



Research paper

Examining the Perceived Effectiveness of Water Service Delivery at the Union Parishad Level in Bangladesh: A Qualitative Study of Citizens' Perspectives

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ABSTRACT

Water service delivery in rural Bangladesh is shaped not only by infrastructure availability but also by local governance practices, institutional responsiveness, and social relations. This study examines citizens' perceived effectiveness of water service delivery at the Union Parishad level in Bangladesh. Using an exploratory qualitative design, both primary and secondary data were used to conduct the study. Primary data were collected through 20 in-depth interviews, 6 focus group discussions from citizens, and 10 key informant interviews from chairmen and members across six unions in three upazilas. Deductive thematic analysis was conducted to analyze the data following six analytical dimensions: accessibility, adequacy, reliability, responsiveness, equity, and affordability. The findings show a clear gap between institutional claims and citizen experiences. While Union Parishad representatives emphasized infrastructure expansion and service initiatives, citizens reported uneven access, inadequate coverage, unreliable supply, weak responsiveness, hidden costs, and loyalty-based allocation. Equity emerged as the most critical dimension, as patron-client relationships and informal networks often shaped access to water services. The study argues that rural water service delivery is not only a technical issue but also a governance problem. Strengthening transparent beneficiary selection, grievance redress system, community monitoring, and need-based allocation is essential for improving service effectiveness and rebuilding citizen trust.

1. Introduction

Access to safe water is an essential element for the human being to sustain on the globe (Oliveira, 2017). The United Nations Sustainable Development Goal 6 seeks to make sure that everyone has access to clean water, and these resources are managed in a way that is sustainable. Improving water service delivery is still a top issue throughout the world (United Nations, 2026). Access to safe water is crucial for the development of public health. Waterborne illnesses are the predominant cause of morbidity and mortality among impoverished populations in developing nations (Malik et al., 2012). Water accessibility is not just privileges, it is widely recognized as a basic human right (Africanews, 2025). Despite some progress, 2.1 billion people around the globe lack access to safe water services where 106 million directly use untreated surface sources for their primary sources of drinking water (WHO, 2025). People in least developed countries are more than twice as likely as people in other countries to

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lack basic drinking water (Lee & Schwab, 2005). Governments of the countries and inter-governmental organizations committed to increase water accessibility throughout the world. Despite this substantial progress, millions of people have limited access to safe water services causing child mortality and morbidity (WHO, 2019). However, in south Asia over 134 million people still do not have access to safe and clean water (UNICEF, 2025). This inaccessibility of water results in undernutrition which causes a hindrance for quality education among the girls and boys in this region. It estimated that 68 to 84 percent of water sources in south Asia are contaminated (UNICEF, 2025). The region South Asia is highly vulnerable to disasters. Natural hazards like floods, cyclones, sea level rise due to climate change causes inundation of salinity in the fresh water which increases the severity of crisis for clean drinking water specially in the coastal region (Karim & Mimura, 2008). Besides that, due to the impact of climate change, water levels go down in the winter season which also causes the inaccessibility of water (Nishat, & Mukherjee, 2013).

In Bangladesh, out of its population, seventy million people lack access to safe water (water.org, 2020). Though Bangladesh met the Millennium Development Targets for drinking water by increasing progress from 68% to 87% between 1990 and 2015. However, only 42.6 % of the population has access to safely managed drinking water services (World Bank, 2020). While most of the population of Bangladesh has access to basic drinking water in urban and rural areas, the quality of water is compromised with bacteriological contamination with over 10 per cent of sources contaminated and seawater intrusion, resulting from climate hazards. Seventeen per cent of the population spends over 30 minutes to one hour, and six per cent spend between one and three hours, walking long distances to collect water every day with the burden falling overwhelmingly on women and girls: 85 per cent of water collection is done by women and 4.7 per cent is done by girls. This means that women miss quality time spent with and for the family, and girls miss spending quality time on education and learning (UNICEF, 2026). In Bangladesh, there have been substantial gains in the last several decades in making it easier for people to get to basic water sources. There are still worries about the quality, dependability, and fair distribution of water services, especially in rural regions (Ahmed et al., 2019). Union Parishads, the lowest level local government and closest institution of rural people, are mostly in charge of providing public services in their areas. These tiers of local governments plan and carry out services including water services in the rural area under Union Parishad Act 2009 (Local Government Division, 2021).

Bangladesh has made great progress in improving its water infrastructure, but rural people still face problems with service quality, consistency, and accessibility (Ahmed et al., 2019; World Bank, 2022). Water service delivery at the Union Parishad level is affected by factors including not having enough money, enough staff, and different levels of community involvement which might lead to unequal access, inconsistent service delivery, and not meeting the requirements of citizens well enough. Without citizen centric study on the efficiency of water service delivery, Policy makers may overlook the actual barriers that shape access, satisfaction, and trust in local water service delivery. Without knowing citizen perception about accessibility, adequacy, dependability, responsiveness, equity, and affordability, water services of the union parishad may not meet the needs and expectations of the rural people. In this circumstance, this study aims to fill this vacuum by examining citizens perception of the efficacy of water service delivery at the Union Parishad level in Bangladesh.

2. Literature Review

The provision of public services is a fundamental governmental activity as it directly interacts with the citizens by means of the delivery of key services like water, sanitation, health, education, and infrastructure (Fox, 2015). The World Bank delivery framework posits that citizens achieve improved outcomes when public services are facilitated through the relationships among citizens and policymakers, characterized by accountability, responsiveness, and the inclusion of the voices of the target group (World Bank 2004). This perspective considers the view of service delivery as required physical infrastructure, assuring that citizens have fair and reliable access to services without unnecessary hurdles (Joshi, 2013). This is particularly critical in low-income countries, where variation across populations within the same setting can be profound due to institutional capacity and resource constraints as well as local power relations that influence service delivery (Oates, 1999). Citizen perception has emerged as an important measure of the effectiveness of performance measures in public services as they experience public service delivery directly. Van Ryzin (2004) posits that citizen's level of satisfaction is contingent upon the relationship between expectations and performance. Andrews and Shah (2005) contend that citizen-oriented government depends on responsiveness, accountability, and service quality. Consequently, the

assessment of service performance should rely not just on administrative records but also on people's experiences in performing these representational roles (Bovens, 2007).

