

PUNJAB URBAN WATER AND SANITATION POLICY



2007

Government of the Punjab

1. Preamble

The Punjab Urban Water and Sanitation Policy of the Government of the Punjab is intended to guide and support provincial institutions, District Governments, Tehsil Municipal Administrations, Water Utilities and communities for improving water and sanitation services. This policy is a result of wider stakeholder consultations held at the provincial and city level with institutional, primary and secondary stakeholders. The Policy provides an overarching framework for addressing the legal, regulatory, institutional, administrative and environmental issues and challenges faced by the urban water and sanitation sector in cities of Punjab. The policy is consistent with *National Sanitation Policy 2006* and *National Environment Policy 2005*.

2. Water and Sanitation Context

The Punjab's total population is 86 million out of which 27 million people are living in the cities. Groundwater is the main source of water supply which is rapidly depleting because of extensive water pumping in comparison to poor recharge. This is so because of lack of property rights over water usage and an absence of regulation to assign these rights. Access to piped water in Punjab's cities is estimated to be only about 55%, as many urban settlers rely on individual groundwater and other un-secure sources. Access to piped WSS service through direct connections to distribution networks exceeds 75% in Lahore, Sialkot and Rawalpindi, but is below 30% in Gujranwala, Bahawalpur, Multan and DG Khan. Several cities have connection ratio to sewers higher than to piped water; for example in Multan, 55% of households are reported to be connected to sewers through 126,000 connections, while less than 20% are said to have access to piped water through 37,000 connections¹.

Groundwater is the main source of supply for most cities. It is known to be adequate in Lahore, Gujranwala, Multan and Sialkot; however, the situation in Faisalabad and many other cities is less favorable. As local aquifers are saline, the main source of fresh water for Bahawalpur, DG Khan and Sargodha is the seepage from large irrigation canals. Groundwater is not only tapped by WASAs and TMAs, but also by real and industrial estates and Cantonment areas; abstraction by these independent WSS service providers is often not negligible. In Lahore, it is estimated that abstraction by users other than the WASA represent about 30% of the water consumed. In Lahore, unregulated abstraction has led to the lowering of the water table by about half a meter per year during the last 30 years; Lahore WASA has commissioned a mathematical model of the aquifer to

¹ Policy Note Options for Improving the Water Supply and Sanitation Service in Urban Areas (World Bank 2007)

help monitor its performance and design a plan to redeploy boreholes. Other cities do not have access to such a sophisticated tool. Most households or industries tap ground water without any permission and, monitoring as no groundwater abstraction fee is levied to manage demand. In addition to groundwater, Rawalpindi and towns on the Potohar Plateau get a large share of their supplies from surface sources or reservoirs and are often short of water especially in summer.

Presently wastewater in the five large cities is collected by WASA and in other cities by DGs or TMAs. A varying level of wastewater collection and drainage system exists in all of the cities. But none of the cities has complete provision to cater for total wastewater generated in the city. Typically, the wastewater collection and drainage system has a combined collection of storm and domestic sewers. There is no separation of domestic and industrial wastewaters. Overflows from the open drains to low lying areas and ponding of wastewater are commonly observed.

Raw sewage in all the cities is either used for irrigation purposes or discharged into fresh water bodies through a net work of drains, which ultimately fall into the rivers. Water from these water bodies and rivers is again used for irrigation purposes. The river waters contaminated by untreated municipal and industrial discharges are also used for drinking and recreational purposes. All this has serious environmental concerns and impacts the ecosystem and human health significantly.

In Punjab none of the cities has a proper WWT 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.

It is estimated that the urban WSS sector employs over 10,000 staff, of which 6,700 in Lahore and approximately 1,800 in the eight other large urban center; these figures do not include staff employed by Go Punjab's agencies, such as PHED. The numbers of staff per thousand water connections are very high in Lahore (14) and high in other urban centers (5.5). Punjab institutions train engineers mostly on design and construction techniques, but provide few courses on O&M. In general profiles of WSS are inadequate and staff is not properly trained.

