P-ISSN: 2709-6254	Journal of Development and Social Sciences	April-June 2022,Vol. 3, No. 2
O-ISSN:2709-6262	http://dx.doi.org/10.47205/jdss.2022(3-II)64	[709-643]

Journal of Development and Social Sciences
www.jdss.org.pk

RESEARCH PAPER

Safe Drinking Water and Local Governments: A Study of Bahawalpur Metropolitan Corporation (2000-21)

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PAPER INFO

Received:
February 24, 2022
Accepted:
May 25, 2022
Online:
May 27, 2022

Keywords:
Local Governments, Metropolitan, Corporation, Safe Drinking Water, Urbanization

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ABSTRACT

Safe Drinking Water is a fundamental human requirement, which necessitates efficient management for better service delivery. Safe water governance remains hardly understood in Pakistan, even though water-related issues are widespread in the country. Pakistan is a federal state with a three-tier government i.e. national, provincial, and district. Constitutionally, the provision of safe drinking water to all citizens is a provincial responsibility. This research is an analysis of the decentralized water services in Bahawalpur Metropolitan by focusing on the nature of consecutive local governments during 2000-21. The paper examines decentralized initiatives, institutional design, and implementation strategies in the water sector. The study uses primary data from a survey involving 300 respondents and records of water-related institutions. Secondary evidence from published sources has also been utilized. Findings of the research point to the importance of decentralization particularly in stakeholder participation on water issues, power, and responsibilities in the water sector.

Introduction

Safe drinking water is substantially essential for the survival of human beings (Mumtaz, Mirjat, Mangio, & Soomro, 2017). Good human health requires quality drinking water, which is a basic human right (Mohsin, Safdar, Asghar, & Jamal, 2013). Poor quality of water, improvised sanitation, air pollution, and poor system of solid waste management have disastrous effects on human health. Among all the factors, contaminated water is the most threatening to human lives (Khan, Fatima, & Khan, 2014). Only 3% of the total volume of water is available for human drinking. 90% of available water is in the form of glaciers, icecaps, and snowfields while the remaining 10% is groundwater. About 18% of the world population of over 1.2 billion people does not have access to improved means of drinking water. About 1/3 of the world's population drinks groundwater, which is continuously falling in contamination due to several factors (Mehmood et al., 2012).

Growth in urban population caused by different socio-economic factors is called urbanization, which places pressure on the availability of freshwater resources in urban areas. The concentration of people also puts the demand for water on a hike. Average water withdrawal in urban areas of developing countries currently accounts for 10%–20% of the total as a consequence of population growth. Economic developments are also a factor, which impacts the water demand and require the efficiency of water governance. A special report by the Intergovernmental Panel on Climate Change (IPCC) indicates that rapidly increasing urbanization and the expansion of urban centers in developing countries have

led to the advent of highly vulnerable urban communities. Hiking urban population will ultimately limit the availability of water for human beings due to increment in per capita water consumption, which will aggravate the maladministration of the available water resources (Okello, Tomasello, Greggio, Wambiji, & Antonellini, 2015).

United Nations General Assembly has recognized drinking water as a human right through Resolution 64/292 on 28 July 2010. According to the resolution the organization calls upon the global community to offer assistance in water resource management and capacity building to improve the water services particularly in developing countries (UN Department of Economic and Social Affairs, 2019).

"Access to water and sanitation is recognized by the United Nations as human rights, reflecting the fundamental nature of these basics in every person's life. People are rights-holders and States are duty-bearers of providing water and sanitation services (UN Water, 2010).

Local government is the 2nd tier in unitary while 3rd and sometimes 4th tier in federal states. Local governments bring closer the administration and people and facilitate the latter to participate effectively in the decision-making. Local governments happen geographically both in urban and rural areas to render public services under the authorities conferred upon them. Political, administrative, and fiscal powers conferred upon the local governments are to democratize the people and render basic civic services (United Nations Human Rights Council, 2015). For pursuing the 2030 Agenda of Sustainable Development, Local Governments are the main organs of governing mechanisms, as has been practiced in most developing countries. UN-Habitat states that most of the 2030 agenda may not be accomplished without the appropriate participation and support of the local players (Ahmad & Haq, 2021).

