

SURVEY REPORT 2025

WATER SALE & BUILDING CONTROL SURVEY

Daska | Pattoki | Rahim Yar Khan | Sambrial



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Acknowledgment

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ACRONYMS

D&C	Demand and Collection
GIS	Geographical Information System
LG&CDD	Local Government & Community Development Department
Lg	Local government
MCs	Municipal Committees
OSR	Own Source Revenue
PMDFC	Punjab Municipal Development Fund Company
PLGA	Punjab Local Government Act
SNG	Sub-National Governance

EXECUTIVE SUMMARY

Introduction and Purpose

This survey presents the findings of a comprehensive assessment of municipal revenue streams in selected Municipal Committees (MCs) across Punjab – Daska, Patoki and Rahim Yar Khan for water sale and Sambrial for Construction fee/ conversion fee/ approval of building plans, focusing on water supply services, building plan approvals, and conversion fees. The objective of the survey was to identify systemic challenges, validate untapped revenue potential through GIS-enabled field surveys. The analysis underlines the urgent need for local governments to enhance their fiscal space in order to sustainability finance urban services, improve transparency, and ensure accountable municipal financial management.

Methodology

The survey employed a structured, GIS-enabled survey methodology to map water connections, building permits, and land-use conversions across the target MCs. Field verification was triangulated with municipal records and validated through consultations with MC staff. This approach produced a reliable baseline of untapped revenue and quantified the gap between assessed liabilities and actual collections. For example, in Sambrial alone, the survey identified a potential of PKR 993 million from unapproved residential and commercial buildings and conversion cases, illustrating the magnitude of untapped fiscal space.

Survey Findings

Across all surveyed MCs, the data confirmed a significant disparity between potential and actual revenues. In water supply, thousands of connections remain unregistered, pointing to a large untapped billing base. In construction approvals, a substantial portion of buildings were erected without approval, resulting in lost fee income. Conversion fee assessments further highlighted the mismatch between potential liabilities and recoveries. Revenue leakage across these streams collectively amounts to hundreds of millions of rupees annually, undermining fiscal capacity for service delivery and urban management.

Cross Cutting Reforms

To institutionalize reforms, municipal revenue surveys should be repeated periodically to update baselines, and a provincial OSR dashboard should be developed for real-time monitoring of performance. Provincial grants can be linked to demonstrated improvements in OSR recovery and compliance. Strengthening citizen engagement through awareness campaigns, complaint redress systems, and feedback loops will be critical to build trust, improve willingness to pay, and align municipal revenues with citizen expectations. Lessons from international experiences—such as Istanbul’s zoning reforms, Singapore’s GIS-enabled master planning, and Dubai’s fast-track digital permitting systems—offer valuable insights for adapting innovative approaches in Punjab.

Conclusion

The assessment demonstrates that Punjab’s municipal committees hold significant untapped revenue potential, particularly in water supply, construction approvals, and conversion fees. Unlocking this potential requires a coherent strategy that combines regulatory reforms, digital transformation, institutional capacity building, and active citizen engagement. If effectively implemented, these measures could unlock billions of rupees in additional revenues, expand municipal fiscal space, and enable local governments to provide sustainable, equitable, and transparent urban services.

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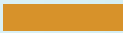
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1. INTRODUCTION



INTRODUCTION

Local governments in Punjab play a central role in bringing governance closer to citizens by ensuring efficient municipal service delivery at the grassroots level. Municipal Committees are responsible for managing core services such as water supply, solid waste management, street lighting, and infrastructure development, alongside functions in budgeting, local regulation, health, and education. To perform these functions effectively, Own Source Revenue (OSR) is critical, as it enables municipalities to finance services without excessive reliance on provincial transfers or external funding. Key revenue streams include water supply tariffs and building plan approvals, both of which directly contribute to sustainable service delivery and improved urban planning. However, persistent gaps; such as unapproved constructions, illegal or unregistered water connections, and weak enforcement of local regulations; undermine municipal revenues and service delivery performance. GIS-enabled surveys on water supply and building control have revealed significant discrepancies between actual service usage and recorded revenue streams, highlighting untapped revenue potential. This survey presents the findings of water sale and building control surveys conducted in selected local governments of Punjab. By addressing compliance gaps and institutional weaknesses, the surveys aim to support municipalities in enhancing revenue mobilization, improving service delivery,

DASKA

34,022

Households

PATTOKI

19,277

Households

RAHIM YAR KHAN

82,949

Households

SAMBRIAL

19,731

Households

Survey Overview

The Water Sale and Building Control Survey was jointly initiated by the Sub-National Governance Programme (SNG), the Punjab Municipal Development Fund Company (PMDFC), and the Local Government & Community Development (LG&CD) Department to strengthen local government revenue generation and service delivery. SNG, operating in Punjab and Khyber-Pakhtunkhwa, focuses on enhancing planning, public financial management, and governance, with a strong emphasis on building sustainable capacities for improved service delivery. Within this framework, PMDFC, as the technical arm of the LG&CD Department, was assigned responsibility for survey execution. The survey was conducted across selected Municipal Committees to establish accurate baselines for two critical areas of Own Source Revenue (OSR): (i) provision of water and (ii) approval of construction plans and collection of conversion fees. Using a structured methodology, survey teams employed mobile applications and GIS mapping to ensure reliable data collection and spatial accuracy. Local surveyors were trained and supervised to strengthen municipal capacities and ensure sustainability beyond the project's duration. The initiative builds on the successful pilot in Municipal Committee Rahim Yar Khan, where revenues increased significantly following a similar survey-led intervention. By identifying unregistered water connections, unauthorized constructions, and gaps in compliance, the survey aims to optimize revenue collection, improve data transparency, and strengthen urban governance. The collaboration among SNG, PMDFC, and LG&CD Department has therefore provided a scalable model for enhancing municipal finances, ensuring compliance, and enabling evidence-based decision-making for improved service delivery. PMDFC has conducted these surveys through surveyors opted from the selected cities, providing them opportunity to grow. PMDFC has developed modern tools of surveys and at the end, performed analytic reports generation and revenue models that can optimize the expenditure vs. revenue deficit to a surplus level.



Water Sale Survey

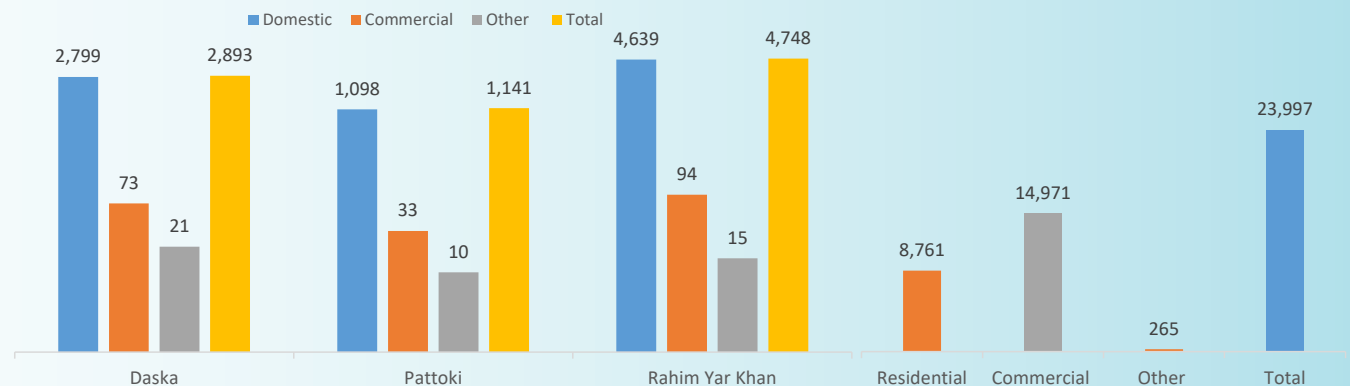
Water Sale Survey was conducted in three selected cities in Punjab including Pattoki, Daska, and Rahim Yar Khan. All commercial and residential facilities were visited to assess registered, illegal, closed, and alternative water supply connections along with old and new connection numbers, current tariff being paid, and connection type. Size of the property / household and residential status was also assessed.



Building Control Survey

Similarly, Building Control Survey was conducted in Sambrial. Total number of residential and commercial buildings were identified and status of approved, applied and unapproved maps was assessed. Current status of the buildings was also identified whether the buildings are permitted, permissible, or prohibited for residence and commercial purpose.

Domestic & Commercial Connections



Purpose & Objectives

Purpose

The survey was designed to assess the revenue potential of water supply, construction plan approvals, and conversion fees in selected local governments, comparing these estimates with actual revenue streams to identify disparities and revenue leakages. By highlighting these gaps, the survey provided evidence for tariff rationalization, ensuring competitiveness and maximizing revenue generation. It also offered a comprehensive analysis of how existing practices aligned with market trends and where policy or operational adjustments were required to strengthen financial outcomes for municipal authorities. Ultimately, the survey supported Municipal Committees in optimizing revenue streams, improving service delivery, and ensuring regulatory compliance, thereby contributing to a more effective, transparent, and financially sustainable system of local governance.