Union Parishads represent the most primary tier of rural local governance in Bangladesh, serving as one of the nearest official entities accessible to rural citizens (Local Government Division, 2021). They are anticipated to make substantial contributions to local development, the provision of essential services, community engagement, and coordination among line departments and development partners. Union Parishads may not always serve as the technical implementing agency for water service delivery, yet they play crucial roles in identifying local needs and beneficiary lists, coordinating with the Department of Public Health Engineering (DPHE), collaborating with NGOs, and addressing citizen complaints (Chant et al., 2016). Union Parishads, being the nearest governmental tier to individuals, are essential in shaping perceptions regarding the fairness, accessibility, and efficacy of rural water service. However, merely the decentralization of a function does not ensure enhanced service delivery. Conversely, inadequate accountability mechanisms may be taken over by local elites (Mansuri and Rao, 2013), obstructing both local development and participatory government (Joshi, 2013). In Bangladesh, local institutions are compromised by a broader framework of constrained resources, inadequate administrative ability, political manipulation, and inconsistent public involvement.

Although Bangladesh has made significant progress in enhancing access to fundamental water services, it faces considerable challenges regarding the rural governance of safe and sustainable water supply (Mondal et al., 2025). These challenges include water quality issues, such as waterborne diseases, limited availability due to seasonal scarcity, particularly in areas heavily reliant on groundwater affected by climate change; pervasive salinity alongside arsenic contamination; uncertainty regarding the financial sustainability of infrastructure post-handover to local institutions for operation and maintenance; and the need for effective coordination among the numerous institutional actors involved at various levels (BBS, & UNICEF Bangladesh, 2019). Water safety remains a significant concern for the majority of rural families, especially those dependent on tube wells and groundwater (Ahmed and Hasan, 2012). This emphasizes that the evaluation of rural water service delivery must consider not just provision but also safety, quality, and usefulness.

Coastal regions encounter difficulties in securing potable water due to climate change, rising sea levels, cyclones and storm surges, as well as water scarcity during dry seasons (World Bank, 2016). Alongside the diminished natural aquifer recharge from rainwater harvesting, salinity intrusion in coastal and low-lying regions restricts groundwater usability, compelling communities to depend on harvested or pond water, reverse osmosis systems, desalination plants, or purchased drinking water supplies (Rafah et al., 2021). Some of these are seasonal, costly, or difficult to maintain (BBS, UNICEF Bangladesh, & icddr, 2021). This has led to coastal households experiencing water insecurity, despite the availability of technology intended to facilitate formal access. Seasonal shortage also affects rural water security (Hoque et al., 2019). During dry seasons, ponds get shrink; groundwater level goes decline, and shallow wells may become inoperative (World Bank, 2020). As a riverine nation, it has abundant water sources; nevertheless, it also faces challenges such as flooding, saline intrusion in coastal regions, arsenic pollution of freshwater aquifers, and seasonal shortages (Ahmed et al., 2023). Approximately 97% of the population relies on groundwater as the primary supply of drinkable water, indicating both dependency and vulnerability (Ahmed et al., 2023). Water service access is fragmented, characterized by a significant dependence on tube wells and an apparent shortage in sanitation services.

In Bangladesh, rural water and sanitation services are administered by the Local Government Division, DPHE, Union Parishads, NGOs, and community-based organizations. The World Bank's service delivery framework indicates that policies and programs aimed at impoverished populations are frequently undermined by insufficient accountability, particularly when residents lack adequate bargaining power with service providers or policymakers (World Bank, 2004). Existing citizens' participation systems in the local government of Bangladesh are merely for eye-washing rather than for ensuring actual citizen participation (Makhdom et al., 2022). Clientelist politics involves the exchange of particular goods, services, or resources for political allegiance (Kitschelt and Wilkinson 2007). Access to public goods in these systems may rely less on rights acquired through coercive incentives and more on connections rooted in personal loyalty and party affiliation, as well as extended kinship ties and informal social structures driven by local influence. In rural Bangladesh, Lewis and Hossain (2008) illustrate that power disparity, and local government practices are significantly dependent on social networks and informal authority. Rahman et al., (2024) discovered that top-down planning approach led to actions that were not contextually appropriate, and the lack of coordination across numerous institutions undermined effective water

service delivery at the local level. Lack of human resources for providing sustainable water services, insufficient supervision, and poor assessment of operations, all of which require further enhancement for better service delivery. Citizen satisfaction is closely linked to service quality, responsiveness, and transparency (Mahmud, 2024). Institutional performance alone does not guarantee positive citizen perception.

Previous research of water governance in Bangladesh have also mostly focused on coverage of infrastructure, quality and arsenic concentration, climate vulnerability and risks, institutional capacity as well as implementation level scenarios surrounding water policies. But how the rural citizens can judge real experience of water service delivery in Union Parishad need to be examined. Specifically, there is limited qualitative evidence about how citizens experience accessibility, adequacy, reliability of services as well as responsiveness, equity and affordability in their day-to-day interactions with service delivery. Furthermore, the role of informal networks including family ties, political loyalty, patron-client relations and institutional trust in local water service delivery, needs to be explored. This study fills this gap by looking at citizen perceptions of water service delivery at the Union Parishad level within six rural unions across Bangladesh.

