SERVING CITIZENS BETTER: MANAGING BAGHDAD’S WATER SUPPLY AND SEWERAGE WITH LEADERSHIP FOR RESULTS (L4R)

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Introduction – Baghdad’s Water and Sewerage Situation: Before the Gulf wars, Baghdad had a well-functioning water and sewerage system, with standards of reliability, access and quality similar to many first world countries, illustrated by a coverage of 95% in urban areas and 75% in rural areas in the 1990s. Because of the war, economic sanctions, and the deteriorating security situation, the national drinking water coverage was down to 48% by 2005. However, according to UNICEF’s 2011 Multi-Indicator Cluster Survey, Baghdad’s water coverage is 97% and sewerage is 60%.

Within Baghdad (estimated population of 7 million in 2012) the quality and quantity of drinking water varies greatly across districts. Similar inadequacies also plague the sewerage system even though Baghdad had a modern sewerage system in the 1980s. The reason for this sub-optimal situation is aging infrastructure and rapid population growth, transforming a system designed to deliver high-volume service to a smaller population into a lower-volume service for a larger population.

Other factors that played a role are:

- High proportion of water lost through large and small-scale tapping.
- Consumers’ reluctance to pay and providers’ reluctance to enforce payment.
- Providers’ lack of customer orientation.
- Rapid development of slums in new areas in Baghdad.

In terms of legal and institutional challenges, the following were identified:

- Owners of plots under 200 m² cannot legally connect to the water and sewerage system. With the population pressure in Baghdad, more and more plots are being subdivided, increasing the number of illegal tappers.
- Procedures for legally connecting to the water system are cumbersome and time consuming.
- The decentralization of tasks to the municipality has not been completed successfully, allowing for shifting of responsibilities and blame between the Mayoralty of Baghdad (MoB) and its 14 municipalities.

Nature of Challenges and Issues: While technical improvements and replacement of aging infrastructure are important initiatives, there are non-technical and adaptive challenges
that require innovative solutions involving the relevant stakeholders. These challenges led to a growing awareness within the MoB that the problems were not merely technical and that engineering solutions alone would not provide reliable water and sewerage services for all.

**Government of Iraq (GoI) and World Bank Collaboration:** A large share of World Bank (WB) support for the MoB in the water and sewerage sector has been technical with a US$ 65 million ITF grant from 2004-2013 for two Baghdad districts and replace equipment to improve water and sewerage service delivery. The MoB made another request to the Ministry of Finance in March 2013 for a US$ 100 million WB loan to further improve services in the city.

**The Leadership for Results (L4R) in Response to Addressing Adaptive Challenges:** Based on an analysis of the issues, the MoB adopted the L4R approach following contacts with the World Bank team in November 2012. The project “Improving Water and Sewerage Management in Baghdad”, supports a change management process in addition to technical infrastructure improvements, and contributes to achieving the Government’s ambitious goal of serving all citizens of Baghdad with reliable water and sewerage services by 2017 and as outlined in the objectives of the National Development Plan – NDP 2013-2017. The L4R is about changing behaviors (without large upfront investments) to better serve customers.

This meant approaching issues which many stakeholders believed were irresolvable and where the perceived risk of failure was large. To encourage experimentation and risk-taking even under such pressure, the approach was to break the reform process into manageable bits. Crucial for the success of this approach was an authorizing environment enabled by a Steering Committee composed of the MoB key decision-makers in Water and Sewerage supported by WB coaches.

Two teams – from Baghdad Water Authority (BWA) and Baghdad Sewerage Directorate (BSD) – used the L4R approach, emphasizing its implementation component, “Rapid Results Initiative (RRI)” to tackle problems from different angles and produce tangible results within 90 days while continuously learning by experimenting with new ways of working, behaving and achieving.

