

PART OF THE LEADERSHIP FOR RESULTS PROGRAM

Improving Sewerage Services and Management for Baghdad Citizens using the Rapid Results Approach

INTRODUCTION

With about 7 million residents and a high population growth rate, Baghdad is the second biggest and most crowded city in the Arab world after Cairo as well as in Western Asia after Tehran. The growing population has put considerable pressure on the Mayoralty of Baghdad to improve its public services, the sewerage system in particular.

In 2013, the Deputy Mayor for Technical Affairs launched a process of change to improve sewerage services by mobilizing people, ideas and resources with the support of the World Bank's Leadership for Results (L4R) program. The intervention would contribute to the government's goal to serve all citizens of Baghdad with reliable sewerage services by 2017 (National Development Plan 2013–2017).

Due to the efforts of the intervention, which took place from January to June 2013, progress has been made in several areas: high-level commitment to improved sewerage management through a formal steering committee; a new, multi-stakeholder approach to reform piloted with an implementation team comprised of members from the Mayoralty, the pilot Municipalities, and concerned District Councils set up to achieve a specific targeted change; improved communication with citizens to improve sewerage management; and increased effectiveness in managing the sewerage network based on citizen input and refined dealings with contractors.

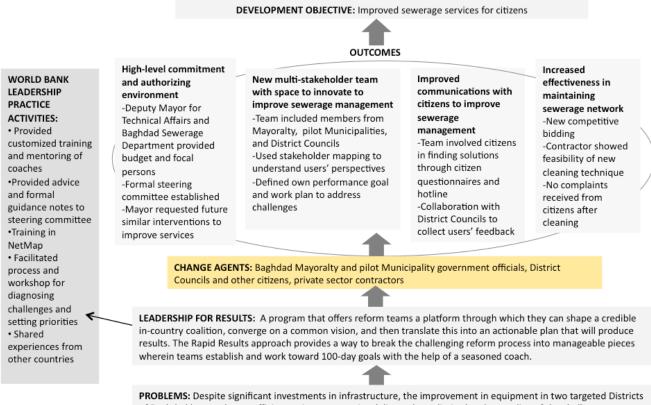
To generate evidence of the outcomes—and milestones and outputs— achieved from the initiative, their significance and how the local stakeholders contributed, the project team identified outcomes to learn from the initiative using a customized outcome harvesting tool. Visual maps present the sequence of outcomes achieved by the actors involved—how the outcomes built on each other over time to form multiactor, institutional processes for change to address the development goal. Outcome stories and lessons highlight key areas of results.

BACKGROUND

The Baghdad Sewerage Directorate is responsible for management of the sewerage main trunks, main sewerage pumping stations and sewerage treatment plants in Baghdad. Each of the 14 municipalities of

Figure 1. Theory of Change

The change strategy map shows how change happened to advance progress toward the goal for reform in the sewerage sector—the development problems addressed, change agents producing the changes, outcome areas, and supporting activities by the World Bank Leadership Practice and the World Bank country office.



PROBLEMS: Despite significant investments in infrastructure, the improvement in equipment in two targeted Districts of Baghdad has not been sufficient to improve service delivery there; limited understanding of the challenges impeding local service delivery and little local commitment to or participation in diagnosing and overcoming those challenges; severely inadequate sewerage maintenance, with blockage and overflow problems; limited public-private partnerships to improve sewerage maintenance

Baghdad has geographical limits within which they are responsible for maintaining the water supply and sewerage networks.

Maintenance of the sewerage network in Baghdad is quite poor, with no action for about 15 years. Significant problems include the growing pollution of the Tigris River, an outdated system installed decades before for a smaller population, combined sewerage and rain water systems, and overloaded and backed up sewerage lines due to aging pumping stations. This problem has been further exacerbated by the splitting up of houses into many units after the 2003 war due to a chronic housing crisis that has caused people inside the city to divide their residential properties into smaller plots with illegal connections to the water and sewerage networks.

In November 2012, the Mayoralty of Baghdad and the World Bank started to discuss both the water supply and sewerage management issues. The Deputy Mayor for Technical Affairs decided to adopt the L4R approach to facilitate innovative performance improvements in service delivery, working collaboratively with the World Bank Leadership Practice and the Bank's sectoral management units in the region related to MENA Public Sector Management and Governance (MNSPS) and MENA Water and Agriculture (MNSWA).¹

The approach: Break the reform process into manageable bits, with an authorizing environment ensured by a Steering Committee composed of key decision makers in the sector, supported by coaches trained in results-based problem solving. The coaches led multi-stakeholder implementation teams in Rapid Results Initiatives (RRIs) to tackle problems from different angles and produce tangible results within 90 days with stakeholders continuously learning by experimenting. The current case focuses on the experience of the sewerage sector.

