treatment for the direct discharge of waste into Nala Leh).



Box 3: Components of the strategy

Vision

Transformation of Water and Sanitation Agency, Rawalpindi, into a developed, modernized and quality-staffed entity, empowered to provide services to citizens in a flexible, transparent and quality manner, and to ensure homogenized development and improvement of water and environmental sanitation sector in the jurisdiction of RWASA on the principles of partnership among public, private, and nongovernmental sectors.

Mission statement

Sufficient water will be managed, treated/delivered to points of use where it is programmed for service.

Wastewater will be collected from, and extended to, areas programmed for growth and delivered to points best suited for wastewater treatment and disposal or reuse.

Both services shall be monitored and maintained in a manner that strives to maximize public health, safety, and welfare for all while minimizing every environmental impact.

The organization will be financially sustainable without compromising on quality services and consumer satisfaction.

Correspondingly, the following objectives and management strategies were put in place:

Objectives

- Provision of safe drinking water and improved sanitation facilities to all.
- Establishment of efficient operations and maintenance mechanisms for water supply and sewerage.
- Development and expansion of additional water sources to cater for future needs.

Management strategies

- Principle-centered leadership.
- Efficient management hierarchy.
- Individual and organizational feedback loops.
- Competency-based hiring and promotions.
- Shared mission, vision, and strategies.
- Vertical and horizontal communication.
- Job enrichments and job rotations.
- Redesigning of training cycles.
- Formulation of standard operating procedures for each set of activities.
- Effective evaluation and monitoring systems.
- Active community participation.
- Effective staff development system.

The Reform Process in Action

The Rawalpindi WASA administration has launched the following key initiatives to tackle the challenges it has identified and achieve the targets it has set for itself:

A. Database Upgradation Initiative

The lack of both proper documentation on modern techniques and upgrading of the database was seen as an impediment on the way towards reform. It was felt that this had contributed significantly in low revenue recovery and in the piling up of a sizeable amount of arrears. There were a large number of illegal connections that were undocumented, and amalgamation of various consumer categories needed to be done. In addition, there was a huge quantity of nonrevenue water (NRW) that could not be accurately estimated in the absence of the proper categorization of domestic, commercial, and industrial uses (since there were no exact numbers available for the water supplied and water billed). Similarly, there was no inventory of the WASA's assets, such as tubewells (working or abandoned), pumps, and lands; there had been encroachments on some land too. These lands have since been restored.

Consumer Survey

An extensive consumer survey exercise was carried out to upgrade the existing database and expansion of consumer network. The scope of work also included the identification of illegal connections and defaulters. As a consequence of the survey, real time category upgradation has resulted in increasing the revenue from

Box 4: Major outcomes: Consumer survey

- Increase in revenue in the form of new/legal connections and category upgradations amounting to Rs. 14 million¹ over a period of two years.
- Revenue collection efficiency increased from 53 percent to 80 percent.
- Performance-based monitoring and evaluation of revenue staff regarding consumer billing and recovery services (quarterly revenue collection targets).
- Development of database and software for the statistical analysis of consumer surveys.
- Decentralized facilities for billing corrections in database.
- Establishment of MIS center equipped with latest hardware and software components.
- Development of proper billing software systems as required.
- Integrated reports for monitoring revenue generation and collection progress.
- Enhancement in WASA Online Customer Support Services.

53 percent, at the start of the initiative in 2007, to 80 percent in 2009 (though it is estimated that 10,000–12,000 illegal consumers have still not been documented). It is also envisioned that this exercise would make available vitally important utility data for future planning, and build consumer confidence about the services provided by the WASA. WSP extended technical assistance in carrying out the entire exercise.

The methodology for conducting the survey included:

- Designing a comprehensive consumer survey questionnaire.
- Preparing and designing of software.
- Inducting and training a motivated workforce for the door-to-door consumer survey.
- Preparing an online data bank.