Objectives

Potential Revenue Streams



To evaluate potential in own source revenue streams for Water Sales and Construction Plans and land Conversions.

Identification of Discrepancies



To identify the discrepancies such as unapproved buildings, illegal water connections, and lack of compliance with local government regulations relating to water supply and construction plans approvals.

Transformation to E-Billing



To provide actionable data for local governments to introduce E-Billing systems for bills generations and collection process

2. SITUATION ANALYSIS



Situation Analysis:

A thorough situational analysis was conducted to evaluate the current state and gaps in **Water Sales and Property Construction** revenue streams. This included an in-depth review of **three years of income and expenditure data** for water supply services to guide the survey design and data collection approach.

GAPS

Except for MC Daska, systematic data on water consumers and building plan approvals or conversion cases is largely unavailable across the municipal committees. Records are maintained manually, often without updates on connection statuses. Fee recovery and arrears management rely on manual receipt books, with insufficient recovery staff contributing to low collections and increasing arrears. Moreover, most municipal committees lack an automated billing system, further limiting efficiency and transparency.



SOLUTIONS

To address these gaps, a comprehensive field survey was executed prior to the implementation of revenue streamlining measures. In collaboration with SNG, PMDFC finalized the survey tools. An interactive analytical dashboard was also designed to facilitate real-time monitoring and visualization of survey results.

Young survey teams were locally recruited within each municipal committee, while strategic and administrative support was secured from the respective Deputy Commissioners, Administrators, and Chief Officers to ensure smooth execution.



RESULTS

Upon completion of the Survey, Data will be cleaned and reconciled with the respective municipal committee's manual records. Findings of the survey will also be shared with SNG, Deputy Commissioner, Administrators and Chief Officers of selected Municipal Committees. Water Supply survey data will be linked with central E-Billing System of Local Government which will extend the payments facilities through e-Payment gateways. This Survey will also identify the Revenue Potential in Water Sale and Building Plan Approval and Conversion Cases.



3. SURVEY METHODOLOGY



Methodological Model

Survey Design and Tool Development

- (1) Development of survey questionnaires for water connections and construction plan/conversion fee
- (2) Customization of a mobile application and dashboard for real-time data entry.

Output/Objectives: Digital tools established to ensure accuracy, transparency, and centralized data capture.

Recruitment & Training Survey Teams

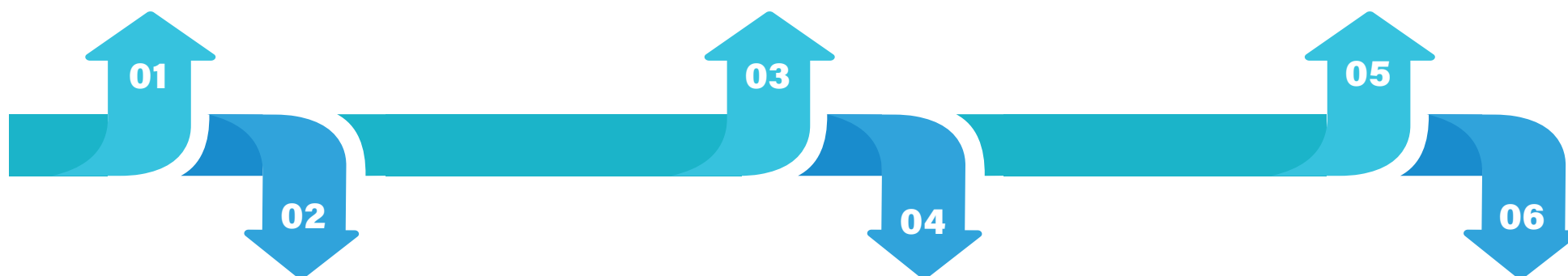
- (1) Hiring of enumerators and supervisors with local knowledge.
- (2) Training sessions on mobile app use, GIS mapping, and data validation protocols.

Output/Objective: Field teams capacitate to conduct reliable and standardized data collection.

Data Compilation, Validation, and Analysis

- (1) Cleaning and reconciliation of data collected from the field.
- (2) Cross-checking with municipal financial records and expenditure data.
- (3) Preparation of revenue potential estimates.

Output/Objective: Reliable baselines established for water tariffs, construction approvals, and conversion fees.



Stakeholder Engagement and Liaison

- (1) Coordination with Municipal Committees (MCs), Deputy Commissioners, and district administrations
- (2) Orientation meetings to secure local buy-in and logistical support.

Output/Objectives: Institutional support ensured for smooth field operations and adoption of results.

Field Execution of Surveys

- (1) Household and commercial surveys for water connections.
- (2) Mapping of construction activities, approvals, and conversion fee records
- (3) Use of GIS-enabled systems for spatial verification.

Output/Objective: Comprehensive datasets generated on unregistered water connections, unauthorized buildings, and revenue gaps.

Reporting and Knowledge Sharing

- (1) Preparation of interim and final reports summarizing survey findings
- (2) Demonstration of survey result to respective SNG, Deputy Commissioners, Administrators and Chief Officers of respective Municipal Committees

Output/Objective: Evidence-based recommendations produced for improving revenue mobilization, compliance, and governance.

Data Collection:

Surveyors were mobilized to collect field data from households and commercial facilities pertaining to water supply connections and construction plans. A mobile application developed by PMDFC was utilized for real-time data entry on water connections, construction plans, and property conversions. Moreover, GIS mapping accompanied the data collection, enabling spatial visualization of surveyed properties and water connections to ensure data integrity and quality control during collection. All data collected from field fetched in Online dashboard to access at any time. SNG and LG&CD department assisted PMDFC with ensuring smooth data collection and mobilizing local resources and provided support in managing the logistics.

WATER SALE SURVEY

Households surveyed and identified:

- » Active water supply connections
- » Alternative water supply arrangements
- » Dead/closed water supply connections
- » Old and new water supply connection numbers
- » Water rate, property type and property size
- » Residential status and locality
- » Water connection type
- » Respondents address and contact numbers
- » Sector and locality of the households

BUILDING CONTROL SURVEY

Buildings surveyed and identified:

- » No of residential and commercial buildings
- » Approved maps of residential buildings
- » Approved maps of commercial buildings
- » Applied maps for residential and commercial buildings
- » Residential buildings with unapproved maps
- » Commercial buildings with unapproved maps
- » Identification of permitted, permissible, and prohibited buildings

Data collection was performed pertaining to two major activities including Water Sale and Building Control Survey