Pakistan ranks among the world's 37 countries, which are under pressure from the water crisis. The quality of drinking water is deteriorating continually due to biological and piped contaminations (Sayal, 2015). World Recourse Institute (WRI) positions Pakistan among the countries facing high water stress. Demand for fresh and safe drinking water has increased remarkably over the years. As per global standards, the availability of 1000 m3 per capita water reflects water scarcity, which has alarmingly come down to merely 1037 m3 per capita in Pakistan. Not only available quantity but the quality is also under a question mark. In Pakistan, safe drinking water is available only for 37% of individuals with worsening health conditions. The country allocates a handsome amount per annum to the treatment of contaminated water (Hartmeyer, 2018).

Groundwater and rivers are the main sources of drinking water in Pakistan (Saleem, Ali, & Afzal, 2018). Excessive water withdrawal from rivers, lakes, wetlands, and ground resources is causing a rapid decline in available water resources. Rapidly increasing unavailability of water may impact the institutional capacity to render water services efficiently (Watts, Walton, & Yeung, 2020). In Pakistan, the per capita water availability has dropped from 5,600 cubic meters in 1952 to 1,200 cubic meters in 2003 and if immediate action will not take, the per capita water availability would decrease to less than 1,000 cubic meters by the year 2022. Currently, the service standard of water supply in the cities of the Punjab province is unable to meet minimum standards. As the population continues to grow, the country is approaching the utilization limits of its water resources (Hartmeyer, 2018).

Pakistan observed rapid growth in population in the second half of the 20th century. Bahawalpur is also among the cities, which experience a high rate of population growth. In 1981, the country's urban population was 24 million, which touched the figure of 42 million in 1998. In 2009, this acceleration in urban population produced 58 million out of the total population i.e. 162 million. The urban population of Punjab was 31.4% in 1998. The same census revealed that 27% of Bahawalpur's urban population. Currently, things are entirely different from that shown in the census of 1998. Increasing urbanization has accelerated the demand for civic services including drinking water and placed an abundant pressure on governing institutions. The biggest challenges faced by the municipal governments including Bahawalpur are due to poor attention and lack of funds (Khan, Arshad, Shafqat, & Khan, 2015).

Industrial development, expansion of urban centers, and population growth, coupled with inadequacies in water use, lead to declining in quality and quantity of the surface water (Abdul & Yu, 2020). Pakistan has an impoverished infrastructure in the municipal services sector, which is unable to cope with the increasing requirements of the abundant urban population. Sustainability in urban civic services depends upon the healthy mechanisms of national and local governance. It involves the sustainable management of city resources by elected offices. Local governments in urban areas are responsible for the governance of civic services for their inhabitants including safe drinking water, which is directly connected to the concerns of urban growth (Khan et al., 2015).

Punjab is the most industrialized and most populous province of Pakistan, which is known for its lowest rate of poverty among all other federating units of the country (Civil Society Human and Institutional Development Programme, 2020). Currently, urban life in Punjab province is facing challenges in the service sector i.e. water, sanitation, and sewerage. Water scarcity has become a source of trouble due to the depletion of water resources. As never in the past, the essentiality of efficient water resource management and concentration on water-related issues has converted into a matter of wider concern. The non-existing policy of water conservation is posing severity in the safe water sector of urban areas (Mohsin & Khan, 2014).

In the governance sector, population pressure, delays in planning, and unplanned withdrawals are major factors impacting the performance of water institutions. There are no adequate legal and policy frameworks regarding safe water services. Ambiguity in institutional mandates creates breaches in terms of oversight to support the improvement in the sector. Institutional mandates outlined in the legislative frameworks overlap between provincial and local governments leading to an ambiguity that who is responsible for water services. In drinking water sector, Local actors including Community-Based Organizations have been given important roles across the globe but not in the case of Pakistan despite the country is a signatory of the Dublin Statement on Water and is committed to Sustainable Development Goals (Watts et al., 2020).