A Recovery Strategy that Works

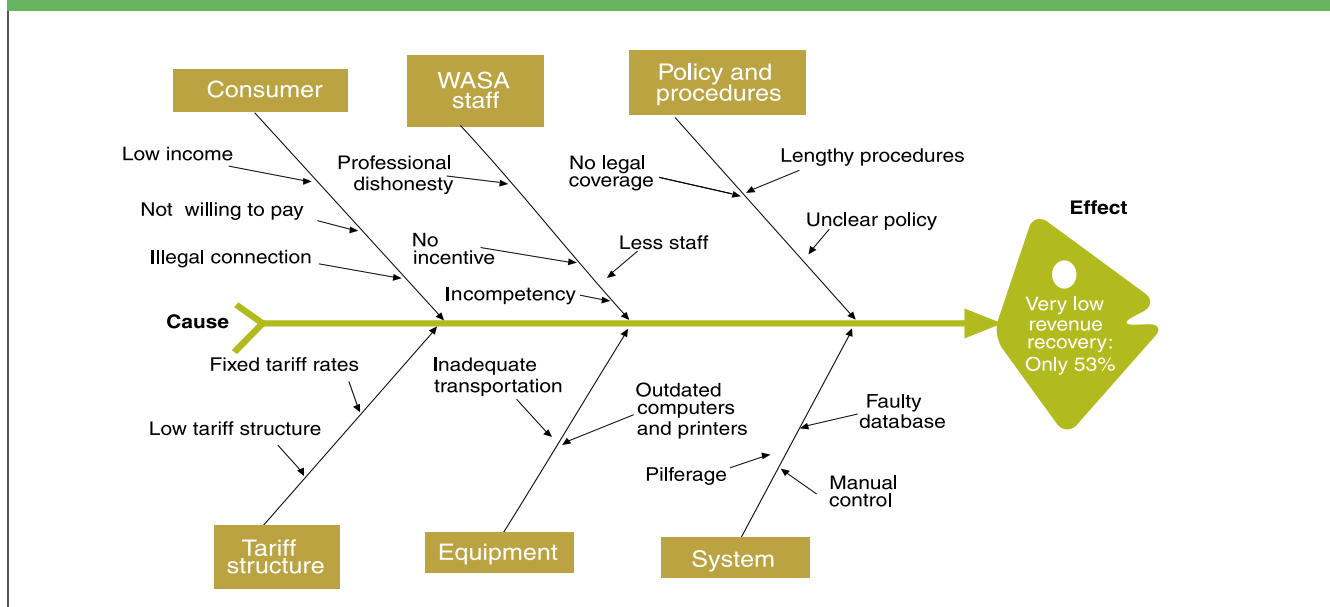
In Rawalpindi WASA, there were huge arrears in both the categories of commercial as well as domestic consumers:

- Consultation with consumers.
- Motivation through electronic and print media.
- Incentive-based: Waiving off surcharge and so on.
- Proactive: Raiding suspected chronic defaulters along with local magistrates and police force.
- Legal action through courts of law.

¹ US\$1: PKR 85 (approximately), as of December 2010. Conversion rates are from www.coinmull.com; all conversions in the text are approximations.

As a consequence of the survey, real time category upgradation has resulted in increasing the revenue from 53 percent, at the start of the initiative in 2007, to 80 percent in 2009.

Figure 2: Cause and effect diagram: Low recovery



A revenue recovery strategy was worked out based on the approaches shown in Figure 2.

Union- and ward-wise quarterly progress reports of recovery inspectors are maintained. All the data is organized by taking the ward as a unit—grading is done between the various wards; even the revenue inspectors are graded according to their performance. Inspectors face disciplinary action for unsatisfactory performance. The grading of inspectors is linked with a package of incentives and disincentives for satisfactory and unsatisfactory performance. Similarly, defaulters have also been categorized according to reasons for nonpayment; separate strategies for revenue recovery are applied for each category.