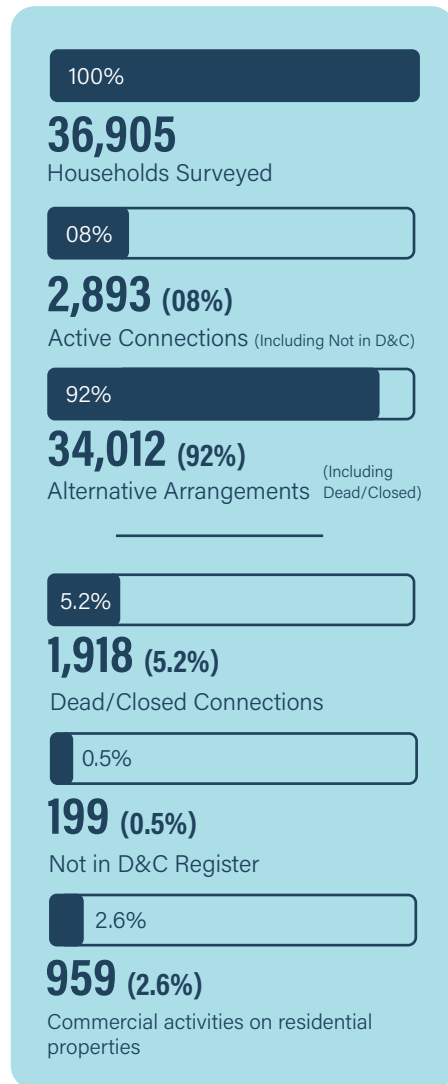
4. DATA ANALYSIS



FY 2024-25

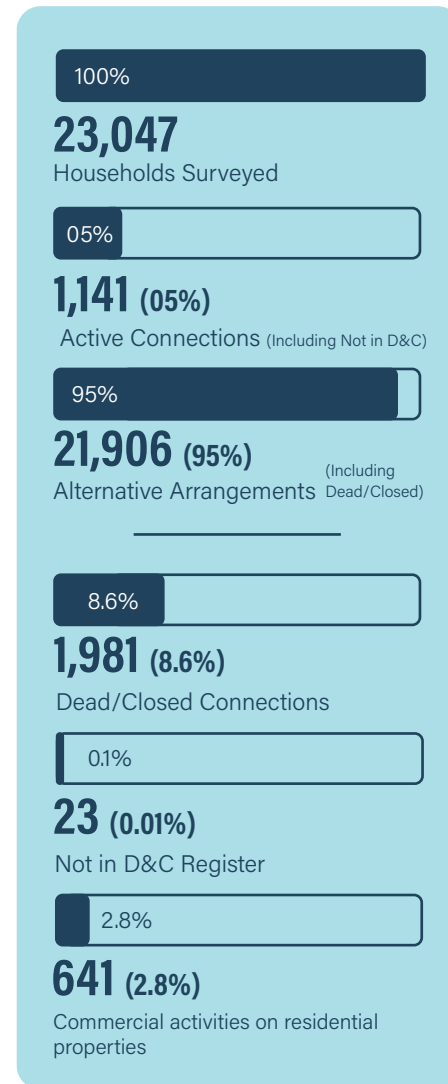
DASKA

Water Sale Survey



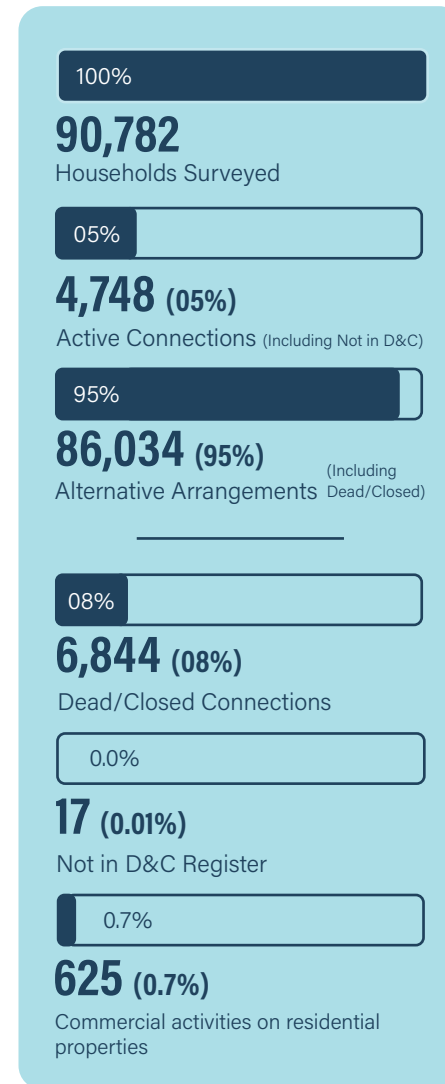
PATTOKI

Water Sale Survey



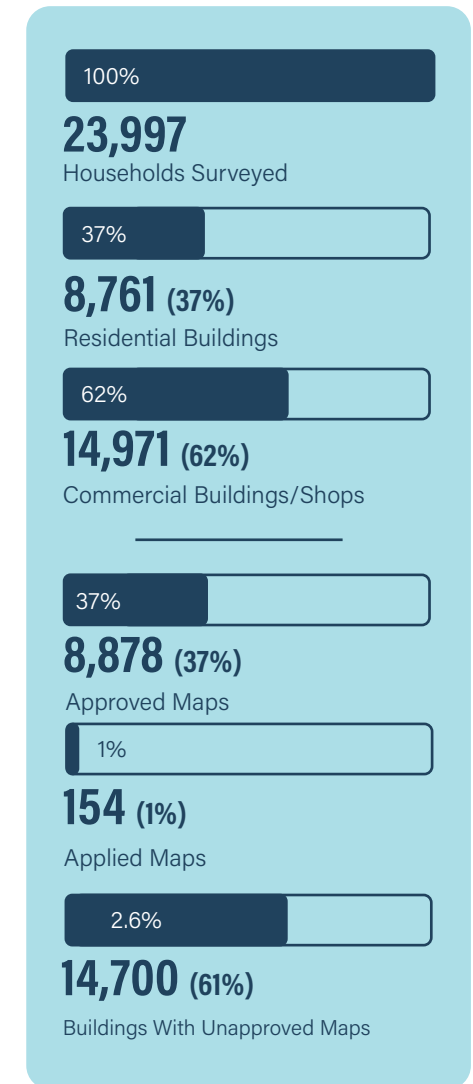
RAHIM YAR KHAN

Water Sale Survey



SAMBRIAL

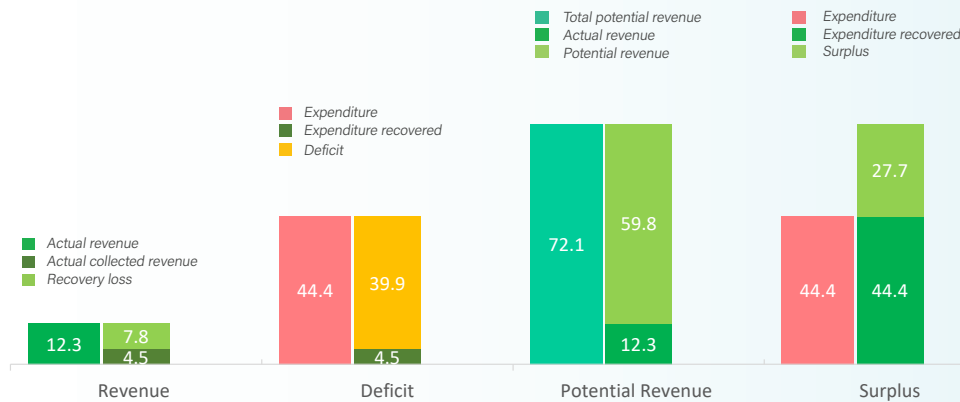
Building Control Survey



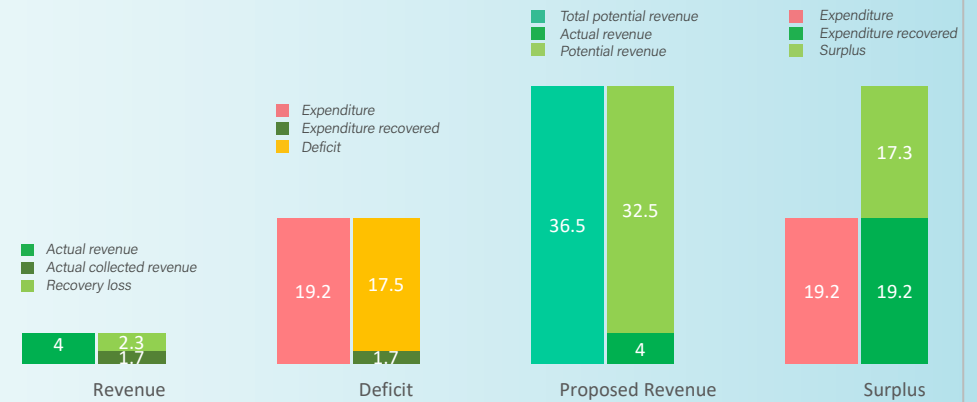
Proposed Models For Potential Revenue (Rs. Million) - (FY 2024-25)

Daska, Pattoki, Rahim Yar Khan (Water Sale Survey) | Sambrial (Building Control Survey)