Material and Methods

This research work has been done with the utilization of primary and secondary sources of data collected from municipal and administrative offices of the government and published works from various national and international publications. Data regarding water infrastructure, municipal staff, billings, and complaint resolution mechanisms have been collected from administration and municipal offices while the essential material regarding the municipal services of safe drinking water has been taken from different published sources. The researcher prepared a comprehensive questionnaire and conducts

a survey comprising 300 respondents from different parts of the Bahawalpur city to gauge the level of awareness and satisfaction among the masses regarding the provision of safe drinking water from Bahawalpur's municipal administration. Convenience sampling of non-probability (Random Sampling) and percentage tool have been adopted to materialize the questionnaire. 40 of the 300 respondents refused to answer back the questionnaire. Survey results obtained from 260 respondents have been analyzed in the study. To make the readers aware of the references, the researcher utilized American Psychological Association (APA) style for the bibliography.

Legislative Measures Regarding Safe Drinking Water and Local Governments

Constitutionally, Article 38(d) obligates the state institutions to provide necessities of life (Constitution of Pakistan).

Federally Legislated DOPP 2000 and LGO 2001

DOPP was based on decentralization, electoral reforms, and the concept of subsidiarity and transfer of power from provinces to districts and other lower levels (Alam & Abuzar Wajidi, 2013). Local Government Ordinance 2001 introduced the three-tier system in district government i.e. district, tehsil, and union level. Infrastructure management and service delivery including waste management, clean drinking water, traffic management, parks, and recreation were the responsibility of the Tehsil Municipal Administration (TMA) under the supervision of the Tehsil Municipal Officer (TMO) or Tehsil Nazim (Khan et al., 2015).

Under the provisions of LGO 2001, TMAs have acquired wired administrative arrangements. Planning, Infrastructure and Services, Finance, and Regulations were given under separate offices. However, incomplete devolution of PHED disadvantaged the tehsil administration in terms of required technical capabilities. Provision of healthy municipal services to urban centers required the upturn in staffing or resources for the Municipal Committees (MCs) at district and tehsil levels but lacking an appropriate resource base has faced resolvable complications. Before the LGO 2001, PHED was responsible for the development and maintenance of water and sanitation services, particularly for large-scale projects but after the central legislation, provinces devolved PHEDs in different ways (Cyan et al., 2004).

Provincial Legislations and Provisions Regarding Drinking Water

Article 52 of LGO 2001 provides that Water and Sanitation Agencies coming under the control of the District Government shall be decentralized to the concerned Tehsil Municipal Administration or the City District Administration. As per Article 54, Tehsil Municipal Administration will provide, manage, operate, maintain and improve the municipal infrastructure and services, including water supply and water resources. Functions of the Union Administration, to provide and maintain public sources of drinking water, including wells, water pumps, tanks, ponds, and other works for the supply of water have been described in Article 76. Concerned local governments are bound under Article 94 to provide to its local area a supply of wholesome water. According to Article 95, all private sources of water supply shall be regulated by the local government. Village and Neighborhood Councils will develop and improve water supply sources under Article 96 (LG&CD Department, 2001).

Punjab Local Government Act, 2013(Amended Up to 06.02.2016) categorizes the intra-city network of water supply into municipal services along with waste management,

public toilets, roads, streets, traffic signals, public parks, graveyards, firefighting, and land use control. The act includes also the maintenance of these services and enforcement of any law relating to municipal services. Under Article 72 union council is responsible for rural water supply schemes and the development of water sources. The act encourages community organizations to coordinate government agencies for rural water supply schemes. Article 77 provides that District Councils will assist the union councils of rural areas to provide and maintain public sources of drinking water. The function of water supply and control and development of water sources in urban areas rests with Municipal Committees under Article 81. According to Article 87, Metropolitan and Municipal Corporations will develop an integrated system of water reservoirs, water sources, and treatment plants. Local governments will be responsible to provide their area of responsibility sufficient supply of water, as provided under Article 102. Private source of the water supply will be regulated by the local government under Article 103 (LG&CD Department, 2016).

