



Wasit Water



Service Delivery Improvement Plan (SDIP)



Prepared by

Wasit Water Directorate

In cooperation with

GSP/Taqadum

February 2015



Iraq- Wasit

1-Introduction:

Service Delivery Improvement Plan (SDIP) is a comprehensive strategic work plan developed to address a variety of management issues, in order to improve the delivery of drinking water services in the province of Wasit , and to enable the Directorate to achieve its short, medium and long term goals. The improvement plan SDIP will enable the development of a long-term vision for the management of the Directorate. At the same time, it will ensure that the issues will be, day after day, under control. This plan includes the planned application of resources in order to achieve these goals. It aims at improving services to help Water Directorate in Wasit in addressing issues related to improving their performance and provide better services to citizens. There are 309 water project and water compact of different capacities and sizes in Wasit province.

1. Executive Summary:

The current analysis mechanisms used in reviewing performance indicators of Wasit Water Directorate in providing services, compared with the national standards and comparison based on direct impact on the performance indicators to ensure the quality and service continuity and in response to citizens' complaints, resulted a basic set of elements and also provided immediate and long term solutions that will improve the service provided for citizens as follows:-

Water Service Management: Service delivery management is considered one important and effective elements in the development of community health, which reflects positively on the growth in the health and economic aspects, while the lack of or poor quality of service will negatively affect the public health in the community, and service management stands on the vital elements that must be invested efficiently and effectively to deliver integral service with high quality to the citizens, and the most influential elements are the financial resources (investment and operational budget and the effective usage of the earned revenues from collection or fees) and human resources (starting from Directorate Management, the engineering cadres working in the projects and water compounds), and the available resources of the mechanisms and equipment. The financial resources are considered one of the important elements but they are not the only crucial element in providing the service as the management of resources, through the organized operations, pre-planning and investment of resources in order to achieve the desired impact in reaching the goals of the Directorate and local government as well as the strategic objectives of the national development.

It is worth mentioning that the directorate's integrated financial planning with the rest of the services sectors, as well as integration in the development of the operation budget

in line with the development of the investment budget will bring positive impact and ensure efficient operation and sustainability of vital projects.

Finding a scientific and rational balance between the costs of producing pure water unit compared with wages earned for each unit of consumed water so as to ensure the economic viability and optimal use of resources and the sustainability and operation of projects.

2- Challenges and problems facing Wasit Directorate of Water; and significantly contributing in providing poor quality of services to citizens

Classification by sectors (1- Financial- 2-Human resources -3- Authorities)

➤ **Financial**

➤ The financial allocation comprises two parts, the first one is the monthly grant which was in 2013 ,about 1,759,578,259 Iraqi dinar and in 2014 ,which is amounting at 14,279,235,249 Iraqi dinar ,which is insufficient and it also was reduced due to disapproval of the budget .The second part is collecting service charges ,where large number of citizens do not regularly pay the service charges , these allocations have a direct effect on the following :-

- 1- Maintenance of water treatment plants , water compact units and vehicles.
- 2- Provision of diesel and fuel to the vehicles and generators.
- 3- Salaries of the daily wages operators and daily wages guards
- 4- Maintenance of the networks, provision of spare parts needed for the maintenance works, consequently affecting the quality and quantity of the produced water.

➤ **Infrastructure**

- The directorate of water in Wasit owns 21 central water treatment and 288 water compact unit ,with different capacities , throughout the province, as well as water networks (at the present time there is no accurate statistic on the length of the networks) , which are distributed in the districts and sub-districts , villages and rural and that require more efforts for operation , maintenance and follow up, in addition to the allocation of funds and human resources .

There are three unfinished water treatment plant in Wasit province

S,No	Project name	Planned	Actual
01	Al-Kut central water treatment plant	%100	%39
02	Al-Zubaidiya water treatment plant	%100	%40
03	Al-Hay and Al-Muwafakiya water treatment plant	%100	%93

➤ **Quality control**

- The directorate of water in Wasit has specialized cadre to follow up water quality and quantity, it also has three central laboratories, in Al-Kut, Suwayra and Al-Hay districts, however those laboratories are not up to the required level, due to lack of staff or cite laboratory equipment, which is negatively affect the quantity and quality of produced water.
- Absence of joint common work plan to periodically evaluate the performance between the departments of health and environment and Wasit directorate of water. Absence of citizens surveys to receive feedback on the service and actively response to citizen needs, carried out by human organizations

➤ **Maintenance and operation**

- Poor follow up of the preventive plan; however there is an annual plan developed by the concerned department in the directorate of water, in corporation with head of operation, collection and maintenance centers to maintain water treatment plants, water compact units, networks, vehicles and generators, provide spare parts needed to maintain water treatment plants and networks. If this plan is efficiently applied it will effectively and positively raise the quality and quantity of water, in the contrary non application of this plan will negatively effects the efficiency of the water treatment plants and water compact units.
- Due to expansion of water compacts , which require lay down of extra water networks to the new neighborhoods , noncompliance of citizens and public departments using water networks , without obtaining official approvals , resulting on damages to the pipes and networks , which require more human resources efforts , funds and financial burdens on the department budget
- Lack of awareness of citizens to rationalize water consumption, which considered as a national source.
- Insufficient disinfection and filtration materials due to poor financial allocations ,which is negatively affects the quality and quantity of produced water , note that those materials are supplied by the directorate general of water , whereas the

share from 2013 to 2014 was reduced to more than 50% , the share in 2013 was 75 big cylinder and 100 small cylinder of chlorine, this share was reduced to 40 big cylinder and 55 small cylinder .