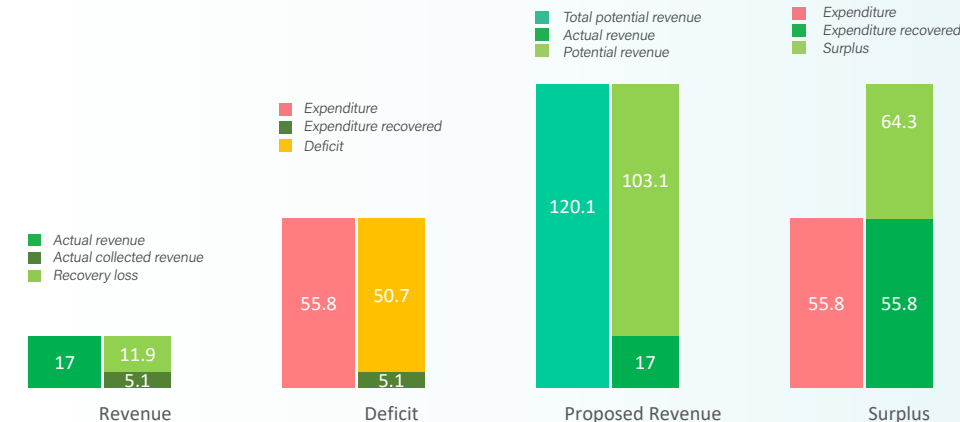
Daska (Million PKR)-FY 2024-25



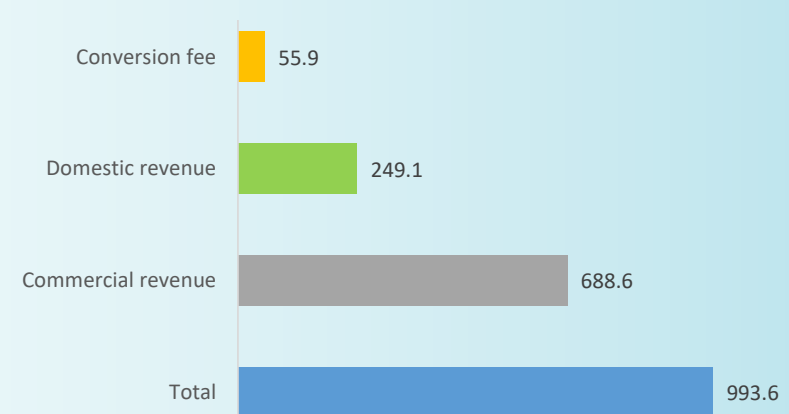
Pattoki (Million PKR)-FY 2024-25



Rahim Yar Khan (Million PKR)-FY 2024-25



Sambrial (Million PKR)-FY 2024-25



 **DASKA**



Daska City Profile: Daska, located in Sialkot District of Punjab, serves as the tehsil headquarters and has historically been influenced by Mughal, Sikh, and British rule. The city's economy is driven by agriculture, small-scale industry, and trade, with local expertise in the manufacturing of agricultural tools and machinery. Despite fertile agricultural land, Daska faces persistent challenges in ensuring adequate and sustainable water supply. Currently, the Municipal Committee provides an average of eight hours of water supply daily.

Municipal Committee Daska: Established under the Punjab Local Government Act (PLGA) 2013, MC Daska is mandated to provide municipal services including water supply, sewerage, solid waste management, street lighting, road infrastructure, and public park development. Household surveys reveal that out of 36,905 households, only 8% have active water connections, while 92% rely on alternative arrangements such as bores and hand pumps. Most properties (83%) are up to five marlas in size, reflecting a predominantly middle-class population.

Water Supply – Service Gaps and Challenges: The survey highlights significant service deficiencies. Around 68% of households lack access to water supply lines, with the majority unwilling to opt for government connections due to poor service quality. Among existing users, 76% rate the water service as poor, and 66% report contaminated supply. The system is heavily underutilized, with 97% of active connections serving domestic purposes, while industrial and commercial connections remain negligible.

Provision of Water – Assessment & Revenue Potential: MC Daska's water supply operations face a severe financial deficit. In FY 2024–25, revenues stood 4.5 Million PKR against expenditures of 44.4 Million PKR, resulting in a 39.9 Million PKR deficit (around 90%). To address this, two viable revenue models are proposed:

1. Tariff on Domestic Bores – imposing tariffs on identified domestic and commercial bores alongside sewerage connections could generate a surplus 27.7 Million PKR.
 2. Tariff on Property Size (Marla-Based) – applying tariffs across property size categories could generate a surplus of 66.7 Million PKR at full recovery.
- Both models require effective enforcement, efficient billing systems, and citizen compliance to ensure cost recovery and long-term viability.



228,626
Population



34,022
Households



6.72
Household Size



3,418
Registered Connections



07
No of Turbines

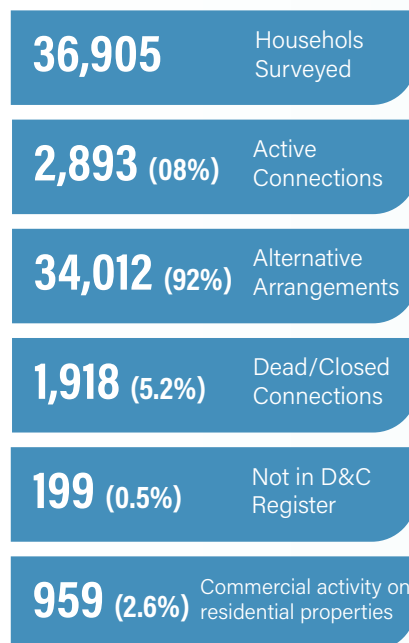


Figure 01: Active & Closed Connections & Alternative Arrangements (FY 2024-25)

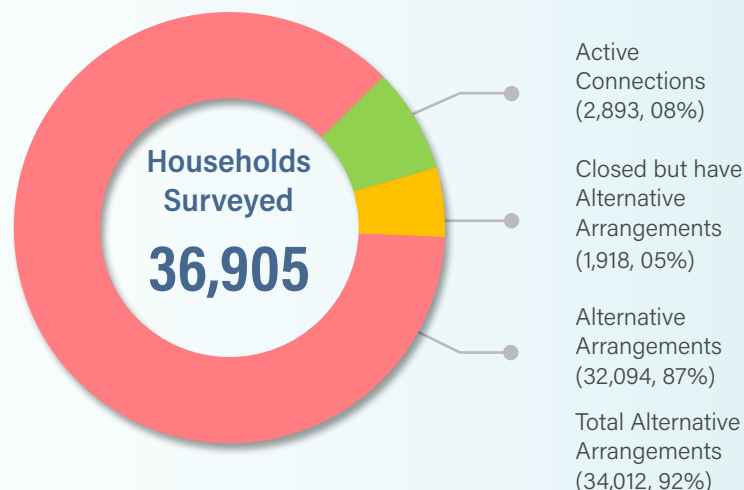
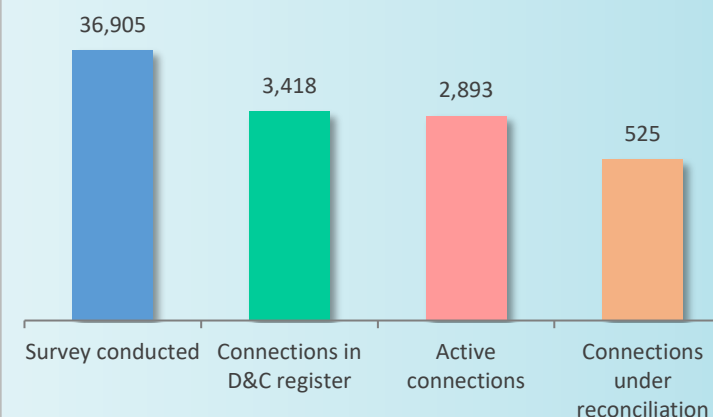


Figure 02: Reconciliation of D&C Register and Household Survey (FY 2024-25)



Active & closed connections & alternative water supply arrangements

Total number of water supply household survey conducted were 36,905. Households with active water supply connections accounted for 2,893, which are 08% of the total households surveyed. Dead or closed water supply connections were 1,918, 5.2%, however, citizens have arranged alternative sources to acquire water supply. Similarly, households who don't have water supply and relying upon alternative arrangements accounted for 34,012, 92% (See figure 01).

Reconciliation of D&C register and household survey

Number of registered connections found in D&C register were 3,418. These connections were verified and reconciled with the active water supply connections found in the survey (2,694) and those which are active but not in D&C (199). The results indicate that 525 active water supply connections are yet to be reconciled in both water supply D&C register and water supply household survey (See figure 02).

Figure 03: Types of water supply connections (FY 2024-25)

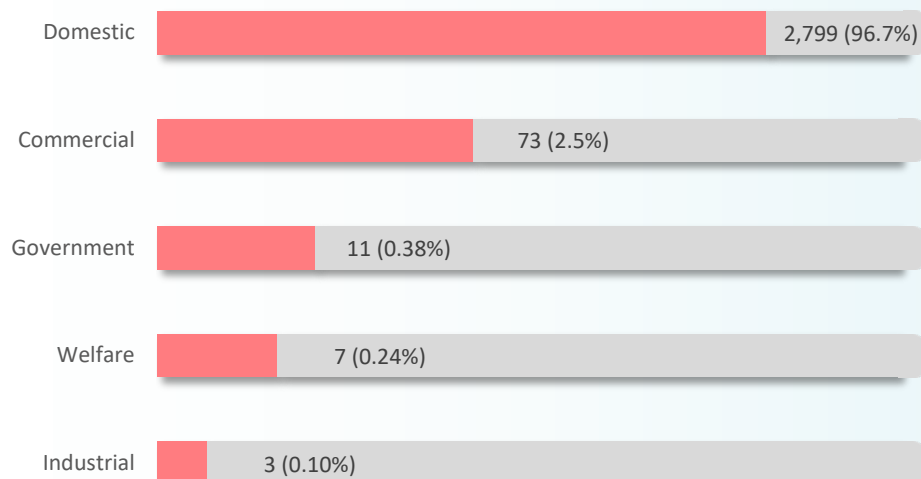
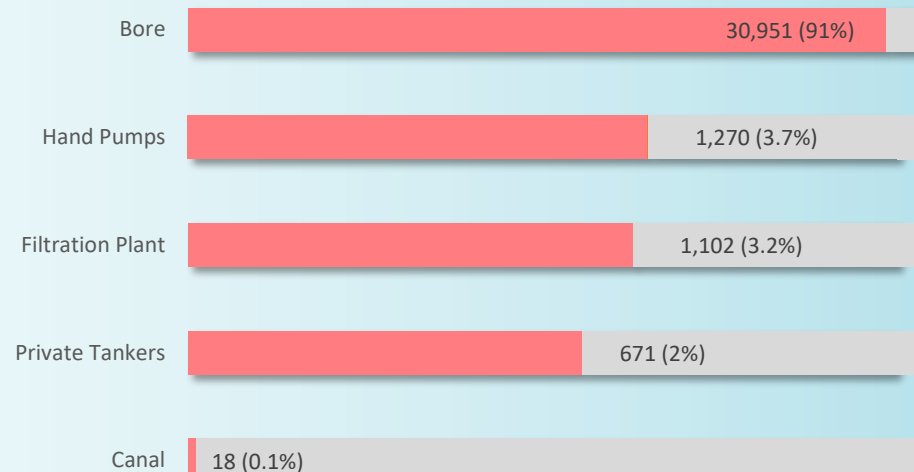


