



Government of Punjab
Housing Urban Development and
Public Health Engineering Department



Punjab Water, Sanitation and Hygiene

Sector
Status Report
2019

December 2019

TABLE OF CONTENTS

BACKGROUND	2
PROCESS.....	3
SECTOR POLICY AND STRATEGY	3
INSTITUTIONAL ARRANGEMENTS AND SERVICE DELIVERY.....	5
ACCESS TO DRINKING WATER	6
ACCESS TO PIPED WATER	8
DRINKING WATER QUALITY.....	8
SAFELY MANAGED WATER.....	9
ACCESS TO SANITATION.....	9
HUMAN EXCRETA MANAGEMENT	10
HYGIENE PRACTICE.....	11
SAFELY MANAGED SANITATION.....	12
EDUCATION.....	12
PUNJAB WASH IN SCHOOLS STRATEGY 2016.....	13
PLANNING, MONITORING AND REVIEW	15
CAPACITY DEVELOPMENT.....	17
BUDGETING AND FINANCING	18
JOINT SECTOR REVIEW WORKSHOP LAHORE.....	19
DISTRICT STATUS OF SAFELY MANAGED WATER	24
DISTRICT STATUS OF SAFELY MANAGED WATER	25
LIST OF PARTICIPATES IN WASH JSR LAHORE.....	26

BACKGROUND

Pakistan is the sixth populated¹ country in the world with a population of 207.87 million. Out of this, 132.29 million reside in rural areas and 75.58 million in urban areas. Population of Pakistan is expected to reach 307 million by 2050 making it 3.4% of the global population. In theory, demographic trends will be conducive to rapid GDP growth, but the authorities have not planned adequately for the expansion of the labour force and have failed to spend enough on infrastructure, education and social services. Democratic institutions are likely to become more entrenched in the long term. The country's area is divided into four provinces namely Punjab, Sindh, Balochistan and Khyber Pakhtunkhwa (formerly North West Frontier Province) along with two territories: Gilgit-Baltistan (GB) and Azad Jammu & Kashmir (AJK).

Punjab is the most populous province of Pakistan with approximately 110 million population as per Population Census 2017. Rapid urbanization and a growing population will continue to increase demands for sector and sub-sector services, as share of urban population is 40 million (36%). The current population growth rate in Punjab is 2.13% compared to 2.4% at national level. The provincial Water, Sanitation and Hygiene (WASH) Sector Plan for 2014-2024 was developed under the aegis of Planning and Development Department of Government of Punjab in collaboration with Housing Urban Development and Public Health Engineering Development (HUD&PHED) and Local Government and Community Development Department (LG&CDD) of Punjab. The plan identified the investment needs of the province on the basis of access and coverage provided in Pakistan Social and Living Standards Measurement Survey (PSLM) and MICS Punjab. The plan not only provides a snapshot of the existing situation but also identifies short term, medium term and long-term objectives/strategies for WASH. The plan was officially launched in January 2016, and it is well aligned with the Economic Growth Strategy 2018 and provincial urban development and health sector plans.

A Joint Sector Review (JSR) process refers to a periodic assessment of performance within a specific sector by government, development partners, and civil society. A JSR process for Water, Sanitation and Hygiene (WASH) includes, annual or biennial gathering, which is led by Public Health Engineering Departments and Local Government Departments in Punjab with the participation of a wide range of stakeholders. The process usually consolidates evidence through analysis of data, studies, and reports in the run-up to the actual gathering. Pakistan rolled out the concept of JSR for WASH) in 2017. The Government of Punjab launched the results of MICS 2018 during March 2019. An analysis of MICS 2018 results was conducted to determine the existing status of coverage and access of water and sanitation followed by budgetary analysis of WASH expenditures in Punjab. Based on the latest data available and interventions, Punjab WASH Sector Status Report 2019 has been prepared to track the key achievements in relation to the roadmap given in the WASH Joint Sector Review 2017. This Annual WASH Sector Plan report highlights the current status, key interventions and challenges of the sector.

¹ Economic Survey of Pakistan 2016-17, Ministry of Finance, Government of Pakistan

PROCESS

The overall aim of this report was to track progress of drinking water and sanitation in the province along with Joint Sector Review, focusing on sector wide approaches. The preparation of this report entailed the following process.

Review of progress of key achievements were made under the following key areas.

1. Sector Policy and Strategy
2. Service Delivery of Drinking Water along with quality, access to sanitation and waste management, health and hygiene and education
3. Planning, Monitoring and Review
4. Capacity Development
5. Budgeting and Financing

The above areas were analyzed by using the secondary data of Government of Punjab particularly MICS 2018 released in 2019, Punjab Budget 2018-2019 along with Annual Development Programmes. Additional information was collected through respective departments and in-depth interviews of key stakeholders where required.

A Joint Sector Review Workshop was organized at Avari Hotel Lahore attended by key stakeholders including Government, autonomous and civil society service representatives engaged in WASH. The facilitators shared the progress of JSR 2017 based on secondary data and in-depth interviews of key stakeholders. The participants clarified the points where information was lacking and added where required. This was followed by WASH Bottleneck Analysis as a part of Joint Sector Review 2019. The overall summary of key progress and challenges against the Roadmap of the JSR 2017 has been presented in this report.

SECTOR POLICY AND STRATEGY

Till 2018, the development of drinking water and sanitation plans and programs were guided by National Drinking Water Policy 2009, National Sanitation Policy 2006, Punjab Drinking Water Policy 2011 and draft Punjab Sanitation Policy 2013. The Government of Pakistan developed National Water Policy in 2018. The Government of Punjab also developed and approved its Punjab Water Policy 2018 which seeks an integrated approach for water conservation and management. The key strategic objectives related to drinking water and sanitation in Punjab Water Policy 2018 are:

- Provide clean and safe drinking water to all urban and rural communities
- Prepare Master Plans for safe drinking water and sanitation of major cities
- Protect surface and groundwater sources of drinking water from all sorts of contamination

- Build, maintain water supply and sewerage infrastructure on financially sustainable basis
- Provide surface water for drinking purposes to reduce pressure on groundwater pumping for major urban centers
- Regulate and monitor private sector for over exploitation of groundwater, compliance with water quality standards and proper disposal of water containers
- Adopt all measures to achieve Sustainable Development Goals (SDGs)

In order to realign previously approved Punjab Drinking Water Policy 2011 and draft Sanitation Policy 2013 with Sustainable Development Goals and provincial strategic priorities, the Government of Punjab initiated the policies' development for drinking water and sanitation. The draft drinking water and sanitation policies were developed through a broader consultation process in 2017 and 2018. However, in 2019, the meeting chaired by Chairperson P&D decided to merge both Water and Sanitation policies as Drinking Water and Sanitation Policy 2019. The document has been submitted for review to P&D, and is being shared with Cabinet for approval in 2020. The new Drinking Water and Sanitation Policy 2019 is well aligned with SDGs and new policy frameworks for water management and climate change.

The Government of Punjab promulgated the Punjab Aab-e-Pak Authority Act 2019 to provide a sustainable supply of clean drinking water to each and every individual of the province of Punjab by mobilizing resources from different stakeholders and institutions. The Provincial Government can entrust Authority to work with a local government for purposes of water supply. The Authority shall perform its functions with having a liaison with Housing Urban Development & Public Health Engineering Department whenever and wherever required. For 2019-20, the Government of Punjab allocated Rs 8 billion to operationalize the Aab-e-Pak Authority for underserved areas.

The Punjab Local Government Act 2019 is the main legislation related to drinking water and sanitation at the community level. The Act stresses on empowering the local councils and undertakers in service delivery, operation and maintenance, water quality surveillance, administrative functions, and management of financial and human resources. Under this Act, the village councils are the lowest tier and even this tier has been entrusted to take care water supply, sanitation and health promotion. The Act envisages the responsibilities of provision, access, operation and maintenance of drinking water and improved sanitation services to respective councils within their jurisdictions including urban and rural areas. In larger urban areas, this further includes development of integrated systems of water reservoirs, water sources, treatment plants, drainage, liquid and solid waste disposal, sanitation and other municipal services in addition to sanitation and solid waste collection and sanitary disposal of solid, liquid, industrial and hospital wastes, treatment and disposal including landfill site and recycling plants. Presently, the Local Government Act has been challenged in the Apex court and is in state of abeyance till verdict is made.