- The necessity to develop the operation staff in donated water compact units, for some times landlords insists to appoint one of their families as an operator in these water compact units, in order to donate the land.
- Difficulties in obtaining and acquisition of lands to establish water treatment plants.
- Most of water treatment plants in the province are of great value, such as Al-Kut water compact unit, which was established in 1979, with a capacity of capacity 3000 m³/h, which is currently out of its designed date and require board money for maintenance works. The existence of other out of date water compact units, such as ,Dammok and AL-Shuhada water compact unit ,which was established in 2001 with a capacity of 4400 m³/h , AL-Al-Jihad quarter water compact unit which was establish in ,2003 ,with a capacity of 400 m³./h.

3- Stages of work on the service delivery improvement plan:

Wasit Water Directorate and in cooperation with USAID GSP/Taqadum program completed the gap analysis model developed by Taqadum program to actively contribute to the gap analysis. The importance of gap analysis in the services provided to citizens is that:

1. The use of scientific method in the analysis of all elements that cause the gap in the indicators of the services provided to citizens compared with the value of the standard
2. Determine the priority of the elements influencing the gap in services through the power of their influence.
3. Put the proposed immediate and long-term solutions to address the elements the gap in order to minimize it.
4. The results of the analysis which represent proposed immediate and long-term solutions will be the input for the preparation of relevant service delivery improvement plan in the province.

Wasit Water Directorate has relied on the use of measurements rates that have been collected in the 17 administrative units with a focus on the most vulnerable units in order to develop effective solutions to reduce the gap and improve the services provided to citizens through the immediate and long-term solutions. The successful use of the model will lead to get accurate results that help determining the right and realistic and executable solutions in reducing the gap and improving the service.

Analysis of elements causing the gap in the service performance:

It Included analysis of (14) elements that are associated with one of the service standard listed previously and relating to the administrative, legal, financial, technical aspects where after completing the analysis, weaknesses or deficiencies were identified in each element and the proportion of its influence in the gap, and thus the most influential elements in the events of the gap were chosen. Wasit water directorate identified these elements and developed immediate and long-term solutions that effectively contribute to the reduction of the value of the gap. In the next chapter, all performance indicators will be analyzed in comparison with standard via using elements analysis in detail, and finally to develop solutions for the elements of the most influential elements causing the gap.

5. Gradual approach

The (SDIP) includes the following questions:

1. Where are we now?
2. Where do we want to be?
3. How can we get there?
4. How can we ensure success?

"1-5 "Where are we now?"

To answer this question, it requires a comprehensive and objective review and a review of the current state of performance and practices of water departments in Wasit and should be measured through key performance indicators. The data related to 'Where are we now?' Can be obtained by using the relevant technologies;

First: ((SWOT analysis by diagnosing strengths -weakness, -opportunities-threats.

Second: Key Performance indicators analysis - these two techniques help to understand and summarize the environment and the performance of the Directorate.

The SWOT analysis helps to identify realistic short, medium and long-term goals in order to:

- Correct weaknesses
- Enhance strengths
- Prevent threats

- Seize opportunities
- Achieve vision

SWOT Analysis of Wasitdirectorate of water

Strengths

- 1) High interest of the officials, Ministry and Province in this sector, even by the Ministry or the province, for this sector is closely related to the life and health of citizens. Interest means that required allocations shall be allocated to establish water treatment plants and water compacts and all operation requirements to operate the water treatment plants and water compact units and provision of disinfection and filtration materials.
- 2) The existence Al-Kut central water treatment plant, in addition to five water compact units of different capacities.
- 3) The existence of Al-Kut great water project /10000 m³ /h, which currently in progress.
- 4) The existence of specialized, engineering and technical staff to carryout and follow out works in water treatment plants and water compact units.
- 5) The presence of accumulated expertise in the water sector that can be used to raise the capabilities of the new cadres
- 6) The existence of GIS unit
- 7) The existence of three central laboratories in Al-Kut, Suwayra and Al-Hay districts.

Weakness

- 1- Difficulty in appointing new operational and technical staff, for current staff are insufficient to maintain and operate new water treatment plants and water compact unit.
- 2- Poor allocation, available specialized vehicles and the number of currents (tank trucks, excavators, trucks, and poclains) is insufficient.
- 3- Allocation funds are not distributed according to the need; however they are allocated to establish new water treatment plants and water compact units and not spared to carryout rehabilitation works and establishing new buildings.
- 4- Lack of water meters, there are no water meters in most of the houses, which resulted in poor revenues.
- 5- Lack of t water leak detection systems, to reduce waste of pure water.
- 6- Poor monthly grants to the directorate.
- 7- Aging water treatment plants and water compact units, which require rehabilitation or establishing new ones.

- 8- Huge waste of produced water due to aging water networks or conveyance lines.
- 9- Delay in execution of new projects by contracting companies.
- 10-Poor annual allocations / operational budget specified for maintenance, rehabilitation, fuel, disinfection and filtration materials.
- 11-Poor allocations of development of regions funds specified for replacement of water networks.
- 12-Insufficient fuel to operate the heavy duty generators used to run water treatment plants and water compact units.

Threats

1. Low service charges. Charges shall be gradually based on amount of consumed water.
2. Lack of water meters to accurately determine the amount of consumed water.
3. Outage of electrical power.
4. Existence of irregular and unofficial subscriptions, which randomly consume water without paying the service charges.
5. Engineering and technical staff shall be engaged in training course coping with the scientific and technological development.
6. Absence of private sector.
7. Existence of irregular and unofficial subscriptions, which randomly consume water without paying the service charges. Poor follow up to this issue by the district administrators and local councils.
8. Absence of citizens awareness to rationalize use of drinking water.
9. Reduction of the level of Dijla River.