Figure 04: Types of water supply alternative arrangements (FY 2024-25)

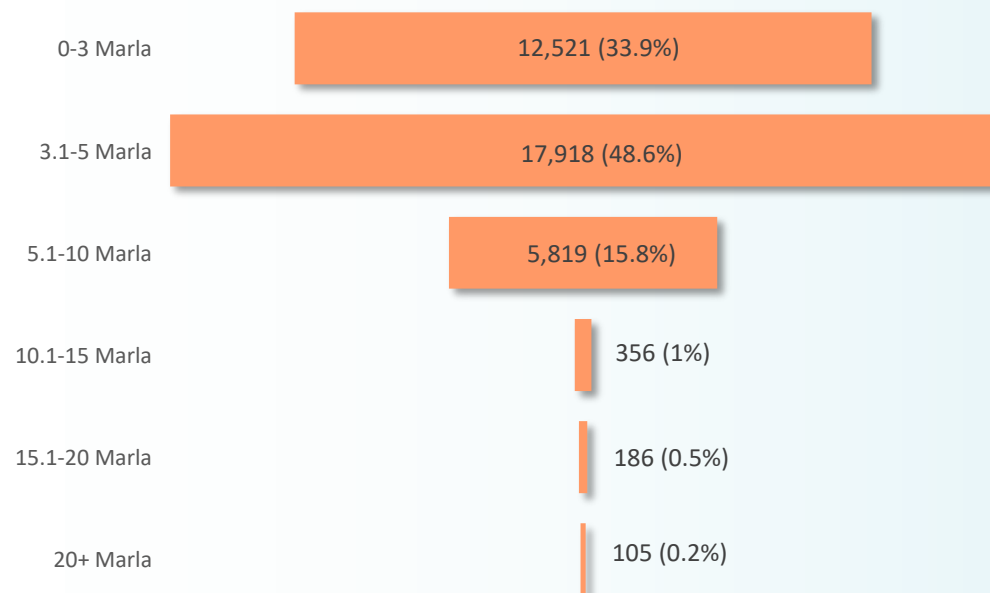


Types of water supply connections

Of the total intact water supply connections, 96.7% (2,799) connections are domestic and used by households for domestic purpose. This implies that most of the water supply is utilized for domestic use. Similarly, 2.5% (73) connections are of commercial nature followed by Government, welfare and industrial connections. (See figure 03). However, they are limited in number. The survey results implies that MC Daska is majorly responsible for provision of water supply as a municipal service to general public.

Types of water supply alternative arrangements

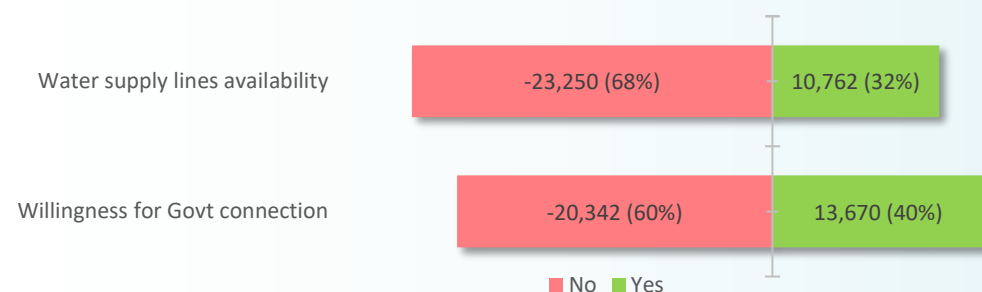
Majority of the households in Daska rely upon alternative arrangements for water supply. A water bore is the most commonly used for that purpose. Survey reveals that 30,951 (91%) households use water bore to fulfill their water consumption needs followed by hand pumps (1,270, 3.7%) and other sources such as filtration plants, private water tankers, and canal (See figure 04).

Figure 05: Property Sizes (FY 2024-25)

Property sizes:

Assessment of property size is an important factor which can be considered while assessing improvement in potential water supply revenue streams and imposition of water supply tariffs. Therefore, analysis on property sizes was performed and the results reveal that majority of the households (17,918, 48.6%) resides in the property sizes comprised of three to five Marla houses followed by up to three Marla (12,521, 33.9%) and 5 to 10 Marla (5,819, 15.8%).

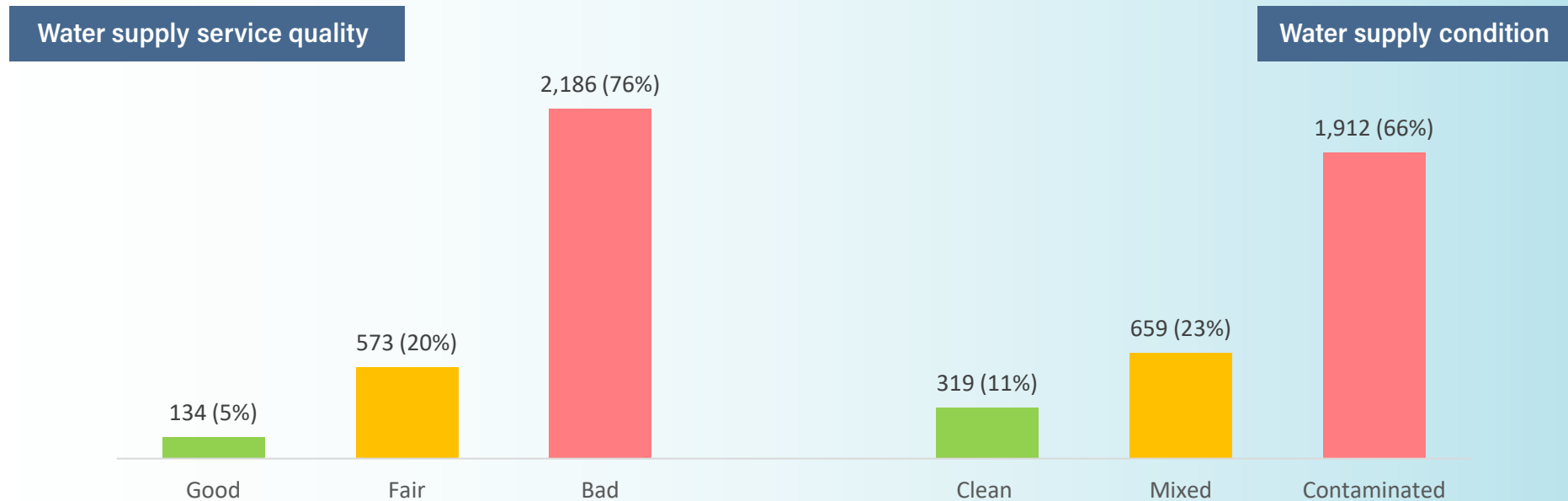
Survey results implies that majority of the population in the city is middle class. Although households with property size of above 10 Marla exist in the city, however, their number is minimal and don't represent large portion of the households in the city.

Figure 06: Availability of water supply lines and willingness To Pay For Govt. Connection (FY 2024-25)

Availability of water supply lines and willingness for Govt. connection

23,250, 68% of the households who don't have water supply connection don't have access to the water supply lines. Lack of water supply infrastructure is a key challenge in provision of water supply to citizen. Moreover, most of the households rely upon alternative arrangements for water supply and they are not willing to take Government water supply connection (See figure 06). Hence, water supply service needed to be improved.