Another major legislation that took place in Punjab is Draft Punjab Water Act 2019. This new Act has been approved by the Cabinet and the provincial assembly, and is currently awaiting final signature from the Governor Punjab. The draft Punjab Water Act 2019 seeks the creation of the Punjab Water Resource Commission and Punjab Water Services Regulatory Authority. The Punjab Water Resource Commission will take a lead: (i) Of conserving, redistributing or otherwise augmenting water resources in the province of Punjab, (ii) Of allocating water resources for domestic, agricultural, ecological, industrial or other purposes in different areas of Punjab, and (iii) Of securing the proper use of water resources in the province of Punjab. In addition, Punjab Water Resource Commission will lead on issuing licenses for water abstraction from any source and sewerage operations in the province. The Punjab Water Services Regulatory Authority will be responsible to: (i) Ensure that the duties and functions of water undertakers are discharged in accordance with the Act and any other law for the time being in force; (ii) Ensure that the duties and functions of sewerage undertakers are discharged in accordance with the Act and any other law for the time being in force; and (iii) Modify tariffs set by water and sewerage undertakers.

The responsibility of operation and maintenance of water supply and sanitation schemes has been entrusted to local community-based organizations (CBOs) since late 1990's, which was previously held by Public Health Engineering Department (PHED). This approach has not yielded the desired results and a large number of water supply schemes in Punjab became non-functional over the period of time. Now, the PHED has been revisiting its current approach to identify a viable strategy for operation and maintenance while delegating and sharing responsibilities among PHED, community-based organizations, and other stakeholders especially after Punjab Water Act 2019. The Planning and Development Department (P&DD), Government of Punjab developed a growth strategy for the province entitled "Punjab Growth Strategy 2019-2023". The document aspires Punjab's vision and strategy, which emphasizes improvement of water, sanitation and hygiene services to prevent communicable diseases. The Government of Punjab has a ten years strategic sector development plan for Water, Sanitation and Hygiene 2014-2024 that was formally approved in February 2016. This serves as the implementation framework for drinking water, sanitation and hygiene in the province with short, medium and long-term strategic actions.

INSTITUTIONAL ARRANGEMENTS AND SERVICE DELIVERY

At provincial level, the two main departments that are responsible for water and sanitation are Housing, Urban Development and Public Health Engineering Department (HUD&PHED) and Local Government and Community Development Department (LG&CDD). City District Governments are responsible for carrying out water and sanitation functions through Water and Sanitation Agencies (WASAs) and Solid Waste Management Companies. Town/Tehsil Municipal Administrations (TMAs) take care of both rural and urban water and sanitation in their respective tehsils. Coordination mechanisms between these two departments are improving gradually although there is much that needs to be done to bring it to an optimal level. With regards to governance of water and sanitation, the institutional structure is as follows:

- At the provincial level - Housing, Urban Development and Public Health Engineering Department (HUD&PHED) and Local Government and Community Development Department (LG&CDD)
- Water and Sanitation Agencies (WASAs) are responsible for 5 big cities. All other areas – Town/Tehsil Municipal Administration (TMAs) are responsible which are likely to be replaced with elected councils very soon- notification awaited.
- Rural Water Supply Schemes – planned, designed and executed by PHED while operation and maintenance (O&M) is the responsibility of TMAs and Community Based Organizations (CBOs).

ACCESS TO DRINKING WATER

As per the Punjab Multiple Indicator Cluster Survey (MICS) 2018, about 98% of the population uses an improved source of drinking water – 98.2% in urban areas and 97.9% in rural. Moreover, 18.7% population of Punjab province has access to tap water followed by 37.5 % motorized pump and 25.3% hand pumps. Table 1 indicates overall distribution of improved water source to households (HHs) in the province.

Table 1 - Access to drinking water supply by source in Punjab

	MICS 2018			MICS 2014		
All source of drinking water -%	Urban	Rural	Total	Urban	Rural	Total
Piped into dwelling	15.1	3.8	7.9	25.8	4.6	11.6
Piped into compound, yard or plot	4.0	3.9	4.0	1.9	1.7	1.8
Piped to neighbour	1.9	1.7	1.8	1.1	0.8	0.9
Public tap /Standpipe	7.8	3.5	5.1	10.3	2.6	5.1
Tube well	0.9	1.1	1.0	0.9	0.7	0.8
Hand pump (Mechanical)	7.2	35.7	25.3	8.6	41.5	30.6
Motorized pump (donkey/Turbine)	34.1	39.5	37.5	38.2	43.4	41.7
Tanker-truck	0.6	0.2	0.3	0.3	0.1	0.2
Cart with small tank/drum	24.9	7.2	13.6	8.9	1.7	4.1
Protected well	0.5	1.0	0.8	0.5	1.1	0.9
Protected spring	0.1	0.2	0.2	0.1	0.4	0.3
Bottled water (mineral)	1.1	0.1	0.5	1.6	0.1	0.6
Improved Water	98.2	97.9	98.0	89.1	96.8	94.3
Unprotected well	0.1	0.5	0.3	0.0	0.3	0.2
Unprotected spring	0.1	0.2	0.1	0.0	0.2	0.2
Surface water (river, stream, dam, lake, pond)	0.4	0.9	0.7	0.1	0.2	0.1
WATER KIOSK	0.8	0.1	0.4	0.8	0.1	0.4
Other	0.4	0.4	0.4	1.5	0.7	1.0
Unimproved Water	1.8	2.1	2	10.9	3.2	5.8

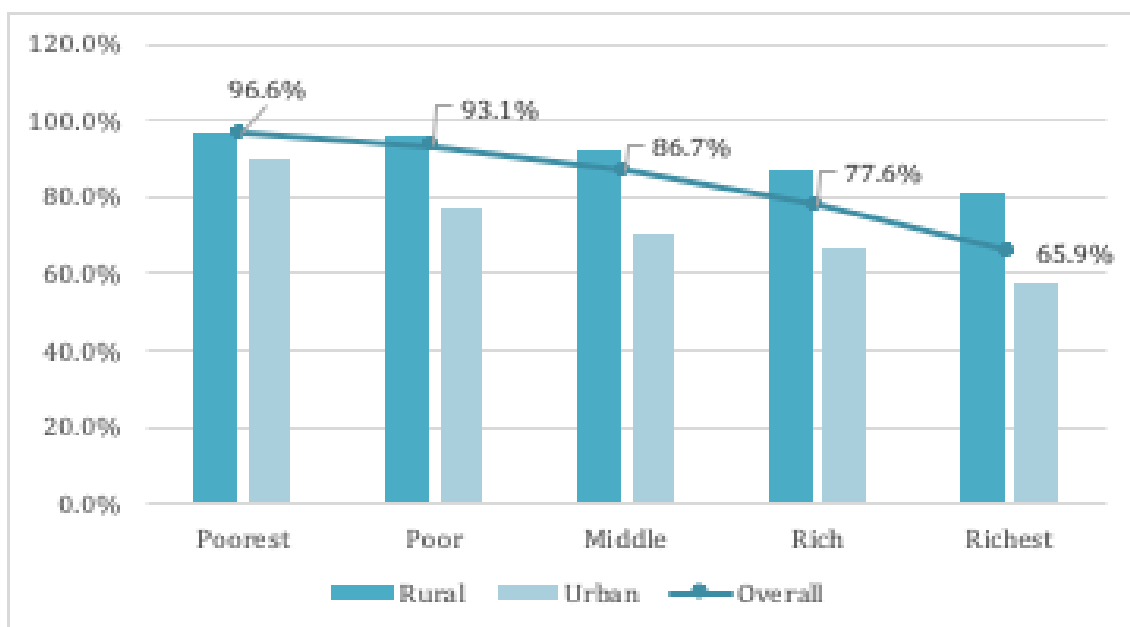
In MICS 2018, the Carts with small tanks/drums and tanker trucks have been added to improved water source as these were not part of improved water source in MICS 2014. The

motorised pumps (donkey/turbine) are the main source of drinking water supply with 37.5% coverage followed by hand pumps 25.3% and piped water supply 18.1%. In rural as well as urban areas, the main source of drinking water supply is motorized pump i.e. 39.5% in rural areas and 34.1% in urban areas. While hand pumps are the second largest source of drinking water in rural areas i.e. 35.7% whereas it is only 7.2% in urban areas.

The piped water supply in urban areas is 28.8% while it is only 13% in rural areas showing a wider disparity in terms of rural urban divide. In urban areas, the cart with small tanks /drums risen to nearly one out of every four (24.9%) in 2018 compared to one out of every eleven (8.9%) in 2014. Similarly, the carts with small tanks/drums is now 7.2% in rural areas compared to 1.7% in 2014. Overall piped water reduced from 38.3% in 2014 to 28.8% in 2018. Similarly, motorized pumps in urban areas reduced to 34% in 2017 from 38% in 2014. This gap has been filled largely by carts with small tanks/drums.