WSS are both operated and regulated by the government in a conglomeration of functions, which are in need of being extricated. In TMA, there is no separate accounting for WSS, which is the necessary basis for accountability. WASA are "autonomous agencies" but essential functions are not in the hands of the WASA management. Punjab WSS institutions lack accountability mostly because of an

unclear mandate of the key functions of policy formulation, ownership of WSS assets and operating the WSS service. This is further aggravated by weak economic setup, poor financial resources and inadequate or non-enforced environmental regulations.

The tariff revenues of WASA and TMA do not even cover current operating costs due to poor collection rates and low tariff levels. Service providers respond to financial shocks by reducing service quality (e.g. reducing hours of service to reduce electricity costs). Poor maintenance and poor operating efficiency leads to existing resources being poorly employed, thus contributing to the vicious circle of poor performance, poor service, poor collection rates, insufficient funding.

The community behavior and attitude towards conservation of drinking water and responsibility for paying the utility bills is poor due to poor education and communication strategies

The partnership with the private sector in the absence of clear policy guidelines and procurement process has not yielded the desired potential and engagement with the sector.

3. *Vision, Goals and objectives*

Sustainable water and sanitation for all

To provide optimum quantity and acceptable quality of water and sanitation services on a sustainable basis.

The objectives of the policy are to:

- I. Provide a legal, regulatory framework and efficient institutional arrangements for sustainable water supply, sanitation and wastewater treatment services
- II. Sustainable financing arrangements including Community Participation and Public Private Partnership

4. *Policy Principles*

The following key policy principles would be employed for achieving the objectives and policy measures.

4.1 *Sustainable Development*

Access to safe drinking water is essential for human well being and human development. The present use of water in the cities for any purpose should not undermine the needs of the future generations. Allocations for various users would consider well defined property rights, environmental flows and sustainable yield of aquifer.

4.2 *Community Participation*

Community participation is essential for sustainable urban water and sanitation projects. The communities living in the cities will be encouraged and supported to participate through component sharing and decision making in the integrated water and sanitation projects in the new coverage area and un-served area. Gender analysis will be used to assess levels of participation of men and women in the planning process.

4.3 *Social and Environmental Considerations*

Investment in the water and sanitation sector will be socially and environmentally sensitive. Each project proponent would assess the environmental and social impacts on the wellbeing of the community and the environment. This would enable the proponent to design and implement appropriate mitigation measures and environmental management plans.

4.4 *Capacity Building*

Institutional capacity building is an essential intervention for effective and efficient functioning of institutions. This entails human resources development through provision of in-service training and the implementation of appropriate corporate institutional arrangement.

4.5 *Public Private Partnership (PPP)*

PPP would be encouraged for revenue collection, metering, and WSS services. A contractual and regulatory framework will be developed accordingly to ensure private sector participation.

4.6 *Environmental, Health and Hygiene Education*

Water is a scarce environmental resource and its conservation is of prime importance. Government will ensure promotion of environmental health and hygiene amongst all stakeholders through integration of Environmental, Health and Hygiene education component in water and sanitation projects and curricula of primary, secondary and tertiary educational institutions.

4.7 *Monitoring and evaluation*

Monitoring and evaluation should be an integral part of institutional operations and throughout the project life cycle. Water utility will use benchmarking indicators of the International Benchmarking Network for Water and Sanitation Utilities (IBNET) for effective monitoring and evaluation of WSS services.

5. *Policy Measures*

5.1. *Allocation of Property Rights*

Government of the Punjab shall prepare and notify regulatory framework for allocation of property rights for surface and groundwater to WSS utilities to further allocate user rights for the surface and ground water resources to legitimate users.

5.2 *Regulatory and Institutional Framework for Water Utilities*

Government of Punjab shall notify a legal and regulatory framework to transform Water and Sanitation Agencies/ public sector water and sanitation providers into independent utilities with optimum levels of administrative, financial and operational autonomy

5.3. *Strategic Urban Water Sector Planning and Management*

Water Utilities would be facilitated and guided towards long-term strategic interventions aimed at:

- . Developing robust *performance improvement* and *business* plans for sustainable infrastructure and services.
- . Structuring capital investment, provincial as well as local, to be geared towards strategic interventions focusing on human resource development, systemic improvements and sustainable infrastructure.