Figure 07: Water supply service condition and quality of active connections (FY 2024-25)

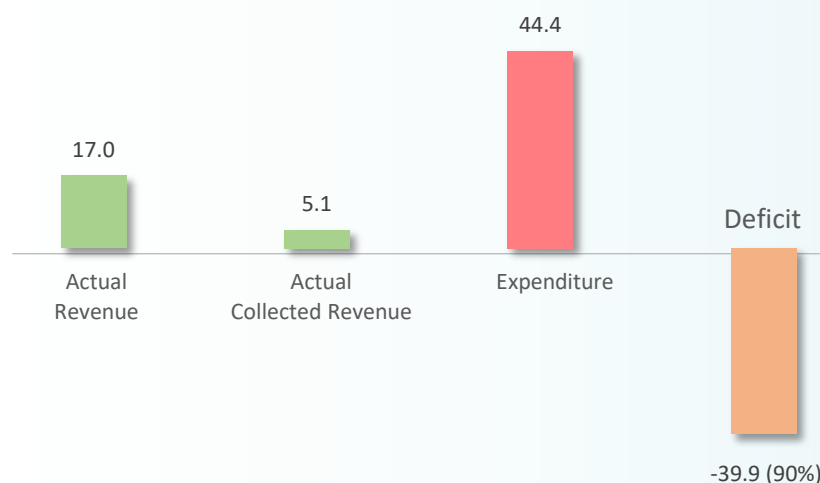


Water supply service quality

Water service quality refers to how well a water supply system meets the needs of users in terms of customer satisfaction. Perception about water service condition was poor among households with active water supply connection (2,893) and large number of households (2,186, 76%) rated poor and perceive that service needed to be improved. Only 05% (134) of the respondents believe service is good followed by 20% who are in view that quality level is just acceptable (See figure 07).

Water supply condition

Households were investigated about the water quality in terms of safe, clean, and reliable delivery of water in compliance with health and safety standards. 66% (1,912) of the households stated that the water supply is contaminated and needs to purify. Around 23% of the respondents perceived that water quality is moderate for domestic use and only 11% of the households stated that they are satisfied with the quality of the water (See figure 07)

Figure 08: Revenue Deficit (Million PKR) - FY 2024-25

Revenue deficit

Present condition of water supply own source revenue is not satisfactory. Revenue is in deficit for the FY 2024-25. The actual revenue is 4.5 Million PKR and expenditure are 44.4 Million PKR. The MC Daska is not in position to cover its expenditures with its current own source revenue. The total deficit is 39.9 Million PKR which is around 90% (See figure 08). The results implies that there is not only need to recover water supply tariffs but to implement a viable model of potential revenue surplus to enhance own source revenue. It is necessary for MC's self-sufficiency to bear water supply expenditure without relying upon Government or external fundings. Therefore, there is need to come up with a viable source of own source revenue which essentially covers up all expenditure.

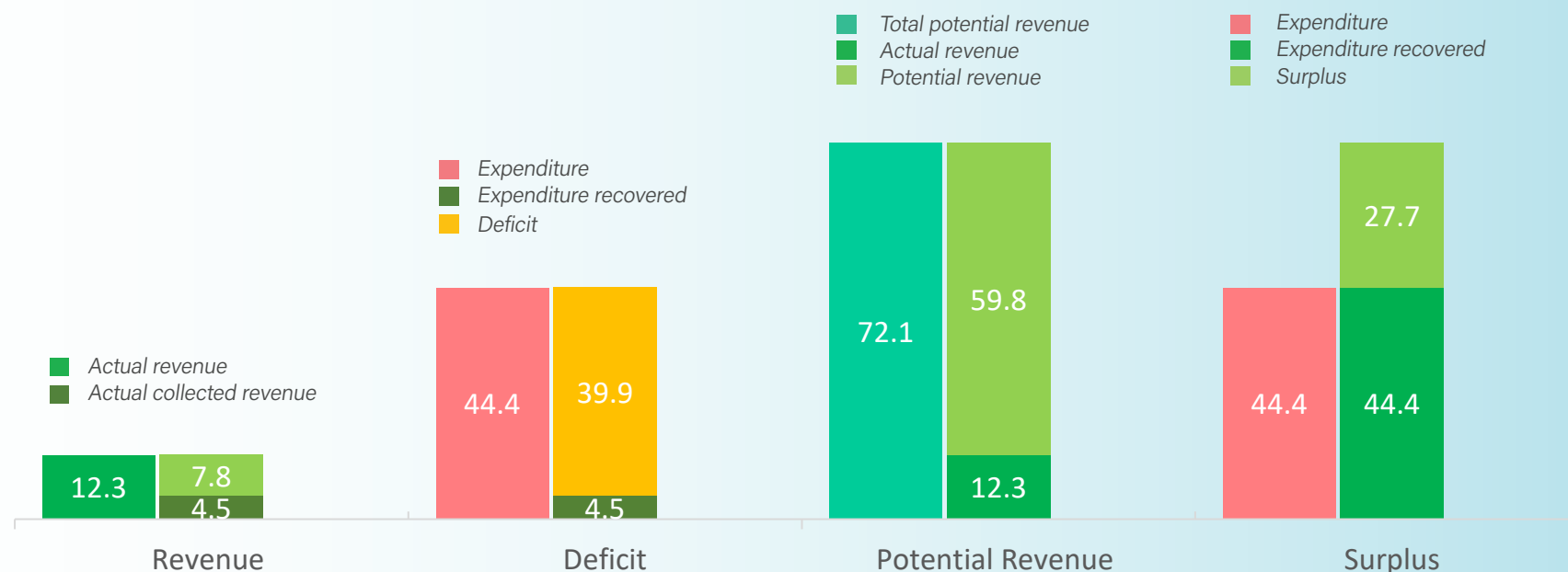
Proposed models for potential revenue surplus

A revenue deficit in water supply services occurs when the income generated from water tariffs and other related sources is not sufficient to cover the operational and maintenance costs of providing water. This deficit can lead to serious challenges for water utilities and the public. It often results in poor maintenance of infrastructure, frequent service disruptions, and reduced water quality due to the lack of funds for treatment and distribution. Over time, the deficit may force local governments to rely on subsidies or loans, which can strain public finances. Additionally, underpricing water discourages conservation and leads to wastage, further deepening the problem. Addressing this issue requires better tariff structures, efficient billing systems, and investment in infrastructure to ensure long-term sustainability and reliable service delivery.

Therefore, based upon the current condition of own source revenue, two potential model of revenues are proposed when implemented, result in revenue surplus. Models are presented with varying levels of recovery to assess the level of revenue is generated by each model on a specific level of tariff recovery by the local government. The models is as follows.

- Water tariff on domestic bores
- Water tariff on Marla categories

Figure 09: Proposed model for potential revenue surplus: Water tariff on domestic bores (Million PKR) - FY 2024-25



Proposed model for potential revenue surplus: Water tariff on domestic bores

This model produces revenue surplus of 27.7 Million PKR (See figure 09). The model proposed that tariff will be imposed on identified connections, domestic and commercial bores, and sewerage connections on monthly basis and resulting tariff collection for 12 months will be added in actual present revenue. . The model will successfully covers water supply expenses with out any revenue deficit. The success of any model depends on the level of recovery. This is the responsibility of the district and local governments to make sure 100% recovery is being made to ensure own source revenue surplus. Moreover, its a viable solution to impose tariffs on domestic bores along with sewerage and identified connections. Without imposition of tariffs, revenue streams will be in deficit and goal of self-sufficiency will not be attained. The breakdown of tariff calculation is given in Table 01.

Table 01: Potential revenue surplus (Daska): Water tariff on domestic bores (PKR) - FY 2024-25

	Number	Tariff (Rs/month)	Duration (Months)	Revenue
Connections Identified	199	300	12	716,400
Bore Connections (Domestic)	27,264	100	12	32,716,800
Bore Connections (Commercial)	3,684	500	12	22,104,000
Sewerage Connections	7,055	50	12	4,233,000
Potential Revenue				59,770,200

NOTE: All revenue streams are calculated on yearly basis (12 months) for both models

Proposed model for potential revenue surplus: Water tariff on Marla categories

Second model proposed that except domestic bores, tariff should be imposed on all Marla sizes, sewerage and commercial bores along with identified connection. The resulting tariff will be calculated on monthly basis and yearly revenue will be added in current revenue. This model provides revenue surplus of 66.7 Million PKR. In this model, households will be charged tariffs on the basis of the size of the property. The household area divided into 6 categories of house in terms of Marla size. Success of the model depends on the recovery of tariffs, the more will be the recovery, the more will be the revenue. This is not only the responsibility of the local governments to collect the tariffs, but also the responsibility lies on the shoulders of the citizen as well to regularly pay utility bills to make sure obligation on their part is fulfilled.

PATTOKI



Pattoki City Profile: Pattoki, the tehsil headquarters of Kasur District, is widely known as the “City of Flowers” due to its extensive nurseries in the Gehlan area, among the largest in Asia, with exports reaching countries such as Saudi Arabia and the UAE. The city’s economy is therefore horticulture-driven alongside agriculture, trade, and services. Like many semi-urban canters in Punjab, Pattoki faces challenges of inadequate water supply infrastructure and limited coverage, with only 5% of households receiving piped supply for an average of eight hours daily.