A review of access to improved water in different quintiles reveals that there is no significant difference between different quintiles as per new definition of improved water sources used in the MICS report 2018. Based on the previous definition of improved water sources (that excludes bottled water and carts with small tanks/drums), there are significant disparities between different quintiles, and coverage goes down from the poorest to the richest, and it is more visible in urban areas compared to rural areas

Figure 1: Access to Improved Water with Wealth Quintiles



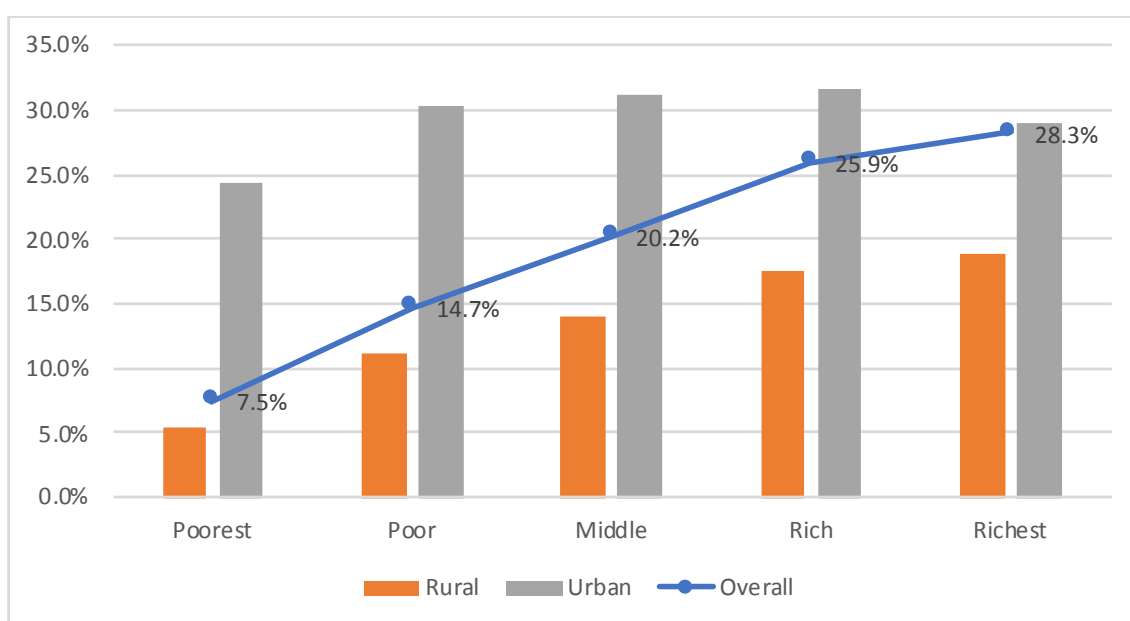
In contrast to 97% of the poorest, only 66% of the richest have access to improved water sources. The cart with small tanks/drums, are about 25.8% in urban areas and only 7.3% in rural areas, and the rich and richest groups generally purchase from such kind of sources. There is evidence from districts Sialkot and Faisalabad where 53.8% and 40.6% respectively have water in small carts/tanks by either purchasing the water or fetching it themselves.

The new definition of SDGs encourages location of improved water sources within premises, and to be available when needed. Thus, this information is key to determine the first and second ladder of SDG for safely managed water. Overall, 69.4% of the population has access to improved water sources located in their premises, with higher in rural areas (74.6%) compared to urban areas (60.1%).

Access to Piped Water

Access to piped water supply in Punjab is 19.3%, which is higher in urban areas (29.3%) and lower in rural areas (13.1%). Compared to MICS 2013, there is downward trend of access to piped water supply in Punjab. Further analysis also shows that poorest have significantly low access (7.5%) to piped water supply compared to richest (28.3%) as shown in Fig 2.

Figure 2 Access to Piped Water Supply in Punjab by Quintiles



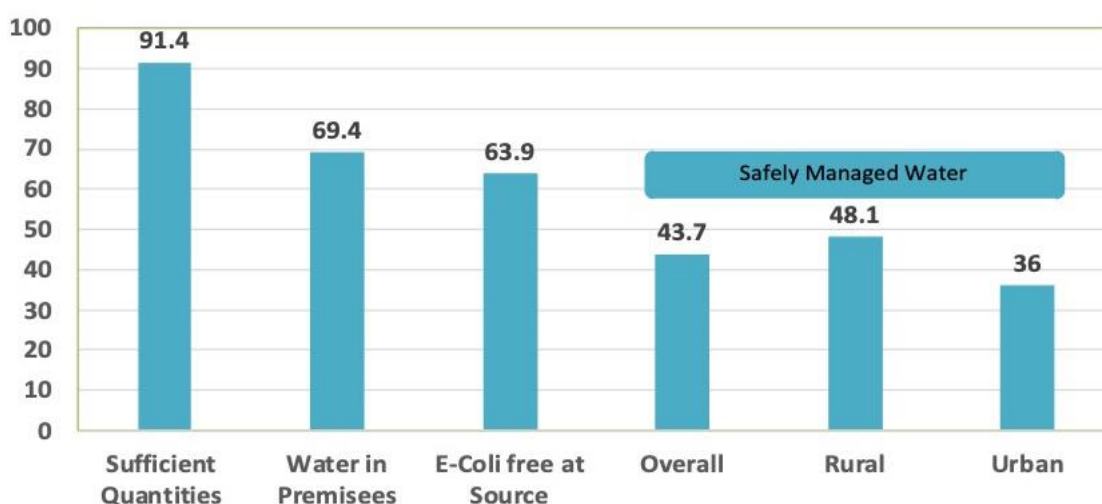
DRINKING WATER QUALITY

As per MICS 2018, around 63.8% of households have water sources without E. coli contamination. This is 66.6% in rural areas and 60.8% in urban areas. Besides, around 59.6% of households are reportedly using drinking water source without E. coli with 60% in rural areas and 58.9% in urban areas. Water quality is directly linked with human survival including incidence of waterborne diseases. As per draft National Water Quality Monitoring Report 2015-2016, prepared by PCRWR, around 35% water sources in Punjab are safe for drinking purposes- free from microbiological and chemical contamination (iron, fluoride, nitrates) and physical characteristics (turbidity, hardness, total dissolved solids).

SAFELY MANAGED WATER

Under Sustainable Development Goals, safely managed water services are defined as: Population using an improved drinking water source, which is: i) Located on premises; ii) Available when needed; iii) and free of faecal and priority chemical contamination. As per Joint Monitoring Program (JMP), of three indicators of the safely managed water, the lowest indicators will be baseline of the defined area. The MICS 2018 reported that 91.4% population has drinking water available in sufficient quantity when needed, 74.1% have water accessible in premises and 63.8% have drinking water without E. coli contamination. **An overall 43.7% of household members have access to improved water; drinking water source located in premises; free of E. coli; and available when needed.** The ladder of Safely Managed Water is defined in Figure 3. Safely Managed Water Services in Urban areas is 36% while it is 48% in rural areas. Furthermore, district wise ladder of Safely Managed Water is provided in Annexure 2 along with an overall picture of urban and rural safely managed water.

Figure 3 Ladder of Safely Managed Water



ACCESS TO SANITATION

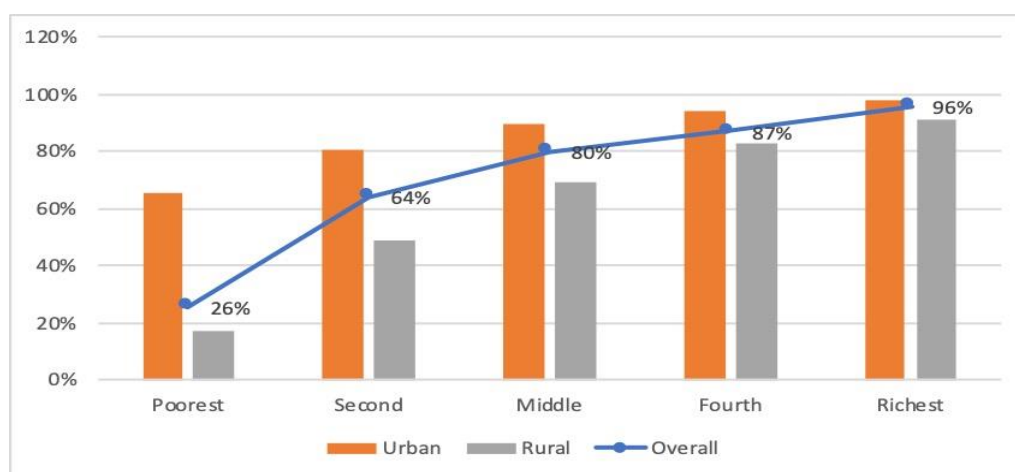
As per Punjab MICS 2018, total 80.1% of the population are living in households using improved sanitation facilities, which is higher in urban (92.8%) as compared to rural areas (72.8%). Of this, 70.4% HHs have improved sanitation and facilities that are not shared, the ratio of this is 61.8% HH in rural areas and 85.5% in urban areas. Around 13 % population of the province (predominantly living in rural areas) is practicing open defecation compared to 17.5% in 2014 and 23% in 2011. The table below provides break-up of the sanitation services in the province along with urban and rural division.