Article 9 of the Punjab Local Government Act 2019 declared nine Metropolitans in the Punjab province; cities of Rawalpindi, Sargodha, Sahiwal, Faisalabad, Gujranwala, Multan, Bahawalpur, Dera Ghazi Khan, and all areas comprising the district Lahore. Article 150 says that all public streams, works for supply, storage, and distribution of drinking water looked after by the local governments. Part Two of the Third Schedule of this act categorizes the drinking water supply into the responsibilities of municipalities. The fifteenth Schedule of the act deals with the municipal offences including related to sources of water supply (Government of Punjab, 2019b)

The Government will notify the establishment of an authority to be known as "the Punjab Aab-e-Pak Authority" under Article 3 of the Punjab Aab-E-Pak Authority Act 2019. Article 4 of the act provides that the authority will be responsible to take appropriate steps for the provision of a sustainable supply of safe drinking water in the province (Government of Punjab, 2019a). Under Article 3 of The Punjab Water Act 2019 the government will constitute Punjab Water Resources Commission to discharge the responsibilities assigned or transferred under this Act. Punjab Water Services Regulatory Authority with the Chief Secretary as the chairperson will be established to discharge the responsibilities assigned or transferred under Article 7 of the Act. Article 14 of the act bounds the water undertakers to institute an effective system of water supply within their area of responsibility (Government of Punjab, 2019d).

Urban Profile of Bahawalpur City (Metropolitan Corporation)

Bahawalpur City covers an area of 96 km, which is located south of the Sutlej River and well connected to the main cities. Currently, Bahawalpur is a city of 762111 residents. The rate of population growth was 5.05% from 1981 to 1998. This population trend projects the population in 2024 approximately 810,276 (The Urban Unit, 2014). Bahawalpur has become Pakistan's 12th largest city due to current trends of urbanization, which aggravated the state of basic civic services even more (Ali Khan, Fatima, & Khan, 2014). The water table of the city ranges from 5.5 to 10 meters. Groundwater in most parts of the city is saline. PCRWR is continuously reporting the contaminations in the groundwater of the city (Mohsin et al., 2013).

Bahawalpur, part of southern Punjab, is one of the rapidly growing medium-sized cities of Pakistan. Rapid urbanization has affected the performance of municipal institutions of the city (Khan et al., 2015). The urban population of Bahawalpur City was 45809 in 1951. It was increased to 81605 in 1961 and 133782 in 1972. The city observed

a rapid increase in population during the following years. The number of individuals in the urban core of Bahawalpur City grew up to 180263 in 1981, 408395 in 1998, and 7.62 million in 2017 (Pakistan Bureau of Statistics, Regional Offices) and (Census 2017). The water demand is increasing day by day and different departments are working cooperatively to cope with the water requirements of the city. There are numerous water supply-related issues mainly due to disorganized water governance (Khan et al., 2015).

Municipal Profile of Bahawalpur City (Metropolitan Corporation)

As compared to other cities in the region, Bahawalpur is in a better position in terms of basic human services. Mechanism of Solid and Liquid Waste Management in Bahawalpur City is almost in the line of other cities i.e. Sargodha, R.Y Khan, Sahiwal, and Jhang, but much healthier than Sheikhupura, Chiniot, Kasur, Okara, and DG Khan. The state of safe water services in Bahawalpur City is unsatisfactory. The water supply network of municipal institutions covers 10% of the city area. Low service coverage, unhealthy quality of water, and unapproved water connections are water-related issues in the city (The Urban Unit, 2014).

Bahawalpur City has been declared as the Metropolitan City under Article 9 of the Punjab Local Government Act 2019 (Government of Punjab, 2019c). The municipal area of the Bahawalpur City observes salinity in water but the situation differs in the canal and riverine areas. Currently, Public Health and Engineering Department is accomplishing the reintegration of the Urban Water Supply Scheme in Bahawalpur City to enhance service coverage. In this regard, Southern Punjab Basic Urban Services Project (SPBUSP) is also working in the sector of safe water services. The increasing magnitude of arsenic in water is causing hazardous diseases among the citizens (Mehmood et al., 2012). It is believed that water in Bahawalpur City is under saturated and of corrosive nature (Tahir, Saleem, & Hussain, 2018).