B. Establishment of Water Districts/Call Centers: Service at the Doorstep

Rawalpindi WASA has established two water districts/zones (Water District 1:

Box 5: Putting public offices to good use!

A separate action list was drawn up to recover commercial and domestic defaulted payments. Rawalpindi WASA officials involved the elected union councilors including *nazims* (union mayors) in the recovery process. The WASA officials and the *nazims* visit the defaulters together and, if required, set up a meeting with the Managing Director of the WASA. Incentives are offered to consumers who are willing to pay. If the negotiations with the defaulters are unsuccessful, then notices along with disconnection *challans* are issued and summons are sent through the police. A Special Judicial Magistrate is stationed at the head office of the Rawalpindi WASA for this purpose. After a case hearing, a decision is taken by the subdivisional magistrate.

Table 2: Recovery comparison through paid scrolls (2005 to 2007)

Session	2005–06	2006–07
January–March	46,448	50,719
April–June	48,022	48,769
July–September	48,893	53,297
October–December	48,569	49,515

Note: ‘Scrolls’ here mean bank scrolls. The consumers deposit their bills in commercial banks. The performance of recovery staff is measured against the bank scrolls as proof.

Table 3: Ward-wise grading

Ward	Consumers	Current amount	Arrears	Consumers	Paid amount	% Paid consumers	% Paid amount	% Age group	Grade
54	1,364.00	494,968.50	3.03	899.00	767,763.00	66	155	90 to 100% (13 wards)	A
06	533.00	455,671.50	2.82	407.00	472,363.00	76	104		
29	2,184.00	706,262.00	5.23	1,451.00	717,701.00	66	102		
08	886.00	434,484.00	4.24	538.00	435,601.00	61	100		
79	487.00	556,243.00	1.34	379.00	547,609.00	78	98		
24	1,044.00	389,879.50	5.07	586.00	380,918.00	56	98		
28	881.00	361,354.00	3.14	633.00	349,679.00	72	97		
16	1,636.00	728,985.00	4.89	1,151.00	701,987.00	70	96		
57	1,679.00	558,472.00	6.89	1,114.00	528,224.00	66	95		
38	1,152.00	385,821.00	2.19	838.00	366,998.00	73	95		
27	1,187.00	409,811.00	2.35	848.00	378,412.00	71	92		
22	2,825.00	1,069,599.00	13.88	1,391.00	972,385.00	49	91		
12	677.00	641,966.00	4.27	536.00	586,003.00	79	91		

Note: Revenue progress for July–September 2008 quarter, presented by MIS section.

Satellite Town; and Water District 2: Khayaban-e-Sir Syed) where complaint centers also function. This is an attempt to decentralize services and make it more convenient for consumers to interact with relevant utility staff and seek redressal for their grievances. Complaint centers, an integral part of Rawalpindi WASA's Customer Relationship Management (CRM) system, cover different union councils and are served by designated technical and engineering staff. There is a subengineer, supervisor, an operator (complaint receiver), and a team leader in each complaint center. Complaints can also be sent online 24 hours a day. The establishment process of the call centers included a program for training customer relationship officers (CROs) or central complaint receivers. This included preparing a CRM systems' user manual and in-house training sessions for CROs, and practical demonstrations of customer complaints.



A review of the CRM is conducted on a monthly basis, which includes monitoring and identifying challenges, issues, and outcomes through the preparation and generation of daily, weekly, and monthly summary reports. These are distributed to the respective departments, that is, Water Supply, Sewerage and Billing, and so on. Control reports have to be prepared for measuring and comparing the

performance of the staff before and after the deployment of the CRM system—by analyzing information gathered through the CRM system, identification of grey areas reflected in the number of complaints handled and processed through the CRM system, enhancement of response time, reviewing the time cycle of complaint rectification, statistical analysis, and so on. Provision has also been made

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for an evaluation of the CRM system, as well as for performance evaluation of CRM staff through monitoring, evaluating, and ensuring compliance of standard operating procedures; detection of violations; and elimination of loopholes from the system.