Opportunities

- 1- The existence of Dijla, Euphrates, AL-Gharraf and Al-Dijaili rivers, the possibility to use them to establish important water projects.
- 2- Relative stable security status
- 3- Availability of workforce.
- 4- Existence of quarries in the province producing different types of raw materials.
- 5- Existence of border outlet with Iran to import required materials and equipment

Second, the performance indicators:

Taqadum project works on providing support for local government to improve the oversight process and monitoring the services delivery down to raise the level of services provided to citizens through the adoption of standard measurable Standard, similar to the rest of the civilized world. Standards-based service delivery stands on (6)

key bases in drinking water service as an essential service which should be accessed both quantitatively and qualitatively and through the following standard and indicators:

1. Service Coverage
2. The amount of water provided per capita
3. Continuity of service
4. Quality of supplied water
5. Dealing with citizens' complaints

Wasit Water Directorate has adopted work according to these standard and indicators were provided at the level of the province, districts and sub-districts. The performance indicators have been reviewed in comparison with the standards standard and diagnose the weaknesses and determine the value of the gap and make recommendations that contribute to improve the performance of service delivery across the province.

➤ **Coverage indicator:**

The reality of the coverage of water networks throughout the 17th administrative units in Wasit province: The coverage rate in the urban is 96.9 % throughout the province and the value of the gap is 3.1 %. As for the rural the coverage rate is 76.4 % and the value of the gap is 23.6 %, the highest deficiency rate is in Al-Muwafakiya sub-district, note that all the centers of the districts and sub-districts are completely covered with the water service, the coverage rate in the center is 100%.

Indicator
The current network proportion compared to the desired network, which covers all areas in the district and sub-district inhabitant by citizens
Deficiency : Zero

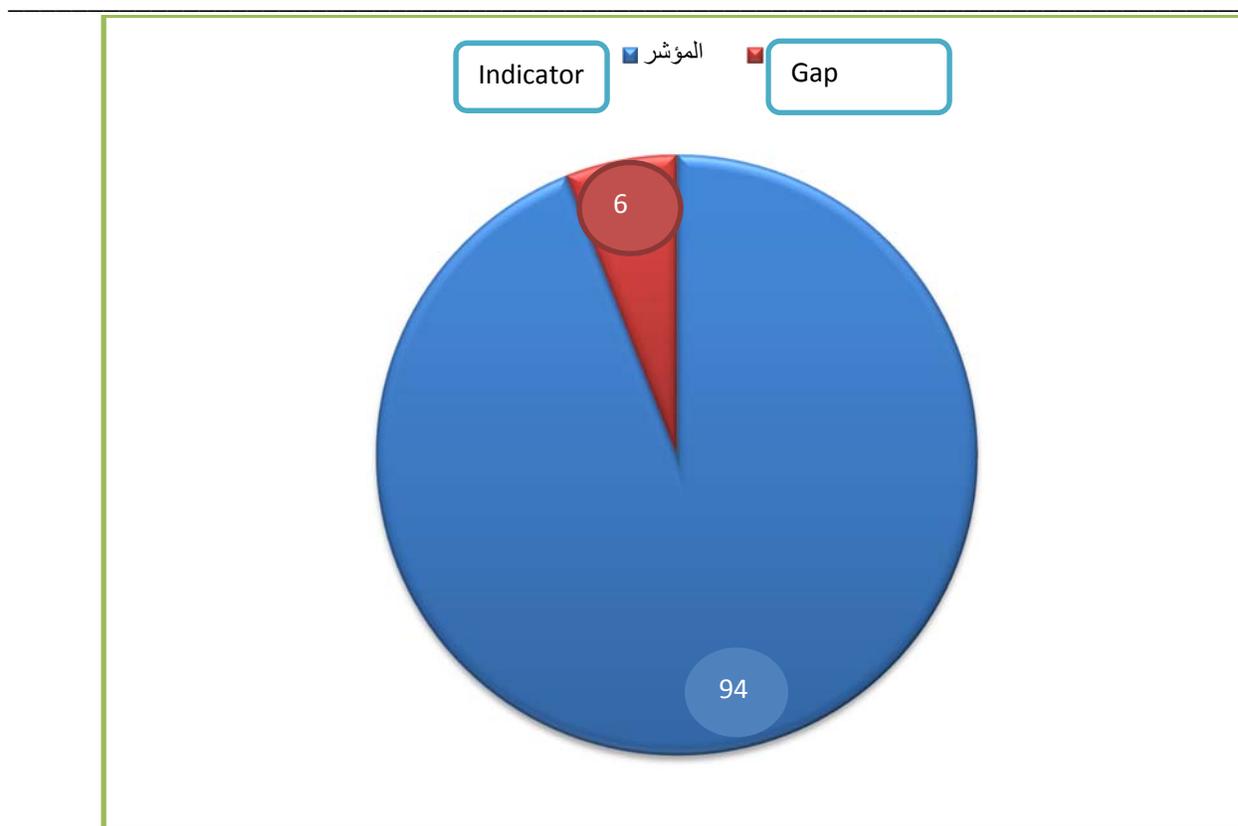
➤ **The mount of supplied water**

The amount of water supplied per capita per day (Liter/ day / person) 450 liters / day in Al-Kut center is 360 liters / day in the districts and sub-districts is 250 liters / day in the countryside:

Standard	Indicator	Gap
Amount of water supplied per capita is 450 liters / day to the center of Al-Kut district	%94	%6

Amount of water supplied per capita is 450 liters / day to the center of Al-Kut district

Services sector – SDIP for drinkable sector



Elements causing gap and their impact:

- 1) **Financial issues:** Depending on the population density for the distribution of allocations standard, and delay of budget approval, poor operational budget, poor revenues used to rehabilitate the water treatment plants, for most of the directorate revenues are used to pay daily wages, emergency maintenance, procurement of necessary materials, reparation of vehicles. The effect of this element on the gap is high.
- 2) **Infrastructure:** Aging water treatment plants and water compact units, which need rehabilitation and persistent maintenance. Incompletion of Al-Kut new water treatment plant, which will contribute in covering the increase of population number. The effect of this element on the gap is high.
- 3) **Technical obstacles:** Continuous outage due to broken pipes, illegal tapping to the networks, lack of citizen awareness, aging networks and improper lay down of pipe lines. The effect of this element on the gap is high.
- 4) **Maintenance and Operation:** Reduce of monthly grant due to reduce of operational budget are resulting in reduction of maintenance and rehabilitation of water treatment plants and provision of spare parts. Aging water treatment plants and water compact units, unauthorized tapping by citizens, irrigation of crops

Services sector – SDIP for drinkable sector

and car washing units to the network by farmers , car washing stations , and areas not served with water resulted in many broken pipes , leakage and damages to the networks , increase the need for maintenance works and waste pure water and waste of money The effect of this element on the gap is high.

