

The Water and Sanitation Agency (WASA) Lahore, established in 1976 under the Lahore Development Authority Act of 1975, operates in Pakistan's 2nd largest city. In January 2025, the Government of Punjab constituted the Punjab Water and Sanitation Authority (P-WASA) as a provincial-level body to oversee all water and sanitation agencies across the province. Consequently, WASA Lahore now functions under the P-WASA Act, with a mandate to deliver water supply, sewerage, and drainage services to the residents of Lahore.

Decryption	Details
Service Area	380 km ²
Serving Population	11 million
Water Supply Network	5000 KM
Sewerage Network	5000 KM
Drainage Network	94 KM
Major Disposal Stations	12
Secondary Disposal Stations	112
System Type	Combined
Primary Drains	76 KM
Source of Water Supply	Groundwater
Number of Tubewell	650
Water Production	450 MGD
Development Budget (FY 2024-25)	Rs. 94 billion
O&M Budget (FY 2024-25)	Rs. 3.2 billion
Energy and Salary Cost (FY 2024-25)	Rs. 22.8 billion
Revenue Collection (FY 2024-25)	Rs. 26.1 billion
Human Resource	6023 including Technical Staff
Water Testing Laboratory	ISO-17025 certified

Water Supply Initiative

54 MGD Surface Water Treatment Plant (BRBD Canal)

- Serves the communities of Mughalpura, Baghbanpura, Shadipura, Mustafabad, and surrounding areas.
- Transitions the system from groundwater reliance to a sustainable surface-water supply.
- Includes DMA establishment, SCADA integration, and major transmission and distribution upgrades.

Wastewater Treatment Plants Under Execution

WASA Lahore is planning to construct wastewater treatment at following locations

1. Babu Sabu Wastewater Treatment Plant
2. Kattar Bund Wastewater Treatment Plant
3. Mohlanwal Wastewater Treatment Plant

Babu Sabu Wastewater Treatment Plant

It is planned to execute the Babu Sabu Wastewater Treatment Plant in two phases

- Phase-1: 88 MGD (to be financed under instant project)
- Phase-2: 110 MGD

Technology:

Conventional Activated Sludge Technology with Anaerobic Sludge Digestion along with provision of Combined Heat and Power System & Solarization for generation of electricity to cope with electricity requirements of the Plant

Objectives:

- Ensure treatment of wastewater according to the standards.
- Reduction in deteriorating environmental impacts due to untreated sewage disposal.
- Improvement in water quality & ecology of river Ravi.

Kattar Bund Wastewater Treatment Plant

Scope of Work

- Construction of 11 MGD WWTP at Kattar Bund Lahore.
- Reconstruction works at Kattar Bund Disposal Station and Niaz Baig Lift Station.

Objectives

- To Improve the environmental conditions in the Kattar Bund area and the River Ravi.
- To produce treated water (and a stabilized sludge) meeting EU and PEQS discharge standards for agricultural purposes which contribute to circular economy
- To promote health and hygiene practices
- To ensure proper treatment of wastewater and its reuse for agricultural purposes to enhance economic growth.

Mohlanwal Wastewater Treatment Plant

- Construction of 168.5 MGD at Mohlanwal Lahore

Objectives

- To Improve the environmental conditions in the area and the Ravi River.
- To ensure proper treatment of wastewater and its reuse for agricultural purposes to enhance economic growth.
- Producing treated water (and a stabilized sludge) for agricultural purposes
- To improve Hygiene and Health of the residents of Lahore.

WASA Lahore Transformation from Conventional Utility to a Digital Data-Driven Water Utility

WASA Lahore has undergone a major transformation marked by remarkable expansion of its service coverage, increased public investments, reduction in non-revenue water (NRW), enhanced operational efficiency, financial sustainability and accelerated digitalization.

WASA LAHORE TRANSFORMATION JOURNEY

Key Performance Indicator	2024	2025	Achievement
Creation of New WASAs	5	36	Expanded institutional presence
Service Area Coverage	248 km ²	380 km ²	+132 km ² expansion integrated
Population	8.7 million	11 million	+2.3 million new consumers
Revenue Recovery	USD 1.77 million/ month	USD 7.10 million/month	Achieved significant financial turnaround.
Collection Efficiency	65%	100%	Improved collection efficiency from 65% to 100%
Centralized Control Room	Not Established	Fully Functional, centralized, smart control room	Enabled real-time monitoring & response
Call Center	Manual	Modernized digital call center	Faster complaint management & tracking
SCADA system Deployment	None	Deployment of 110 SCADA system on tube wells & disposal stations	Automated monitoring & operational control
GIS-Based Asset Mapping	Partial data	Complete GIS mapping of assets & networks	Improved planning, O&M, and investment targeting
Water Meters	None	Installed 1000 Smart Water meters	Enable accurate billing, detect leakages in the system
Rain Gauges	Manual	Smart Rain Gauges	Enhanced real-time rain gauges enabled with LORAWAN technology
Flood Level Sensors	Not Available	Installed at Critical sections of water bodies	Strengthened climate resilience & early warning
Financial Management System	Manual	Customized software	Improved transparency & financial control
Project Management System	Manual	Customized software	Better progress tracking & accountability
Creation of DMAs	No DMAs	Pilot Project for 300 houses	Stronger pressure control & leak detection, NRW calculation
Non-Revenue Water	52%	29%	23% reduction through leak control, metering & DMAs
Public Satisfaction Rate	70%	>90%	Significant improvement due to service upgrades
Energy Management System Compliance	None	ISO 50001:2018	Achieved ISO 50001:2018 compliance
GWOPA Partnership	Mentee	Mentor	Successfully transitioned from GWOPA Mentee (2022–2025) to Mentor status

Revenue Profile & Financial Reforms

WASA Lahore has undergone major revenue improvements over the past two years.

Revenue Performance

- **Previous Monthly Revenue: Rs. 579 million (2023)**
- **Current Monthly Revenue: Rs. 1.655 billion (2025)**
- **Increase: Almost 3x growth** in 24 months
- **Annual Revenue Growth: +Rs. 12.9 billion**

Key Revenue Drivers

- Restructuring of Revenue Directorate
- 61,000 new legal water/sewer connections added
- Real-time monitoring dashboards
- Digital invoicing, e-payments & automated billing
- Reduced theft, illegal connections and NRW losses
- Systematic recovery from chronic defaulting areas

Partnerships & International Collaboration

WASA Lahore works with major global partners:

- AFD
- JICA
- AIIB
- GIZ

- DANIDA
- DFAT (Australia)
- UNICEF
- Budapest Waterworks (EU-WOP Program) 2022- 2025