



1<sup>st</sup> Deliverable A report on

**“FROM NET DRAIN TO GAIN”**

Technical Assistance for  
Comprehensive Review of  
Reports and Framing  
Scope of Work for  
Institutional/Restructuring  
Process in Punjab WASAs

*for*

Agence Francaise of Development  
&  
Housing & Urban Development and Public Health  
Engineering Department, Government of Punjab

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## About the Assignment

The study is part of a larger technical assistance (TA) program supported by the Agence Francaise of Development (AFD) on the request of Housing, Urban Development and Public Health Engineering Department (HUD&PHED), Government of Punjab (GoPunjab).

The GoPunjab is cognizant of urban centers importance in development and growth and of the urban services, including water and sanitation, which are essential to maximize the economic potential to Punjab cities. In past, the government has made numerous attempts to improve water and sanitation services and launched few studies to come up with reform options. The government has admitted that Water and Sanitation Agencies (WASAs) of large five cities are not structured in right frame to deliver improved services keeping in view the dynamics of large urban centers which are fast growing. The GoPunjab is keen and committed to convert WASAs “from Net Drain to Net Gain” institutions by addressing all legal, administrative; technical and social root causes.

AFD is supporting GoPunjab in this reform agenda through a phased approach. The support is structured in following phases:

1. Analysis of sector and WASAs and stock taking of prior reform attempts and
2. Preparing a comprehensive Terms of Reference (TORs) for an international firm to design and support GoPunjab in implementation of WASA reforms.

The consultant hired by AFD for this TA adopted an inclusive and comprehensive approach of consultation to develop this report. Meetings were held with the all relevant and important stakeholder of HUD&PHED (Secretary, Additional Secretary and Deputy Secretary), The Urban Unit team and the management and staff of all five WASAs). A structured questionnaire was prepared to record the views of WASA staff wiz-a-wiz comprehensiveness of past reform efforts and their suggestions for restructured WASAs.

AFD, HUD&PGED and WASAs shared reports of numerous studies on WASA reforms which were studied by the consultant and presented in this report. The report (covers tasks listed in #1) provides an overview of national Water Supply and Sanitation (WSS) sector and then focuses on Punjab WSS, state of service delivery and challenges of WASAs. It then captures the gist of past reform exercises and analyze the progress of recommendations.

The author would like to extend thanks and appreciation to AFD and GoPunjab officials who provided valuable details and insight that was helpful in compilation of this report. This report will be followed by another report which will capture the task # 2 of AFD TA to HUD&PHED.

## Acronym

AFD	Agence Francaise of Development
CDA	Capital Development Authority
GoPunjab	Government of Punjab
GoP	Government of Pakistan
HUD&PHED	Housing, Urban Development and Public Health Engineering Department
KW&SB	Karachi Water and Sewerage Board
KP	Khyber Pakhtunkhwa
LGRD&HTPD	Local Government, Rural Development & Housing and Town Planning
LG&CDD	Local Government & Community Development Department
MDGs	Millennium Development Goals
PHED	Public Health Engineering Departments
SDGs	Sustainable Development Goals
TA	Technical Assistance
TMAAs	Tehsil/Town/Taulaqa Municipal Administration;
WASAs	Water and Sanitation Agencies
WSS	Water Supply and Sanitation
WSSP	Water and Sanitation Services Peshawar

## 1 NATIONAL CONTEXT

### 1.1 General

Pakistan is the world's sixth largest country, with some 192.8 million residents.<sup>1</sup> The country has the 26<sup>th</sup> largest Gross Domestic Product (GDP) with Purchasing Power Parity (PPP) of US\$ 884.2 billion and per capita income of US\$ 1,260.<sup>2</sup> Pakistan's economy has been facing severe challenges since 2007-08, with a stagnant rate of economic growth, high inflation particularly in food prices, power shortages and a poor law and order situation. The security situation has also resulted in a diversion of public expenditure from the development sector to security measures. Pakistan is federating units of four provinces — Punjab, Sindh, Khyber Pakhtunkhwa (KP) and Balochistan — and including three regions: Federally Administered Tribal Area (FATA), Azad Jammu and Kashmir (AJK) and Gilgit Baltistan (GB).

Every year, Pakistan adds the equivalent of a New Zealand to its population.<sup>3</sup> Pakistan's urban population is currently estimated at 74 million (40 percent of the total). By 2030, about 50 percent of its population, or roughly 137 million people, will be living in urban areas. Currently, nine cities have populations exceeding 1 million residents and 75 cities have populations between 100,000 and 1 million people. About 40 percent of the population in the larger cities currently lives in *katchiabadis* (slums).

Pakistan is vulnerable to a number of adverse natural events and has experienced a wide range of disasters over the past 40 years, including floods, earthquakes, droughts, cyclones and tsunamis. Exposure and vulnerability to hazards is further exacerbated by a rapid population growth, growing urbanization, environmental degradation and shifting climatic patterns that can result in the occurrence of increasingly severe natural disasters. Over the past decade, damage and losses resulting from natural disasters in Pakistan have exceeded US\$18 billion; as Pakistan's population and asset base increase, so does its economic exposure to natural disasters. Poor people living in slums are at particularly high risk from the impacts of climate change and natural hazards. Resilience and risk reduction is high on the agenda of government and its mainstreaming urban development is slowing creeping in.

### 1.2 Water and Sanitation

Pakistan's water profile has changed drastically from being a water abundant country, to one experiencing water stress. Between 1990 and 2015, per capita water availability declined from 2,172 cubic meters per inhabitant, to 1,306 cubic meters per inhabitant<sup>4</sup>. Pakistan is classified as a "water-stressed" country that is headed towards becoming a "water-scarce" country if action

<sup>1</sup> 2016 World Population Data Sheet – site visited on 27 April 2017- <http://www.unfpa.org/world-population-dashboard>

<sup>2</sup> <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:23452962~menuPK:51508133~pagePK:64141683~piPK:4688102~theSitePK:502184,00.html>

<sup>3</sup> Pakistan vision 2025, Ministry of Planning and Reform Development, Government of Pakistan, [http://www.pc.gov.pk/?page\\_id=73](http://www.pc.gov.pk/?page_id=73)

<sup>4</sup> Development Advocate Pakistan, UNDP, 31 January 2017.

[http://www.pk.undp.org/content/pakistan/en/home/library/hiv\\_aids/development-advocate-pakistan--volume-3--issue-4.html](http://www.pk.undp.org/content/pakistan/en/home/library/hiv_aids/development-advocate-pakistan--volume-3--issue-4.html)

is not taken urgently<sup>5</sup>. The Indus is country's only major river system and, should current trends continue, decreasing snowfall in the Himalaya and Karakorum mountains may progressively limit this supply of fresh surface water. Underground water sources are quickly being depleted due to unsustainably high withdrawals. Pakistan extracts 74.3 percent of its freshwater annually, thereby exerting tremendous pressure on renewable water resources. Irrigation accounts for 91.6 percent of the total water used in the country, followed by environment at 3.3 percent, municipal at 3.6 and industry at 2.5 percent. Hence, water saving and efficient utilization of water in the agriculture sector is crucial, given that this sector demands the highest amount of water. Surface water supplies are increasingly threatened by wastewater pollution because only 50 percent of effluents are collected and only 10 percent of those collected are treated. Groundwater is now being over-exploited in many areas and its quality is deteriorating.

The 1973 Constitution of Pakistan assigns policy, planning, and financing responsibility for the water and sanitation sector to the provinces and service provision to local governments. In practice, this means that operations take place at the level of municipalities, since water supply and sanitation services are local in nature. The 18<sup>th</sup> Constitutional Amendment (April 19, 2010) has further resulted in fiscal, administrative, and functional decentralization of several sectors to the four provinces, which are struggling to shoulder this tremendous responsibility. However, the federal government has a strong role to play in preparing a national framework in consultation with the provinces, facilitating fiscal transfers to the provinces, and coordinating efforts to track progress towards achieving both national and global goals and targets.

## **2 Institutional structure of Water and Sanitation institutions in Four Provinces**

Three type of utilities are responsible for service provision in various parts of Pakistan. In large urban cities, four provincial capitals and four largest cities of Punjab, a city-wide utility is responsible for municipal services, in small and medium size towns Tehsil/Towns/Tauluqa Municipal, Administrations/Municipal Corporations and in rural areas Public Health Engineering Departments (PHED) are the responsible institutions for municipal services.

In eight large cities (five in Punjab, and three provincial capitals of Sindh, KP and Baluchistan provinces), municipal services is a city function. The services are delivered by the Water and Sanitation Agencies (WASAs) in the five large cities of Punjab and one in Baluchistan, by the Karachi Water Supply and Sewerage Board (KW&SB) in Karachi, and by the Water and Sanitation Services Peshawar (WSSP) in Peshawar<sup>6</sup>. In the capital city – Islamabad – Capital Development Authority (CDA) is responsible for planning and delivery of municipal services. A schematic view of provincial and local level institutions responsible for provincial and service delivery functions in four provinces is given in below table.