Figure 2. Results Chain for Impact Toward Goal

Outcomes were grouped according to their type of change, and then placed along a results chain to identify how the project contributed to higher-level results.

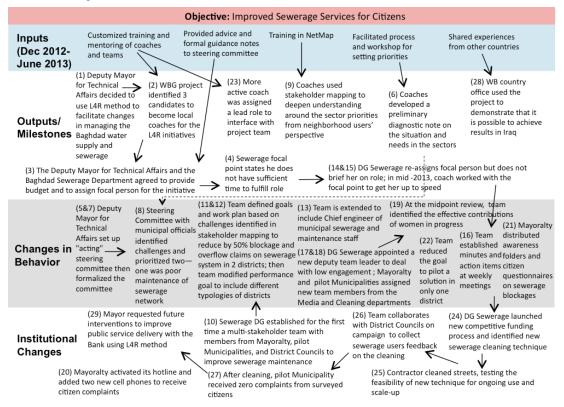
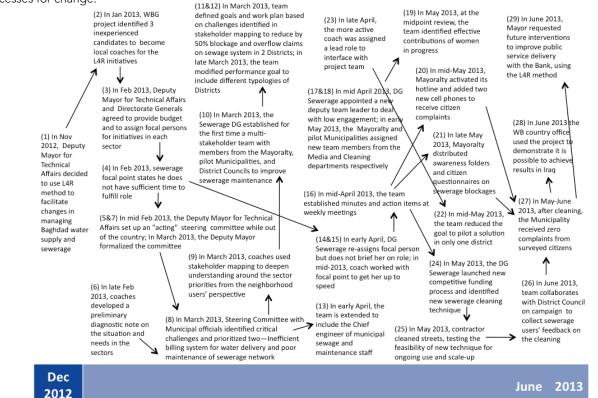


Figure 3. Map of Initial and Evolving Outcomes

An outcome map illustrates how key outcomes along a timeline connected and built on each other to form multi-actor processes for change.



OUTCOME STORIES

I. High-level commitment and authorizing environment

Key leaders prioritized the sewerage management problems and provided the authorizing environment for change by allocating budgets, establishing focal persons and teams, and monitoring progress to solve problems as needed.

Outcomes

Key outcomes in this area and their significance include:

- In November 2012, the Deputy Mayor for Technical Affairs decided to use the L4R approach to facilitate changes in managing the Baghdad water supply and sewerage. L4R incorporates behavioral and institutional change alongside infrastructure improvements to pilot rapid, client-responsive approaches that have the potential to be institutionalized or scaled up.
- In January 2013, the World Bank project identified three candidates to become local coaches for the RRI implementation teams. In the country context it was not possible to find coaches experienced in guiding RRI teams and results-based problem solving processes, given the importance of language and local understanding of issues.
- In February 2013, the Deputy Mayor for Technical Affairs and two concerned Directorate Generals (Bagdad Water Authority and Baghdad Sewerage Directorate) agreed to provide a budget and assign two focal persons who would work with the coaches and multi-stakeholder RRI implementation teams to be set up for 90 days to achieve results for a persistent problem in their respective sector (water and sewerage). This signaled commitment to improve service delivery, and led to provision of the necessary resources, authorization, and support to set up the two teams to implement RRIs.
- In mid-February 2013, the Deputy Mayor for Technical Affairs set up an "acting" steering committee to proceed with the initiative while he was out of the country traveling. To get things moving in his absence, he saw that it was crucial to have the senior staff represent him. The acting steering committee was to launch the initiatives and was comprised of the two Directorate Generals and focal persons from each sector. He later formalized the

KEY LESSON FOR OUTCOME STORY I

Formally specifying the roles and composition of a steering committee and providing supportive coaching to fulfill these roles were critical steps for ensuring clear guidance and authority for the L4R initiative in Baghdad.

- System reform requires sustained collective leadership, but the initiative had only one main champion at the start. This champion, the Deputy Mayor for Technical Affairs, had to travel outside of the country, which hindered his ability to oversee and guide the process.
- The establishment of an "acting" steering committee allowed the initiative to proceed in the Deputy Mayor's absence and demonstrated the need for the support and engagement of senior staff to guide activities. The identification of coaches provided dedicated persons to support implementation.
- The decision to turn the steering committee into a formal body provided overall institutional support for the initiative and clarified the roles, responsibilities, and authority of committee members.