**From Broad Challenges to Performance Goals:** The Steering Committee, acting as strategic leaders, defined the following core challenges for the BWA and the BSD, respectively: (i) “poor maintenance of the sewerage network” and (2) “the inefficient billing system of the water supply network”. These were then deepened to better understand the formal and informal networks that impact on the successful improvement of Baghdad’s water and sewerage systems. This was done by preparing four Net-Maps or stakeholder influence maps together with key stakeholders including NGOs, the private sector, and user households in addition to BSD, BWA and Municipalities.

These inputs helped the teams to formulate their performance goals, which were:

For **Water:** to increase the collection ratio by 10% among a sample of 200 homes from two Baghdad neighborhoods (Sector 906 in Al-Karada Municipality and Sector 612 in Al-Mansour Municipality) compared to the previous year in 90 days. This goal was to be achieved by increasing consumers’ understanding of how they were billed and how much their bills were being subsidized.

For **Sewerage:** Starting from April 1st 2013, to reduce in 90 days the number of blockages and overflows by 50% in District 518 (Al-Sader 2 municipality), where there had been no maintenance for the last 15 years.

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2 In Sector 906 (Al Karada) the collection ratio (cash received / amount billed for the period) for 2012 was 107% and became 97% in 2013. In Sector 612 (Al Mansour) the collection ratio for 2012 was 85% and became 92% in 2013.

3 Household consumers are charged 7 Dinars for the first cubic meter, 17 for the second, 30 for the third and 55 Dinars per cubic meters afterwards. Commercial users are charged 100 Dinars per cubic meter. Baghdad Water Authority estimates that the true cost to produce and distribute water to households is 155 Dinars per cubic meter.

4 24 blockages and overflows were identified as a baseline and the target was to reduce this by 50%. However, 100%...
L4R’s Factors of Success and Achievements:
For both teams these included matching team composition to the tasks, clear allocation of responsibility, efficient management of time, simple and systematic internal communication, regular coordination between the DG and the team, and direct contact and collaboration with the citizens/users were real new ways of increasing effectiveness.

For Water, a user-friendly billing system has been designed, the current water bill has been modified and a media campaign engaging citizens has been initiated.

For Sewerage, a first survey on the inventory and condition of the network has been completed, a regular users’ feedback mechanism has been initiated, a more efficient procedure to release contractors’ payments have been established, team composition has been extended to municipality staff, manhole covers were manufactured locally and new maintenance and cleaning techniques were implemented (using brushes and wire steel, jet machine vehicles, provision of trash cans and steel covers for gullies and manholes). This intervention showed that good results could be achieved fast and at a relatively low cost.

Summary of Results Achieved: The RRI teams reached their goals. Bill collection in the water sector registered a 13 percent increase on the previous year in Al-Karada municipality and Al Mansour municipality (Al-Yarmouk neighborhood) and customer awareness of the true cost of water improved over the same period. By working closely with the Al-Sader 2 municipality, the District 518 sewerage network was thoroughly cleaned, which put an end to residents’ complaints of blockages and overflows. The residents’ appreciation of the contractor’s work and the results achieved in a short time encouraged the Al-Sader 2 municipality to start cleaning other clogged and non-functioning areas such as the District 76 sewerage network using the same techniques.

The teams reported that they learned a lot from each other – to work collaboratively, respect each other’s competence, ask for and offer help to the group, hold each other accountable and take full ownership to achieve the team’s final goal – as well as gaining confidence about undertaking projects. Throughout this process the Steering Committee members validated and guided the work of the RRI teams so that it remained strategically relevant and useful to their longer-term goals.

Citizen Feedback: The momentum for results was obvious to citizens:

Sewerage cleaning: "Once the contractor started cleaning, the results were amazing!" said an older resident of District 518, where they had experienced repeated blockages over the past few days with no hope of a solution.

New water bill format and guide: "Now that I understand this, I will photocopy the bill guide for customers, to show how their water bills are calculated!" said an excited Deputy Head of Al-Yarmouk neighborhood municipal office (Al Mansour Municipality).