Table 2: Access to Sanitation by Source in Punjab

	MICS 2017-%			MICS 2013-%		
All source of Sanitation	Urban	Rural	Total	Urban	Rural	Total
Flush to piped sewer system	56.9	4.9	23.8	56.3	4.1	21.3
Flush to septic tank	32.0	50.0	43.5	33.8	49.1	44.1
Flush to pit (latrine)	2.8	15.4	10.8	1.5	12.2	8.7
Flush to unknown place/ not sure	0.6	0.7	0.7	0.3	0.3	0.3
Ventilated improved pit latrine (VIP)	0.2	0.1	0.7	0.1	0.3	0.2
Pit latrine with slab	0.2	0.7	0.5	0.1	0.8	0.6
Improved Sanitation	92.8	72.8	80.1	92.1	66.8	75.1
Flush to open Drain	5.5	6.6	6.2	6.2	7.2	6.9
Pit latrine without slab/ open pit	0.0	0.3	0.2	0.1	0.3	0.2
Bucket	0.0	0.0	0.0	0.0	0.0	0.0
No facility, bush, field	1.4	19.7	13.0	1.3	25.4	17.5
Other	0.3	0.5	0.4	0.1	0.3	0.2
Missing	0.0	0.0	0.0	0.3	0.1	0.1
Unimproved Sanitation	7.2	27.2	19.9	7.9	33.2	24.9

Overall, the toilets connected with septic tanks are the leading type of sanitation system used in Punjab in 43.5%, followed by Flush to Piped Sewer system (23.8%) and then No Facility/Bush/Fields, called as open defecation (13%). In urban areas, the leading system of sanitation is flush connected with piped sewer system in 56.9%, followed by flush to septic tank in 32 % and about 5.5% flush connected to somewhere including open drains. In rural areas, the main system of sanitation is flush to septic tank in 50 %, followed by open defecation in 19.7%, flush to pit latrine in 15.4% and flush to piped sewer system in 4.9% households.

Figure 4 - Access to improved sanitation in Punjab by quintiles



HUMAN EXCRETA MANAGEMENT

Overall, 23% of the Households in Punjab reported connection of their latrines with sewers. These include 56.9% in urban areas and only 4.9% in rural areas. The use of an improved

sanitation facility which is not shared with other households and where excreta are safely disposed in situ or transported and treated off-site is categorized as safe management of human excreta. Around 40.7% of HHs reported on-site safe disposal of human excreta i.e. 50.5% in rural areas and 23.4% in urban areas. Whereas, 3.7% are reported as unsafe disposal of excreta from on-site with 4.6% in rural areas and 2.1% in urban areas. Similarly, another 9.3% HHs reported removal of excreta for treatment from on-site sanitation facilities with 9.7% in rural and 8.7% in urban areas.

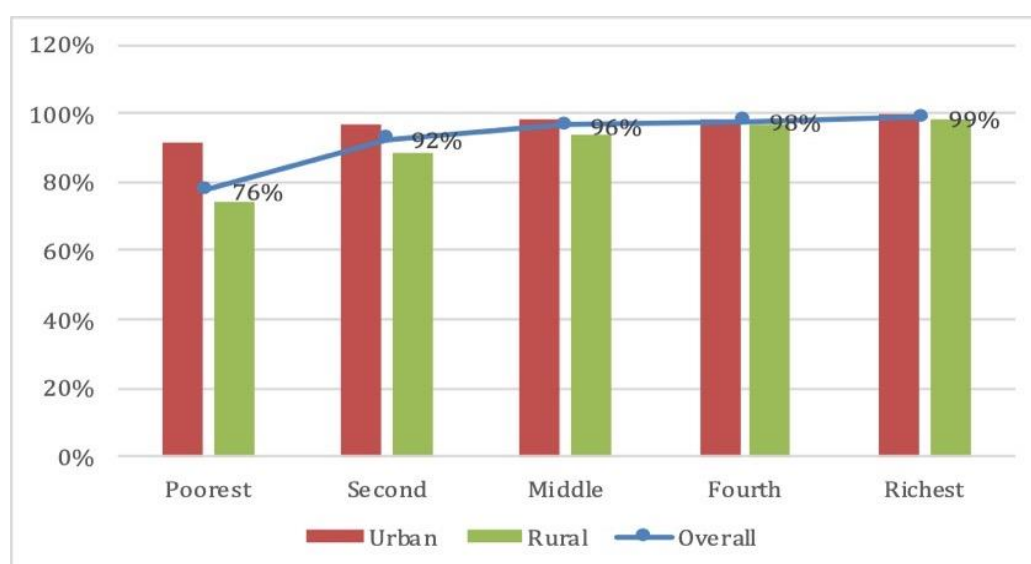
Table 3: On-Site Safe Disposal at HH level

Punjab	Using improved on-site sanitation systems (including shared)		
	Safe disposal in situ of excreta from on-site sanitation facilities	Unsafe disposal of excreta from on-site sanitation facilities	Removal of excreta for treatment from on-site sanitation facilities [1]
Overall	40.7	3.7	9.3
Rural	50.5	4.6	9.7
Urban	23.4	2.1	8.7

HYGIENE PRACTICE

As per MICS 2018, it was observed that about 92.1% of the households had a specific place for hand washing with water and soap (or another cleansing agent), and this was higher in urban (96.7%) as compared to rural areas (89.4%).

Figure 5 – Hand Wash with Soap and Water by Quintiles



There is a clear disparity between income quintiles as only 76% of the poorest use water and soap for hand washing compared to 99% of the richest. In urban areas, there is less disparity as 92% use water and soap for hand washing compared to 100% of the richest. However, there is a

great disparity between the poorest (74%) and the richest (98%) in rural areas for using water and soap for hand washing.

SAFELY MANAGED SANITATION

Under Sustainable Development Goals (SDGs), Safely Managed Sanitation services are defined as: population using an improved sanitation facility (including a hand washing facility with water and soap) that is not shared with other households and where the excreta are safely disposed in situ or transported and treated off-site. Around 70.4% population in Punjab has improved sanitation, which is not shared with others, and around 92.1% population indicated hand washing with soap and water. Around 40.7% of HHs reported on-site safe disposal of human excreta i.e., 50.5% in rural areas and 23.4% in urban areas. However, still there are issues in understanding and reporting the effective faecal sludge management either on-site or off-site with the use /construction of septic tanks or sewer lanes. Based on on-situ treatment, around 32.9% population of Punjab has been categorized under safely managed sanitation with 20.2% in urban areas and 40.2% in rural areas. Overall ladder of Safely Managed Sanitation Services is given in Figure 6 below. Furthermore, district wise ladder of Safely Managed Sanitation Services is provided in Annexure 2 along with an overall picture of urban and Safely Managed Sanitation Services.

Figure 6 : Ladder of Safely Managed Sanitation



EDUCATION

Between 2004 and 2007, the Government of Punjab (GoPb) implemented the Punjab Education Sector Reform Programme (PESRP), with support from the World Bank. PESRP delivered systemic improvements in teacher recruitment and placement, competitive textbook production and public financing of private schools. The World Bank, DFID and CIDA provided further support to GoPb through the Punjab Education Sector Project 1 (PESP 1) between 2009

and 2012. The second phase of PESRP-2 started from 2012-13. Along with support to other missing facilities, the PESRP-2 focused on providing drinking water facilities in 4000 schools and sanitation facilities in 5000 schools. The school councils were funded to build and refurbish schools' WASH facilities. A significant number of access and coverage of School WASH facilities was noted in the province by 2015-2016.