3. Analytical Framework

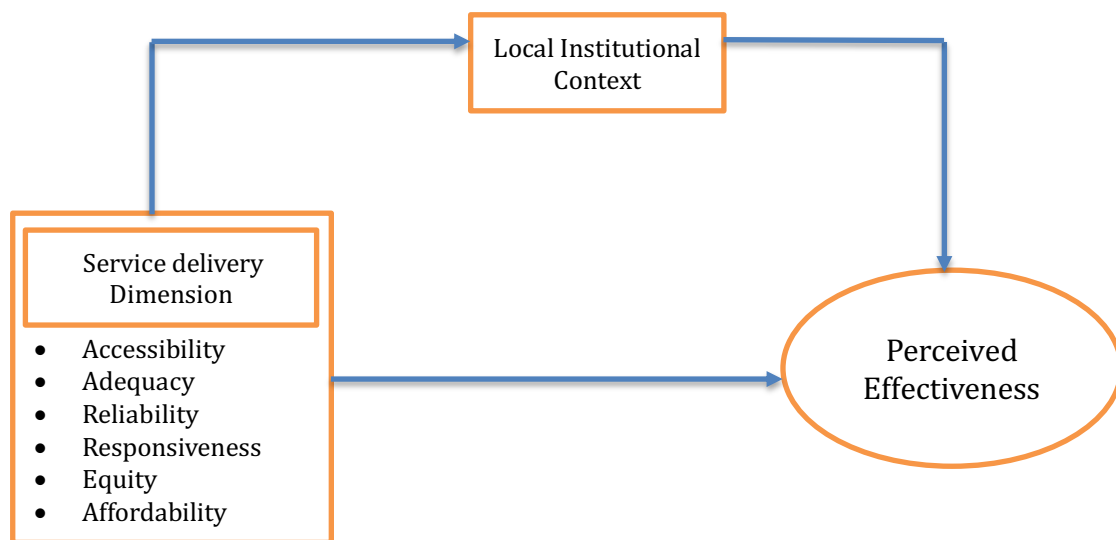


Figure 1: Analytical Framework

The study is conducted following an analytical farmwork where effectiveness of water service delivery in the union parishad is measured through six dimensions including accessibility, adequacy, reliability, responsiveness, equity, and affordability. These dimensions were selected as they capture both physical availability and governance issues of water service delivery. Accessibility refers to the extent to which citizens can obtain water services at the time of their need. It includes availability of effective water sources in their locality and distance from the home to water sources (World Bank, 2004). Adequacy in the framework is related to the quantity of water sources and amount of water supplied from the sources meeting the needs and demand of the citizens. Insufficient water supply from the sources can affect the satisfaction of the citizens (Frongillo et al., 2010). Reliability in service delivery states about the efficacy of water sources in providing sufficient amount of water and consistency of water supply from the sources to the citizens. Seasonal impact and infrastructural impediments affect the continuity of water supply to the citizens (Ahmed et al., 2023). Responsiveness in this farmwork refers to the reply and reaction rate of the authority to the demand of the citizens (Zainal Abedin et al., 2018). Inadequate and poor response can adversely impact satisfaction of the citizens on the institutional performance (Vigoda, 2000; Mahmud, 2024). Equity refers to the allocation and distribution of resources in a way that reaches the citizens who are in need of it. This approach captures justice in the service distribution, especially for marginalized and disadvantaged groups of citizens. Public services are delivered based on the need instead of personal connection (World Bank, 2022). Affordability is related to the cost and charges for the water services. It includes both formal and hidden cost of the services (Pérez-Foguet, 2023). In combination of these six factors, citizens perception and satisfaction for the water services is affected in the lowest tier of local government in

Bangladesh. In addition, together these dimensions allow the study to examine water service delivery not only as an infrastructure issue but also as a governance and accountability issue.

4. Methodology

The study followed an exploratory qualitative research design to assess the effectiveness of water service delivery at the union level. A qualitative approach helps to explore the phenomena from deep insights and lived experience of the respondents, focusing on answering why a person behaves in a definite way (Creswell & Poth, 2018; Schwandt, 2014). The study was conducted in six unions across three upazilas; Ashidron and Sindurkhan unions of Sreemangal upazila, Goroikhali and Raruli unions of Paikgachha upazila, and Amadi and Bagali union of Koyra upazila. The study areas are selected from haor, plane and coastal region of Bangladesh. These areas were selected purposively to capture diverse local contexts of rural water service delivery and to generate information-rich insights relevant to the study objective (Patton, 2015). Both primary and secondary data were used in the study. Primary data were collected through IDIs, FGDs and KIIs. 20 In-Depth Interviews (IDIs) and 6 Focus Group Discussions (FGDs) with citizens and 10 Key Informant Interviews (KIIs) with Union Parishad chairmen and members were conducted to collect primary data for the study. KIIs with chairmen and members provided intuitional perspective of service delivery while IDIs and FGDs allowed citizens to share detailed personal experiences of water access, reliability, affordability, and service responsiveness in a private setting (Rubin & Rubin, 2012). Participants were selected through purposive sampling because this technique is suitable for identifying respondents who have direct knowledge and experience of the issue under study (Patton, 2015). The sample size for the study was determined by using data saturation points on the themes as it is the common method to explore phenomena in qualitative design (Malterud et al., 2016; Guest et al., 2020). Semi structured questionnaires were used to conduct IDIs, FGDs and KIIs where flexibility was ensured to allow new emerging themes (Kallio et al., 2016). All interviews were conducted by the researcher himself, and audio recorder was used to record conversations. Collected data was analyzed using thematic analysis. Deductive approaches were used to analyze the collected data and presented in the themes followed in the analytical framework. Ethical standards were maintained throughout the study including taking consents from the respondents before starting interview and following anonymity in the data analysis.

5. Results

Table 1: Demographic Information of the Respondents

Respondent Category	Variable	Response	Frequency	Percentage
KII Respondents	Profession	Union Parishad Chairmen	4	40.0%
		Union Parishad Members	6	60.0%
	Gender	Male	8	80.0%
		Female	2	20.0%
IDI Respondents	Profession	Farmer	5	25.0%
		Day Laborer	4	20.0%
		Small Business Owner	4	20.0%
		Housewife	3	15.0%
		Private Service Holder	2	10.0%
		Student	2	10.0%
	Gender	Male	13	65.0%
		Female	7	35.0%
FGD Respondents	Profession	Farmer	12	30.0%
		Day Laborer	8	20.0%
		Small Business Owner	7	17.5%
		Housewife	6	15.0%
		Private Service Holder	4	10.0%
		Student	3	7.5%
	Gender	Male	27	67.5%
		Female	13	32.5%