The city is under stress and depletion of natural resources due to the rapid increase in urban population. Most urban residents use electric water pumps to extract water for domestic usage (Mohsin et al., 2013). The quality of groundwater is unhealthy in the Bahawalpur city, which has higher values of EC, fluoride ions, and TDS than WHO and PSI standards which may lead to many health issues. The presence of pH in groundwater is another threatening factor to human health (Mehmood et al., 2012). The majority of the urban inhabitants are unhappy with water services, which do not cope with the expectations of the citizens. An ineffective system of monitoring hurdles the efficiency in service delivery of water-providing institutions (Mohsin et al., 2013). There is morbid coordination among the service providers' e.g. local government and municipal institutions (The Urban Unit, 2014).

According to a study "Sustainable Management of Water Supply in Bahawalpur City, Pakistan" the majority of people in Bahawalpur City consider safe water services a challenge for social life (Mohsin & Khan, 2014). Municipal Corporation of Bahawalpur (MCB) provides water services in city areas while Safe Pani Company provides safe drinking water in rural areas. The city has been divided into Sweet and Brackish Zones. An old city is covered by seven gates and western parts of the city fall into the sweet zone while others are in the brackish zone (Office of the Metropolitan Corporation, Bahawalpur). According to a report by the Pakistan Council of Research for Water Resources (PCRWR), there are arsenic concentrations above the WHO standard in some groundwater samples obtained from Bahawalpur (Aziz, 2005).

Analysis of the Data Collected from District Administration and Municipal Offices

Table 1
Managerial Arrangements in Bahawalpur City (Metropolitan Corporation)

Officials / Staff	Number	Posting / Recruitment	Recruited during the Enforcement of LGO 2001	Recruited during the Enforcement of LGA 2013	Recruited during the Enforcement of LGA 2019	Recruited before the Enforcement of LGO 2001
Municipal Officer Infrastructure	1	Posting	-	-	-	-
Sub Engineer (SE)	1	Posting	-	-	-	-
Engineer	1	Posting	-	-	-	-
Sub Engineer	1	Posting	-	-	-	-
Supervisor	1	Recruitment	-	-	-	1
Technical Staff	6	Recruitment	2	3	-	1
Operators	50	Recruitment	22	14	2	12
Total	61	-	24	17	2	14

(Office of the Metropolitan Corporation, Bahawalpur)

The office of the Municipal Officer Infrastructure (MOI) heads the water services provided by Bahawalpur Municipality. One Executive Engineer (EXN), one Sub Engineer (SE), six Technical Staff, and 50 operators assist this office. This human resource does not meet the requirements of the increasing demand for water in the city (Office of the Metropolitan Corporation, Bahawalpur).

Drinking Water-Related Infrastructure in Bahawalpur City

In August 1982, PCRWR established its Desertification Monitoring Unit (PADMU) in the city, which was upgraded to the Regional Office of the PCRWR in 1985. The regional office of PCRWR has a Quality Laboratory, which is equipped with the latest equipment and qualified professionals (PCRWR, Regional Office Bahawalpur). Public Health Engineering Department (PHED) is another organ of district administration that deals with the water-related technical portfolios. Installation and maintenance of water infrastructure in Bahawalpur District rest with the PHED (PHED Office, Bahawalpur).