S.No	Standard	Arrangement of basic elements (which receives the figure 3 (high impact) that contribute to reducing the value of the gap, according to the priority	Immediate solutions	Long term solutions
2	Amount of water supplied per capita is 450 liters / day to the center of Al-Kut district	Financial issues (Poor operational budget , Investment budget and development of regions funds	1-Increase the directorate revenues by acceptable increase of service charges 2-Draft an ordinance by the PC to impose annual fees on private RO stations ,when renewing their permits	Increase the allocations of the development of regions funds ,investment budget and monthly grant
		Infrastructure	Conduct quick maintenance works to rehabilitate water treatment plants and water compact units. Accelerate the execution of the water compact unit 400m ³ /h ,for the compact units currently in the operation stages by seeking assistant from the GO to overcome the remaining problems ,so that the province another 200m ³ /h . Cooperate with the GO to urge the company executing the water compact unit 400 m ³ /h to exert higher effort to finish this compact unit in Al-Jihad neighborhood	Accelerate implementation of strategic water treatment plants which are currently under progress and install new water compact units funded by the regional development funds. Execute Al-Kut grand water treatment plant

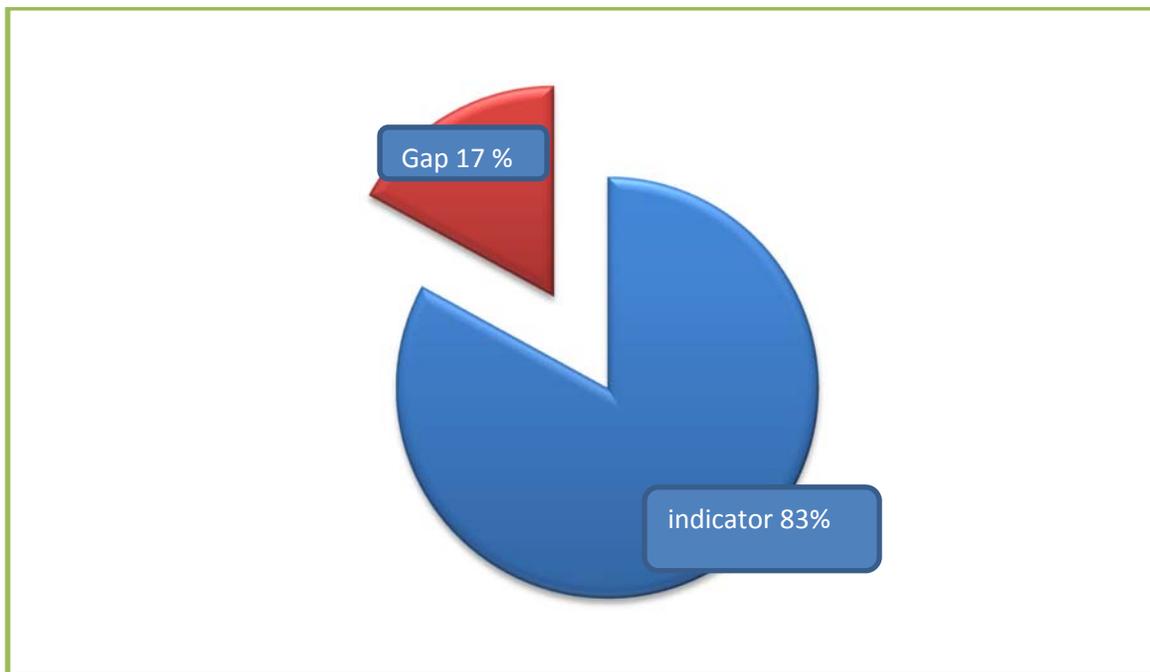
Services sector – SDIP for drinkable sector

		Maintenance and operation	Develop a preventive maintenance and rehabilitation plan for water treatment plants and water compact units according to a practical approach to avoid sudden outage	
		Technical obstacles	Cooperate with the local authorities to lift the illegal use and unauthorized tapping to water networks	Cooperate with Wasit PC to draft an ordinance on slum areas and illegal use and unauthorized tapping to the water networks

➤ **Continuity of service** (for the central projects 20 h/day / for the compacts 20 h /day, as for the projects are 18 h/day. The continuity of the service indicator is 83%. The gap value of 17%.

Standard	Indicator	Gap
Continuity of service 20 /h in Al-Kut district	%83	%17

Continuity of service 20 /h in Al-Kut district



Analysis of influential elements in the gap:

1- Infrastructure: Lack of water reservoir to sustain the continuity of service and lack of regular networks in some areas.

2- Maintenance and operation: Aging water treatment plants and water compact units, depreciation of equipment and filters and pumps, which have negative effect on the continuity of service.

3- Human resources : lack of technicians and operators

4-Coordination: Poor coordination with relevant departments such as, electricity and water resources departments.