The utilities operating in the seven large cities of Pakistan (Lahore, Faisalabad, Gujranwala, Multan and Rawalpindi in Punjab province, Karachi in Sindh province and Quetta in Baluchistan

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<sup>5</sup>Ranking the world's most water stressed countries 2040, Water Resource Institute, August 2015, [http://www.wri.org/sites/default/files/uploads/water\\_stress\\_world\\_map\\_large.jpg](http://www.wri.org/sites/default/files/uploads/water_stress_world_map_large.jpg)

<sup>6</sup> WSSP is Pakistan's first city-wide corporate governed and autonomous utility.

province) are operating as city wide agencies. Peshawar (capital of Khyber Pakhtunkhwa province) is the only large city which has as ring fence, autonomous and corporate governed utility. Except Peshawar the other seven utilities are not structured as ring-fenced and autonomous institutions to plan, design, maintain, and recover cost to deliver services without encountering political and administrative interference.

The present structure of cities and urban service delivery agencies suffers from myriad problems such as lack of distinctive mandates and efficient institutional structure, issues related to weak governance, diffused accountability, absence of a performance base contracts and fiscal flow is impacting services delivery and quality.

**Table 1. Mapping of water and sanitation institutions**

Area	Punjab		Sindh		Khyber Pakhtunkhwa		Balochistan	
	Provincial Dept.	Utility	Provincial Dept.	Utility	Provincial Dept.	Utility	Provincial Dept.	Utility
Urban	HUD& PHED	WASAs	LGCD& HTP	KW&SB	LGE&RDD	WSSCs	LG& RDD	WASA
Rural	HUD& PHED	PHED	PHED	PHED	PHED	PHED	PHED	PHED
Town	LG&CDD	TMA	LGCD& HTP	TMA	LGE&RDD	TMA	LG&RDD	TMA

KP=Khyber Pakhtunkhwa; HUD&PHED=Housing, Urban Development and Public Health Engineering Department; WASAs=Water and Sanitation Agency; KW&SB= Karachi Water and Sewerage Board; LGRD&HTPD=Local Government, Rural Development & Housing and Town Planning Department; TMA= Tehsil/Town/Taulaqa Municipal Administration; LG&CDD= Local Government & Community Development Department; PHED= Public Health Engineering Department

“National Sanitation Policy Framework<sup>7</sup>” 2006, “National Drinking Water Policy Framework<sup>8</sup>” 2009, “Framework for Economic Growth<sup>9</sup>” 2011 and “Vision 2025<sup>10</sup>” 2014 are four national level frameworks that emphasize role of water and sanitation, both at provincial and national level, and demonstrate Government of Pakistan (GoP) resolve for improvement this sector in line with international commitments specially Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs).

The Planning Commission’s *Framework for Economic Growth* emphasizes the need for change through the identification of, and advocacy for, reforms. The framework advocates growth

<sup>7</sup> National Sanitation Policy Framework, Ministry of Environment, [http://epd.punjab.gov.pk/system/files/National\\_Sanitation\\_Policy.pdf](http://epd.punjab.gov.pk/system/files/National_Sanitation_Policy.pdf)

<sup>8</sup> National Drinking Water Policy Framework, Ministry of Environment, [http://www.environment.gov.pk/act-rules/D\\_NATIONAL\\_DRINKING\\_WATER\\_POLICY.pdf](http://www.environment.gov.pk/act-rules/D_NATIONAL_DRINKING_WATER_POLICY.pdf)

<sup>9</sup> *Framework for Economic Growth*, Ministry of National Development & Reforms, <http://yesnetworkpakistan.org/wp-content/uploads/2015/10/YES-Featured-in-Pakistan-Framework-for-Economic-Growth-2011.pdf>

<sup>10</sup> Vision 2025, Ministry of National Development & Reforms, <http://pc.gov.pk/web/vision>

through rational infrastructure development, creation of better environmental conditions and addressing the physical, social, land-use, and other aspects of urban management. The focus of the strategy is to concentrate on the “software” of economic growth—issues of economic governance, institutions, incentives, and human resources.

The Planning Commission’s Vision 2025 highlights the imbalance between economic development and social development, and suggests policies for improving the socioeconomic indicators of the country. The turnaround from the current state of affairs in most social development indicators including access to potable water is promised by investing more in human and social development. Access to an adequate supply of water for all (agriculture, industry and domestic users) is one of the absolute priorities of Vision 2025. Realizing Pakistan Vision 2025 requires policies to correct the demand and supply imbalance with a sharp focus on both sides of the equation. Another key determining factor for the growing gap between demand and supply arises from the continuing lack of adequate recognition of the economic value of water. This is reflected in our historical policies, which treated water availability almost exclusively as a supply-side problem, with a near-total neglect of demand side issues and rationalized water usage charges.

There is no city in Pakistan with a 24x7 water supply. This imposes a series of coping costs on consumers who have to invest in alternative arrangements and/or spend time managing their water services; time which could otherwise be used more productively. None of the utilities are collecting full operating expenditures and have 100 percent metered connections. All utilities have working ratios higher than one and thus require subsidies to meet their operating expenses. If sufficient subsidy funds are not available, the operation of these utilities deteriorates as maintenance is deferred, breakdowns remain unattended, and suppliers withhold goods and services in response to slow payments. This poor financial performance results from low technical and commercial efficiency and from tariff structures that do not cover costs or efficiently collected. The high levels of nonrevenue water (NRW) reported by these utilities (estimated to be 30 to 68 percent, depending on the jurisdiction) also reflects low operational efficiency.

## 2.1 Punjab Context

Punjab is Pakistan’s most populous province with almost 102.4<sup>11</sup> M population and about 30 million people currently live in its urban centers. Lahore the provincial capital is home to about 10 M people, four other cities have population in excess of 1 million: Faisalabad (3.5 million), Gujranwala and Rawalpindi (2.5 million each) and Multan (1.9 million). Collectively, about half of the urban population, 16 M, of Punjab is concentrated in these five cities. In addition, three other large cities (Sialkot, Bahawalpur, and Sargodha) are poised to cross the 1 million mark. Among the provinces and regions in the country, Punjab has the highest urban poverty rate, with 32 percent of the urban population below the “basic needs urban poverty line.” This compares to a national average of 25.7–28.3 percent according to World Bank estimates.

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<sup>11</sup> Population of Punjab, 2017, <http://www.pbs.gov.pk/pco-punjab-tables>

Access to safe water in Punjab is 91 percent<sup>12</sup>, with 35 percent urban and 9 percent rural population have access to piped water. Many urban settlers rely on individual groundwater sources, which is shallow but rapidly being depleted because of poor regulation and monitoring. Despite water production capacities often being sufficient to provide a permanent service, piped water is never distributed on a 24/7 basis and thus is at risk of being contaminated each time distribution mains are without supply. Access to flush toilets is – 79 percent – highest among four provinces but because of clogged sewers or non-functioning pumping stations, overflowing and ponding of raw sewage are common. Except for Faisalabad (which practice primary treatment), waste water is disposed of into the environment without proper treatment by all WASAs.

Table 2: **Water and Sanitation Access in WASA Cities**

City	Water %		Flush latrines %
	Household Tap	Other safe sources	
Punjab	18	63	
Lahore	73	7	100
Faisalabad	18	34	99
Multan	19	71	98
Gujranwala	9	73	100
Rawalpindi	47	32	99

In Punjab provision of municipal services is responsibilities of three type of institutions. In large urban cities (Lahore, Faisalabad, Multan, Gujranwala and Rawalpindi) water supply and sanitation provision is mandate of city wide Water and Sanitation Agency, in rural areas the mandate is with Public Health Engineering while in small and medium towns this function is parked with Tehsil Municipals Administration (TMAs). At provincial level WASAs are mapped to Housing, Urban Development and Public Health Engineering Department (HUD&PHED) while TMAs are aligned to Local Government and Community Development Department (LG&CDD). WASA Lahore draws its legal statutes from Lahore Development Authority Act 1975<sup>13</sup> while rest of the four WASAs were established under Punjab Development of Cities Act 1976<sup>14</sup> and all five WASAs are attached Agency of respective City Development Authorities.

By and large all WASAs, as per their mandate, are responsible for “planning, designing and construction of water supply, sewerage & drainage facilities for new works, rehabilitation and augmentation of the existing system, operation and maintenance of water supply, sewerage & drainage system and billing and collection of rates, fees and charges for the services provided to consumers”.