"I support you 100%. This should have been done long ago!" said the Deputy Head in charge of services of the Al-Yarmouk municipal office, after seeing the bill guide for the first time.

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was achieved due to the excellent coordination of interventions from all involved parties.

5 (i) Minutes of meetings were prepared and sent up to the BWA and BSD and occasionally to the Deputy Mayor in charge of Technical Affairs, to inform them of progress and get appropriate authorizations in order to continue the work; (ii) Within the department, the work plan and a step-by-step breakdown of actions were put up on the wall for others to see

6 A mid-term survey was carried out two weeks after the interventions of a special contractor and a final survey was carried out on June 20, 2013 at the end of the programmed cleaning operation.

7 A survey was carried out at the beginning of the 90-day period to register the number of blockages and overflows and identify the worst points of the sewerage network. For this purpose, the BSD team met 40 citizens in different locations of District 518 and also made a review of all complaints previously recorded by the sewerage maintenance department of Al Sader 2 Municipality and even all the interventions of private companies contracted out by citizens to solve these problems. At the end of the period, after the cleaning of the sewerage network, no new complaints were registered.
Lessons learned: The L4R/RRI demonstrated that an enabling environment established through leadership, collaborative efforts and good team dynamics helps to achieve ambitious goals, such as improvements in service delivery, and promote learning, greater accountability and full ownership of the process involved in reaching a common goal. It also showed that shifts in policy, procedures and administrative structures can be achieved without major financial investment.

- The (high) passion displayed by the team in reaching their goals is key to sustaining the momentum for results. The roles of coaches, team leaders and strategic leaders (the Mayor of Baghdad, the Deputy Mayor in charge of technical affairs, DG BWA and DG BSD) were essential success factors.

- Multi-functional teams composed of members from a range of appropriate units in the BWA and the BSD and stakeholders from civil society organizations are necessary to achieve tangible goals which concern more than one unit/department.

- Direct interaction with consumers can provide more effective solutions and bring real value to the process and should be institutionalized into regular operations.

- Foundations for expanding similar initiatives to other geographical locations and/or other areas of work have been set, but this momentum needs to be supported and continued otherwise it will waste away.

Recommendations:

Water: (i) More emphasis on working as an integrated team and cooperating between different directorates and departments; (ii) putting communication mechanisms in place to better understand citizen needs; (iii) effective planning and project management with prior planning, setting targets before beginning the work, and focus on a reduction of routine steps.

Sewerage: (i) forming inter-departmental teams and a rotating committee to follow up on maintenance; (ii) contract specialized personnel who can be more effective at performing the tasks of cleaning thorough streets, maintenance, and cleaning of manholes; (iii) ensure clearly-stated task assignments to promote accountability of individuals and teams. Hold the teams to announced schedules.

The Way Forward: During the final review, the RRI team identified ways in which the Steering Committee could build on their success. They found that the approach they used deserves to be expanded not only within water and sewerage but also into the other departments in the MoB. The Steering Committee is eager to sustain the momentum of progress. The Mayor of Baghdad is fully supportive and has asked if new interventions were being planned for the near future. The Deputy Mayor in charge of technical affairs stated that “More collaboration with the World Bank is needed for similar operations in the areas of Water Supply and Sewerage”. The Director General of BWA even suggested a concrete if ambitious goal for the next step in an area of critical concern: “To focus on the reduction of water leakages, which represent about 35% of production”.

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8 Fostering changes and results: providing an opportunity to think freely (vs waiting for instructions) and a space for innovating when facing obstacles and looking for ways to move forward; ensuring technical and financial support, and administrative authorization …

9 Refer to Law 16 of 1995 of the Baghdad Municipality, which shifted the responsibility of maintaining neighborhood networks (pipes of less than 400 mm in the case of water and 300 mm in the case of sewerage) from the Baghdad Water Authority and Baghdad Sewerage Directorate to the municipalities.