Table 2
Drinking Water-Related Infrastructure in Bahawalpur City

Infrastructure	Total	Installed during the Enforcement of LGO 2001	Installed during the Enforcement of LGA 2013	Installed during the Enforcement of LGA 2019	Installed before the Enforcement of LGO 2001	Installed Privately or under Public-Private Partnership
Water Filtration Plants	33	3	25	3	-	2
Water Supply Schemes	9	4	4	-	1	-
Distribution Lines	26 KM	8				
Tube Wells	55	20	32	-	3	-
Storage Tanks	8	2	4	-	2	-
Direct Pumping Stations	2	1	1	-	-	-

(Office of the Metropolitan Corporation, Bahawalpur)

Bahawalpur City has 33 Water Filtration Plants including three Reverse Osmosis (ROs) plants, which remove contaminated particles from drinking water. There are nine Water supply schemes and 55 Tube wells in the city. The length of distribution lines in Bahawalpur City is 26 KM. Water has been stored in four Ground Storage Tanks and four Overhead Reservoirs, and two direct pumping stations. MCB is lacking well-designed infrastructure, the latest techniques and equipment for water storage, a system of public relations, and ample strength of technical staff (Office of the Metropolitan Corporation, Bahawalpur). Water supply charges are being collected by TMAs in Bahawalpur (Asian Development Bank, 2012). Some officials of local government institutions say that fully enforcement of Punjab Aab-E-Pak Authority Act 2019 and Punjab Local Government Act 2019 has not been materialized. No offices of the Punjab Aab-E-Pak Authority and Punjab Water Resources Commission have been established in Bahawalpur. The establishment of the Punjab Water Services Regulatory Authority is also in abeyance (Office of the Metropolitan Corporation, Bahawalpur).

Results and Discussion

A survey has been conducted in Bahawalpur City to find out the quality of the municipality's water services, citizens' awareness, and level of public satisfaction. Among the 260 respondents, 38% drink groundwater, 18% piped water, and 19% take water from filtration plants. Only 5% use bottled water. 65% of the respondents cannot differentiate between polluted and safe drinking; 29% have awareness about quality drinking water while 15% are not sure about the question. Unavailability of safe drinking water is a major problem for human beings, 82% of people say. 15% of the respondents are against this stance. 60% strongly agree while 19% just agree that they prefer municipal water services to the ground and bottled water. 16% do not want to prefer municipal water services to other sources of water. The majority of the respondents intend to avail the water services of municipal institutions if there is an improvement. Only 16% of the surveyed people are not willing to drink water serviced by municipal institutions.

More than half of the population shows dissatisfaction with the services of Bahawalpur's municipality. Merely 14% of the respondents are satisfied with the services. About half of the population blames infrastructural issues and 35% blame administrative issues behind the poor services. Financial and quality issues have been blamed by 20% and 15% respectively. In Bahawalpur City, 11% of people drink normal water, 16% sweet, 21% medium and 43% use brackish water for drinking. 24% of the respondents don't know about the taste of the water they drink. Question about the smell or odor from the water, 12% say no smell, 15% slight smell, 21% medium smell, and 39% feel the fast smell from drinking water. 45% of respondents say that there is a filtration plant in or near the residential area of while 39% deny it. 76% of the 260 want a water filtration plant in the locality of their residence while 11% are not agree. The majority of the respondents believe that the Municipal Corporation of Bahawalpur does not render quality water services.

About 75% of populations believe that population pressure affects the performance of municipalities. Only 11% of people do not consider the population pressure as an impediment to the performance of municipalities. There is no water-conservation strategy in the knowledge of 60% of people launched by municipal offices. 19% of the respondents disagree the statement. Most people pay no or nominal price for municipal water services. More than half of the populations want free cost water services while a little number of the respondents agrees to pay nominal charges. A little number of the people drink one to ten

glasses of water whereas majority of the individuals drink a small quantity of water. The majority of the people agree that the quantity of drinking water per day may be increased if the qualities of water or water services from Municipal corporations upturn.

In terms of water storage at homes, 12% of people use cemented tanks, 12% plastic tanks, 62% fiber tanks, and 4% steel tanks while 11% avail of direct supply. Fiber tank users believe that fiber tank is better for water storage in homes. In the opinion of the 11% of people, a direct supply of water is also a good option. According to survey results maximum people clean their water tanks after one year. More than 60% of people have no necessary knowledge about water departments and easy access to municipal offices to put forth the complaints regarding water services. 8% of respondents have sufficient knowledge and 11% know little about the above. Amongst the total respondents, 64% never lodged any complaint with any government agency against issues of water services. 16% have contacted government institutions regarding the issues of safe drinking water in the city.