5-Equipment : lack of specialized vehicles and trucks to maintain the networks

S.No	Standard	Arrangement of basic elements (which receives the figure 3 (high impact) that contribute to reducing the value of the gap, according to the priority	Immediate solutions	Long term solutions
3	Continuity of service (as for the water compacts 20 h/day and 20h/day for the water treatment plants	Infrastructure	1-Supply generators to new water treatment plants and compact units. 2- Rehabilitate Al-Hikma water reservoir and Al-Hora water reservoir	If Al-Kut grand water treatment plant is completed and networks are laid down in the slum areas ,a large part of the problem will be solved
		Maintenance and operation	Develop rehabilitation and preventive maintenance lists to rehabilitate water compact units and water treatment plants according to the available resources and in operation networks	Supply high quality of pumps, tools and spare part .Most of the outages are due to the pumps

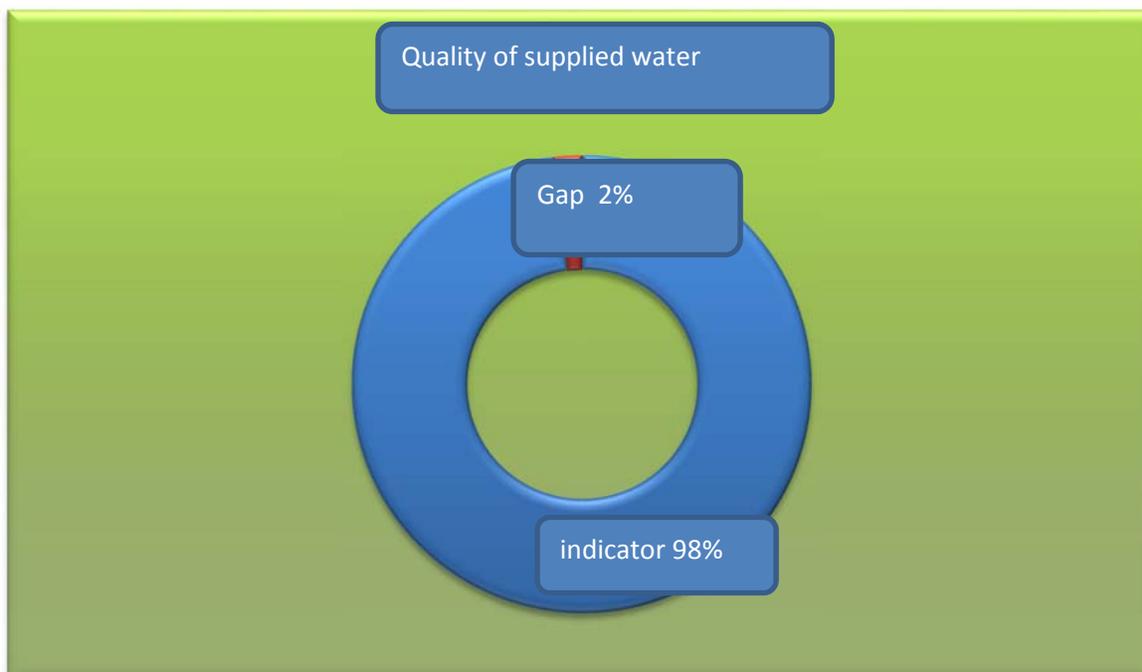
Services sector – SDIP for drinkable sector

		Coordination	Coordinate with the department of water resources and electricity to sustain the continuity of water and connect some of water treatment plants and water compact units to the National emergency grid.	
		Equipment	Increase the provision of disinfection and filtration materials, equipment, spare parts, and fund them from the operational budget.	Purchase specialized vehicles and trucks and equipment to expedite maintenance of networks

➤ **Quality of supplied water**

The indicator of the quality of supplied water throughout Wasit province –Al-Kut district is 98% ,the gap was 2%

Standard and indicator information and calculation of gap between them	Indicator	Gap
Quality of supplied water	%98	%2



Elements causing gap and their impact:

Human resources: Lack of laboratory staff and skilled workers

Infrastructure: lack of field laboratories in the water treatment plants sites "17 water treatment plants and water compact units " The current number of labs are only three labs in (Al-Kut, Suwaira and Al-Hay) to carry out tests for all water treatment plants and water compact units in all seventeen districts and sub-districts, which is resulting in delay of delivering the results.

Maintenance and operation: lack of financial resources and aging water compact units and water treatment plants, and maintenance of chlorine and alum systems.

Misuse of human resources : Misuse of disinfection systems ,conflict among concerned units ,broken pipes ,unauthorized tapping to networks , irrigation of crops ,car washing units and stores ,poor implementation to laws against violators.

Capacity building: The need for training courses to the operators on operation and maintenances of water treatment plants and water compact units.

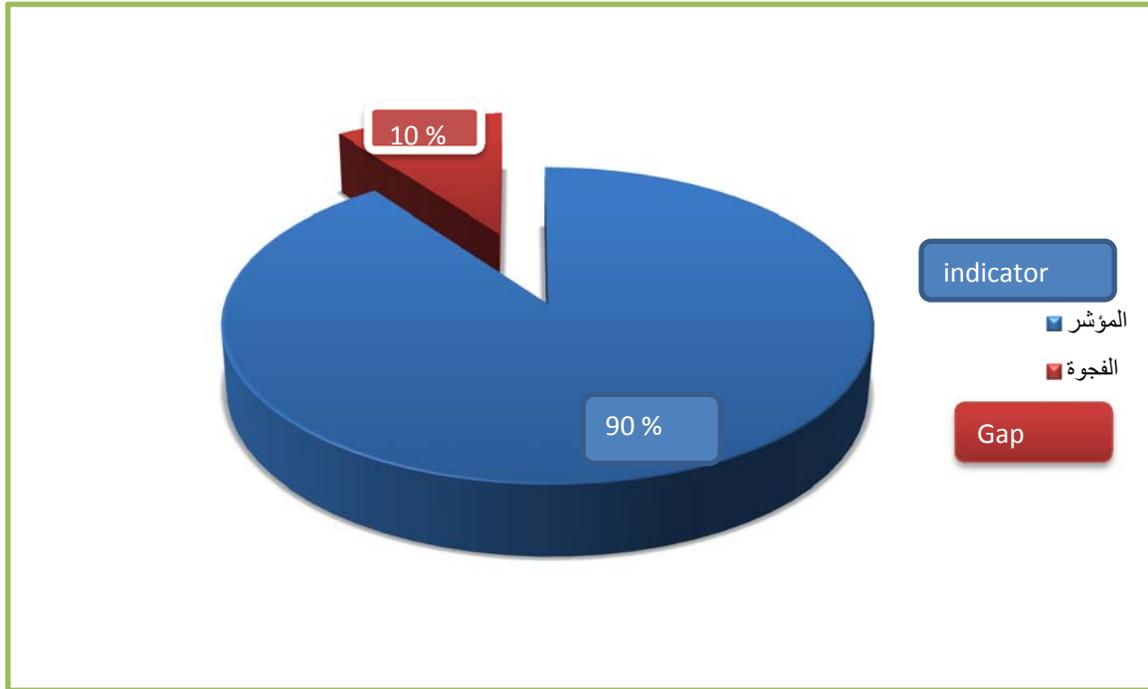
Services sector – SDIP for drinkable sector