Internal feedback from the staff has to be gathered on a quarterly basis by:

- Organizing regular meetings with all complaint receivers, supervisors, and field staff.
- Presenting reports and outcomes of the Plan which was designed for performance improvement.
- Discussing individual roles and achievements of the staff.
- Discussing issues and challenges of the operational staff.

On the other hand, external feedback has to be gathered on a weekly basis by:

- Confirmation calls to customers after rectification of their problems.
- Suggestions and recommendations from customers for further improvements in the system.

The complaint centers deal with complaints related to water supply, sewerage, and billing; the majority of the complaints received are about billing. All the complaint centers are synchronized with the Head Office. An information board placed near the entrance provides consumers with information on matters such as connection fees, requirements for category change, new connection requirements, and so forth. All the Water Districts have their own assets at their disposal; the vehicles provided are color-coded and employed only within designated districts to avoid misuse.

Figure 3: Control room work flow

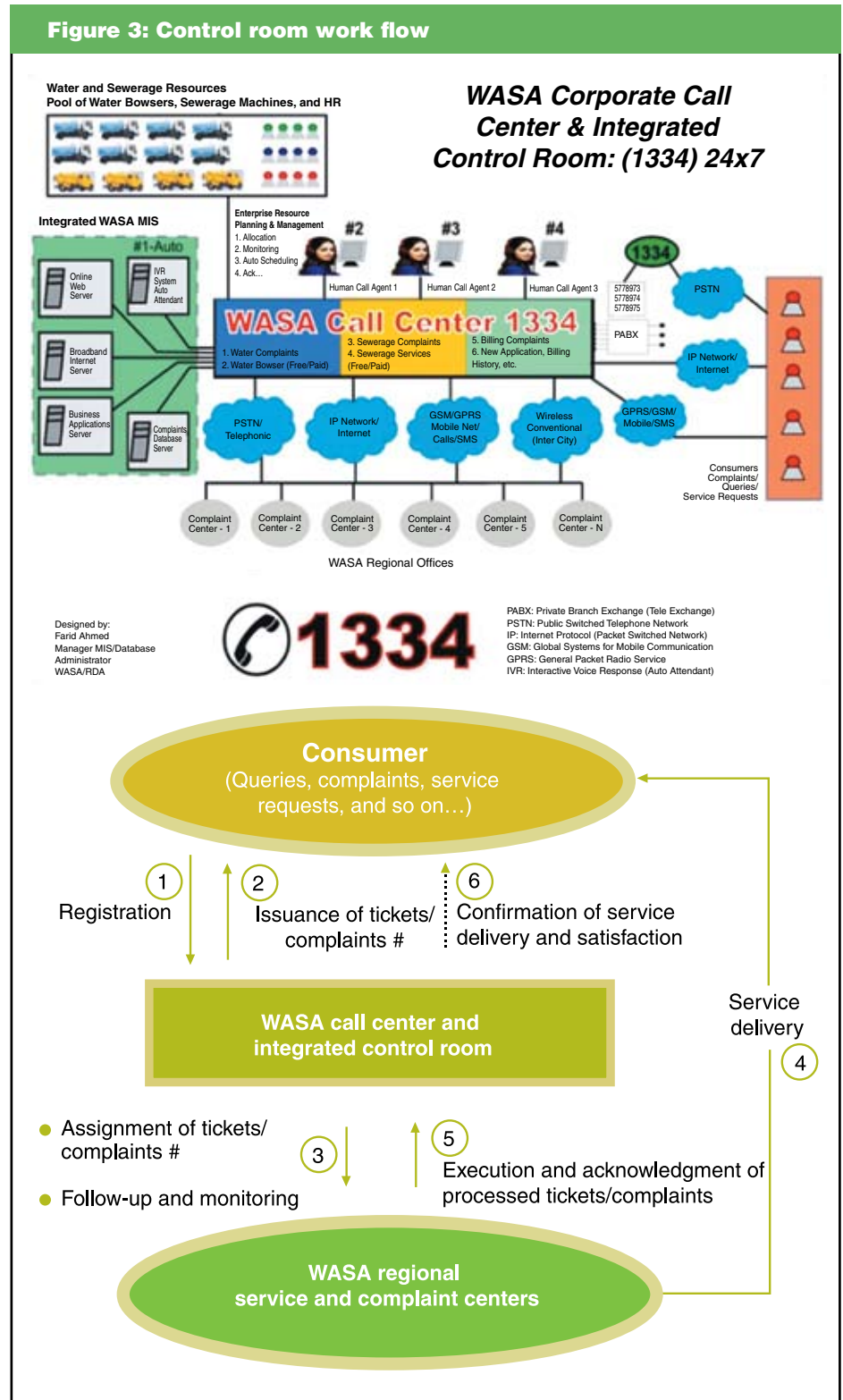


Table 4: Category-wise summary report of complaints

From date 01.07.2009 To date 30.07.2009						
Water complaint						
Complaint type	New	Pending	Processed	Rejected	Total	Nos. %
Leakages	0	0	50	1	51	9
Dirt in water	0	0	41	1	42	7
Pipeline leak	0	0	67	1	68	11
Odor in water	0	0	6	0	6	1
Water shortage	0	0	4	0	4	1
Low water pressure	0	0	7	1	8	1
Colored water supply	0	0	1	0	1	0
Variable water supply	0	0	2	0	2	0
Water disconnection	0	0	2	0	2	0
No water supply	0	0	405	11	416	69
Total water complaints	0	0	585	15	600	
Billing complaint						
Complaint type	New	Pending	Processed	Rejected	Total	Nos. %
Extra water bill	0	2	0	0	2	29