Municipal Committee Pattoki : Formed under the Punjab Local Government Act (PLGA) 2013, MC Pattoki is responsible for providing core urban services, including water supply, sanitation, solid waste management, and road and infrastructure maintenance. A household survey covering 23,047 households showed that only 5% have active water supply connections, while 95% rely on alternative arrangements and 9% reported dead or closed connections. Most water supply is used domestically (94%), while commercial and government connections remain limited

Water Supply – Service Gaps and Challenges: Survey findings indicate that 95% of households relying on alternative arrangements lack access to water supply lines, with 62% unwilling to obtain government connections due to poor service delivery. Water service quality is perceived as weak, with a majority rating it poor. Similarly, water quality concerns persist, as 25% of households report contamination and only 17% express satisfaction with supply. The heavy reliance on bores (78%) and private tankers (16%) highlights the inadequacy of municipal systems and underlines the urgent need for infrastructure expansion and service reliability.

Provision of water – Assessment & Revenue Potential: MC Pattoki’s water supply operations face a severe fiscal imbalance. In FY 2024–25, revenues totalled PKR 1.7 million against expenditures of 19.2 Million PKR, leaving a deficit of 17.5 Million PKR (91%). To address this unsustainable gap, two models are proposed:

1. Tariff on Domestic Bores – imposing tariffs on identified domestic and commercial bores and sewerage connections could generate a surplus of 16.3 Million PKR.
 2. Tariff on Property Size (Marla-Based) – applying tariffs across household property size categories could generate a surplus of 39.6 Million PKR at full recovery.
- Both models offer viable pathways toward self-sufficiency, but their success hinges on effective tariff recovery, improved billing systems, and citizen compliance, alongside municipal accountability.



113,735

Population



19,277

Households



5.9

Household Size



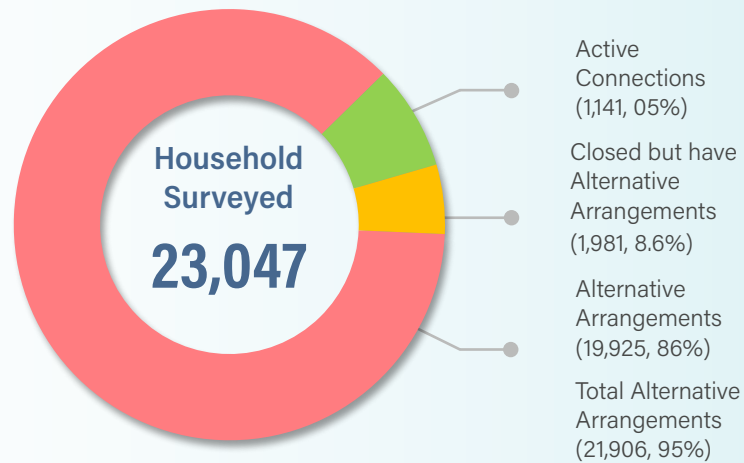
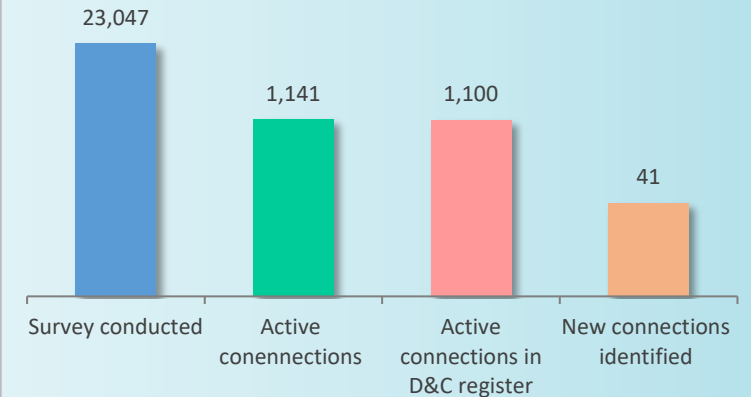
1,100

Registered Connections



07

No of Turbines

23,047Household
Surveyed**1,141 (5%)**Active
Connections**21,906 (95%)**Alternative
Arrangements**1,981 (8.6%)**Dead/Closed
Connections**23 (0.1%)**Not in D&C
Register**641 (2.8%)**Commercial activities/
residential properties**Figure 10: Active & Closed Connections & Alternative Arrangements (FY 2024-25)****Figure 11: Reconciliation of D&C Register and Household Survey (FY 2024-25)**

Active & closed connections & alternative water supply arrangements

Total number of water supply household survey conducted were 23,047. Households with active water supply connections accounted for 1,141, which are 05% of the total households surveyed. Dead or closed water supply connections were 1,981, 8.6%, however, citizens have arranged alternative sources to acquire water supply. Similarly, households who don't have water supply and relying upon alternative arrangements accounted for 21,906, 95% (See figure 10).

Reconciliation of D&C register and household survey

Number of registered connections found in DNC register were 11,00. These connections were verified and reconciled with the active water supply connections identified in household survey. The results indicate that 1,100 active water supply connections were reconciled in both water supply D&C register and water supply household survey and 41 new connections found (See figure 11).

Figure 12: Types of water supply connections (2024-25)

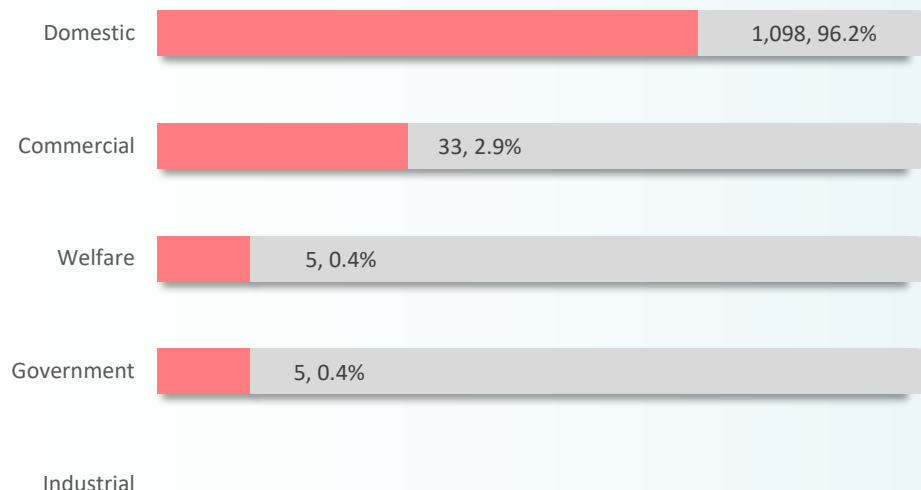
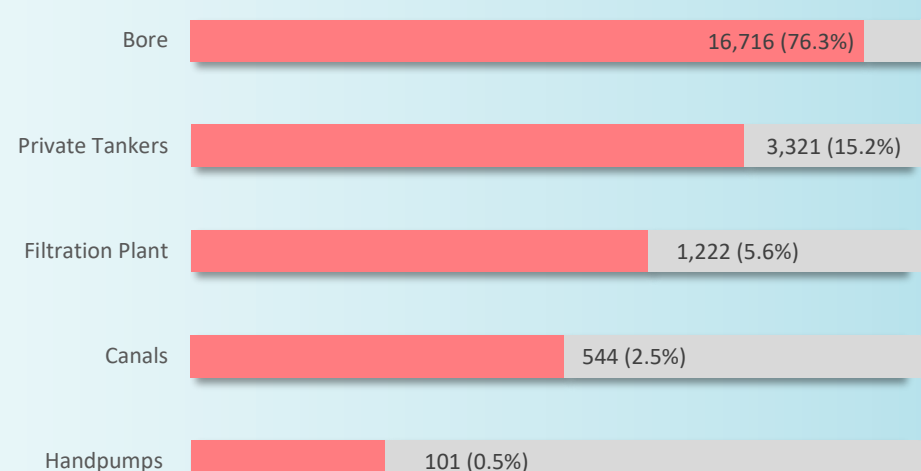


Figure 13: Types of water supply alternative arrangements (2024-25)