S.No	Standard	Arrangement of basic elements (which receives the figure 3 (high impact) that contribute to reducing of the value of the gap, according to the priority	Immediate solutions	Long term solutions
5	Quality of supplied water	Human resources		Appoint specialized lab staff ,specialized in(chemical and biological test)
		Infrastructure	Supply the water treatment plants with disinfection and filtration materials to increase production rate	1-Open central labs in the sites of water treatment plants and compact units. 2-Supply water treatment plants and networks with remote recent reading meters
		Misuse of human resources	Activate trespassing committee .Impose fine against unauthorized tapping to networks. Increase the number of maintenance team to eliminate the number of and leak.	
		Capacity building	Hold training courses on modern use of disinfection and filtration methods	

- **Efficiency of response to citizens' complaints:** The efficiency of response to citizens' complaints is 90% and the value of the gap is 10%

	Indicator	Gap
Efficiency of response to citizens' complaints	%90	%10

➤ Efficiency of response to citizens' complaints



Elements causing gap and their impact:

1-Cordination: Existence of water compact units with various capacities not connected to the National electricity grid, **which** leads to the un-continuity of service, other networks connected to the power stations suffer of instability of voltage, fluctuated electrical current and power cut, lack of generators. There is a need for voltage regulators and coordination with the directorate of electricity to supply stable voltage.

2- Maintenance and operation: Poor response to necessary maintenance, preparation of maintenance lists to rehabilitate these water compact units within the operational budget. As for long term solution there is a need to prepare technical integrated list, so as to rehabilitate these water compact units within the regional development funds

Based on the above explanation, the following elements have the highest impact on the gap are Coordination, maintenance and operation

Services sector – SDIP for drinkable sector

.No	Standard	Arrangement of basic elements (which receives the figure 3 (high impact) that contribute to reducing the value of the gap, according to the priority	Immediate solutions	Long term solutions
	Response to citizens' complaints	Coordination Vertical and horizontal coordination	Increase coordination with the local government to establish Citizens Services Desk, with easy access and hotlines in the centers and districts.	1-Develop and document weekly, monthly and quarterly reports on the number of received, handled and unhandled complaints. 2-Follow up citizen complaints by head of departments, units and divisions. 3) Activate the role of the media unit. Through cooperation with the GO.
		Maintenance and operation		1-Increase the number of maintenance units and maintenance staff. 2- replace aging networks to reduce citizen complaints

"Where we want to be?"

Based on the information that has been collected from the statistics relying on the statistics and plans developed by the directorate, clarify the goals and objectives of Wasit Directorate of water, which are derived from the mission and vision of the directorate.

Vision of Wasit Water Directorate:

Produce and deliver safe drinking water with world-class specifications for all the inhabitants of the province in the urban and rural areas.

Message of Wasit Water Directorate:

Eliminate of the existing deficit in the amount of produced water.

Goals of Wasit water directorate

Served un-served villages with drinkable water.

The directorate of water in Wasit province has developed

County name	Number of population in 2014	Village name	Service proposal
38 Al-Mukhatam	371	Al-Khajiya	Can be served by tank trucks (Sparse houses)
37 Um Halail	449	Sadoon Al-Nida	In need for conveyance line (10) diameter from the city entrance water compact unit
37 Um Halail	703	Fahad Al-Ghaidan	
37 Um Halail	1395	Ghafat Al-Lijam	
37 Um Halail	461	Al-Zirkan and Alabed	
37 Um Halail	605	Rabiaa Mohammed Al-Nimran	
21 Al-Yousifiya	548	Al-Yousifiya 1	The need to install water compact with a capacity of 400 m ³ /h to also serve AL-Yousifiya village 3 ,which is currently served by a water compact unit 14m ³ /h
21 Al-Yousifiya	195	Al-Yousifiya 2	
21 Al-Yousifiya	1440	Al-Yousifiya 4	
21 Al-Yousifiya	816	Al-Yousifiya 5	
45 Um hallana	226	Utba	The need to install water compact with a capacity of 140 m ³ /h
27 Al-Swada-The center	486	Al-Zuwiya (Hussein zrar)	The need to install water compact with a capacity of 50 m ³ /h
17 Du'aibla and Um AL-Soof	150	Al-Sheikh Babdar	The need to install water compact unit with a capacity of 200 m ³ /h, connect the following villages to this water combat unit (Bisrokya number of its population is 202 person , which is served by and Abdulridha Al-bandar water compact unit with a capacity of 50 m ³ /h , and AL-Badriya