Important indicators that could be used to track increased leadership commitment could include:

- Agreement of steering committee on priority areas to focus implementation teams and to allocate budget [Y/N]
- Coach dedicated to support implementation process [Y/N]
- % of steering committee members regularly attending meetings to participate in decisionmaking ("regularly" should be assigned reasonable definition; as evidenced by steering committee meeting minutes)

steering committee to provide overall institutional support and direction during the RRI.

- In late February 2013, a preliminary diagnostic note on the situation and needs in the sectors was used to guide the steering committee. This detailed note helped build consensus and prioritize the water supply and sewerage projects—the key was understanding the needs from the users' perspective. The findings related to quality and quantity of water supply and reduced performance of the sewerage network. Problems found included illegal connections, leaks, and collapsed lines, among others.
- In March 2013, the Steering Committee with municipal officials identified critical challenges

and prioritized key challenges in the sewerage sector to form an RRI implementation team to identify innovative reform solutions—maintenance of the sewerage network. The Mayoralty and its 14 Municipalities had not done maintenance in about 15 years, and despite many complaints, many citizens had never seen maintenance in their lifetime. Identifying critical challenges and establishing priorities among a wide group of stakeholders were key steps toward ensuring alignment of interest and focus on results.

Program Contribution

The L4R program shared successes from other countries to demonstrate the potential of L4R initiatives for managing reforms in Iraq and helped prioritize the focus on the water supply and sewerage sectors. The World Bank Group team briefed the Deputy Mayor for Technical Affairs and other members of the leadership team on how to assign budgets and focal persons identify coaches who the team could train and closely mentor to support the entire L4R process and the importance of establishing a steering committee. The team also provided written guidance on key roles in English and Arabic.

II. New multi-stakeholder team with space to innovate to improve sewerage management

The Mayoralty, pilot Municipalities, and District Councils all played key roles on the RRI implementation team to develop solutions. The steering committee gave them autonomy to innovate while providing leadership to solve problems impeding progress.

Outcomes

Key outcomes in this area and their significance include:

- In March 2013, the multi-stakeholder implementation team was established in the sewerage sector with members from the Mayoralty, pilot Municipalities, District Councils, and communities to improve sewerage maintenance. For the Baghdad water supply and sewerage sector this was the first time a mixed stakeholder team was established, with a specific focus on results. All team members were concerned with reducing sewerage blockage. Thus, this was a major difference from business as usual, with the potential of sparking innovations.
- In March 2013, the implementation team defined their own goal and work plan based on the chal-

KEY LESSON FOR OUTCOME STORY II

The creation of a multi-stakeholder implementation team engaged "those who have the problem" in solving it, a departure from the traditional, top-down approach.

- The team at first did not include all of the perspectives and expertise needed to adequately address identified challenges, with members lacking technical expertise in key areas. The team first included the chief engineer of municipal sewerage and local maintenance staff from Al Sadr Municipality II.
- Once the Mayoralty understood the potential value of the initiative to citizens, the Media and Cleaning Departments were invited to support the team. These units also had a direct concern about sewerage blockage.
- The team aimed to develop a solution that could provide a learning opportunity for how to address the problem over the long term, with multi-stakeholder involvement.

Important indicators that could be used to track this change process could include:

- Team's autonomy to set its own goal and implementation process (team charter or other document specifying team's mandate and protocols)
- % of team members satisfied with responsiveness of Strategic Leader (DG Sewerage) to implementation needs of team (survey of implementation team)
- Formal representation of all relevant groups on implementation team (yes, no—by key department, as evidenced by team charter and/or meeting minutes)

lenges identified in the stakeholder mapping: to reduce by 50% the blockage and overflow claims on the sewerage system in two districts, within 90 days, starting from a specific date. By defining their own goal and work plan the team fostered ownership and a realistic plan by those people who carry it out. The team also reached a consensus on criteria for choosing the districts, taking into account technical and economic factors.

In late March 2013, the team modified its performance goal to focus on different typologies of districts. This decision was significant because it aimed at providing cases that should be as distinctive as possible to further generalize outcomes that could provide a learning opportunity.