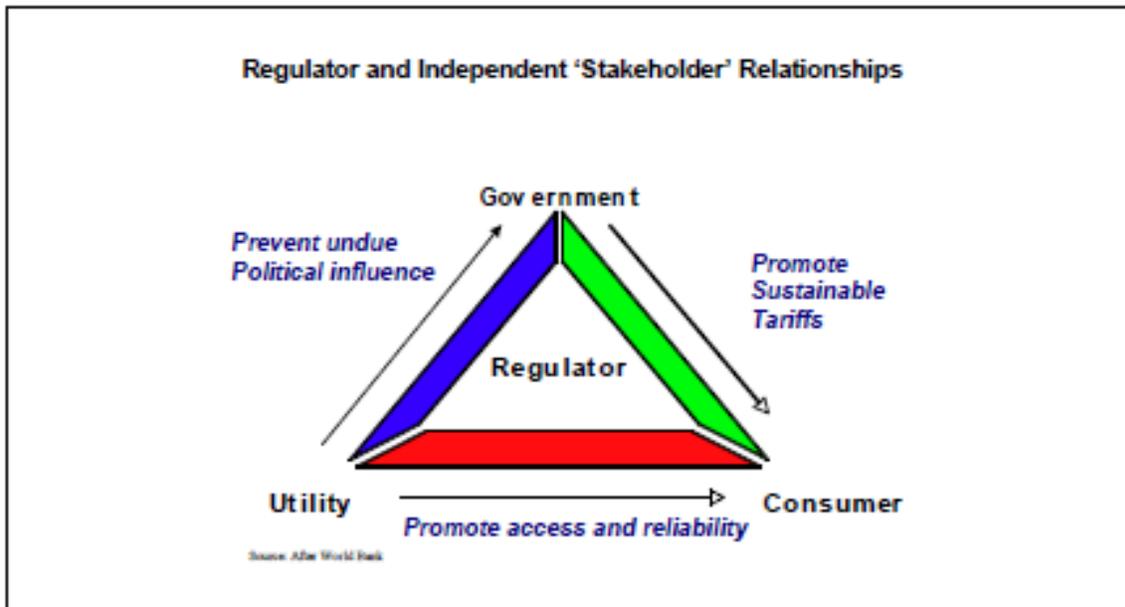
<sup>12</sup> Pakistan Standards and Living Measurement (PSLM) 2014-2015 Survey released in 2016  
[http://www.pbs.gov.pk/sites/default/files/pslm/publications/PSLM\\_2014-15\\_National-Provincial-District\\_report.pdf](http://www.pbs.gov.pk/sites/default/files/pslm/publications/PSLM_2014-15_National-Provincial-District_report.pdf)

<sup>13</sup> Lahore Development Authority (LDA) Act, 1975, [http://www.wasa.punjab.gov.pk/system/files/lda\\_act\\_1975.pdf](http://www.wasa.punjab.gov.pk/system/files/lda_act_1975.pdf)

<sup>14</sup> Punjab Development of Cities Act, 1976, <http://tariq.pap.gov.pk/laws/1444.html>

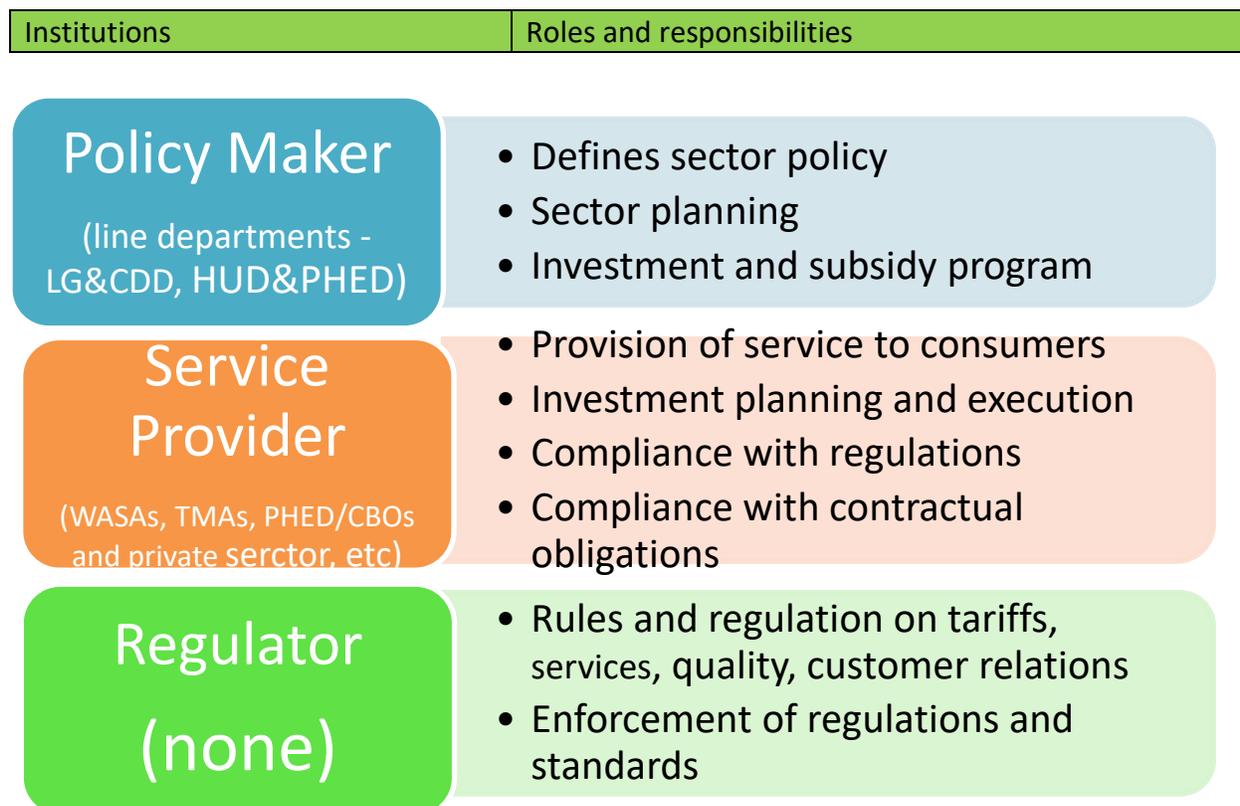
Like other provinces the functional assignment of Water Supply and Sanitation (WSS) in Punjab is also not as per global principle. The global principle of WSS sector is that policy; service delivery and regulation are three key aspects of sector – (fig 1) - and should be assigned to different tiers/institutions with absolutely no conflict of interest.

**Fig: 1**            **WSS triangle of Functional Assignment**



In Punjab, one see conglomeration of functions at policy formulation and service delivery level and there exists no formal sector regulator Fig 2. In the absence of regulator its functions; like tariff setting and enforcement of service standards, are being performed by other functionaries which is a clear conflict of interest. WASA are “autonomous agencies” but essential powers to discharge the functions are not vested with the WASA management and that jeopardizes the concept of autonomy.

**Fig 2 Functional Assignment of WSS in Punjab**



## 2.2 Strategic Direction

In last few years Government of Punjab (GoP) have prepared policy and strategic documents defining the vision and objectives of the government to improve the economic, trade, cultural, infrastructure, social and rule of law in the province. These strategic documents were thoroughly deliberated and had strategic input of international development partners. The section below covers the most relevant and strategic aspects of urban water and sanitation commitments.

### 2.2.1 Punjab Growth Strategy

The Government of Punjab launched the “Punjab Growth Strategy” 2015-2018 in March 2015. It states, “the Provincial Government envisions Punjab as a secure, economically vibrant, industrialized and knowledge-based province, which is prosperous and where every citizen can expect to lead a fulfilling life”. Punjab Growth Strategy aims to overcome the key challenges to realizing this vision. These challenges include: an underutilized manufacturing capacity and stagnant exports; low productivity of physical and human capital; unemployment, under-employment and skills shortages; slow progress on achieving the Millennium Development Goals (MDGs).

The growth strategy has a special focus on urban cities, it highlights the issues and challenges (including poor state of water and sanitation) faced by urban centers and commits reforms and resources for converting Punjab cities into engines of growth. Punjab's urban areas have inadequate infrastructure and urban management capability to meet current needs, let alone an ability to respond to growing economic demand and increasing urbanization. There exists significant under-performance in service delivery and large deficiencies in infrastructure, which affect the livability and conditions of cities and creates an impediment for commercial growth. This reduces the productive potential of cities and require urgent reform action from the government.

Due to inadequate urban planning and management, urban growth has resulted in unplanned urban sprawl and an increase in slum and squatter settlements. There is a cumulative shortage of millions of housing units, mostly in the urban areas, in the absence of a robust housing policy and dearth of investment by the public sector financial institutions.