Figure 7: Drinking Water in Government Schools 2010-11 and 2015-16

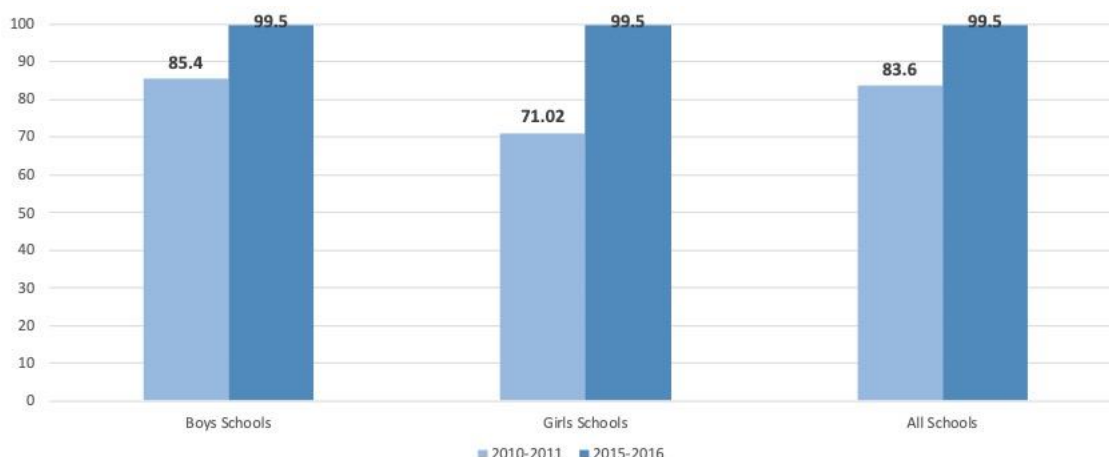
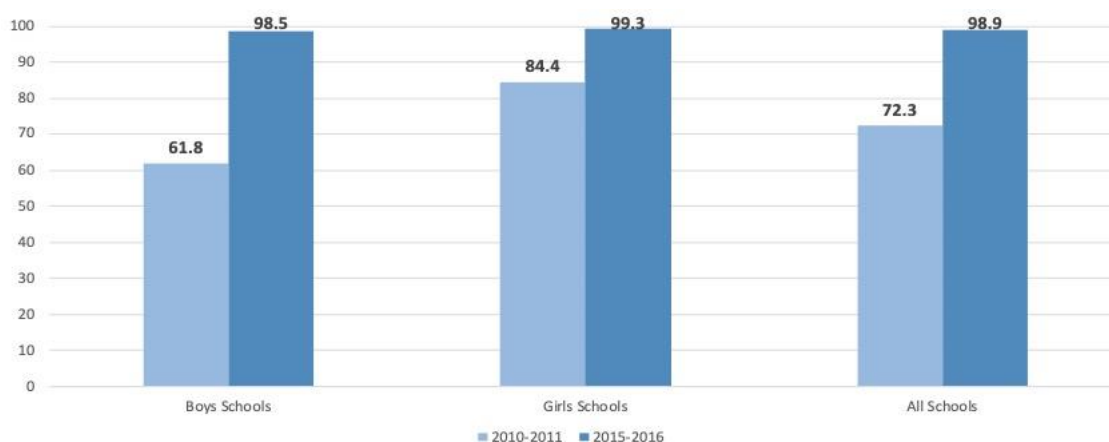


Figure 8: Latrines in Government Schools 2010-11 and 2015-2016



Punjab WASH in Schools Strategy 2016

In 2016, the School Education Department of Government of Punjab identified the need for a specific WASH in schools (WinS) strategy in collaboration with UNICEF. The development of WinS strategy went through participatory consultation with Sector Partners and other stakeholders. The provincial level consultations were followed by consultations and investigations in 31 schools of three objectively identified study districts, including: Lahore, Toba Tek Singh and Muzaffargarh. The detailed consultation and investigation of 31 schools has further revealed the following bottlenecks regarding school WASH at public schools:

Drinking Water: Unhygienic water points and sources. 14 out of 38 water quality tests of school drinking water were declared unfit for drinking due to microbiological and chemical contaminations.

School Toilets: Inadequate toilets facilities (high number of students per toilet); the designs of WASH facilities are not accessible for physically challenged children; and open defecation by students despite of having toilet in school due to locked toilets to keep it clean for inspection

Hand Washing: The soap was generally not found at the hand washing stations; and hand washing stations for group handwashing with soap were non-existent.

Hygiene KAP: No detailed chapter or subject matter in the text books; and majority of teachers believing that the responsibility lies with the parents rather than teachers.

Menstrual Hygiene Management: Dust bins in latrines were generally non-existent; and teachers were generally reluctant to discuss this matter with adolescent girls.

The Punjab's WinS Strategy not only guides the stakeholders for strategic interventions but, coupled with Strategy Rollout Action Plan, provides WinS Standards and training modules for key stakeholders. This strategy has four major components: 1) Minimum Hygiene Package 2) Training Package for Stakeholders 3) Minimum Hardware Package and 4) M&E Framework and Action Plan. The first phase of the strategy was from July 2017 to Jun 2019. Apparently, the time limit of phase-I has ended. The project made a slow start, so introducing all elements of three-star approach has been taking more time than originally envisaged. The institutionalization of Punjab WinS Strategy has already started well and following are key successes in last two years:

- Since the inception of Punjab WinS Strategy in July 2017, there is significant increase of number of usable toilets in schools. The recent datasets show an addition of 42,720 usable toilets, reaching the total usable toilets to 229,469 in 2018-19 from 186,749 in 2016-17 in government schools of Punjab Government.
- An analysis of October 2018 School Census shows that 10,716 schools have a ratio of 40 students per toilet or below (toilets dedicated for teachers are excluded in this calculation). This is around 20% of total schools of Punjab. Yet the census results of 2019 are not available but it is evident that progress is being made in phases. Overall ratio is 70 students per toilet in all census schools.
- On 30th January 2018, Punjab School Education Department through a notification titled "Implementation of Punjab WinS Strategy, Standards and Action plan" was directed to all Chief Executive Officers (CEO) at districts' level to take measures for formation of WASH clubs in school and ensuring the availability of soap for students for hand washing at critical times. This notification further made the head teacher responsible for any laxity to implementation of notification's directions.
- On 4th January 2019, Programme Monitoring and Implementation Unit of Punjab Education Department revised its monitoring indicators through a notification. The new

set of districts' ranking indicators consists of 14 indicators, while three of these are derived from WinS i.e. sufficiency of toilet, drinking water, and hygiene of schools. Furthermore, in another notification issued on January 1st, 2019, PMIU revised hygiene indicators through including availability of soap.

- On 9th April, 2019, PMIU included another set of indicators related to existence and functionality of WASH club in its schools' monitoring application.
- In addition to institutionalization and adaptation of WinS strategy in day to day business of education department, 440 teachers from districts of Faisalabad, DG Khan, Rahim Yar Khan, Rajanpur and Bahawalpur were trained on WinS by Literacy and Non-Formal Basic Education Department of Government of Punjab.

PLANNING, MONITORING AND REVIEW

The Government of Punjab set its baseline and targets for SDGs related to drinking water and sanitation through a consultative process in 2017-2018 which culminated at National Joint Sector Review in December 2019. The provincial baseline was determined on the basis of Pakistan Social Living Standards Measurement Survey (PSLM) 2015 and water quality data 2015 from Pakistan Council of Research on Water Resources (PCRWR). The SDG targets were determined on the basis of resource envelope of finances and historical trends of allocations. To provide strategic direction to the planning processes, the Government of Punjab conducted a review of existing drinking water and sanitation policies for alignment with development priorities. It has also developed its new Economic Growth Strategy 2023 during 2018-2019 that includes WASH. Key performance indicators agreed for Economic Growth Strategy 2023 are:

- 60 percent of the population in the province has safe/managed water services
- 70 percent of urban and 35 percent of rural population has access to piped water
- 100 percent water metering in cities, 50 percent in intermediate cities and 30 percent in small towns
- Sewerage system covers 70 percent area in cities and 40 percent area in rural areas
- Achieve open defecation free status by 100 percent population/area
- 80 percent solid waste is collected and disposed per day
- More than 90 percent schools have usable drinking water

The Planning Manual of Government of Punjab serves as a key guideline document for the project identification, formulation, execution and M&E. In the first step, the plans are identified through consultative process at the local and departmental levels, based on local political aspirations and strategic sector priorities. These plans are translated into Annual Development Programs (ADPs). This is complemented with a medium-term development framework to determine the cash flow and future projections. The ADPs are approved before the start of financial year i.e. July. The allocation to unapproved projects is also added in the ADPs, but

principal approval of the concept is made at the relevant forum that includes rationale for allocation.