- From April–May 2013, in a session to review their progress, the implementation team acknowledged technical knowledge gaps blocking their ability to advance the goal. Other challenges included the team leader and some members of the Mayoralty often not joining meetings and blocking the team's progress. Initially members from Municipalities did not show up for meetings because of miscommunication around the potential value to citizens and a lack of availability.
- To address these challenges, the Steering Committee appointed a new deputy team leader to act as de-facto team leader. A new member from the Mayoralty Media Department was added and the Municipality also assigned new members from the Cleaning Department to support the team. These adjustments indicated joint problem-solving and openness from the team in identifying the knowledge gap and bringing in needed expertise and local representation.

Program Contribution

The L4R program provided rapid results training to the leadership, encouraged the establishment of a team that included representatives of all groups concerned and provided mentoring for coaches and teams, and support to review progress.

III. Improved communication with citizens for sewerage management

The implementation team applied new methods to understand users' perspectives around the sewerage management goal and engaged citizens in finding solutions.

Outcomes

Key outcomes in this area and their significance include:

 In May 2013, the pilot Municipalities distributed awareness folders and citizen questionnaires on sewerage blockages. This helped the implementation team involve citizens in finding a solution. The Mayoralty also activated a hotline and added two new cell phones to receive citizen complaints. The activation of the hotline and provision of appropriate equipment meant that for the first time citizens have voices in the ongoing project to improve water and sewerage services, quality of services that result, and other factors affecting sustainability. Through the involvement of the Media Department,

KEY LESSON FOR OUTCOME STORY III

The regular team meetings and communication between the Steering Committee and Implementation Team identified the importance to engage the District Councils. This was instrumental for getting systematic input from users to ensure the sewerage system overcame challenges to address local needs.

- Citizens previously had no voice for improving water supply and sewerage services, and the quality of services was not monitored via citizens' reactions.
- The collaboration with the District Councils on the content and conduct of the campaign helped ensure alignment of the campaign with local knowledge, needs, and priorities.
- Feedback from the District Councils, in combination with real-time feedback through citizen complaint mechanisms, enabled the delivery of continuous responsive services that resulted in higher satisfaction and cleaner streets.

Indicators for tracking this change process could include:

- Number of sewerage blockages reported by citizens (community survey)
- % of surveyed community members satisfied with responsiveness of government in addressing reported blockages (community meeting)
- % of District Council members satisfied with their role and influence in the awareness campaign (council meeting)

the Mayoralty saw how better communication with citizens was crucial for the initiative's sustainability.

 In June 2013, the implementation team collaborated with the District Council on a campaign to collect sewerage users' feedback on the cleaning. The campaign was aligned with local knowledge, needs, and priorities, and communication went two ways. The team met with citizens in the district to record a video on sewerage users' feedback.

Program Contribution

As part of L4R, the Bank offered workshops on stakeholder mapping and using effective facilitation methods to better understand who influences the performance of the sewerage system. The L4R also encouraged the direct involvement of citizens in the solution.

IV. Increased effectiveness in maintaining sewerage network

The reform process led to fewer sewer blockages and cleaner streets in the pilot district and a sharp reduction in citizen complaints.

Outcomes

Key outcomes in this area and their significance include:

- In May 2013, the Directorate General for Sewerage launched a new competitive funding process to identify new sewerage cleaning techniques that incorporated features superior to past practice. The funding process included specific Terms of Reference, disciplined review of bids, provision for local manufacture of some inputs, and specifications dictating more modern maintenance and cleaning techniques. This process departed from the usual practice and promised to result in more highquality, responsive, and cost-effective cleaning and maintenance services.
- By the end of May 2013, the District launched a new program of maintenance services with benchmarks to retroactively judge quality. The first contractor began the process of cleaning streets, upon assignment due to reported blockage. From no sewerage maintenance, the pilot Municipalities improved service by retaining contractors to remove blockages reported by citizens and used pilot benchmarks to monitor cost-effectiveness and support eventual scalability.
- In May–June 2013, after cleaning, the Mayoralty reported a citizen survey found no complaints from citizens of blockages. Citizen reports constitute one key indicator for the success of maintenance and need to be monitored over time.

Program Contributions

The L4R program supported training of coaches to facilitate the diagnostic work; an L4R workshop focused on identifying and prioritizing challenges. The Bank trained and supported coaches and mentored the team in conducting a preliminary field survey to estimate the costs of new technologies and in activating the citizen hotline and complaint mechanism.

NEXT STEPS

In June 2013, the Bank country office used the project to demonstrate that it is possible to achieve results in Iraq. This is a problem country in a problem region—to

KEY LESSON FOR OUTCOME STORY IV

A new competitive funding process was key to identifying a new sewerage cleaning technique for better quality and more responsive cleaning and maintenance services.