Punjab's cities have inadequate infrastructure for municipal services both in quality and coverage. An important deficiency in this regard has been the lack of capacity of local governments (including WASAs) to generate sufficient funds through user's charges even for the operation and maintenance of existing networks. For major projects the local governments depend on the assistance of Provincial and Federal governments. Public sector investment in the sector is very low, at 0.25% of the GDP.

### **2.2.2 Punjab's Strategic Focus in Urban Development**

The Government of Punjab's urban strategy is reflected in the Mid-Term Budgetary Framework (MTBF) 2014 as ***developing modern and efficiently managed urban centers to serve as engines of growth for provincial economy.***

The Medium-Term Framework covers District Governments of all large and selected intermediate cities (population ranging 0.24 - 0.54 million), as well as the Water and Sanitation Agencies (WASAs) and Development Authorities (DAs) of the 5 largest cities. For urban development, this framework envisages:

- i. Updating legislation for empowered, responsive, efficient and accountable municipal governments;
- ii. Reviewing and rationalizing all levies, fees, and rating areas;
- iii. Encouraging greater own-source revenue generation with matching Provincial grants;
- iv. Preparing Capital Investment and Asset Management Plans, and linking new schemes to such plans of the city
- v. Undertaking Provincial Master Planning to guide all future investments.

### 2.2.3 Improving Urban Governance via Reforms

In the short term, the Government of Punjab will focus on improving urban governance by strengthening the institutions and management systems of cities. These governance actions include:

- i. Alignment of jurisdictional boundaries of various entities operating in urban areas;
- ii. Improving budget planning process of local governments and entities and introducing Development and Asset Management planning across the urban space;
- iii. Enhancing resource mobilization at the local level and reviewing levies, fees, and rating areas as well as automation of Urban Immovable Property Tax system;
- iv. Strengthening accountability of urban institution and ensuring transparency of information in decision making, by strengthening their capacity for financial management, audits, and transparent disclosure.

**Institutional Alignment:** Whereas the overall vision of city management is the ultimate goal, the Government of Punjab is working on the design of the institutional realignment at the city level.

**Functional Alignment:** To improve urban governance, the Government is focused on removing overlapping functions. Some measures that can achieve this aim are as follows:

- i. Land use planning will be conducted by one agency, preferably Development Authorities
- ii. Road construction will be centralized under one agency
- iii. Separate institutional arrangements for solid waste management and water supply and sanitation will be notified for cities along the lines of the model followed for waste management in large, where dedicated companies have been established.

### 2.2.4 Investment Program for Improving the Livability of Cities

The medium-term objective of the Government is to provide Punjab's cities with basic urban services that make our cities more livable, healthy and productive. The main areas of emphasis of the investment program will be:

- i. **Clean water and adequate sanitation:** Providing clean drinking water and adequate sanitation and sewerage facilities to urban residents is already a priority area of the Punjab government. Investment in this area will have a major benefit of preventing diseases and reducing expenditure in healthcare. This will raise the productivity of our labor force, which will lead to economic growth.
- ii. **Investment in wastewater treatment:** Punjab currently does not have any major facility for wastewater treatment, resulting in major damage to public health environment and

productivity of our cities and downstream agriculture areas. Investment in these facilities will be made on a priority basis.

### **2.3 Punjab Drinking Water Policy**

The Cabinet of Punjab approved Punjab Drinking Water Policy in 2011<sup>15</sup>. The vision of the Government of the Punjab is provision of safe drinking water of an adequate quantity at an affordable cost through equitable, efficient and sustainable services to all citizens by 2020.

The policy specifically focus on poor state of urban water and sanitation both its institutional aspects and dismal state of service delivery. The policy is cognizant of WASAs inability to become an efficient and effective institution. The Government of Punjab commit to launch an institutional reform program which will not only focus on improvement in service delivery but also address allied issues such as rationalization of tariff, improvement in management of organization and introduction of performance monitoring systems so as to ensure that the WASAs are transformed into a progressive; accountable and financially viable institution by the year 2016. The policy also commits that the year 2016, the WASAs would also ensure installation of consumer meters on 100% connections. The Government will adopt measures to promote various proven community participation approaches to ensure community involvement in various aspects of service delivery

The policy also committed to invest in major wastewater treatment facilities in all the WASAs to ensure conservation of underground water aquifers as well as water bodies like rivers & canals. The reduction of non-revenue water (NRW) and leakages which result in contamination of drinking water will also be ensured by the year 2015. The Government of the Punjab will also invest in better water storage facilities in all WASAs as well as rain harvesting mechanisms.

### **2.4 Punjab Municipal Water Act**

Punjab is the first province in Pakistan which started preparation of Municipal Water Act in 2007 which is still in draft form even after ten years. The promulgation of Act by the Punjab Assembly will lead to establishment of an independent regulator for the province. The jurisdiction of regulator will include all urban and rural service providers in the province, regardless of whether they are under public or private control.

Like Municipal Water Act many of the principles and commitments of both “growth strategy” and provincial “drinking water policy” has yet to be translated into action. The commitments on WASAs institutional reform, investment in waste water sector, consumer metering and comprehensive reduction in NRW yet to start.

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<sup>15</sup> Punjab Drinking Water Policy, 2011, <http://www.hudphed.punjab.gov.pk/system/files/1-Punjab%20Drinking%20Water%20Policy%202011.pdf>

### 3 State of Service delivery

Currently, none of the WASAs are providing 24-hour water supply, fully recovering their operational cost, delivering equitable and quality services and proactively engaging with customers. While Government of Punjab is spending billions on WASAs but the true value for money is distant dream. On one hand the deficit of infrastructure and services is fats widening and large investments are needed to expand and maintain the networks while on another WASAs financial woes are compounded by the fact that significant financial inflows are lost each year to NRW, unrealistic low tariffs, piling arrears and lack of a coherent revenue collection system.

Consequently, these WASAs are a big burden on the Government of Punjab as these institutions are constantly drawing large funding for their development and operating shortfalls. (over Rs. 16 billion in the last three years 2013-2016) Annual development program contributing Rs 8 billion and the yearly deficit financing every single year making up the rest (Rs. 8 billion over last three years).

The section below analyzes the challenges WASAs are confronted with and efforts of Government of Punjab, WASAs and international development partners to turn around WASAs into a more commercial, viable and bankable entity.

#### 3.1 Issues & Challenges

##### 3.1.1 Institutional, Governance and accountability Challenges

In large cities of Punjab, the water and sewerage low level services is foremost a governance and institutional challenge than an infrastructure one only. International studies have shown that well run water service providers have the following characteristics:

- Autonomy—financial and managerial—to operate the provider without undue interference on a day-to-day basis and in the long-term interests of the community
- Accountability—to a range of stakeholders to demonstrate that they provide the services and performance expected of them, whether that performance be technical or financial
- Customer orientation—to ensure that the provision of service to customers is the focus of management and staff (Weak service providers, reliant on governments for financing, will often focus their attention on satisfying their government at the expense of the customer.)
- Market orientation—to ensure that the service is provided as efficiently as possible and thus minimizes costs to both customers and government (as a sector financier).

The WASAs of Punjab, as presently structured, falls short against most of these criteria, indicating a need to review the institutional structure and governance of the sector to align it with these characteristics. Lack of autonomy, ad-hoc political interference, hierarchal decision making

process, diffused accountability and multiple reporting lines complicate the situation. This has implication on the management performance that consequently affect the level service delivery.

The City District Governments owns WSASs whereas the Provincial Government is its primary financier. WASAs being an agency of the Developing Authority (DA) has limited autonomy as the Director General of the DA has full control over the WASA and on its Managing Director. Maximising the autonomy of WASAs would mean minimizing the day-to-day influence of provincial government on its business. It also means increasing the accountability of WASA to its key stakeholders. Minimizing day-to-day influence of provincial government will be a challenge so long as the provincial government is a major financial supporter of WASAs.

### **3.1.2 Administrative Challenges**

WASAs are confronted with many administrative challenges the foremost is the influence of unions in WASAs which have the full potential to hostage the system. Many MDs uses special tactics – including budging to the union demands – to control that mafia. Another administrative challenge is that WASAs have to move every case through the office of the Director General (DG) of the DA as the DG is administrative head of the WSAs at the city level. In many cases, it has been observed that the WASAs related matters receive low priority of at DA office especially during the BoD meetings. MD of WASA has limited powers to transfer WASA staff within WASA from one directorate to other as this power is with DG of DA and in many cases also influenced by the WASA union. Some of these administrative challenges have implication on the performance of WASAs.

### **3.1.3 Technical Challenges**

Among many technical challenges, which almost every WASA is facing, high NRW, old and rusted pipes, dysfunctional over-head reservoirs and groundwater abstraction.