The *table 1* showed the socio-demographic profile of respondents in the study. The respondents among KII, Union Parishad members held the majority portion which was 60% while the rest of the respondents were Chairmen of the Union Parishads. In gender dimension, KII respondents represented 80.0% male and 20.0% female. IDI respondents were most likely to be farmers, at 25.0%, followed by day laborers and small business owners 20.0% respectively. Furthermore, housewives were comprised of 15.0%; private service holders and students each accounted for 10.0 % of the respondents as well. Concerning the fact of gender distribution, 65.0% of IDI respondents were male and 35.0% were female. In case of FGD, the largest occupational group of the respondents were farmers 30.0%, followed by 20.0%-day laborers, 17.5% small business owners, 15.0% housewives, 10% private service holders, and 7% students. Out of six FGDs, in the gender composition for the participants, there were 67.5% male and 32.5% female. The table thus showed that, the study covered different institutional actors with a group of citizens in order to have a mixed response from various perspectives in terms of water service delivery, performing across all Union Parishad level.

Insights from the respondents

The findings of this study are presented (*see table 2*) in alignment with six analytical dimensions of perceived service effectiveness: accessibility, adequacy, reliability, responsiveness, equity, and affordability. In addition, cross-cutting themes—particularly patron-client relationships, loyalty-based service distribution, and low institutional trust—emerged from the data and significantly shape citizens' perceptions of water service delivery at the Union Parishad level.

Table 2: Themes of the Findings

Major Theme	Frequency of Data	Illustrative Quotation
Accessibility	12	“We visited our member many times for a tube-well, but we still did not receive one.”
Adequacy	13	“We collect drinking water from a neighbor’s tube-well, but sometimes they feel disturbed by our visits.”
Reliability	13	“After cyclone, we suffered for a long time to get fresh water.”
Responsiveness	12	“I did not get any tube-well, and I have not seen anyone I know receiving one from the Union Parishad.”
Equity	15	“Deep tube-wells and shallow tube-wells are given to relatives and close people of members and chairmen.”
Affordability	9	“As a day laborer, I have to keep part of my daily income for buying water.”

Accessibility of Water Services

Water infrastructure such as tube-well, deep tube-well, pond sand filters, desalination plants, reverse osmosis plant, rainwater harvesting system have been active in the study area. Location like coastal areas differs water technology where desalination plant, pond sand filters, reverse osmosis plant, rainwater harvesting system are more common than tube well. However, very few people have water problems though they can bring safe water from nearby. Also, tube-wells and deep tube-wells were provided to ensure water accessibility for people. Especially deep tubewells were established in haor area to remove the lack of water supply. For the hill area where tube-wells do not work, Kuas are dug for water supply to the people. Alongside, a new project has been taken in order to establish water tank in the villages, but the problem is the lack of suitable land. Each technology is not effective for all regions of the area. In this context, one respondent said that

In the other side of the canal, tubewell is effective where in my home the water of tubewell is saline. We must depend on the rainy water for drinking (IDI, 2, September 2025)

In the coastal region, most of the people depend on the rainwater system to manage their source of drinking water. But due to shortage of pots, they can't reserve water for the whole of the year. One KII respondent expressed that,
Rainwater Harvesting System has been introduced in the coastal area to protect drinking water for the year. It is activated in the common place where villagers can collect their demanding water (KII 1, September 2025).

On the other hand, the study areas like Sreemangal, tube wells and deep tube wells are the primary sources of drinking water. Private and community owned tube well and deep tubewell are providing water access for the people. One KII said that

We distribute tubewell for a single family and deep tubewell for the community of 10-15 families in a village. They bear some amount and most of the cost is borne by the government (KII, 5, October 2025).

Union Parishads have taken multiple initiatives to improve the accessibility, including installment of deep tube-wells in haor areas and digging kuas in hilly regions where conventional tube-wells are ineffective. They also highlighted the plans for new water tank projects, although land scarcity was identified as a constraint. In addition, they collaborate with NGOs, voluntary organizations to install water infrastructure at the union level to ensure accessibility of clean drinking water. However, IDI and FGD indicated that citizens have limited direct access to these water services. Some respondents stated that they had not personally received any water facilities and had only heard about such services being provided to others by the union parishad.

We are four family living in this house. We have visited our Union Parishad members so many times to get a tubewell as we don't have ability to install ourselves. He committed but ultimately our fate didn't get a tube well (FGD, 1, September 2025).

Water infrastructure does not necessarily ensure equitable access to clean water. Accessibility is further constrained by the need for repeated visits, personal communication with elected representatives, and reliance on informal networks to obtain services.

Adequacy of Water Service Provision

The adequacy of water service delivery systems has emerged as a significant concern among citizens. Although Union Parishad representatives claimed that water needs are largely met and that only a small number of people face water shortages, citizen responses indicate the opposite picture. Participants emphasized that the number of water facilities is not sufficient to meet the demand of water for the local people and that existing facilities do not adequately cover all households or communities.

We must collect drinking water from the tube well of the neighbor house. Sometimes they feel irritated as we visit their tube well frequently (FGD, 4, October 2025).

Though union parishads in collaboration with NGOs and voluntary organizations have installed multiple water infrastructure in the study area, they are not enough to ensure sufficient water security for the people in the study area. People specially women and girls have to visit one to two kilometer daily to collect drinking water for their family.

Every afternoon you will see a line of women and girls walking with jars to bring water for their family. And, in the dry season, the situation gets worse as most of the water sources in the winter season got dried (IDI 2, September 2025).

Findings indicated that while services exist, their scale and distribution remain inadequate to fully address local demand. Community-based rainwater harvesting system can't fulfill the demand of the local people. They have to buy water from the market to meet their needs.

Reliability of Water Services

Reliability on the service delivery is another aspect where citizen perceptions diverge significantly from institutional claims. While KII respondents did not highlight major issues regarding service continuity, citizens frequently reported irregular and unreliable access. Most of the water sources were affected by natural disasters in the coastal areas where citizens had to depend on the market to meet their needs of drinking water. Damaged water sources were not repaired quickly by the authorities; citizens had to repair them at their own cost. They had to struggle to repair their homes as well as to think about water sources which cause the severity of the impact. Moreover, they had to depend on contaminated water or to buy from the market.