- In the past, there had been limited focus on sewerage maintenance, and previous bidding procedures for contractors emphasized price rather than quality.
- The new bidding procedure introduced several new practices, including specific terms of reference for contracts, a disciplined review process for bids, the requirement for local manufacture of some materials, and specifications for more modern techniques.
- Once a qualified contractor was selected and retained, pilot benchmarks were tracked to monitor the cost-effectiveness and eventual scalability.
- After the selected contractor started cleaning in response to a reported blockage, there were no complaints from citizens. This was a marked improvement over the 24 blockages and overflows that had been previously reported in the sewerage network of that District.

Indicators can be monitored to track this change process, such as:

- Number of qualified bids received in response to tendering ("qualified" indicates compliance with the new terms of reference, as evidenced by administrative data)
- Number of blockages reported after the start of the new cleaning technique (community survey)
- Average maintenance cost per household (administrative data, using contractor fees and number of households served in District)

show progress can be made here has implications for other projects in Iraq and in the region. The Mayor of Baghdad requested future interventions to improve public service delivery with the Bank using the resultsbased, team learning approach. A follow-up Bank project to extend improved water and sewerage services is in the pipeline for Iraq. This request signaled the Mayor's awareness that the project had introduced a new way of solving difficult development challenges in Iraq's sectors. ■

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WBI's Capacity Development and Results team led the outcome mapping; Jenny Gold coordinated the exercise with Dawn Roberts and support from Dale Hill. Sharon Fisher provided writing, editing, and design services. Samuel Otoo provided overall guidance.

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FOOTNOTES

¹ For more information on this process, see the MENA Knowledge and Learning Quick Note, Serving Citizens Better: Managing Baghdad's Water Supply and Sewerage with Leadership for Results (L4R) (September 2013 Number 104) at http://siteresources. worldbank.org/INTMENA/Resources/QN104.pdf and a report issued by the World Bank's Leadership Practice, Serving Citizens Better: Managing Baghdad Water Supply and Sewerage with Rapid Results (August 2013).

ANNEX Table of Outcomes by Key Stakeholders in Baghdad

The focus is on outcomes in the sewerage sector although the project looked at both water and sewerage. The numbers refer to the outcomes mapped in figures 2 and 3. Benjamina Randrianarivelo and Eva Schiffer mapped the outcomes.

No	Outcome	Significance	Contribution of World Bank	Type of change
0	In Nov. 2012, the World Bank (WBG) Task Team Leader (MNSWA) and Deputy Mayor for Technical Affairs of Baghdad, in reviewing results from USD 65 million ITF grants from 2004–2013, agreed that the replacement of water networks in Al Za'afraniya and sewerage networks in Al Sader in Baghdad city had been necessary but not sufficient to improve service delivery in other parts of the city.	This raised awareness on the part of the Mayoralty of Baghdad was significant, as it would be possible to reshape an upcoming project to apply lessons learnedan additional request had been made in March 2013 for a USD 100 million IBRD loan to further improve water and sewer- age services in other parts of the city.	The WBG's review of Mayoralty of Baghdad priority sectors had high- lighted deficiencies in water and sewerage service delivery, despite the substantial investment.	Early milestone
1	In Nov. 2012, the Deputy Mayor for Technical Affairs decided to use the L4R method to facilitate changes in managing the Baghdad water supply and sewerage.	L4R has been a proven method in many countriesincorporating be- havioral and institutional change to complement projects with infrastruc- ture improvement to pilot rapid, client-responsive approaches that have the potential to be institutional- ized or scaled beyond the initial proj- ect areas and scope. Thus, potential impact for Iraq was high.	The WBG project team advised the Mayoralty about the potential of Leadership for Results (L4R) initiatives to manage the change process in the water and sewerage sectors, and strategically focus the L4R on the local needs. Examples of successes in other countries were given.	Early milestone
2	In Jan. 2013, the WBG project identified three inexperienced candidates to become local coaches for the L4R initiatives.	Quality coaches are crucial for the success of an initiative. Due to orga- nizational and security constraints in Iraq an experienced coach was not available, and new coaches had to be chosen from existing staff and consultants in the World Bank office.	WBG contribution was its knowl- edge of the standards required for quality coaches and its offering of new ways to bring inexperienced coaches up to speed, e.g. through customizing training, and regular mentoring by Skype.	Early milestone Constraint in country context
3	In Feb. 2013, the Deputy Mayor for Technical Affairs and the 2 concerned Directorate Generals agreed to provide budget and to assign two focal persons who would work for 100 days on achieving challenging results for a persistent problem in their respective sector (water and sewerage).	This signaled commitment to improve the water and sewerage services problem, and ultimately led to provision of the necessary resources, authorization, guidance and problem solving support to set up the 2 teams to implement the L4R initiatives.	The WBG made the case to the Deputy Mayor for Technical Affairs to assign the budget and focal per- sons, clarifying what results could be expected, including briefing to him/her and other members of the	Early milestone
4	In Feb. 2013, the Baghdad Sewerage Directorate focal point states he does not have sufficient time to fulfill the role.	The focal point was appointed early in the project and did not under- stand the role he had to play and what was required in terms of time and availability. A non-functioning focal point puts the project at risk as this would mean the team is disconnected from the authorizers to provide senior guid- ance and problem solving.	Mission met with focal points and discussed the required commit- ment.	Early milestone Setback