In March 2019, the Government of Punjab released MICS 2018 report. With the support of UNICEF WASH section, a comprehensive secondary data analysis of MICS 2018 related to WASH was conducted to determine coverage, access and equity at district level with urban and rural break-ups. Punjab JSR 2019 has used the analysis for discussions and deliberations. Moreover, district-based WASH scorecard and WASH index has been developed with three categories i.e. Overall, Rural and Urban. An infographic for status of WASH in the province has also been developed, and is being shared with the planners and policy makers for evidence-based planning and resource allocations. The Government of Punjab also documented two case studies to share the learning it made in the areas of Pakistan Approach to Total Sanitation and School WASH Strategy 2016. Both documents captured the key processes that were adopted in the execution of strategic approaches. The case studies also highlighted the efforts of advocacy and impact of behavioral change strategies.

The Public Health Engineering Department of Government of Punjab developed a comprehensive management information system for WASH based on android for real time entry in the field. The MIS generates outputs by feeding input data from the field and district offices. Furthermore, there are challenges of coordination for monitoring and reporting due to complexities in the roles and responsibilities of different stakeholders in the government, cantonment boards and defence housing authorities, non-government and private sectors.

The World Bank is designing an integrated water supply and sanitation program for rural and urban areas of Punjab with a key focus on SDGs criterion. Integration and tracking the progress through existing systems and structure will be the key focus of new financing being arranged for this program. Similarly, Asian Development Bank is financing an intermediate cities development program in Punjab that includes specific focus on municipal service delivery. The community participation and local accountability are key pillars of the ADB intermediate cities development initiative. The Government of Korea has signed the contract to strengthen water quality and wastewater management system in Punjab province from 2020. The GIZ is working with Local Government Punjab to develop guidelines for participatory monitoring of new Local Government Act 2019 which will include WASH.

The Government of Pakistan launched Clean Green Pakistan Movement (CGPM) in October 2018. The Clean Green Pakistan has five pillars i.e. Drinking Water, Sanitation, Solid Waste Management, Hygiene/ Liquid Waste Management and Plantation. The Local Government and Community Development Department of Government of Punjab has been striving for different initiatives with their local institutions. A comprehensive behavioral change campaign to underscore the objectives of CGPM has been initiated with a key focus on mobilizing the communities. In 2019, the Ministry of Climate Change being custodian of CGPM designed a Pakistan Clean Green Index (CGPI) for ranking the cities in collaboration of provincial government especially Punjab and Khyber Pakhtunkhwa. The CGPI will rank the cities on periodic basis against the set indicators. In 2019, a series of consultations were held with key

stakeholders in Punjab to set the performance indicators for CGPI. The Prime Minister of Pakistan launched CGPI on 25th November 2019. Now the Government of Punjab is rolling out CGPI data collection processes and submission of reports at the provincial and federal levels.

CAPACITY DEVELOPMENT

The up gradation of Local Government Academy has been made with the support of KOICA. Sector partners also supported in reviewing WASH curriculum and necessary accessories for effective training at limited level. Similarly, JICA provided necessary technical and financial support in upgrading the WASA Academy (Al-Jazari) in Lahore. The academy offers different type of the courses largely to the staff from WASAs. However, there is a need to link promotion and career paths with the successful completion of training courses at different training institutes. The Community Development Unit of PHED and Staff of Local Government are actively engaging the CBOs for water conservation and ODF under PATS. The sector partners are financing the capacity development of CBOs.

The WASH Human Resource Capacity Assessment 2017 and Punjab WASH Sector Development Plan 2014-2024 recommended rationalization of WASH service providers. In 2018-19, the HUD&PHED carried out performance evaluation and rationalization of technical staff of Public Health Engineering Department (PHED) responsible for developing and implementing drinking water and sanitation programs in rural and small urban areas; and restructuring of WASAs (Water and Sanitation Agencies) which are key service delivery organizations in five major cities of Punjab. The key findings for PHED rationalization include development of proper job descriptions of key position holders, empowering divisional and district teams in designs and approval processes, while introducing a dedicated monitoring unit with staffing up to district levels in PHED. The role of community development unit should be redefined as communication and research unit to lead on behavioral change. The rationalization also identified gaps in training needs assessment and structured capacity development of the staff. The staff also showed their concerns on promotion criterion and career paths.

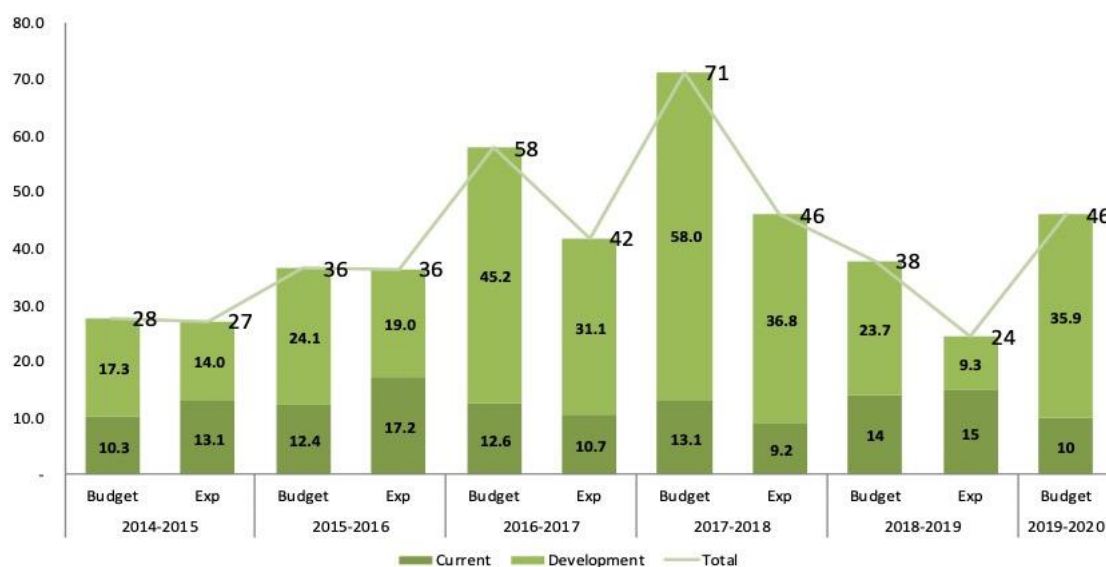
An assessment of WASA was conducted in 2018 to unpack the possible structural reforms required for effective service delivery. The study recommended following key actions: Align and develop a new legal framework for urban water supply and sanitation services in five major cities either derived from existing laws or suggest new bill/act or regulation; develop a performance management framework of WASAs to be reviewed and monitored by the Board of Directors and Provincial Government and develop a regulatory framework for drinking water and sanitation in Punjab with emphasis on urban population. Punjab Water Act 2019 is very much aligned with the recommendations made in both studies especially about the creation of a regulator; and periodic performance review of service providers.

The Government of Punjab has rolled out Clean Green Pakistan Movement in 2018. Since then, Local Government and Public Health Engineering Departments have been pursuing different campaigns and awareness session. Now the WASH clubs in the schools and District WASH

committees in the Punjab province have been oriented about key pillars of Clean Green Pakistan. In December 2019, the Government of Punjab launched Clean Green Pakistan Index for cities ranking and mobilizing the local communities. A capacity development program for performance reporting has been initiated from December 2019 for 12 cities of Punjab in the first phase. This shall be scaled up to other cities in next phase (expected from second half of 2020). World Bank is extending a loan to Government of Punjab for provision of water supply and sanitation facilities in rural areas of Punjab i.e. 5 to 10 tehsils. Capacity development and behavioral change are key components of this initiative. Moreover, the HUD&PHED developed a behavior change campaign in line with Clean Green Pakistan Movement for Punjab in collaboration with sector partners.

BUDGETING AND FINANCING

The WASH Sector Development Plan 2014-2024 identified the need of an annual spending of Rs 40 billion for next 10 years to reach 2/3rd population of Punjab for water and sanitation services. Since then an incremental change in allocations and spending was noted till 2017-18. In 2018-2019, there was a decline in allocation and spending of WASH finance. There is an increase in budgetary allocation from 2019-2020 again.