Bill not delivered	0	2	0	0	2	29
Exemption for widow	0	1	0	0	1	14
No connection but billed	0	2	0	0	2	29
Total billing complaints	0	7	0	0	7	

There are now also plans to introduce storage facilities at the Water District offices for storing items for repair. When a complaint is filed, it is forwarded to the relevant staff member. After the rectification of the problem, written confirmation is obtained from the complainant and reported to the District office. The records show that about 90 percent complaints are satisfactorily rectified within 24 hours.

C. Outsourcing of Tubewells

Another initiative of Rawalpindi WASA has been outsourcing the operation and maintenance (O&M) work of 22 tubewells and conducting their energy audits. The decision was made due

to the frequent breakdowns of motors, pumps and accessories, incompatibility between designed and actual requirements of electrical motor rating, and the installation of the wrong size of protective accessories and gadgetries. At places, there was inappropriate installation of equipment. In addition, there was excessive electric billing.

Process and Service Delivery Benefits

The service delivery benefits that were the basis for the decision to outsource O&M were identified as:

- Complaints to be attended within 12 hours and restoration of the tubewells within 24 hours.
- O&M to be done by qualified engineers and technicians.
- Establishment of workshops in the project area.
- Energy audit of 22 tubewells to be conducted.
- Rehabilitation of civil and electrical works by the outsourced party.
- Maximum pumping hours to be 14.
- Ensuring customer satisfaction.
- Presence of operator and other relevant staff in tubewell vicinity during operational hours.

For utilities to effectively address challenges in a sustained manner, become self sufficient and technically and financially viable, they have to be linked with growth and development in the sector.