After the Amfan we must suffer for long time to get fresh water. We tried to get support from the government offices, but we couldn't succeed in availing of these services (FGD, 5, October 2025).

Though chairmen and members have commitment to ensure smooth water supply for the local people, limited manpower and budget confined them to ensure reliable water services for the citizens.

We are here to serve the people. Another name of water is life. So, we are trying to ensure reliable water supply for our people. But due to limited services and budget we can't satisfy all the people at a time (K II, 5, October, 2025).

Water supply sources are sometimes poorly managed, or inconsistent, leading to negative impacts on the delivery service. These accounts suggest that reliability is undermined not only by infrastructural limitations but also by weak management practices and lack of accountability in service operation.

Responsiveness of Union Parishad

The responsiveness of Union Parishad presents a mixed dimension of responses from the respondents. Union Parishads authority portrayed themselves as a proactive responder in addressing the demands of the respondents related to water service delivery. They highlighted their initiatives and efforts to ensure smooth and effective water service delivery. In this context, one KII expressed his view in the way,

We are not alien; we are from the general people. They made us their representative to serve them. We try our best to solve any problems including water issues (KII, 7, October 2025).

In contrast to the claims of authority, citizens expressed their views that getting water service infrastructure needs continuous efforts of visiting chairmen and members with personal relation to the respective authority. Services are not provided on time and most of the respondents do not get services directly from the union parishad. One respondent said,

I didn't get any tube well. Even I didn't see any of my known people getting but heard about getting tube-wells from UP (IDI 10, October 2025)

Responsiveness from the institutional perspective to the needs of the citizens is mediated by informal connection to the chairmen and members instead of direct selection and response to demands. Getting water infrastructure from the Union Parishad is characterized by frequent visits and appeal from the citizens.

Equity in Service Distribution

More citizens in the study felt that water-related services are not allocated and provided on the basis of need. The authority of union Parishad gave it based on loyalty, goshti culture and patron client relationship. Politicians and influential social groups tend to gain water infrastructure services like tube-well support.

Deep tubewells and Shallows are distributed among those people who are their relative and very close person of the members and chairmen. In most cases, needy people get refrained from this kind of services (FGD 8, October 2024).

The perception of the citizen emerged from the exclusion and favoritism in the beneficiary selection of union Parishad. The neediest are often ignored while others who have more political connections get the services well. Likewise, a limited number of respondents who claimed that they received services without monetary payment, still had to do face-to-face visits so many times and personal advocacy. These findings suggest that equity is a key determinant of misperceptions regarding Union Parishad performance.

Affordability and Informal Costs

Affordability of services is affected not only by official costs but also by informal financial burdens. While Union Parishad representatives indicated that many services are provided at low cost or free of charge, citizen responses suggested the presence of hidden or informal costs. Some participants reported paying money to access services or incurring financial losses through borrowing in anticipation of receiving support. The respondents described borrowing money to pay for a tube-well, not only to face delays but also not receive the service ultimately but still having to pay interest on the loan. Thus, tube-wells are provided to the loyal person of the elected officials where actual needy person doesn't get the service.

I gave 2000 taka for a tube-well by borrowing. After two years, I received back 2000 taka after long hassle without any tube-well. But I must pay 2400 interest to the lender for borrowing (IDI 1, September 2025).

In case of winter season, most of the common sources are not available for the water services. Ponds get dried up and the groundwater level declines, reducing the functionality of tube-wells. In that time, bottled water becomes the only source for drinking water.

As a day laborer, I have to struggle to manage money for water. Before buying other things, I must keep a portion of my daily income for buying water (IDI 9, October 2025).

Power relations based on patronage and informal networks combined with low trust in institutions shape water service delivery at the Union Parishad level. Respondents felt that access to tube-wells and services related to water more often depended on closeness with the chairman or its members, political allegiance, supporting kinship tie of local goshti culture than actual need. In seeking services, citizens also reported frequent visits to representatives for informal negotiations, hidden payments and repeated office trips. This infuriated poorer, less-connected households who felt that they were being deprived of fair access. Respondents expressed their views in the way,

Deep tube-wells and shallow tube-wells are given to relatives and close people of members and chairmen. In most cases, needy people are excluded from these services (FGD 3, September 2025).

Inequitable access, informal practices and asymmetric responsiveness of Union Parishad fed into a larger problem of low institutional trust. An initial reticence of citizens to speak out publicly about the performance of Union Parishad indicates additional evidence for this low institutional trust. The findings indicate that ineffective water service delivery is not merely an infrastructural malfunction, but a governance failure related to patronage, weak accountability and trust in Union Parishad institutions. The findings of the study enable us to declare that citizens have low confidence in the water service delivery of UP. For UP performance, it is essential to develop the relationship between citizens and elected representatives with a reduction in loyalty due to gosti culture by means of patron client relation.

6. Discussion

This study aims to examining citizen's perception of the efficacy of water service delivery at the Union Parishad level in Bangladesh; in doing so it analyses the evaluation of water service delivery at Union Parishad level in Bangladesh through six different dimensions. These findings illustrate an ongoing disjunction between the intuitional narratives and actual realities suggesting that local water governance effectiveness is not necessarily site provision but rather patterns around practices social relations regarding elected representatives.