About 80 percent of Punjab has fresh groundwater which is under constant threat as is now being over-exploited since last many areas. Three out of five WASAs, Lahore; Multan and Gujranwala have, high reliance on ground water as he only available water source. These three WASAs have over 800 deep tube wells which are excessively mining ground water which not only resulting in higher energy bills but is also threatening the ground water aquifer. In these three cities, there is abundance of shallow groundwater for households to abstract water domestic use. The lack of wastewater collection and treatment adversely affects the quality of drinking supplies as the shallow ground water is being constantly contaminated.

Dilapidated infrastructure especially old and rusted pipes are also having a big toll on WASAs. On one hand these old pipes (having cracks and loose joints) are prone to ingress on wastewater which contaminates water but on other is one of the main reason of high NRW.

The present NRW, although due to low metering no one has accurate figures, in WASA ranges from 30-60 percent and is rising due to aging infrastructure and low maintenance. None of the WASAs have adequate metering on domestic or industrial connections, Lahore leading with only 16%<sup>16</sup> of metered connections This trend has led to vast amounts of NRW which has huge opportunity cost. It is estimated that in 2014-2015 five WASA accumulated a loss of Rs 3 billion<sup>17</sup> on account of NRW.

**Table 3 – WASA NRW losses 2014-15**

Description	Unit	Faisalabad	Gujranwala	Lahore	Multan	Rawalpindi
<b>Annual Production</b>	Million m <sup>3</sup>	51	92	680	36	91
<b>NRW (best estimate)</b>	%SIV (Intermittent)	30	40	40	22	30
<b>NRW</b>	Million m <sup>3</sup>	15	37	272	8	27
<b>Total NRW= 359 Mm<sup>3</sup> / year</b>						
<b>Cost of electricity= 359*7Rs= Rs.2.5 billion/year (US\$2.5 million /year)</b>						

Physical losses of system, poor revenue collection from customers and absence of metering are all contributing to high NRW in WASAs. Nearly all WASAs are charging their customers on plot size rather than on volumetric consumption because on low metering regime.

### 3.1.4 Environmental Challenges

In Punjab none of the cities, including the five large cities, have a waste water treatment (WWT) plant or system, except in Faisalabad that has a limited capacity of treating only 20 percent of the total wastewater generated in the city. There are some individual wastewater treatment plants in some of the industries, mostly the exporting industries. These plants are installed under the international environmental governance by the buyer's.

Direct discharge of raw sewage is not only environmental problem with huge consequences but is also contaminating the ground water. Poor collection and crude dumping of solid waste (which is responsibility of waste management companies in WASA cities) further adds to environmental challenges in the cities.

<sup>16</sup> Punjab Cities Governance Improvement Project: Enhancement of OSR in Five Large Cities of Punjab Situation Analysis and Action Plans. Tanawur Hyder. 2013.

<sup>17</sup> Annual report on Performance Benchmarking initiative and NRW reduction program of WSP, WB in Punjab WASAs.

### 3.1.5 Financial Management

On the operational front, virtually all WASA's are facing a grim fiscal situation. WASA Lahore has been running a multi-billion-rupee annual deficit for the past many years<sup>18</sup>, followed by WASA Rawalpindi, Multan, Faisalabad and Gujranwala that also show deficits. The operating expenditures of WASAs cannot be recovered through operating revenue due to unrealistic low tariff. Incomes from water tariff's and other sources have generally stagnated while recurring costs have gone up due to rapid salary increases, electric bills and other costs. Lahore WASA data shows an exceptionally high 220 % increase in salary budgets and a similar 219 % increase in power bills since 2006. This translates into a 44 % annual increase in expenditure, which the provincial government continues to subsidize on an annual basis. The case is similar for other WASAs as well.

The WASAs tariff are un realistically low and average ranges from Rs 90 – 900/month (US\$ 0.86 – 8.6/month) for smallest category house of 800 sq. ft. to over 10,000 sq. ft. palatial houses. The last revision of (domestic) tariff was done in 2003 Gujranwala, 2004 Multan, 2006 Faisalabad WASA and 2009 Rawalpindi WASA, while inflation, cost of electricity and salary are increasing constantly. WASAs deficit is either met by provincial government or by reducing supply hours and or delaying periodic maintenance.

Furthermore, WASAs have been unable to collect their receivables from customers. Arrears of WASAs range from Rs. 2.9 billion in Lahore to Rs. 600 million in Gujranwala. In addition to the low tariff, huge arrears pit further strain on WASAs financial resources.

Conservancy charges (sewerage tariff) is 1/3<sup>rd</sup> of water tariff but interestingly the expenditures (electricity and establishment cost) occurred on sewerage disposal station is much higher than the expenditures occurred at the water tube well. Gujranwala, Faisalabad and Multan have more than double to four time of sewerage connection than water connections (table 4). Gujranwala, Faisalabad and Multan WASAs are producing 21, 110 and 57 Million Gallon per day (MGD), water respectively, while total sewerage received at disposal stations of these WASAs is 123, 335 and 185 MGD respectively. Technically sewage disposal stations should be receiving 80 - 85 percent of water supplied in the system by WASAs but in these cities the disposal stations are receiving 3 – 6 times what the system input is. Each WASA has more than one disposal station in a city and all are running 24x7 to pump raw sewage to higher level (and finally into natural water bodies) hence the operating expenditure at disposal stations is much higher than at tube wells (which runs 8-16 hrs./day).

The reason for extra volume of sewage at disposal station than water produced is households have private boreholes and they don't rely on WASA water. Since there is no regulation for ground water abstraction ground water mining at house hold level is widespread practice. This makes a business case to raise the sewerage charges to partially off-set the WASAs deficit.

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<sup>18</sup> WASA Lahore shows a PKR 2.7 billion deficit in 2013/14, PKR 2 billion deficit in 2012/13 and PKR 1.8 billion deficit in 2011/12 ; WASA Rawalpindi shows a PKR 220 million and other WASA's also slightly lower or break even scenarios on annual basis.

(Table 4) - **Number of Water and Sewerage Connections in WASAs**

WASA	Water Connections			Sewerage Connections		
	Domestic	Commercial	Industrial	Domestic	Commercial	Industrial
L-WASA	613,970	41,980				
F-WASA	111229	2442	-	247057	20712	1426
M-WASA	64599	3289	70	216880	19872	633
G-WASA	35556	1576	66	83462	13653	1228
R-WASA	110100	13537	5	44698	6600	

One of the key performance indicator to measure the financial performance of utility s its working ratio (operating revenue/operating expenditure). A working ratio of > 1 depicts that operations are running in losses meaning operating expenditures are more than operating revenue. A working ratio of 1 or < 1 is sign of commercially viable utility which is either 100 percent recovering its operating cost or earning more than expenditures.

Table 5 – **Working Ratios of WASAs**

WASA	Working Ratio				2015-2016		
	2010	2011	2012	2017	Expenditure	Revenue	Subsidy
L-WASA	1.85	2.11	2.27	-	-	-	-
F-WASA	1.43	1.74	1.86	2.4	1479.58	616.07	690.19
G-WASA	7.04	4.35	4.75	2.02	442.18	282	200
M-WASA	2.76	2.77	3.44	5.4	1510.881	278.394	313.96
R-WASA	1.48	1.74	1.86	2.7	1034.5	283.39	1986

Unfortunately, none of the WASA is commercially viable and the working ratios are in the rage of 1.4 to 5.4 over a period from 2010-2012 and 2017 meaning that expenditures are up to five times of revenue. The operating short fall is covered by WASAs through subsidy which is non-predictable and ad-hoc hence WASAs have to adjust their level of services to cut on electricity cost.

Electricity and salaries constitutes up to 80 percent of the operating expenditures leaving very minimal amount for maintenance. Deferring of maintenance is widely practice which effect the life of performance of system and it does not perform on its peak capacity.

The table above shows break up of two major expenditures which has trend of increasing every year specially the salaries. In case of electricity WASAS some-time default the payment which they pay in later years with interest/penalty for payment.

Table 6 – **Main Heads of WASA Expenditures**

WASA	2013-14			2014-15			2015-16		
	Electricity	Salaries	Total	Electricity	Salaries	Total	Electricity	Salaries	Total
L- WASA									
F- WASA	362	619	1113	442	634	1216	517	762	1479
G- WASA	192	164	443	184	188	472	209	196	443
M- WASA	267	326	707	326	355	1439	303	456	1510
R- WASA	290	253	669	386	282	719	253	340	679

### **3.1.6 Equitable access**

At present, some 40 percent of the urban population lives in urban slum areas. Although they are WASAs but there is very little effort made by WASAs to address this segment of population. There is no clarity on the institutional, social and administrative aspect of services to urban slums. Tenure; legality of slums and presence of strong informal sector is a constraint that affect how best such services can be provided to slums. Even if WASAs want to connect them but the peculiar nature of constraints requires out of box solutions to achieve the desired results. A social survey by Faisalabad WASA reported that residents of a slums, Shahbaz Nagar, were spending an average of Rs. 1,260 per month (US\$12.6/month) on water through tankers and donkey carts, while WASA-connected houses (of comparable size as of Shahbaz Nagar) were billed a flat rate of Rs. 150 per month (US\$1.5/month). This proves that un-connected poor are paying much more than connected customers of WASA and if efforts are made by WASA they will be more than willing to become potential customers of WASAs.