There is a major shift in the policy and program focus since 2019. The Government of Punjab created an Aabe-Pak Authority to replace the previous initiatives like Punjab Saaf Water Company. In 2019-20, an allocation of Rs 8 billion has been earmarked for Aabe-Pak Authority to lead on provision of clean drinking water supply. Similarly, Government of Punjab is providing Rs One Billion for multi-nutrition strategy with focus on WASH. While, the Government of Punjab has created a Program Management Unit at Public Health Engineering Department to lead on coordination and reporting with sector partner organizations and government forums. This PMU was previously a WASH cell funded by sector partners.

The Government of Punjab has approved new Local Government Act 2019, which will become effective once local bodies elections are held. The new Act and draft drinking water and sanitation policy seeks the leadership role of local council in identification and implementation of water supply and sanitation programs. Hence, the funds will be transferred from Local Government Department to these councils to set their priorities and spending including WASH. This would be an additional funding to what has been allocated under current budget to PHE and Urban Development for WASH.

JOINT SECTOR REVIEW WORKSHOP LAHORE

Policy and Strategy

Key Bottleneck	Proposed Action 2018-2019	Status by December 2019	Proposed Action up to December 2020
Draft Drinking Water and Sanitation policies are in lines with parameters of SDGs.	Approval of policies by the competent authority.	After Water Act 2019 and Punjab Water Policy 2018, the Government of Punjab decided to merge water and sanitation policy as one document.	Approval of draft drinking water and sanitation policy 2019.
Draft Municipal Water Act 2014 along with other fragmented legislation for WASH i.e. PLGA 2013 and Punjab Environment Act exist but overlap or contradict with each other.	A legislative review of all existing legislation with necessary arrangements in Draft Municipal Water Act.	The Government of Punjab has recently developed and approved Water Act 2019 awaiting the final signature of the Governor of Punjab. The Act is a very comprehensive legal framework for establishing Water Services Regulatory Authority to lead on the accountability. Similarly, it seeks the creation of Water Resource Commission to steer overall water allocation, distribution and water governance in the province.	Prepare a policy brief on Water Act 2019 and Aabe-Pak Authority in English and Urdu for wider dissemination among the stakeholders.
The policy and draft Municipal Act include provisions for accountability mechanisms between users, service providers and government.	Developing a consensus among stakeholders for the role and provisions for creating or allocating a regulatory body.		Develop the rules of business and standards operating procedures of newly created authorities (for water and sanitation services).

Institutional Arrangements

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
The existing service delivery models are not compatible with consumer demands and emerging technologies.	A review and guidelines for service delivery, as outlined in draft policies, should be developed and implemented.	New Water Act 2019 identified provision of water up to household level as preferred approach. It is the responsibility of undertakers to define the systems as per needs.	Develop guidelines for service delivery in line with Punjab Water Act 2019 and Local Government Act 2019.
No cross departmental guidelines/ standards for planning/ evaluation of WASH schemes.	Review of existing departmental service delivery and scheme planning standards/guidelines and development of standard guidelines for WASH schemes that is also aligned with SDG standards and NEQS.	The proposed Regulatory Authority will lead on development and implementation of guidelines and standards for service delivery with different undertakers.	Effective functioning of Clean Green Pakistan Index initiative will strengthen the cross departmental actions and approaches.
The internal control mechanism is not very robust as outcome data is not collected.	Strengthen the PMU for ensuring the compliance to standards and review the progress across the department.	The Water Act 2019 and Local Government Act 2019 suggested new approaches for internal control and performance reporting.	Implement and share draft results of Clean Green Pakistan Index and Punjab Intermediate Cities Program for performance management.

Budgeting and Financing

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
Although the budget and expenditures have separate codes for WASH sub sectors, it became difficult to track financing from reports of various departments.	Integration of sub-sector break-up in ADP for Water and Sanitation.	The breakup of WASH sub sector is available at the department level.	P&DD submit the case of sub-sectoring tracking to the Finance Department.
Current tariff structure and collection is not sufficient for the	A study on per capita costing of WASH service delivery with recommendation of	Only conceptual discussions held at P&DD and PHED levels.	Conduct per capita and tariff study to determine costs of service delivery and

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
sustainability of schemes.	revised tariff structure on equity bases.		possible tariff structures.
Some sensitization programs are budgeted in ADP i.e. PATS but the budget is not sufficient.	Allocating separate budget line for sensitization especially around water, sanitation, hygiene and MHM.	Different sensitization programs with sector partners developed and under development around Clean Green Pakistan and empowering the local councils.	The budgetary allocation and spending for sensitization programs increased by 50%.
Financing by few donors is off-budget and could not be tracked.	Provincial Program Management Unit (PMU) should take the responsibility of cross departmental reports compilation.	Provincial PMU should link (the progress reports and engagement) plans from stakeholders with provincial WASH MIS.	Conduct a study to track the mechanisms of off-track support to WASH in the province.

Planning, Monitoring and Review

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
Provincial SDG 6.1 and 6.2 are not set.	Setting provincial targets for SDG 6.1 & 6.2 as per available and planned investment.	The provincial SDG targets for water and sanitation had been established.	Establish district-based SDG costing related to drinking water and sanitation.
JSR at nascent stage and processes are being institutionalized.	Develop Annual WASH Sector Status Report from findings under JSR.	JSR held in December 2019 by HUD&PHED to consolidate 2017-18 JSR and prepare sector status report on the basis of this JSR.	From 2020, the leadership of JSR shall be defined with promulgation of Water Act 2019 Mechanisms in place to review periodic progress of JSR.
No well-defined performance base management arrangements.	Development and implementation of performance management framework with clear indicators.	Two performance management systems under development: Clean Green Pakistan Index for cities ranking and MIS of WASH at PHED	Document the learning of pilots of Clean Green Pakistan Index and MIS at PHED.
Lack of sector learning processes used by	SMU of CM Punjab is taking lead but it	The role of SMU has been evolved, and	Prepare a case for the establishment of

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
stakeholders.	needs to be institutionalized through PMU.	learning has been devolved to the departments.	knowledge management hub for WASH at PERI.

Capacity Development & Broader Enabling Environment

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
Punjab WASH HRD plan exist but its implementation has just started.	Consolidation and review of existing WASH courses by PMU.	WASH integrated in teachers training and health workers training programs.	Revision in HRD plan would be required to bring in-line with new legislative reforms and LGA 2019.
Grassroots level WASH service providers have insufficient orientation on the concept of Safely Managed WASH,	Development of policy briefs in Urdu for grass root level service providers.	An infographic in English for Punjab WASH status 2018 had been developed.	Prepare policy brief (s) in Urdu for sharing at the district and grass roots levels.
Punjab EPD has mandate to monitor PEQS. However, EPD is not playing a vital role in monitoring.	Strengthening PMU and Punjab EPD through capacity development to play key role in water surveillance.	HUD&PHED conducted rationalization and restructuring studies for rural and urban WASH. New Water Act 2019 redefined quality assurance and monitoring to the Regulatory Authority.	A provincial /national consultation for defining water surveillance framework and capacity building needs for water quality monitoring.
Limited participation of religious leaders, media and celebrities in awareness on WASH.	Recruit and engage celebrities as WASH ambassadors.	The HUD&PHED developed a behavioral change campaigns/ plans in line with Clean Green Pakistan Movement that underpins engaging the local communities and key influencers from media, celebrities and religious leaders. The campaign has been rolled out since November 2019.	Development of training manuals/guidelines for engagement of clean green champions and clean green index ranking.
Local Government councils were elected	Strong lobbying and advocacy by civil	New Elections under Local Government Act	Develop a training package for local

Key Bottleneck	Proposed Action	Status by December 2019	Proposed Action up to December 2020
in 2015. However, they could not be empowered through resource allocation.	society for the empowerment of local elected bodies.	2019 had not held so far.	councils in WASH as per LGA 2019 and Water Act 2019.
Local councils' representatives lack the capacity of planning and execution. Furthermore, there is also lack of clarity of role among local representatives.	LGA 2013 should be reviewed with provision of capacity development of decentralized tiers.	New Local Government Act 2019 promulgated but election has not been held so far.	
Social norms for revenue generation and ownership of public infrastructure does not exist.	Development and enforcement of regulations for social norms.	Sensitize parliamentarians on WASH and climate change. Linking WASH and climate change in all campaigns.	Develop a climate change WASH policy brief with two orientation sessions.
No incentives for service providers.	Review of performance management framework linked with incentives for good performance.	HUD&PHED conducted rationalization study to determine existing performance management approaches.	The Government of Punjab launched Cities Index Ranking and Cities' Improvement Programs with rewards for best performance.