No	Outcome	Significance	Contribution of World Bank	Type of change
5	In mid Feb. 2013, the Deputy Mayor for Technical Affairs set up an "acting" steering committee to proceed with the initiative while he was out of the country.	At the start of the initiatives, the Deputy Mayor for Technical Affairs, who was the main champion of this project, was traveling. To get things moving in his absence, it was crucial to have the support of senior staff who could represent him. The acting steering committee was to launch the initiatives – it was composed of the 2 concerned DGs and focal persons from each sector.	In a first meeting with the DGs for water and sewerage and their staff, the L4R approach was explained including the role of a steering com- mittee for the process.	Early milestone
6	In late Feb. 2013, coaches devel- oped a preliminary diagnostic note on the situation and needs in the sectors.	This detailed diagnostic note helped build consensus and provide the basis for a better design of the next water and sewerage project. Key findings related to quality and quantity of water supply, and reduced performance of sewerage network. Problems included illegal connection, leakages, collapsed lines, among others. Important was understanding the users' perspec- tive.	The WBG provided training to coaches, which facilitated the diag- nostic work—Guidelines, orienta- tion, and support, including training in stakeholder mapping method Net-Map, and conducting participa- tory exercises, were provided.	Early milestone
7	In March 2013, the Deputy Mayor for Technical Affairs formalized the steering committee.	The Steering Committee provided overall institutional support and direction during the RRI. For example on issues of budget, work plan revi- sion, and adding new team mem- bers.	WBG team explained to the Deputy Mayor and now-formal steering the basics of the L4R, its benefits and their roles. Guidance was formal- ized in a brief note – in English and Arabic.	Behavioral change
8	In March 2013, the Steering Com- mittee, with Mayoralty officials, identified critical challenges and prioritized two—inefficient billing system for water delivery and poor maintenance of sewerage network. The Mayoralty had not done maintenance for branches of sewer pipes inside the district in about 15 years, and despite many complaints, citizens had never seen maintenance in their lifetime.	Identification of critical challenges and establishment of priorities among a wide group of stakeholders was a key step toward ensuring align- ment of interest and focus on results.	WBG provided Support to design and facilitate the L4R workshop, which provided the opportunity to identify and prioritize the chal- lenges.	Behavioral change
9	In March 2013, coaches used stakeholder mapping to deepen understanding around the sector priorities from the neighborhood users' perspective.	The Net-Map exercises (March 12 to 14, 2013) helped to identify and mobilize actors and deepen insight on the challenges from the users' perspective. The provider perspec- tive was already well understood, but there was limited experience communicating with citizens on the challenges. Problems faced included a high number of blockages and leaks in the sewerage system, a reluctance of citizens to pay for sewerage services and a low trust of citizens in the government agencies to deliver sewerage services.	The coaches learned to use a stake- holder mapping method (Net-Map) to interview water users on their perspective. They had guidance on stakeholders to interview, what questions to ask and feedback on the results. The Net-Maps tackled two ques- tions: Who influences the perfor- mance of the sewerage system? And: Who influences the setting of acceptable prices?	Early milestone