Services sector – SDIP for drinkable sector

			number of its population is 606 person ,Al-Tameem ,number of population is 254 person and the immigrants number of its population is 430 person, which is currently served by Al-Tameem water compact unit with a capacity of 50m ³ /h
17 Du'aibla and Um AL-Soof	335	Swadi	Can be served by tank trucks
17 Du'aibla and Um AL-Soof	335	Obaid Al-Gharbawi	The need to install water compact unit with a capacity of 14 m ³ /h,
36 Nahar Dhamen	751	Bani Natoosh and Salim Dhakhil and Zaher Taraf and Abudluhusein Joudha and a power station	Can be served by the conveyance line diameter 10 inch ,proposed to Um Halail village
49 Abu Rummana	305	Abu Rummana(Sparse houses)	Can be served by tank trucks
46 Nisf Al-Dijaili Al-Gharbi	938	Shakir Ghasheem	Will be served by Al-Rafidian water compact unit /50 m ³ /h
34-Al-ALkaya	646	Kalyel Rawdhem	The need to install water compact unit with a capacity of 50 m ³ /h,
44 Al-Safha	265	Wahhab Mohammed Esab	To be served by installing water compact unit with a capacity of 50m ³ /h, with Hasan Al-khayoon village , number of its population 483 person ,which currently served by a water compact unit with a capacity of 14m ³ /h,
44 Al-Safha	431	Al-Meythaq	The need to install water compact unit with a capacity of 50 m ³ /h,
44 Al-Safha	793	Hamdan Ali Al-Tawos	The need to install water compact unit with a capacity of 50 m ³ /h,

Services sector – SDIP for drinkable sector

44 Al-Safha	895	Salman Madhloom	
44 Al-Safha	1140	Salman Madhloom /Slums	
Nisf Al-Hujailat Al-Sharqiya	604	Hussein Al-Dahar and Salman Essa	The need to install water compact unit with a capacity of 50 m ³ /h,
2 Al-Bisrokya	45	Katee Al-Al-Thabbah	To be served by tank trucks
2 Al-Bisrokya	73	Hasson Al-Ajeel	To be served by tank trucks
2 Al-Bisrokya	216	Neamah Najm	Will be served by a water compact unit ,with a capacity of 1 m ³ /h ,operated by solar energy
Mhadijah / Al-Shuwajah river	551	Milat Wadaa	The need to install water compact unit with a capacity of 50 m ³ /h
30 Al-Shuwajah	1422	Al-Baath	Most of the inhabitants are nomads the rest are houses and factories .Can be served by tank truck
46 Al-Sina'eyyat	48	Eilaiwi Kaitan	The need to install water compact unit with a capacity of 50 m ³ /h
46 Al-Sina'eyyat	204	Zwaid Hussein	
46 Al-Sina'eyyat	483	Hussein Zrar	
46 Al-Sina'eyyat	263	Al-Mutasim Briks factory	Can be served by tank truck
46 Al-Sina'eyyat	122	Sparse houses	
	18708		

2-Meeting the deficit in the produced quantity of water in the current operable water treatment plants.

Depending on the Ministry of municipalities and public works, regional development funds and the investment budget, the directorate of water in Wasit province has developed a plan to establish number of water treatment plants and water compact units throughout the centers of the districts and sub-districts to cover the deficit in the quantity of produced water and increase the amount of water provided per capita.

Services sector – SDIP for drinkable sector

Name of district and sub-district	Water treatment plant capacity	Implementation Proposed year
Al-Hay and Al-Bashier	6000	2014
Al-Suwairah	6000	2014
Al-Dabbwni	1000	2014
Sheikh Saad	1000	2014
Al-Hafriya	2000	2015

3-Improvement of produced water can be achieved through

- A-Rehabilitation of water treatment plants and compact units.
- B- Provide integrated labs inside water treatment plants and water compact units.
- C-Rehabilitate aging networks.
- D.Train operational staff on disinfection and filtration issues. .

4-Quality control: Control quality over the input and output of the water production process, control final water product to be consistent with the national standards.

How can we get there?

Wasit Water Directorate and in cooperation with USAID GSP/Taqadam program completed the gap analysis model developed by Taqadam program to actively contribute to the gap analysis. The importance of gap analysis in the services provided to citizens is that:

- 1-The use of scientific method in the analysis of all elements that cause the gap in the indicators of the services provided to citizens compared with the value of the standard.
- 2-Determine the priority of the elements influencing the gap in services through the power of their influence.
- 3-Put the proposed immediate and long-term solutions to address the elements causing the gap in order to minimize it.
- 4-The results of the analysis which represent proposed immediate and long-term solutions will be the input for the preparation of relevant service delivery improvement plan in the province.

Wasit Water Directorate has relied on the use of measurements average that have been collected in the 17 administrative units with a focus on the most vulnerable units in order to develop effective solutions to reduce the gap and improve the services provided to citizens through the immediate and long-term solutions. The successful use of the model will lead to get accurate results that help determine the right and realistic solutions that executable in reducing the gap and improving service.

How can we ensure the success?"

In order to ensure the success of Services Delivery Improvement Plan (SDIP), it is important to continuously control the standard and indicators of achieved progress evaluation to improve the performance and its external factors at all levels, and to provide data and reactions using the appropriate mechanisms in writing reports. This allows the management to determine the actual and potential success and failure in early enough time to facilitate timely adjustments. There should be a unit within the Directorate of Water in Wasit that will be responsible for coordinating the activities and performance evaluation in line with the agreed targets according to a monthly basis. This report will be submitted to the Director General of the Directorate of Water in Al-Diwaniyah, and the preparation of progress and performance quarterly and annual reports. The Director General of the Directorate of Water of Wasit should supervise the implementation of SDIP and report to the Provincial Planning and Development Council PPDC and the governor office as needed. They will provide strategic guidance on the effective implementation of the plan.