Annex-1

DISTRICT STATUS OF SAFELY MANAGED WATER

Regions	Improved Drinking Water			Safely Managed Water*		
	Available in sufficient quantities	Accessible on premises	Without E. coli in source	Overall	Urban	Rural
Punjab	91.4	69.4	63.9	43.7	36.0	48.1
Bahawalpur	88.0	76.4	74.5	44.3	45.5	43.8
Bahawalnagar	80.2	73.6	32.2	20.9	17.1	22.0
RY Khan	93.5	73.4	75.5	55.5	57.8	54.9
DG Khan	89.0	71.8	65.7	56.8	31.8	62.7
Layyah	96.2	93.6	71.5	63.8	69.4	62.7
Muzaffargarh	97.3	94.6	70.8	62.9	72.4	61.2
Rajanpur	89.9	79.3	56.7	48.8	79.1	43.9
Faisalabad	88.9	38.7	58.6	20.4	15.9	24.5
Chiniot	97.0	82.1	80.0	68.0	72.0	66.3
Jhang	94.8	87.3	67.0	60.0	67.9	57.6
TT Singh	87.6	71.2	57.6	38.8	31.8	40.3
Gujranwala	93.1	70.3	64.3	48.3	50.7	45.0
Gujrat	88.4	59.0	84.0	49.2	38.6	54.1
Hafizabad	95.9	61.9	76.7	52.6	55.3	51.3
M Bahauddin	96.3	64.8	54.5	37.5	12.3	43.6
Narowal	98.3	76.3	92.5	71.9	55.0	75.3
Sialkot	88.0	43.4	71.6	28.1	5.6	37.6
Lahore	85.9	59.6	51.9	27.6	27.6	NA
Kasur	89.7	75.0	64.8	48.4	42.4	50.2
Nankan Sahib	94.3	38.0	76.4	23.9	9.3	27.5
Sheikhupura	89.2	64.0	71.9	49.3	33.9	58.0
Multan	92.9	77.4	57.6	46.5	33.2	57.0
Khanewal	96.3	89.6	76.9	69.4	78.8	66.8
Lodhran	80.9	77.8	39.2	23.9	30.1	22.9
Vehari	93.5	77.3	80.0	60.2	44.7	63.3
Rawalpindi	91.3	54.3	42.1	21.0	20.8	21.2
Attock	97.0	79.7	69.3	50.5	53.1	49.4
Chakwal	90.8	78.8	55.5	45.0	55.6	42.5
Jhelum	90.9	75.8	71.4	57.4	66.5	54.0
Sahiwal	85.9	72.1	83.5	52.8	54.2	52.6
Okara	89.0	74.5	67.2	49.8	54.7	48.0
Pakpattan	88.9	81.9	51.7	42.9	31.3	46.2
Sargodha	97.1	66.4	64.1	43.9	47.4	42.3
Bhakkar	98.0	98.0	72.2	70.1	65.8	70.9
Khushab	85.0	56.9	42.2	26.0	32.4	23.8
Mianwali	95.5	83.3	69.7	56.7	68.5	54.1

Annex-2

DISTRICT STATUS OF SAFELY MANAGED WATER

Regions	Improved Sanitation	Hand Washing	Safe disposal in situ	Safely Managed Sanitation		
				Overall	Urban	Rural
Punjab	80.1	91.7	40.7	32.9	20.2	40.2
Bahawalpur	69.6	79.8	35.9	24.5	15.1	29.1
Bahawalnagar	69.5	85.2	48.6	38.4	33.0	39.8
RY Khan	75.6	87.8	39.6	31.4	12.2	37.2
DG Khan	61.4	82.7	37.9	28.2	38.2	25.7
Layyah	81.5	94.4	57.4	42.7	24.7	46.2
Muzaffargarh	65.9	92.0	43.5	29.5	36.9	28.3
Rajanpur	52.2	84.1	33.7	23.6	29.7	22.4
Faisalabad	85.2	96.2	27.3	22.3	7.0	36.7
Chiniot	59.3	93.2	36.5	30.9	29.8	31.4
Jhang	67.1	92.2	43.5	36.1	37.3	35.8
TT Singh	87.4	95.2	38.7	34.0	26.1	36.1
Gujranwala	97.9	94.3	32.1	28.5	25.4	32.9
Gujrat	94.0	95.0	69.3	61.1	52.9	64.7
Hafizabad	85.1	93.1	55.4	49.8	52.9	48.1
Mandi Bahauddin	79.2	92.2	57.9	50.9	61.8	48.1
Narowal	89.6	93.3	79.6	68.0	55.1	70.5
Sialkot	82.2	97.4	45.7	40.5	18.7	49.3
Lahore	96.4	95.5	7.3	6.3	6.3	
Kasur	76.2	94.1	50.0	38.2	30.9	40.5
Nankana Sahib	83.2	94.3	50.5	40.6	17.2	45.7
Sheikhupura	95.8	91.6	38.1	31.3	15.9	40.4
Multan	63.2	92.5	15.2	10.7	2.7	16.9
Khanewal	71.0	92.4	44.9	36.4	18.4	41.0
Lodhran	62.7	83.8	41.1	28.4	7.6	32.5
Vehari	70.3	91.2	39.1	31.9	8.1	37.3
Rawalpindi	93.0	91.5	54.5	48.4	42.1	55.2
Attock	86.7	87.1	71.6	63.9	61.0	65.0
Chakwal	85.7	90.6	68.5	58.8	62.0	58.1
Jhelum	91.6	92.4	69.2	59.2	62.1	58.2
Sahiwal	78.5	92.8	36.7	30.3	11.4	35.2
Okara	72.9	91.5	36.9	30.2	12.2	36.8
Pakpattan	69.4	91.7	44.4	34.6	23.1	36.8
Sargodha	81.2	96.7	49.9	39.1	31.4	42.2
Bhakkar	75.7	90.1	63.1	46.1	44.9	46.3
Khushab	67.7	70.4	49.1	33.8	30.4	35.1
Mianwali	82.7	89.5	65.5	48.7	31.8	52.8

Annex-3

LIST OF PARTICIPATES IN WASH JSR LAHORE

12-12-2019

Sr.	Name of Participant	Designation	Organization
1	Dr Bashir Ahmed	DHS-MIS	DG Health officer 24 Cooper road Lahore
2	Usman Ghani	---	---
3	Umer Ali Aziz	Data Analyst	PMU(WASH)HUD & PHED
4	Dr. Omer Bangash	Consultant	Rasheeda Trust
5	Muhammad Waseem	M & E Coordinator	AGAHE
6	Amir Naseem	Executive Manager	HANDS
7	Muhammad Nadeem	ARF	PERI
8	Sabahat Ambreen	WASH Specialist	---
9	Haibat Ali Khan	Chief WASH	P & D Department
10	Fahad Raza	Prog. Manager	HUD & PHED
11	Praskash Lamsal	WASH Specialist	UNICEF
12	Asad Khan	Planning Officer	PHED
13	Rizwana Yasmeen	COO	PHED Lahore
14	A. Razzaq	CDO-Kasur	PHED
15	Shazia Ghaffar	Research Officer	PCRWR
16	Tanya Khan	Country Representative	WSSCC
17	Tariq Muhammad	DD CDU	PHED
18	M. Sardar	PM-Exe	Qatar Charity
19	Babar Ali	PM- Muslim Aid	Muslim Aid
20	Ghulam Dastgeer	PM	PRSP
21	Shahid Hanif	PM-ASWA	LPP
22	Sana Ejaz Khan	SPO	AWF (Pvt) Ltd
23	M. Sajid Zaman	DMS	AWF (Pvt) Ltd
24	Kamean Naeem	WASH Specialist	UNICEF
25	Rashid Mahmood	Director	PURE
26	Nabeel Rauf	CBM	PHED
27	Khadeja Bibi	CBM	PHED
28	Shaubat Ali	CBM	PHED
29	Afshan Usman	CBM	PHED
30	M.Waqas Tahir	PO	PRSP
31	Khawar Ata	Research Economist	PERI
32	Naheed Rajput	Consultant WASH	WASA
33	Najeeb Aslam	DY. Secretary	LG & CD
34	Niaz Ullah Khan	CEO	AWF Pvt Ltd