No	Outcome	Significance	Contribution of World Bank	Type of change
10	In March 2013, the Sewerage DG established for the first time a multi-stakeholder team with members from the Baghdad Sewerage Directorate and Municipality, to improve sewerage maintenance.	For the Baghdad sewerage sector this was the first time they set-up a mixed implementation team, with specific results focus. All team mem- bers were directly concerned by the issue of reducing sewerage block- age, including members from the Baghdad Sewerage Directorate, and municipal administrations. Thus this was a major difference from business as usual, with the potential of spark- ing unexpected innovations.	The WBG's contribution was encouraging a team composition that included representatives of all groups concerned, instead of limit- ing the composition to those with delineated administration respon- sibilities.	Institu- tional change
11	In March 2013, the team defined its own goal and work plan based on the challenges identified in the stakeholder mapping to reduce by 50% the blockage and overflow claims on the sewer- age system in 2 specific districts, within 90 days, starting from a specific date.	The fact that the team defined its own goal and work-plan fostered ownership and the setting of a realis- tic plan by those people who have to do the work. The team also reached a consensus on specific criteria for choosing the specific districts, tak- ing account of both technical and economic factors.	The WBG trained and supported coaches to work with the teams to specify the goal and develop the work plan.	Early milestone
12	In late March 2013, the team modified its performance goal to focus on different typologies of districts.	The significance of this decision was that it aimed at providing cases, which should be as distinctive as possible for the purpose of further generalization, providing a learning opportunity.	The WBG provided guidance to form "ambitious but doable performance goals" as well as to jumpstart sufficiently representative examples during regular check-in calls.	Early milestone Setback
13	In early April 2013, the team, acknowledging technical knowledge gaps, invited as new members the chief engineer of municipal sewerage and some local maintenance staff from Al Sader 2 Municipality.	The significance of this step was the joint problem-solving that identified the knowledge gap and openness from the team members to bring in needed expertise and local repre- sentation.	Provided guidance to coaches that the team members should include those directly concerned by the issues.	Behavioral change Turning point
14	In early April, the DG Sewerage re-assigned focal person but does not brief her on the role.	The DG Sewerage without any instruction and guidance appointed the focal person.	Guidance to the DG on the profile of the focal point and process for appointing a new one.	Milestone Setback
15	In mid-2013, the coach work with the focal point to get her up to speed.	One local coach took the initiative to share the description of roles with the focal point and supported her during team meetings (see next) After this introduction, second focal point worked effectively.	Provided translated profile of focal point in Arabic. Coaches reported problem in weekly call and WBG team worked with them to find solution.	Milestone Turning point
16	In mid-April 2013, the team established minutes and action items at weekly meetings.	This small scale change helped mo- tivate team members to take quicker action.	Brainstormed with coaches on new practices they could test to improve the way of working.	Behavioral change

No	Outcome	Significance	Contribution of World Bank	Type of change
17	In mid April 2013, the DG Sewerage appointed a new deputy team leader to deal with low engagement.	The team leader and some members of the Municipality did not join meetings and this was blocking the team's progress. The success of the team depended on engaging "those who have the problem" in solving it - departing from the traditional top-down approach. However, without an active engagement of the Municipality and team leader this strategy would not work. Appointing a deputy team leader helped everyone save face – the deputy started acting as de-facto team lead while the ini- tial team leader would keep the position. The team leader is the crucial connector and driving force that keeps the team focused in day-to-day work and connects to the authorizers, coach, etc. Without a committed team leader success is unlikely.	Problem surfaced in the weekly calls with the coaches and different solu- tions were proposed (e.g., exchanging team-leader, establishing deputy posi- tion, etc.), drawing from experiences in other countries. Provided support to team members to better understand the strong role that the municipalities (as subordinate agencies) would have to play in the team.	Milestone Setback
18	In early May 2013, one representative from the MoB Media Department joined the team and the Municipality assigned new team members from Cleaning Departments.	This showed that the Municipality now un- derstood the potential value of the initia- tive to citizens and their role in it, and that some missing roles should be provided. Members from municipalities were not previously showing up because of a misun- derstanding in communication and a lack of availability.	Support to the coaches to devise strategies to deal with the low participation of municipalities. Recommended that the Sewerage DG mobilize the DGs of concerned municipalities to assign new team members from the Municipality who were directly concerned to solve the issues.	Behavioral change Turning point
19	In May 2013, at the midpoint review, the team reported on the role of the female members and commented on their contributions, and the relationship of their participation to the progress of the initiative.	At the midpoint, the team reported the role of the female members in the prog- ress. The 18 person team had 6 women, including 2 in coordination roles. The team reported: the women had skills at par, or better, than the many of the men to contribute to the work; the senior staff ac- knowledged their roles, often for the first time; the assignment built the confidence of the women; male colleagues began to accept them as valuable members of the team; the women's contribution to the discussion enriched the decision making to better reflect community needs.	Encouraged inclusion of women in key positions in the team.	Behavioral change
20	In mid-May 2013, the Mayoralty activated its hotline and added two new cell phones to receive citizen complaints.	The activation of the hot line and provi- sion of appropriate equipment means that for the first time citizens will have a voice in the progress of ongoing project to improve water and sewerage services, the quality of services that results, and other factors affecting its future sustainability. Through the involvement of the Media department the Mayoralty saw that better communicating with citizens was crucial for the sustainability of the initiative.	Recommend the involvement of concerned persons in the Municipality in the team structure. It took some time before this was accepted and turned into practice.	Institu- tional change