About 7% of complainants approached the local government office, 14% lodged a complaint with the municipality, and 9% tabled the complaint to district administration offices. More than 60% of people never registered any complaint. About 68% of people say that water-related offices have no proper mechanism of complaint resolution. In the opinion of 16%, water-related offices resolve the complaints properly. The people who know nothing about complaint resolution are 15%. Fully functional local government systems can deliver healthier water services and it is better to approach representatives of local bodies for this purpose, 53% agree with the statement. 38% of people do not endorse the above statement and 9% are not sure what to answer. The stance of about 70% of people is that municipal institutions can deliver healthy services of drinking water under an effective system of local governments while more than 20% do not endorse the above stance.

Conclusion

After studying the municipal profile of Bahawalpur City at length, it has been analyzed that in the municipal sector of Bahawalpur City, services of safe drinking water are unsatisfactory and need to be improved. The municipality of Bahawalpur City could not recruit good-sized technical staff and operators which is insufficient to cope with the service requirements of the Metropolitan area. The infrastructural picture also portray a poor image of the safe water sector in the city. No reasonable water treatment facilities are available with the Metropolitan Corporation of Bahawalpur. In terms of quality testing, city's only PCRWR laboratory facilitates both urban and rural areas of the district.

During the study, a survey questionnaire covering the citizen's awareness and public satisfaction has been responded by 260 individuals who reside in different areas of Bahawalpur City. After the materialization of the survey, It is generally believed that unsafe drinking water is a major health issue. The most people use self-extracted groundwater and do not ready to depend upon the water services of the municipality. In their point of view, the Metropolitan Corporation of Bahawalpur does not render quality water services. Most of the respondents are willing to use drinking water from the water supply system if serviced efficiently by municipal institutions. About half of the population blames infrastructural issues behind the poor services followed by administrative, financial, and quality issues, which require overhauling of the entire water system. It is a general observation among the people that population pressure affects the performance of municipalities and there is a gap between demand and supply.

There is no water-conservation strategy launched by municipal offices to lower this gap. On the financial side, most people pay nothing or a nominal price and they are not ready to pay a sufficient amount for the services they provided. Most people agree that the quantity of drinking water per day may be increased if the quality of water or water services from the municipality upturns. There is prevailing unawareness about the storage of water and cleaning of storage tanks at homes. About 60% of people have no necessary knowledge about water departments. Complaint-lodging with the administration offices is uncommon among the people. It has been analyzed that most of the population endorses a fully functional local government system in Bahawalpur City to deliver healthier water services. They prefer to approach representatives of local bodies for this purpose.

It is a common thinking that municipal institutions can deliver better services of drinking water under an effective system of local governments. Improvement in the service quality of the existing water supply system and revenue collection mechanism is the need of the hour. It is necessary to uptake the decentralized administrative approaches to maximize the utilities of safe water services. An effective system of safe water governance requires lessening the bureaucratic approach while escalating the public participation in water governance. Trust building between local governments and local communities is also necessary. The local governing mechanism is essential for urban water pricing and tariff reforms.

Local government institutions particularly municipalities make aware of the people about the water-related concerns. The researcher also recommends that to safeguard the fundamental human rights and ensure the provision of safe drinking water to 220 million people of Pakistan, political and administrative ramifications must be materialized on war footings. Planning in the safe water sector has been devised based on the availability of resources, which should be based upon local demands. The infrastructure of the Metropolitan Corporation providing water services should be upgraded. It is necessary to recruit well-educated assistance staff specifically operators. Make trust-building efforts and launch an awareness campaign to motivate the people regarding the utility of municipal water services. Budgetary allocations must be enhanced. Enhance the number of water filtration plants. Maximum areas should be given a water supply scheme. Consumer rights must be protected in future water policy. It is highly recommended to strategize a result-oriented mechanism of safe water services.

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