Some of the financial benefits that have already accrued are:

Energy consumption in KW/hr (Unit per day)	Before rehabilitation	After rehabilitation
		180 units

Savings of unit per month = 60*30 = 1,800 units @ Rs. 7.31 = Rs. 13,158 (*22 tubewells = Rs. 289,476)

Financial aspects

	Year	Expenditure: WASA (millions)	Expenditure: HMA—private contractor (millions)	Savings (millions)	Total benefits/ year (millions)
O&M of 22 tubewells	2010–11	3.500	1.500	2.000	2.82
Energy savings	2010–11	5.736	4.920	0.820	



D. Vehicle Tracking and Geo-Fencing System

This satellite-based system works through global positioning systems (GPS), short message service (SMS), and general packet radio services (GPRS). It controls any irregularities, misuse, and pilferage of petrol, oil, and lubricants (POL) by WASA tankers, especially by water tankers. A control room to monitor WASA vehicles online has also been established in Rawalpindi WASA. After the implementation of the geo-fencing system, WASA vehicles are now restricted to WASA jurisdiction only. This is expected to result in effective tracking of vehicle movement, preventing misuse of vehicles, and stopping pilferage of POL.

E. Water Quality Improvement

Several steps have been taken to improve the quality of water reaching the consumers, including:

- Relocating distribution lines in different areas of Union Council, No. 18 passing through sewer manholes and drains.
- Doing field demonstration of adverse impacts of installation of suction motors, free distribution of stock chlorine solution for water disinfection on-site, alteration or correction of defaulters' bills, and spontaneous restoration or reinstallation of water connections.
- Establishing water quality monitoring and limited water testing facilities of critical parameters.
- Rehabilitating water purification plants installed by the tehsil municipal administration, Clean Drinking Water Initiative, nongovernmental organizations, and local governments.
- Giving free stock chlorine solution to consumers for disinfection of ground and overhead tanks in consumers' houses.

Box 6: Rawalpindi Water and Sanitation Agency goes global

Twinning of Rawalpindi WASA with mega cities

During the Second Annual Mega City Water Forum in Atlanta, USA, organized from May 14 to 16, 2007, Rawalpindi WASA has been twinned with:

Partner city	Area of interest
Seattle	Funding and budgeting
Sarajevo	Water quality management
Tucson	Water efficiency
Atlanta	Water management
Albuquerque	Adequate water supply

Membership of international organizations

- Global Water Operators' Partnerships Alliance—Steering Committee membership (<http://www.gwopa.org>).
- World Water Council (www.worldwatercouncil.org).
- International Water Association (www.iwahq.org).
- International Association of Hydrological Sciences (<http://iahs.info>).
- World Environment Federation (www.wef.org).
- South Asian Water Utilities Network (www.sawun.org).



The example of Rawalpindi WASA clearly reflects that, despite obvious restraints, much can be achieved through motivational leadership, learning, and innovation linked with capacity building of the staff.

Mapping the Outcomes

Two years have passed since the WASA embarked upon a process of transformation. The effort has already yielded some tangible results:

- The utility's customer base has expanded from 85,000 to 102,000 as a result of the consumer survey that facilitated legalization of connections, expansion of services, accurate information of consumers, and updating of connection categories.
- Previously unconnected residents (accessing water themselves through alternative means) now pay an average of 15 times less per month for water services and spend three to five hours less per day collecting water.
- The utility has become more financially stable through a 29 percent increase in revenue

recovery by having new connections, recovery of defaulters' payments, and decrease in energy costs.

- Improved borehole operations have decreased energy consumption, and reduced ground water extraction and contamination levels.
- The utility holds regular open meetings to solicit customer feedback on services and has set up decentralized window offices in three locations around the city.
- The utility has established regional complaint centers, with a direct hotlink to the main office, which operate on a 24x7 basis and have a toll-free number.
- Approximately 50 people have been trained at the Government Technical Training Institute, Gujar Khan, and by Pakistan Council for Research on Water Resources.

Future Projects

Some major approved and proposed future works include:

- Augmentation of water supply based on Cherah Dam: This project, cleared by the Central Development Working Party (federal-level project approval forum) and costing Rs. 5,307 million, will be discussed in the Executive Committee of National Economic Council (federal-level project approval forum), as per meeting on March 30, 2009.
- Conduction of water for twin cities from Indus River: Project pending with the Central Development Working Party (CDWP) of the Planning Commission, for allocation of 400 cusecs water by the Indus River System Authority (IRSA).
- Upgradation of the Rawal Lake filtration plant.
- Replacement of 95 tubewells.
- Rehabilitation of about 50 mini filtration plants.