The recommendations proposed by Taqadum program for the immediate solutions:

- Increase collection rates for service charges from citizens and make the contribution depends on the amount of consumption taken into account poor families. First group from 1 to 10m³ p/m 2000 Iraqi dinar, Second group from 11 to 20m³ p/m 5000 Iraqi dinar, third group from 21 to 30m³ p/m 20000 Iraqi dinar, the incremental value of consumption will significantly eliminate the misuse of water and rationalize consumption. Fees of water service in Iraq is very low compared to neighboring, European countries and America (Please note that the amounts of collection control must be coupled with the installation of meters \ gauges in homes, stores and governmental departments)
- Redistribute the vehicles and trucks directorate according to the real need, size of the district and number of inhabitants. Provide drivers to the 17th vehicle and truck.
- Conducting an integrated feasibility study with the departments of health, environment and water to make use of ground water in the province to supply remote areas with pure water.
- The need to hold surveys of water services provided to citizens to find out the reality of the situation from the view of the beneficiary and compare the results figures to Wasit Water Directorate figures to find out the shortcomings and correct them.
- Link the largest number water compacts with the National emergency grid.
- Supplying sensors to scan networks and to draw the reality of the coverage networks

- The need to conduct maintenance for projects and compacts to reach the maximum capacity (available) and remove all obstacles that stand in the way of achieving this goal. Almost all projects and compacts are not working at maximum capacity (available). There is a need to find out the reasons and to develop immediate and practical solutions to reduce the scarcity of water.
- The need for preventive maintenance operations according to a specific timetable by water directorates in the districts and sub-districts. These works must be carried out by a specialized staff. The preventive maintenance will increase the actual age of the water projects and compacts, especially there is tarry in the establishment of the strategic projects.
- Expand the financial authorities of the manager Wasit directorate of water for more than of 100 million Iraqi dinars per month, to enable him to perform the maintenance and operation works, fix the fractures, change old pipes and purchase required equipment and devices.
- Ratio of fractures in networks are very high in some areas, and the reason is due aging networks and ill gal use of citizens, which led the citizens to unauthorized connection to the nearby networks through making holes in the pipes and they make incorrect connection without permission of water departments in the province. This subject requires the application of the laws in force and facilitates licensing procedures and increase network coverage in areas that witnesses many cases of unauthorized connections. The fractures in the networks cost the maintenance teams in the province expensive amounts each month and cause a huge waste in the water.
- The water department should put (GPS) in all working vehicles for the optimal use of time and resources.
- There must be collection of water service wages from the citizen to provide funds to support the operating budget of the directorate, which is reduced to a large margin from the previous year. Funds should be available by the ministry in 2015, will being few, limited and will be spent in specific sections, so the water department must find other sources of funding to provide permanent service.
- Connect the largest number of compacts to the National emergency grid that are operating in the province.
- The need to set up a laboratory in each administrative unit, but there is a need to buy a mobile laboratory to ensure that the samples reach the laboratory in the province. There is a need to provide each project and complex with tools for taking samples and conducting tests on the ratio of chlorine and turbidity in the water (KIT). There is a need for training courses for personnel working in compacts and projects

Services sector – SDIP for drinkable sector

No.	Standard	Standard description	Standard unit	Data required for standard measurement	description	Measurement unit
1	People served through direct connection with the network	The total number of houses that have a direct connection to the network of drinking water out of the total number of total houses in the area.	%	A. Total number of houses in the area	Housing units registered in the Real Estate Registry Department that have building licenses	Number
				B. Total number of houses that have direct link with network	Housing units that have direct and systematic subscription with the network	Number
				Indicator calculation= $100 \times \frac{B}{A}$ (calculation is done quarterly)		%
2	The amount of water provided per person per day (450 liters in provincial centers, 360 liters in districts. 250 liters in sub-districts)	Total water provided per person per day, according to the Iraqi Specifications	Liter/day/person	A. Quantity of monthly supplied water	Measuring the daily product amount which is pumped to the network with consideration to measurements on a daily basis and find the total during the month, taking into account the non-calculation of the lost in network, which can be estimated at a minimum of 15%.	Liter/month
				B. Number of people served in the area	Number of people connection to the network within the service area	Person (number)
				C. Number of days monthly	Number of days per specific month	Day/month (number)
				Indicator calculation= $B / \frac{A}{C}$		Liter/day/person
3	Measuring the extent of the amount of water for subscriptions	Total subscription supplied with meter out of the whole total subscriptions	%	A. Total number of houses that are directly connected to the network	Housing units that have subscription in water department	Number
				B. Total number of houses that are supplied	Housing units that are equipped with	Number

Services sector – SDIP for drinkable sector

				with consumption meter	the gauges of consumption and are adopted in calculation of consumer water wage	
				Indicator calculation= $100 \times \frac{B}{A}$		%
4	Service continuity	Continuity of pumped water is measured in average hours of pumping water in the network during one day where the level of water height reaches in housing units, one floor at a minimum	Hour / day	1. Average of pumping hours per day	Daily pumping hours for a period of 7 days is calculated and draw rate as a monthly average	Number
				Indicator calculation= number of hours in 7 days/7 (calculation is done quarterly)		%
5	Quality of water supplied to person	The quality of drinking water provided per person per day, which matches or exceeds the Iraqi standards specifications	%	A. Number of models drawn monthly related to water quality	The actual number of samples of water drawn for examination monthly. Models must be taken from the ends and exits and middle of network project.	Number/m onth
				B. Number of samples matching the specifications monthly	The total number of models that are drawn whose tests result match or exceed the applicable standard specifications water	Number/m onth
				Indicator calculation= $100 \times \frac{B}{A}$		Liter/day/p erson
6	The efficiency of dealing with citizens' complaints	The total number of complaints about water service, which are dealt with within 24	%	A. The total number of all complaints received from citizens during the month	Complaints registered within complaints office in registry and follow up system should be effective	Number/m onth
				B. the total number of complaints that have been	The number of complaints that have been handled	Number/m onth

Services sector – SDIP for drinkable sector

		hours from the moment of receipt of the complaint		directed and handled during the month C. 000000+	correctly and satisfactorily within 24 hours or the next working day from the moment of registration of the complaint	
				Indicator calculation= $100 \times \frac{B}{A}$		%

Annex No 2) Standard adopted by the DG of water in the province