- . Enabling Public-Private Partnership for financially, socially and environmentally sustainable infrastructure and service delivery.
- . Ensuring effective community participation and promoting gradual community cost sharing models for sustainable infrastructure and service delivery.
- Adopting equitable and inclusive approaches for provision of infrastructure and services for the poor and other marginalized areas as well.
- . Ensuring consumer metering of water consumption to discourage over use of water for industrial and municipal purposes.
- Treatment of water and municipal wastewater to comply with the drinking water quality standards and NEQS respectively.
- . Using benchmarking of utility services as a tool towards continuous performance improvement.

5.4 *Environmental, Health and Hygiene Education*

Government of Punjab, District Governments and Water utilities will develop and implement effective *environmental conservation* and *health & hygiene* education programs for consumers, educational institutions and other internal and external stakeholders.

6. *Policy Instruments*

The following key policy instruments would be employed for achieving objectives of the Policy.

6.1. *Statutory Instruments*

Appropriate legislation in the urban water and sanitation sector would be promulgated which includes.

- Punjab Urban Water Act for assignment and regulation of surface and ground water property rights in Cities.
- WASCO Act to establish corporate independent Water and Sanitation utilities in Cities
- Punjab Municipal Services Regulatory Authority Act for establishment of a regulator to regulate the provision of water and

sanitation services by water utilities and Independent Service Providers with due consideration of property rights, quality of services, customer satisfaction and environmental sustainability. The regulator will also regulate the inter agency agreements and disputes.

6.2. *Environmental Governance Instruments*

- Environmental consideration would be integrated into water and sanitation strategic and investment plans prepared by Water utilities and Cities.
- Environmental Impact Assessment (EIA) and Initial Environmental Examination (IEE) and related provision of the Pakistan Environmental Protection Act, 1997, would be enforced for all the water and sewerage projects.
- Social Impact Assessment (SIA) will be conducted for large projects involving resettlement and rehabilitation.
- Environmental Monitoring and Management Plans for WSS projects will be prepared and used to assess the performance of the project and consequently, environmental audits.
- ISO-14001, 9001 will be implemented in water utilities.

6.3 *Socio-economic Instruments*

- **Performance Based Financing:** Government of Punjab and Cities will fund water utilities based on performance based incentive financing from its own resources and from private sectors, which are sustainable and invested in sustainable systems.
- **Component Sharing:** Water and sanitation projects will use *internal and external component sharing model* for financing of community based interventions.
- **Need Based Financing:** The Government of the Punjab will fund water and sanitation projects based on the accessibility to services and the condition of infrastructure in the city.
- **PPP contract:** PPP mode of financing and management shall be used as an instrument to facilitate capital investment, enhance efficiencies, expand the service areas; and improve accountability & quality of service delivery.

- **User charges:** The tariff for service provision should be linked to the actual cost of service provision to ensure financial sustainability.
- **Subsidies:** Subsidies will be provided through lifeline tariff in the low income areas. To enhance provision of water and sanitation services in low income areas, the differential cost will be met through targeted subsidies.

7. Implementation and Monitoring

The implementation of this policy is the joint responsibility of Government of the Punjab and respective water utilities.

To ensure effective coordination of Policy Implementation and to oversee the progress in this regards a “Punjab Urban Water & Sanitation Policy Implementation Committee” would be notified by the Government of Punjab at the provincial level:

1. Chairman P&D Board (Chairperson)
2. Secretary LG&CD Department (member)
3. Secretary HUD&PHED (member)
4. Two Representatives of the Water Utility (members)
5. One District Nazim
6. One T.M.A Nazim
7. Chairperson of the Water and Sanitation Committee of the Provincial Assembly
8. Representative of the EPD, Go Pb
9. One Representative of Civil Society (member)

The Committee shall prepare an annual report on the implementation status, hurdles and problems and suggest measures to overcome these constrains. This report shall be presented before the provincial assembly, released to the press and placed on the official website of Go Punjab for public dissemination. Urban Unit P&D Department will be the secretariat of the committee.