Conclusion

There is no doubt that Rawalpindi WASA has moved forward, towards positive change. The most critical measure of success has been the remarkable improvement in revenue generation and collection. This has been made possible essentially as a consequence of appropriate priority setting—the consumer survey. The management of Rawalpindi WASA decided correctly at the onset of the reform process that the first step is the most important one and made the right choice in opting to first determine the status of the utility—its services, its consumers, and its administration. Since then, it would appear that the management has tackled service areas where it felt that they themselves were in a position to make a significant difference without assistance from other sector players. These areas of service have included revenue generation/ collection and customer service. In revenue generation, there has been visible and vibrant progress. The system is better documented and better managed than before. Packaging incentives and disincentives with revenue collection has added a level of accountability to the process that now holds good prospects of continuity and further improvement. However, while the focus has remained on reducing arrears and enhancing collection efficiency, there is no movement on tariff setting/ scheduling and linking of tariff increases with improved performance. It is felt that in the long run, it may be difficult to sustain increased investments and performance improvement if the tariff is allowed to remain static and delinked with sector investments and increased expenditure.



In the area of consumer services, the effort to decentralize services by establishing water districts is again a policy decision that appropriately reflects the ground realities. However, while a level of decentralization has definitely taken place, only very limited powers and functions have been devolved at the decentralized unit—the water district. On-the-spot decision making and functioning at the water district level is only limited to adjustments in billing (installments) and addressing certain types of billing complaints. This is one area where further progress could be made to devolve more financial and administrative powers from the central command to the decentralized units. The working hours of the water district offices could be increased by introducing a shift system (currently, the office closes at 3 pm) as there are not many complaints that can be addressed in a timely manner by accessing the online system which operates 24 hours a day.

As mentioned earlier, the Rawalpindi WASA management has not, as yet, developed a coherent policy or strategy, or taken action in areas where there is an overlap with other sector players at the government level, for example, on the issue of water quality. Ground water pollution levels are growing and the water gets further contaminated during distribution. Rawal Lake is also polluted. Political, administrative, and jurisdictional constraints limit and restrict Rawalpindi WASA's capacity to effectively tackle this challenge. Greater emphasis on consensus building and regular interaction is suggested.

Similarly, tariff setting is an issue that has been politicized generally everywhere in the water and sanitation sector in Pakistan and Rawalpindi WASA is no exception. As the reform process progresses further, strategies would need to be developed to tackle the more

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WSP Field Notes describe and analyze projects and activities in water and sanitation that provide lessons for sector leaders, administrators, and individuals tackling the water and sanitation challenges in urban and rural areas. The criteria for selection of stories included in this series are large-scale impact, demonstrable sustainability, good cost recovery, replicable conditions, and leadership.

complicated challenges that require offsetting or neutralizing political expediencies, such as possibly in the case of the failed attempt to meter water consumption at the retail level. There should also be greater focus on human resource development and capacity building of the staff so that not only are reforms associated with an institution and are not person-specific,

but also that policy decisions taken at the management level are effectively implemented by the operational staff. Outsourcing of work, such as O&M of tubewells, is a good initiative, the results of which need to be properly monitored and documented and the practice of outsourcing applied elsewhere where the potential technical, financial, and administrative benefits merit taking such a policy decision.

The example of Rawalpindi WASA clearly reflects that, despite obvious restraints, much can be achieved through motivational leadership, learning, and innovation linked with capacity building of the staff. However, for utilities to effectively address the full menus of challenges in a sustained manner and become self sufficient and technically and financially viable, they have to be linked intrinsically with the overall growth and development in the sector and ring-fenced from negative political interference.

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