The study offers many insights to highlight that water accessibility remains uneven, even if water infrastructure has expanded, which in in alignment with the findings from ((Rahman & Rahman, 2015a). Union Parishads along with NGOs and development partners, have promoted other technologies like tube-wells, deep tube-wells, desalination plants systems (reverse osmosis), rainwater harvesting as alternative options but Alam et al., argued that saline water and high arsenic concentration is a serious barrier (Alam et al., 2019) . The findings pointed out that access to fresh water depends not only by provision of infrastructure but also on design adapting to context and implementation locally. Cleaver & Hamada (2010) clearly articulated that water interventions only work if they are sensitive both to geographical and socio-environmental realities. Local authorities considered existing water coverage to be adequate, whereas respondents reported chronic shortages and some experienced seasonal fluctuations and long travel times in obtaining water, this was previously revealed by(Rahman & Rahman, 2015b). The situation highlights the “implementation gap” facing decentralized governance systems where intended policy scarcely translates into the effective policy (Mansuri & Rao, 2013). It also highlighted the unfair burden mostly on women and girls as household heads for water collection in rural areas which identified the gender inequities in water access as a barrier to achieve the goals of rural development, these findings complement the study conducted by Sultana (2009) and Anisur (2026). The other area that echoes structural weaknesses with service delivery systems is reliability. Residents said that they were unable to get regular supply of fresh water during and after the cyclones and the maintenance/ repairing work would take long days. It indicates that institutional capacity in areas where disaster is a risk usually prevents continuity of services. Therefore, sustainability difficulties come from a lack of finances as well as human resources required to heed necessary solutions (Hossain, 2018). This situation forces the citizens to buy fresh water from the market which affect their daily standard of living.

In terms of responsiveness, the Union authorities tend to argue that they work for the people but actually it requires multiple visits to them to get a service where social connections and informal negotiations work as a determinant of access to the services. Fox (2015) embodied social accountability, naming citizen ‘voice’ as one

axis in institutional responsiveness. So, citizen engagement in this connection is characterized by citizens stating their demands actively but not converting these concerns into accountability because there are no institutionalized mechanisms for accountability and timely delivery. Critically, many respondents reported that the processes to offer allocation are unfair and exclusionary. Rather, water infrastructures are apparently distributed mainly on political patronage and loyalty, kinship networks, or simply *gosti*-based social formations. It reflects the long-lasting legacies of patron-client links in local governance regimes with resources for public goods delivery distributed to retain political loyalty (Kitschelt & Wilkinson, 2007). These practices undermine fairness and equity, with the greatest effects felt by those on the margins of society or lacking social ties. Affordability — a vital issue closely related to access but nonetheless concerns both formal and informal payments. Some respondents reported that although water services are low-cost or free on paper, they instead pay in other ways to get access including hidden cost and service charges. Unofficial practices and transaction costs continue distorting access to publicly provided services (Transparency International 2019). Such additional costs become burden to the poorest and hence effectively cut them off from essential services such as clean drinking water.

The disintegration of institutional trust appears as an overarching state across all dimensions. Citizen trust on Union Parishads appears to be very low where perceptions like favoritism among representatives, transparency deficit in the beneficiary selection and wastage of time in obtaining basic services have contributed to this low trust. Bovens (2007) identified that answerability and transparency in public service delivery contributes reputation building through trust on behalf of public institutions. In this context, it appears that the absence of institutions properly held to account and grievance systems diminishes institutional legitimacy vis-à-vis citizen engagement.

These findings indicate the question whether the crises of water service delivery have been remedied properly, since independence ultimately boils down to a governance rather than technical problem. Infrastructure will continue to be important, but the development of the infrastructure must go hand in hand with improvement of institutional capacity and accountability as well as equity. The research complements the existing gap of knowledge and elucidates how public service delivery is indeed a complex process, where informal practices/social relations can act as mediators between citizens and access to services. It is also a burden to cover whole service by a single permanent employee of Union parishad (Alam, 2009).

The results underscore the need for ensuring participation as well as accountable governance processes at Union Parishad level. Active participation plays a crucial role in promoting self-determination which is crucial for facilitating effective decision-making (Rubel et al., 2024). This can be achieved by increasing transparency of beneficiary selection, reducing reliance on informal networks and focusing on more need-based allocation. This research makes an academic contribution to the literature on decentralized water governance by treating citizen perception as a measure of service delivery success. While there is need for external support and technical interventions to improve water service delivery in Bangladesh, It is also essential to institutional reforms, aimed at increasing equity, accountability and compressed trust relations between citizens and local government actors.

7. Conclusion

The results expose a stark divide between institutional measurements of service success and real-world experiences by the citizens. Union Parishad representatives highlighted several programs- commissioned or completed, water technologies tried out in their respective areas, but citizens reported limited access to new services with uncertain delivery records as well as potential inequity in benefits. Having infrastructure does not guarantee service delivery. How governance works, level of institutional responsiveness and fairness in resource allocation matter in ensuring water access. Equity was identified as the most important influencing dimension among six dimensions. Patronage and loyalty-based benefit allocation and *gosti* culture render fairness so meaningless; they prevent truly needy populations from benefiting from services. Informal and indirect costs for water technology installment services contribute to making clean water unaffordable as well. These combining problems create a severe trust deficit between citizens and Union Parishads members.

Though water service delivery is institutionally embedded at the Union Parishad level, it remains socially uneven and constrained by governance weaknesses. Uneven coverage of water service delivery as well as weak accountability and limited responsiveness resulted in inefficiency in the service delivery. Water infrastructures alone seldom lead to improvements in service effectiveness and citizen satisfaction without tackling the governance challenges. Water service delivery failure at the Union Parishad level is not only an infrastructure problem; it is also a governance, equity, and trust problem.

To address inequity, Union Parishads could set out simple and publicly available criteria for allocating water services. Accountability mechanism needs to be improved so that services can be responsive in a timely and equitable manner. Community based monitoring committees can identify irregularities in the distribution of services. There should also be a grievance redress mechanism structured at the Union Parishad level, enabling citizens to report problems with services without any fear.