### **3.1.7 Human Resource and Morale of Staff**

The sector has a wealth of highly trained staff, but their efforts (of productivity and performance) are partly restrained because of institutional structure and lack of conducive environment.

The salary levels are determined by the Provincial Government which also administers all appointments in WASA. Recruitment procedures have inefficient and there has been a usual practise of political appointees which has recently been changed to test and interview by a 3<sup>rd</sup> party for ensuring transparency. Faisalabad – WASA was the 1<sup>st</sup> to hire 11 engineer in 2011 after a ban on employment which lasted for 20 years. The process of hiring is very cumbersome and involve many offices and institutions which has been affecting the process. The Gujranwala – WASA took almost 3 years to hire 22 new diploma and degree engineer. The process was initiated by G-WASA on 16-7-2014 and the file had back and forth to eight different offices in Gujranwala and in Lahore before offer letter was issued by MD on 24 April 2017. Many junior level staff run

their own private businesses (during duty time) as salaries are too low and accountability is weak. There is a shortage of qualified and competent professionals staff in middle, lower management and at high level (table 7). This has resulted in an institution with a low level of capability and low morale which, in turn, makes filling vacant positions with capable staff extremely difficult. This situation is a serious impediment to improving the effectiveness of WASAs. The management of WASAs need to be given greater autonomy in hiring and firing staff and setting conditions of employment.

Table 7– Human Resource Position of WASAs

WASAs	Positions			% vacant position	Vacant position			
	Total	Filled	Vacant		Grade 17	Grade 18	Grade 19	Grade 20
L-WASA								
F-WASA	2689	2265	794	29	45	22	6	
G-WASA	1014	794	278	27	8	5	2	1
M-WASA	1932	1483	449	23	14	7	1	3
R-WASA	1507	1485	22	1.5	12			

There is no emphasis on commercial skills in any of the WASA. There are serious deficits in areas of management, commercial, and technical skills and in areas like O&M, which enjoys a very low priority and low level of recognition as evident from heavy numbers of lower grade junior positions.

Financial structure of WASAs crumbled when WAPDA changed its tariff, in May 2000, for tube wells from Agriculture tariff (Rs 2.6 per unit) to Scrap/industrial tariff (Rs 5.15 per unit, now Rs. 15 per unit). Before May 2000 established WASAs (Lahore, 1975 and Faisalabad 1978) were financially stable and were recovering their operating expenses while new WASAs (Multan 1992, Gujranwala 1997 and Rawalpindi 1998) were infancy stage when they were confronted with high energy bills. Adverse pressure of high tariff on financial profile of WASAs led to deficit budgeting for the first time in the history in FY 2002-2003. In May 2004 Government of Punjab allowed 40 percent increase in WASAs tariff against 100 percent demand. Domino effect of power tariff hike hit WASAs financial profile and deficit are immense.

#### 4 WASA Reform Initiatives

Since early 2000 Government of Punjab has seriously attempted to improve ever deteriorating performance of WASAs. Some of these studies and reform initiatives were either home grown and in some Government of Punjab partnered with international development agencies to learn from their global experience. Lahore WASA has remained the most desired target of Government of Punjab when it comes to reform as it is the oldest and largest WASA. In last ten years, almost eight major studies and projects were launched on WASAs reform majority funded by WB and led by The Urban Unit on behalf of Government of Punjab.

Table 8 **Mapping of WASAs institutional Reforms**

Initiative name	Year	Focus WASA	Donor	Government of Punjab lead institution
Proposal for a Water and Sanitation Concession	2005	Lahore WASA	IFC	Planning & Development Board
Punjab Urban Water Supply and Sanitation Reform Study	2006	Punjab WASAs (except Lahore) and four other cities	WB	Urban Unit
Identification Study for Provision of Water Supply and Sewerage Services in Lahore City	2007	Lahore WASA	French	L-WASA
Reform of the Gujranwala Water and Sanitation Agency	2008-09	Gujranwala WASA	WB	Urban Unit
Preparatory Study for Lahore Water Supply, Sewerage and Drainage Improvement Project	2009	Lahore WASA	JICA	L-WASA
Institutional Reform of Lahore WASA	2012	Lahore WASA	Government of Punjab home grown initiative	Urban Unit
Technical Advisory Services (TAP) Institutional Reform in WASAs	2013	Faisalabad WASA	WB	Urban Unit
Advisory Services for Organizational Improvement	2016	Faisalabad and Gujranwala	JICA	F and G WASA

#### **4.1 Proposal for a Water and Sanitation Concession**

The major objective of the study was to assess the possibility of Private Sector Participation (PSP) option in L-WASA. The study concluded that immediate long term concession may not be possible. However, it proposed that PSP might be available, if the Government of Punjab spend US\$ 100 - 300 M over the next six years (to improve WASA infrastructure and retire the bad debt to make it a commercially viable entity) and guarantees tariff revisions, to the successful concessioner, up-to 100 percent increase.

This study was financed by International Finance Commission (IFC) of the World Bank. The study analyzed the structure of Lahore WASA and proposed reform options. To improve the operational efficiency of WASA it proposed to rationalize tariff, immediate domestic and bulk metering, establishment of customer care centers, introduction of data management and GIS system, media campaigns to sensitize citizens and regularization of illegal connections. On the policy side the study recommended formulation of regulatory & institutional framework (including delinking of L-WASA from Lahore Development Authority) and urgent legislation for water resources ownership. It also proposed improving the financial viability of L-WASA through better operating ratio, creation of a sink fund for CAPEX and initiating performance contracts for management of L-WASA.

#### **4.2 Punjab Urban Water Supply and Sanitation Reform Study**

M/S Fitchner carried out this study in four WASAs (except Lahore where IFC was already engaged on reform study) and four major cities (Bahawalpur, Dera Ghazi Khan, Sargodha and Sialkot). The objective of the study was to propose the options to improve the provision of water supply and sewerage services by focusing on institutional, governance and investment needs.

The study recommended to “corporatize all WASAs” to ensure improved service delivery. It also suggested to Government of Punjab to set up service standards to satisfy customers, support utilities in developing business plans. On financial management side the study concluded that WASAs must improve their billing and collection efficiency coupled with raising of the tariff. It also proposed legislation on ground water abstraction.

#### **4.3 Identification Study for Provision of Water Supply and Sewerage Services in Lahore City**

The focus of the study was on sewerage collection & disposal, Un-accounted for water (UFW) and metering, O&M, equipment and human resources development in L-WASA.

M/s Seureca/Veolia conducted the study with French financial assistance. It carried out an audit of the existing sewerage system and came up with technical recommendations for improvement of network and prepared a detailed investment plan. The study implemented a pilot to reduce UFW (NRW) in Johar Town area on 1500 connections. It included on job training of L-WASA staff

in detecting leaks and repairing leaks. It also prepared a UFW reduction strategy together with 8-year detailed action and investment plan, of Rs 5 B. A detailed audit of WASA's operation & maintenance procedures and equipment utilization was carried out.

#### **4.4 Reform of the Gujranwala Water and Sanitation Agency**

This WB funded study carried out by individual consultants, focused on institutional, governance and legal aspects to reform Gujranwala WASA.

The study after reviewing relevant documents and consultations with stakeholders finally suggested to de-Link G-WASA from Gujranwala Development Authority and creation of Gujranwala Water and Sanitation Authority. The international consultants strongly recommended to establish a municipal regulator to control ground water abstraction, tariff regulation and performance audit of (Public and private) service providers. In order to improve financial management, it recommended to establish a "Sustainable Development Fund" to meet the shortfall of new G-WAS Authority in the initial years. The legal consultant gave detailed legal recommendations for amendments of PDCA – 1976. Interestingly it also recommended that new G-WASA to take over solid waste management function under the integration and economy of scale concept. It gave a detailed implementation plan with activity timelines from 2009-2012 and prepared detailed job description of management of new G-WASA.

#### **4.5 Preparatory Study for Lahore Water Supply, Sewerage and Drainage Improvement Project**

This JICA funded study in L-WASA was launched to prepare institutional reform and service delivery improvement plan with allied details on legal, technical, human resource and infrastructure investment.