No	Outcome	Significance	Contribution of World Bank	Type of change
21	In late May 2013, the Municipality distributed awareness folders and citizen questionnaires on sewerage blockages.	This helped the team and Municipal- ity involve citizens in finding a solu- tion.	Mentoring of teams and coaches during this process.	Behavioral change
22	In mid-May 2013, the team re- duced the goal to pilot a solution in only one district, recognizing that the districts had the same issues, and that such a reduced focus would limit budgetary com- mitment without sacrificing the eventual ability to scale up and meet the original goal.	This decision promised to increase the likelihood of success while im- proving cost-effectiveness.	The WBG provided guidance on adjusting the goal to meet specific constraints.	Behavioral change
23	In late April, the more active coach was assigned a lead role to interface with the project team.	At the midpoint review it was identi- fied that one coach was mainly providing needed problem solving support to complete the project.	WBG facilitated open discussion about the effectiveness of the coaching support during a debrief- ing meeting.	Milestone Setback
24	In May 2013, the DG Sewerage launched new a competitive funding process to identify new sewerage cleaning techniques that incorporated several features superior to past practice: specific TORs, disciplined review process of bids, provision for local manufacture of some input, and specifications dictating more modern maintenance and cleaning techniques.	This process departed from the usual practice, and promised to result in more high-quality, responsive, and cost-effective cleaning and mainte- nance services.	WBG mentored team in preliminary field survey to estimate costs of new techniques.	Behavioral change
25	In May 2013, the district launched a new program of maintenance services, with benchmarks to ret- roactively judge quality, and the first contractor began the process of cleaning streets, upon assign- ment due to reported blockage.	From no sewerage maintenance, the municipalities improved service by retaining contractor to remove block- ages reported by citizens, with pilot benchmarks to monitor cost-effec- tiveness, and thus eventual scalability.	WBG had provided continuous guidance and coaching which helped contribute to culmination of this key milestone.	Institution- al change
26	In June 2013, the team collaborates with the neighborhood council on a campaign to collect sewerage users' feedback on the cleaning	Campaign is aligned with local knowledge, needs and priorities, and communication goes two ways. The team met with citizens in the district to record a video film on sewerage users' feedback on the cleaning.	Mentoring of coaches on adjusting the work plan to develop a new way of communicating to deepen the relationship with the neighborhood.	Institu- tional change
27	In May-June 2013, after clean- ing, the Municipality received zero complaints from surveyed citizens.	Previously, 24 blockages and over- flows were accounted in the sewer- age network in District 518 (Al-Sader 2 Municipality). Citizen complaints constitute one key indicator for the success of mainte- nance of sewerage system – receiving no citizen complaints in the commu- nity survey indicates one element of success of the pilot cleaning in one district.	WBG had provided continuous guidance and coaching which helped contribute to the involve- ment of citizens and activation of citizens' hotline and complaint mechanism.	Institu- tional change

No	Outcome	Significance	Contribution of World Bank	Type of change
28	In June 2013, the WB country of- fice used the project to demon- strate that it is possible to achieve results in Iraq	This is a problem country in a problem region - to show it can be done here has implications for other projects in Iraq and in the region	Worked with WB country office, coaches and administration to document and communicate proj- ect achievements.	Milestone
29	In June 2013, the Mayor requests future interventions to improve public service delivery with the Bank use the results-based team learning approaches	A new follow-on WB project to extend improved water and sewer- age services is in the pipeline for Iraq. The Mayor's recognition of the demonstrated success of the results based team learning approach in one district's water and sewerage services increases likelihood that applying the same approach in the new follow-on project and potentially other project will achieve success too. The project introduced a new way of solving difficult development challenges in Iraq's water sector.	WBG helped MoB organize event with high ranking Baghdad officials to showcase the results and the key learning from this experience.	Institu- tional change