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References

- Africanews. (2025). *Global crisis: Billions still without safe water and sanitation – WHO* | Africanews. <https://www.africanews.com/2025/08/26/new-who-report-one-in-four-people-lack-access-to-safe-drinking-water/>
- Ahmed, F., Kamal, A. K. I., & Idrish, M. H. B. (2023). *A review of current water governance in Bangladesh: A Case study on administrative and performance of water policy*. XI(XII). <http://dx.doi.org/10.31364/SCIRJ/v11.i12.2023.P1223973>
- Ahmed, K. M., Bhattacharya, P., Hasan, M. A., & Akhter, S. H. (2019). Arsenic contamination in groundwater of Bangladesh: Causes, effects, and remediation. *Water Resources Research*, 55(8), 6986–7008. <https://doi.org/10.1029/2018WR024284>
- Ahmed, R., & Hassan, S. (2012). Hard-to-reach areas: Providing water supply and sanitation services to all. https://www.academia.edu/73922530/Hard_to_reach_areas_providing_water_supply_and_sanitation_services_to_all
- Alam, M. S. (2011). *Decentralized rural water supply and sanitation services in Bangladesh: A critical overview*. https://repository.lboro.ac.uk/articles/conference_contribution/Decentralized_rural_water_supply_and_sanitation_services_in_Bangladesh_a_critical_overview/9592352/1
- Alam, R., Malak, A., Quader, M. A., & Jannat, N. (2019). CHALLENGES OF FRESHWATER SUPPLY SYSTEMS IN SOUTH- WEST COASTAL AREA OF BANGLADESH. *Jagannath University Journal of Life and Earth Sciences*, 5(2), 131–145. https://www.academia.edu/download/95460891/5_2_264.pdf
- Andrews, M., & Shah, A. (2005). Citizen-centered governance: A new approach to public sector reform. In A. Shah (Ed.), *Public expenditure analysis* (pp. 153–182). World Bank.
- Anisur, R. M. (2026). *Gendered Burdens of Drinking Water Scarcity: An Ethnographic Study of Women's Multidimensional Vulnerabilities in Coastal Bangladesh* (SSRN Scholarly Paper No. 6327758). Social Science Research Network. <https://papers.ssrn.com/abstract=6327758>
- Bangladesh Bureau of Statistics, & UNICEF Bangladesh. (2019). *Progotir pathey, Bangladesh multiple indicator cluster survey 2019: Survey findings report*. Bangladesh Bureau of Statistics and UNICEF Bangladesh.
- Bangladesh Bureau of Statistics, UNICEF Bangladesh, & icddr,b. (2021). *Bangladesh MICS 2019: Water quality thematic report*. UNICEF Bangladesh.
- Bovens, M. (2007). Analysing and assessing accountability: A conceptual framework. *European Law Journal*, 13(4), 447–468. <https://doi.org/10.1111/j.1468-0386.2007.00378.x>
- Chan, N., Roy, R., & Chaffin, B. (2016). Water Governance in Bangladesh: An Evaluation of Institutional and Political Context. *Water*, 8(9), 403. <https://doi.org/10.3390/w8090403>
- Cleaver, F., & Hamada, K. (2010). Good water governance and gender equity: A troubled relationship. *Gender & Development*, 18(1), 27–41. <https://doi.org/10.1080/13552071003600054>
- Creswell, J.W. and Poth, C.N. (2018) *Qualitative Inquiry and Research Design Choosing among Five Approaches*. 4th Edition, SAGE Publications, Inc., Thousand Oaks.
- Fox, J. (2015). Social accountability: What does the evidence really say? *World Development*, 72, 346–361. <https://doi.org/10.1016/j.worlddev.2015.03.011>
- Frongillo, E. A., Isaacman, T. D., Horan, C. M., Wethington, E., & Pillemer, K. (2010). Adequacy of and Satisfaction with Delivery and Use of Home-Delivered Meals. *Journal of Nutrition For the Elderly*, 29(2), 211–226. <https://doi.org/10.1080/01639361003772525>

- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLOS ONE*, 15(5), e0232076. <https://doi.org/10.1371/journal.pone.0232076>
- Hoque, M. A.-A., Ahmed, N., Pradhan, B., & Roy, S. (2019). Assessment of coastal vulnerability to multi-hazardous events using geospatial techniques along the eastern coast of Bangladesh. *Ocean & Coastal Management*, 181, 104898. <https://doi.org/10.1016/j.ocecoaman.2019.104898>
- Hossain, N. (2018). Governance and service delivery in Bangladesh: The role of local institutions. *Journal of South Asian Development*, 13(2), 215–235. <https://doi.org/10.1177/0973174118780145>
- Joshi, A. (2013). Do they work? Assessing the impact of transparency and accountability initiatives in service delivery. *Development Policy Review*, 31(s1), s29–s48. <https://doi.org/10.1111/dpr.12018>
- Kallio, H., Pietilä, A., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. <https://doi.org/10.1111/jan.13031>
- Karim, M. F., & Mimura, N. (2008). Impacts of climate change and sea-level rise on cyclonic storm surge floods in Bangladesh. *Global environmental change*, 18(3), 490–500.
- Kitschelt, H., & Wilkinson, S. I. (2007). *Patrons, clients and policies: Patterns of democratic accountability and political competition*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511585869>
- Lee, E. J., & Schwab, K. J. (2005). Deficiencies in drinking water distribution systems in developing countries. *Journal of water and health*, 3(2), 109–127.
- Lewis, D., & Hossain, A. (2008). A Tale of Three Villages: Power, Difference and Locality in Rural Bangladesh. *Journal of South Asian Development*, 3(1), 33–51. <https://doi.org/10.1177/097317410700300102>
- Local Government Division. (2021). *Union Parishad operational manual*. Ministry of Local Government, Rural Development and Co-operatives, Government of the People's Republic of Bangladesh.
- Mahmud, R. (2021). Citizen satisfaction in the service delivery of city corporations in Bangladesh. *Scholars Journal of Research in Social Science*, 1(2), 1–13.
- Mahmud, R. (2024). Determinants of Citizen Trust in Public Institutions in Bangladesh. *Journal of Developing Societies*, 40(4), 531–546. <https://doi.org/10.1177/0169796X241288602>
- Makhdom, N., Rumi, M. H., & Islam, N. (2022). Measuring Quality of Public Participation in the Local Government of Bangladesh. *Journal of Public Administration and Governance*, 12(1), 1–14. <https://doi.org/10.5296/jpag.v12i1.19279>
- Malik, A., Yasar, A., Tabinda, A. B., & Abubakar, M. (2012). Water-borne diseases, cost of illness and willingness to pay for diseases interventions in rural communities of developing countries. *Iranian journal of public health*, 41(6), 39.
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Qualitative Health Research, 26(13), 1753–1760;
- Mansuri, G., & Rao, V. (2013). *Localizing development: Does participation work?* World Bank. <https://doi.org/10.1596/978-0-8213-8256-1>
- Mondal, S., Wangdi, K., Gray, D. J., Kelly, M., & Sarma, H. (2025). Access to water, sanitation, and hygiene (WASH) facilities and key influencing factors in coastal households, Bangladesh. *Acta Tropica*, 270, 107792. <https://doi.org/10.1016/j.actatropica.2025.107792>
- Nishat, A., & Mukherjee, N. (2013). Climate change impacts, scenario and vulnerability of Bangladesh. In *Climate change adaptation actions in Bangladesh* (pp. 15–41). Tokyo: Springer Japan.
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37(3), 1120–1149. <https://doi.org/10.1257/jel.37.3.1120>
- Oliveira, C. M. D. (2017). Oliveira, C. M. de. (2017). Sustainable access to safe drinking water: Fundamental human right in the international and national scene. *Revista Ambiente & Água*, 12, 985–1000. <https://doi.org/10.4136/ambi-agua.2037>
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods*. SAGE Publications Ltd. <https://uk.sagepub.com/en-gb/eur/qualitative-research-evaluation-methods/book232962>
- Pérez-Foguet, A. (2023). Broadening the water affordability approach to monitor the human right to water. *Cities*, 143, 104573. <https://doi.org/10.1016/j.cities.2023.104573>
- Rafa, N., Jubayer, A., & Uddin, S. M. N. (2021). Impact of cyclone Amphan on the water, sanitation, hygiene, and health (WASH2) facilities of coastal Bangladesh. *Journal of Water, Sanitation and Hygiene for Development*, 11(2), 304–313. <https://doi.org/10.2166/washdev.2021.170>