The project recommended development of adequate policy and regulatory environment for institutional reform. It emphasized that without accurate data preparation of definitive vision and strategies would be a futile effort. It also strongly recommended reduction of UFW/NRW. It carried out a detailed training need assessment and proposed institutional set up for imparting training to L-WASA staff on regular basis. The other areas on which it focused were improvement in customer services and legal steps for groundwater monitoring and regulation.

#### **4.6 Institutional Reform of Lahore WASA**

This was home grown initiative was led by Government of Punjab. A select group of national and provincial legislators supported by Government of Punjab officials had in-depth consultation with technical support of the Urban Unit and came up with following recommendations.

It proposed technical, financial & human resource autonomy of L-WASA by converting it into a state-owned company under Companies Ordinance-1984. It recommended adequate tariff revision with the immediate increase of 30% tariff and immediate start of metering on all

connections. To improve the quality of human resource it recommended to induct professional staff from market on competitive salary. The group also worked on the operating short fall of L-WASA and suggested a targeted subsidy program. To implement its recommendations, the committee suggested the Government of Punjab to reach out to WB for technical and financial assistance. 2013, after general election, was set as target date for implementation of reform project.

#### **4.7 Technical Advisory Services (TAP) Institutional Reform in WASAs**

In 2013, a team of Urban Unit and WB staff worked with Planning & Development on F-WASA reform program.

The team proposed to de-notify WASA as Agency of Development Authority and establish as an Authority with a professional Board and a provincial oversight committee of Government of Punjab. It prepared a detailed institutional reform and investment program with target service delivery improvement for net five years. It also recommended to promulgate Municipal Water Act 2014.

#### **4.8 Advisory Services for Organizational Improvement**

This JICA advisory services targeted organizational improvement in all five WASAs. Lahore, Faisalabad and Gujranwala work is almost completed while in remaining two WASAs it is in progress. For Faisalabad, the advisory services have following recommendations:

- Establishment of a roadmap and operational guidelines for tariff revision;
- Drafting of customer charter;
- Formulation of water, sewerage and drainage regulation;
- Drinking water services improvement plan;
- Sewerage and drainage services improvement plan;
- Options for financial sustainability;
- Human resource development plan; and
- Strategy for improving customer relationship

This advisory service adopted a different approach than some of the above studies as most of the outputs are developed through a long-term partnership between JICA and the recipient WASA. In many cases the actual work of situation analysis and options for improvement is carried out by WASA staff under the supervision of Japanese expert. This approach is also building the capacity of WASA staff through on job training.

#### **4.9 Improvement through PCGIP**

A WB funded “Punjab Cities Governance Improvement Project PCGIP” of US 150 M loan has successfully introduced some organizational and planning level improvements in WASA

functions. Government of Punjab and WASAs have introduced some disciplines in administrative; financial and planning side to improve WASAs performance. The details of some of the outputs/achievement are below:

- Alignment of boundaries of all city service delivery institutions including WASAs;
- Integrated city finance system;
- Three-Year Integrated Rolling plans for Development and Asset Management (IDAMP);
- Improvements in Own Source Revenue (OSR); and
- Public disclosure and Access to Information mechanism implemented.

## **5 Brief Analysis of Reform Recommendation**

All the above studies/project clearly recommended that the present structure of WASAs is inefficient and main stumbling block in improved service delivery. One very strong and consistent recommendations which almost every initiative came up with is de-link WASAs from authority and establish them as a more autonomous and independent institutions. Except one all studies are emphasizing to establish WASA as “authority” while one is recommending a corporate structure “a not for profit GoPunjab company” as autonomous entity under 1984 companies ordinance.

The other common recommendations of all studies are:

1. Raising/rationalization of tariff;
2. Establishment of a regulator for tariff setting and ground water management;
3. Immediate installation of meters on all domestic connections;
4. Improving human resource quality through competitive and market based hiring and institutionalized training program;
5. Implementation of NRW reduction programs;
6. Improvement in billing and collection; and
7. Developing Long term business plans.

Unfortunately, except for few none of the recommendation has been implemented in letter and spirit. Having said these reform initiatives prime the ground for some improvement in administrative and institutional side of WASAs.

- A state of the art training and human development academy is established in Lahore to train not only Punjab but entire Pakistan water and sanitation experts;
- Lahore WASA has established a dedicated NRW wing;
- Customer care centers have been established in all WASAs;
- A national network of Pakistan urban utilities (Pakistan Water Operators Network P-WON) was established with support of Government of Punjab and donors in 2011 which is having a secretariat in Lahore and effectively contributing in learning and knowledge agenda of large urban utilities;

- Significant improvement has been made in revenue collection area;
- Lahore and Faisalabad WASA have developed detailed business plans;
- Punjab became the 1<sup>st</sup> province to draft legislation on sector regulation in 2007 (which is yet to be enacted);

But the most important and crucial recommendation of all studies i.e. “De-linking of WASAs from DA” and re-establishing it as an Authority is still long way from reality. Nearly all studies have proposed this recommendation but none has given detailed roadmap of this major institutional and administrative reform associated with details of benefits, risks, action plan and mitigation plan.

The most recent and comprehensive step towards WASA reform is home grown initiatives which started on the directive of Chief Minister of Punjab in May 2016. The initiative is led by Chairman Planning & Development Board and has taken a very pragmatic and practical view of the situation. It has jot down certain key actions to trigger reform and has come up with timelines. “Annex A” contain the minutes of meeting held on July 1, 2016 which can be taken as basis for moving forward by HUD&PHED and AFD.

Since the main essence of this report is institutional reform a concluding effort is made in blow section to link the deteriorating performance of WASA with root cause i.e. WASAs structure.

- 5.1.1 Root causes for the financial troubles and lack of service delivery are common for the WASAs. Almost every study has concluded that WASAs are poorly structured under the Development Authorities (DA) that do not have the incentives, expertise and skills to handle WASAs affairs. Moreover, WASAs lack of effective boards, weak internal organizations having no dedicated marketing, services or Human Resource departments leading to lack of accountability, hindrance in reaching out to consumers, rightsizing the workforce and collecting arrears. The lack of integrated master plan for guidance and business plans for implementation contributes to the poor financial position and service delivery of WASAs. Countless improvement plans have been presented, both externally and internally, but without focused targets and accountability specifically targeting service delivery, turning around of WASAs remains a dream.
- 5.1.2 The studies also concluded that WASAs institutions lack accountability mostly because of unclear mandate of the key functions of policy formulation and ownership of assets. This is further aggravated by weak economic setup, poor financial resources and inadequate or non-enforced environmental regulations.

- 5.1.3 While no one model of improved governance exists, there is a need to refocus attention on the institutional and governance aspects of WASAs which were established through a legislation of 1975 and 1976 when population of Lahore was only 1.8 M which is now over 10 Million but the institutional arrangements yet to be adjusted to cope with population which has increased by five-fold now since 1975.
- 5.1.4 To support the institutional reform agenda of WASAs, it will be important to strengthen the policy direction and oversight of the sector to guide it toward a better future. The role of WASAs parent department HUD&PHED has remained little passive in all the above reform initiatives. One reason for low engagement of HUD&PHED is its own weak capacity to design, supervise, and implement reform agenda. A weak parent department may not be able to hold WASAs accountable for their deficient performance until the department elevate its own capacity. Constitutionally it is the responsibility of the parent provincial department to lead establishment of a robust institutional reform agenda, oversight mechanism of performance of its subsidiaries and implementation of policy principles.
- 5.1.5 It is well accepted that reform in the sector is necessary and will require a firm commitment and will on the part of government, with a clear departure from current ad-hoc practices. Implementing reform will likely to be challenged by opposing forces that are the legacy of many decades of poor service. Such opposition must be identified and possibly given a role in the reform process. Government and sector experts know well what is needed to improve sector performance but implementation remains a challenge in the face of lack of political will and insufficient financial resources. Implementation of reforms requires long-term, strong, and sustained political support and a priority focus on operation and maintenance and new investments.
- 5.1.6 To improve levels of service, managers must have autonomy to manage for operational outcomes. Reform should make interference in operational decisions by elected officials more difficult. At the same time, new governance arrangements need to provide mechanisms through which the legitimate interests of elected representatives are channelled and considered. Such governance arrangements might resemble the board of directors of a corporation. A regulator, as mentioned above, would also help as both Provincial and City District Governments could make submissions to the regulator.
- 5.1.7 The Government of Punjab should make a commitment that the reformed will be designed to have operational and decision making autonomy and that it will seek to achieve financial autonomy in the shortest reasonable period. Consideration of the key issues and challenges and reference to reform practices in other countries could provide a guideline to localize best practices in the context of Punjab WASA.