- Rahman, M., Alam, M.-U., Luies, S. K., Ferdous, S., Mamun, Z., Rahman, M. J., Biswas, D., Ananya, T., Asadullah, Kamal, A., Chowdhury, R., Khan, E. R., Johnston, D., Worth, M., Daisy, U. F., & Ahmed, T. (2024). Institutional capacity assessment in the lens of implementation research: Capacity of the local institutions in delivering WASH services at Cox's Bazar district, Bangladesh. *PLOS ONE*, 19(2), e0297000. <https://doi.org/10.1371/journal.pone.0297000>
- Rahman, S., & Rahman, M. A. (2015). Climate extremes and challenges to infrastructure development in coastal cities in Bangladesh. *Weather and Climate Extremes*, SI: IGBP APN, 7, 96–108. <https://doi.org/10.1016/j.wace.2014.07.004>
- Rubel, Md. A. I., Rumi, M. H., & Ripon, Md. A. (2024). Empowerment through engagement: Assessing the female university students' involvement in volunteering activities. *Southeast Asia: A Multidisciplinary Journal*, 24(1), 69–81. <https://doi.org/10.1108/SEAMJ-08-2023-0062>
- Schwandt, T. (2007). *The SAGE Dictionary of Qualitative Inquiry*. SAGE Publications, Inc. <https://doi.org/10.4135/9781412986281>
- Sultana, F. (2009). Fluid lives: Subjectivities, gender and water in rural Bangladesh. *Gender, Place & Culture*, 16(4), 427–444. <https://doi.org/10.1080/09663690903003942>
- Transparency International. (2019). *Global corruption report: Corruption in the water sector*.
- UNICEF. (2025). *Water, sanitation and hygiene (WASH) | UNICEF South Asia*. <https://www.unicef.org/rosa/water-sanitation-and-hygiene-wash>
- UNICEF. (2026). *Water, sanitation and hygiene | UNICEF Bangladesh*. <https://www.unicef.org/bangladesh/en/water-sanitation-and-hygiene>
- United Nations. (2023). *The sustainable development goals report 2023*. <https://sdgs.un.org>
- United Nations. (2026). *THE 17 GOALS | Sustainable Development*. <https://sdgs.un.org/goals>
- Van Ryzin, G. G. (2004). Expectations, performance, and citizen satisfaction with urban services. *Journal of Policy Analysis and Management*, 23(3), 433–448. <https://doi.org/10.1002/pam.20020>
- Vigoda, E. (2000). Organizational Politics, Job Attitudes, and Work Outcomes: Exploration and Implications for the Public Sector. *Journal of Vocational Behavior*, 57(3), 326–347. <https://doi.org/10.1006/jvbe.1999.1742>
- Water.org. (2026). *Bangladesh's Water Crisis*. Water.Org. <https://water.org/our-impact/where-we-work/bangladesh/>
- WHO. (2025). 1 in 4 people globally still lack access to safe drinking water – WHO, UNICEF. World Health Organization. <https://www.who.int/news/item/26-08-2025-1-in-4-people-globally-still-lack-access-to-safe-drinking-water---who--unicef>
- World Bank. (2004). *World development report 2004: Making services work for poor people*. World Bank and Oxford University Press.
- World Bank. (2016). *Bangladesh: Improving Water Supply and Sanitation*. Retrieved February 5, 2026, from <https://www.worldbank.org/en/results/2016/10/07/bangladesh-improving-water-supply-and-sanitation>
- World Bank. (2020). *Bangladesh rural water, sanitation and hygiene for human capital development project*. World Bank. Retrieved February 5, 2026, From <https://documents1.worldbank.org/curated/en/361201601344848296/pdf/Bangladesh-Rural-Water-Sanitation-and-Hygiene-for-Human-Capital-Development-Project.pdf>
- World Bank. (2022). *Bangladesh: Improving water supply and sanitation services*. World Bank Group. Retrieved February 5, 2026, from <https://www.worldbank.org/en/results/2016/10/07/bangladesh-improving-water-supply-and-sanitation>
- Zainal Abidin, N. Z., Singaravelloo, K., & Azizan, I. S. (2018). Responsiveness and the influence to public trust: the study on local government service delivery. *Journal of Administrative Science*, 15(1). https://jas.uitm.edu.my/images/2018_JUNE/8.pdf

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