## MINUTES OF THE MEETING

### Consultative Session on Revamping/ Restructuring of Water & Sanitation Agencies in Punjab

**Day & Date:** Friday, 01-July-2016

**Time:** 10:15 – 12:45

**Location:** Planning & Development Department – Auditorium

Chair : Chairman P&D Board & Minister Housing

#### **Session - Details**

Following were the details of the session:

Session starts with the recitation of the Holy Quran and with the acknowledgement of the participants’ participation by Member PPP P&D Board. After the explanation of the activities going to be performed in the session the member PPP explained the objectives as

1. To deliverable on reforming WASAs in Punjab
2. To learn about the international best practices including Bench Marking and sustainable models of private sector participation in service delivery
3. Initiative public private partnership dialogue

After articulating the contour of the today session, Member PPP invited Chairman P&D for the session’s opening remarks.

- In ***opening remarks***, Chairman P&D make the following points:
  - ✓ Difficulties in revamping WASAs due to complex organizational and legal structure and is not an easy job.
  - ✓ WASA cannot reform itself and its is an outsider job
  - ✓ Recognition of the fact that WASA not meeting the Level of Service despite of its potential
  - ✓ Need to focus on analyzing and managing the existing system, resources and revenue models
  - ✓ One should focus on the immediate gains and what is doable in next two years as short term followed by Medium terms and long term agenda
  - ✓ Partnership with private sector for management of various services of WASAs due to public sector resource limitations while considering the market capacity and what can be outsourced as well

- ✓ The reforming of WASAs should lead to tangible targets benefiting the service delivery and citizens who are the main beneficiary of the improvement in the services
  - ✓ We need to look at what we can do with the existing resources and what is required to be deployed to achieve the targets
  - ✓ WASA needs a management structure with an enabling model and integrated with the feedback of consumers
  - ✓ The participation of private sector shall be considered for maintenance, operations, management and WASAs to keep the core functions only including regulatory and oversight by the Government. WASA to outsource the function they are doing
  - ✓ Significance of coming up with the concrete recommendations and action plan as a result of this session.
- After the opening remarks, first presentation of the session was presented by Secretary HUD&PHED on ***“Functioning and challenges of WASAs “*** (Annex A) by focusing on the following points:
    - ✓ Functions of WASAs such as planning and development of projects (replacements + extensions), operation and maintenance of facilities and billing and collections
    - ✓ Challenges being faced by the WASAs such as low level of service delivery, complex structure of decision making, human resource deficiency and low financial sustainability
    - ✓ On the basis of various studies conducted by the international organizations such as IFC, JICA, WSP – Urban Unit and World bank, the recommendations evolved were the institutional reforms such as wasa as corporate entity with independent governance, metering practices, tariff rationalization and master planning, creation of sinking fund for capital works & meters procurement, overhead reservoirs, tube wells and sewerage facilities and de-notification of WASA as a agency of Development authority
    - ✓ At the end of the presentation, above mentioned recommendations were endorsed by Secretary HUD&PHED as a way forward .
  - Secondly presentation was given on ***“ Private sector perspective on potential solutions of Water and Sanitation sector ”*** By Barrister Mujtaba , Ex Chairman Punjab Saaf Panni Company by pointing out the following ( Annex B):
    - ✓ Creating space for the private sector by resolving the ambiguities and aligning the differences

- ✓ Creating public value with the private Sector
- ✓ Reconsideration of the structure of WASAs before entering into Public Private Partnership
- ✓ Fairness, transparency, clarity, effective governance structure, partnership in risks & profits and Return on investment are the factors to which Private sector is looking for
- Last presentation was given by Urban Unit on “ **International Best Practices in Water and Sanitation Sector & Reform Model for WASAs in Punjab ( Annex C) ”** with the following points:

Institutional aspects and Performance of WASAs needs significant improvement as citizens living outside WASA area are paying high price for poor water and we are subsidizing WASA, using public funds collected through indirect taxes (GST), contributed by those who are not even served by WASA

- ✓ Focused on PWD model & NOT as a Service Delivery Entity
- ✓ Significant vacancies in WASA are vacant and there is no succession plan in WASAs especially in WASA Lahore where approx. 100 technical and senior staff will be retiring by 2020 out of 256 .
- ✓ As a result of independent energy audit conducted under PCGIP, WASAs with an investment of Rs 1640 Million Rs with a payback period 1.8 years can save Rs 890 million per annum
- ✓ The Municipal Water Act MWA (Draft) will cover the legislative gap in the functioning of WASAs and establish regulatory regime through Municipal Water Commission through regulating service delivery and water quality regime in WASAs areas/Urban Area
- ✓ Assignment and regulation of ground water and surface water in urban areas
- ✓ International Public sector in Malaysia, South Africa , Uganda, Australia also support the proposed corporatization as a public sector entity
- ✓ All WASAs have agreed to transform WASA as an independent Authority as a essential service
- ✓ De-notify WASA as Agency of DA
- ✓ Create Authority in each City - Punjab Development of Cities Act (PDCA) 1976
- ✓ Municipal Water Act
- ✓ Oversight Committee of Govt of Punjab
- ✓ Performance based Ops Funding & Investment based on Integrated Development Asset Management Plan (IDAMP)
- ✓ Investment for Improve Coverage and Service Delivery
- ✓ Appointment of professional with Performance Contracts
- ✓ International Advisory Support & Utility TA Support

- After presentations, following are the highlights of moderated discussion on revamping/ restructuring of proposals and potential structures :
  - ✓ Representative of UET pointed out that it's a time for the actions for WASA Reforms as we are discussing the problems and solutions of WASA since 2006.
  - ✓ JICA's representative emphasized the importance of metering practices, independent accounting system, operations and maintenance of WASAs facilities and an independent decision making structure to improve service delivery and attract private sector investment .
  - ✓ Banking Sector representative also shows interest for investment in the properly planned and feasible projects of WASAs after the finalization of regulatory regime as well as the structure of Public Private Partnership setup.
  - ✓ Retired MD – WASA Multan criticizes the model of Public Private Partnership by stressing that WASA has the potential of adequately managing its resources and system on its own
- Chairman P&D while making the closing notes, make out the following concluding guiding principle for reforming WASAs :
  - ✓ WASAs' performance can be improved up to 5 to 7% by just showing the commitment to work by MD.
  - ✓ The institutional home for reforming the WASAs is important as WASA cannot reform itself and it should be HUD&PHED. WASA Management is busy in day to day operations so cannot reform itself
  - ✓ A WASA Reform Unit is to be established at HUD&PHED with 3 to 5 professionals headed by a senior professional reporting to Secretary HUD&PHED. This unit looking at WASA every day and reforms
  - ✓ Management Firm to be hired for supporting reforms and WASAs
  - ✓ P&D will provide the resources to HUD&PHED for reforming WASAs
  - ✓ De-notification of WASA as agency of Development authority and take all administrative and legal action to carry it out by HUD&PHED
  - ✓ A Menu of Reform to be prepared with legal, regulatory management with a plan for 3 months with actions.
  - ✓ HUD&PHED, P&D and CM will be supporting the reforms
  - ✓ The said unit will be over sighted by the secretary HUD&PHED
  - ✓ There will be no change in the MDs of all the WASAs for 1 year after the establishment of the said unit. Each MD will sign a
  - ✓ The said unit will then provide a detailed package for offering to private sector mentioning the details of the projects, time required for completion, resources to be employed, the payback period and rate of return of the projects.
- At the end, Minister HUD&PHED concludes the session with the following remarks:

- ✓ Good initiative of P&D department and very thought provoking presentations and discussions
- ✓ Punjab government intentions are very clear that it's a high time for putting plans into actions. This will be depicted from the fact that Punjab govt. has increased the allocation of resources in water sector from Rs.13 billion to Rs.62 billion.
- ✓ The main problem rests in the planning as we don't have any form of SWOT analysis, master planning, effective planning and linking of responsibility with accountability.
- ✓ At the end, Minister HUD&PHED stressed to come up with effective plans to government for their immediate implementation.

## **Decision**

### **Following were decision made**

1. WASA to de-notify from the Development Authority
2. Segregation of Function of WASAs is important for Private Sector Participation that is generation , transmission , distribution and revenue collection
3. WASA Reform Unit to be established with professional staff reporting to Secretary HUD&PHED leading reforms and monitoring WASAs on day to day basis
4. Energy Audit investment shall be done through Pvt sector as it has a good pay back and support and finances for the technical assistance will be provided by P&D
5. WASA to outsource its operations , maintenance and management functions
6. Three Month Reform action plan to be prepared with targets by HUD&PHED
7. All MDs will provide their Target under which they will be assessed by HUD&PHED &P&D on quarterly basis and sign a performance contract with HUD&PHED.
8. All MDs who will sign the performance contract as per their targets & indicators. They will be given one year assurance of tenure to demonstrate their performance
9. Management Firm will be hired for supporting the WASA reform by HUD&PHED

At the end of the session, participants were thanked and appreciated for their valuable presence.