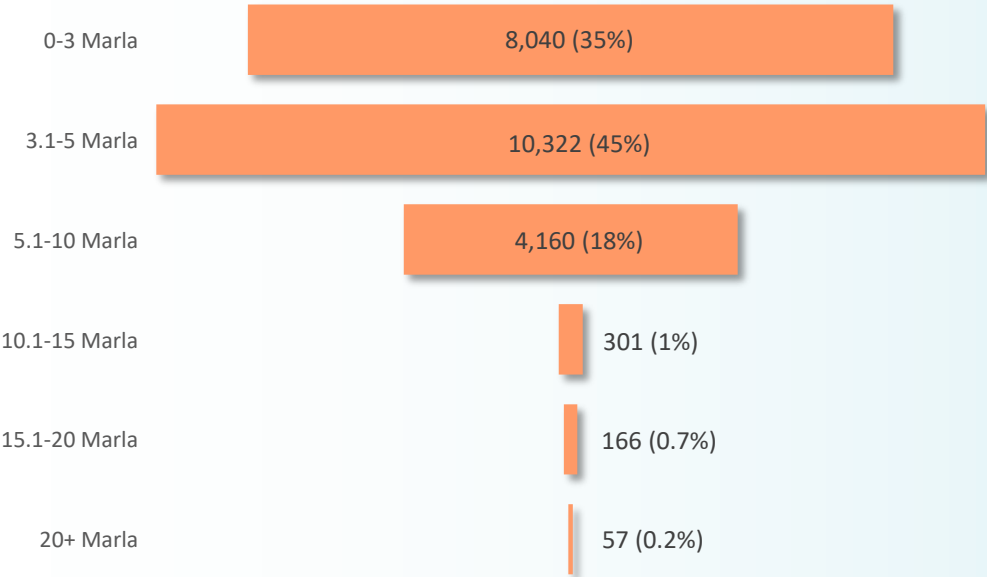
Types of water supply connections

Of the total intact water supply connections , 96.2% (1,098) connections are domestic and used by households for domestic purpose. This implies that most of the water supply is utilized for domestic use. Similarly, 2.9% (33) connections are of commercial nature followed by Government and welfare. There is no industrial connection. (See figure 12). The survey results implies that MC Pattoki is majorly responsible for provision of water supply as a municipal service to general public.

Types of water supply alternative arrangements

Majority of the households (21,906) in Pattoki rely upon alternative arrangements for water supply. A water bore is the most commonly used for that purpose. Survey reveals that 16,716 (76.3%) households use water bore to fulfill their water consumption needs followed by private tankers (3,321, 15.2%) and other sources such as filtration plants, hand pumps, and canal (See figure. 13).

Figure 14: Property Sizes (2024-25)

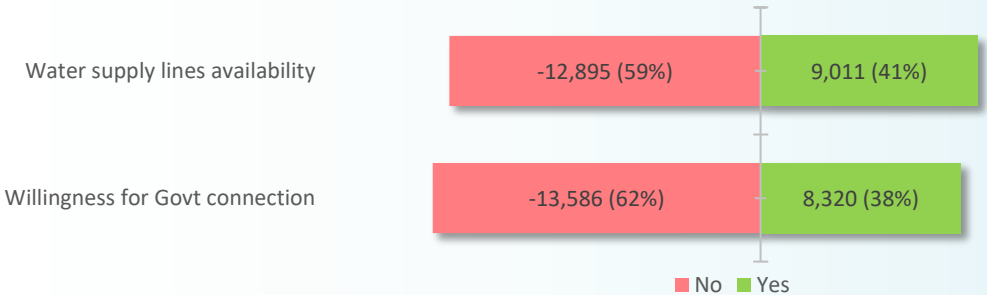


Property sizes:

Assessment of property size is an important factor which can be considered while assessing improvement in potential water supply revenue streams and imposition of water supply tariffs. Therefore, analysis on property sizes was performed and the results reveal that majority of the households (10,322, 45%) resides in the property sizes comprised of three to five Marla houses followed by up to three Marla (8,040 (35%) and 5 to 10 Marla (4,160, 18%).

Survey results implies that majority of the population in the city is middle class. Although households with property size of above 10 Marla exist in the city, however, their number is minimal and don't represent large portion of the households in the city.

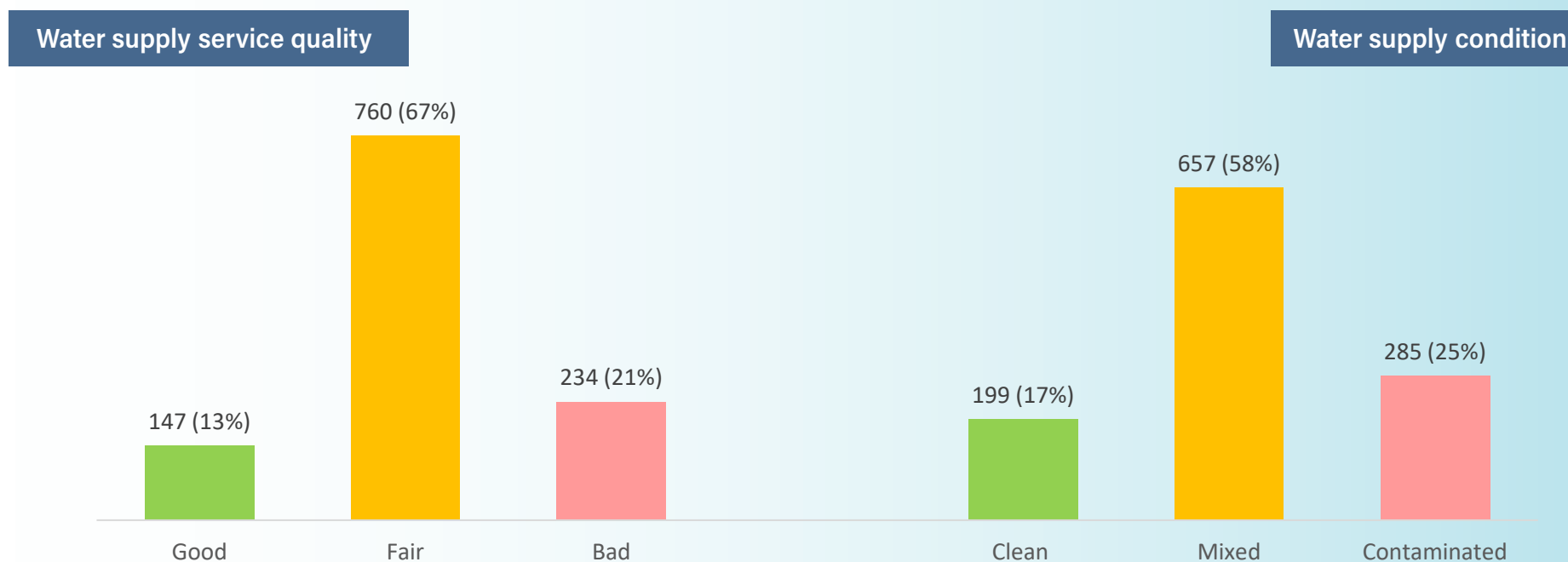
Figure 15: Availability of water supply lines and willingness for Govt. Connection (2024-25)



Availability of water supply lines and willingness for Govt. Connection

Of the total households with alternative arrangements 12,895, 59% of the households don't have access to the water supply lines. Lack of water supply infrastructure is a key challenge in provision of water supply to citizen. Moreover, most of the households (13,586, 62%) rely upon alternative arrangements for water supply and they are not willing to take Government water supply connection (See figure 15).

Figure 16: Water supply service condition and quality of active connections (FY 2024-25)

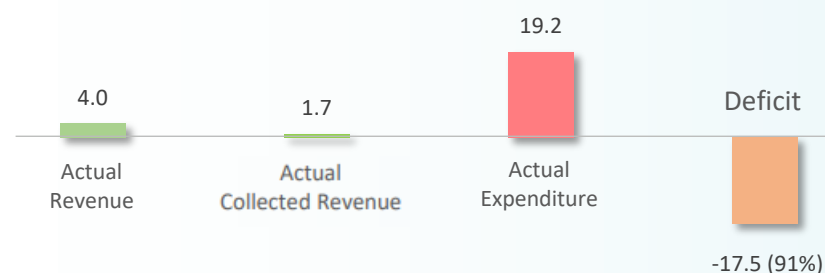


Water supply service condition

Water service quality refers to how well a water supply system meets the needs of users in terms of customer satisfaction. Perception about water service quality was fair among households with active water supply connection (67%, 760) rated fair. Only 21% (234) of the respondents believe service is bad followed by 13% who are in view that quality level is good (See figure 16).

Water supply quality

Households were investigated about the water quality in terms of safe, clean, and reliable delivery of water in compliance with health and safety standards. 25% (285) of the households stated that the water supply is contaminated and needs to purify. 58%, 657 perceived that water supply is somehow able for domestic use and only 17%, 199 of the households stated that they are satisfy with the quality of the water (See figure 16).

Figure 17: Revenue Deficit (Million PKR) FY (2024-25)

Revenue deficit

Present condition of water supply own source revenue is not satisfactory. Revenue is in deficit for the FY 2024-25. The actual revenue is 1.7 Million PKR and expenditures are 19.2 Million PKR. The MC Pattoki is not in position to cover its expenditures with its current own source revenue. The total deficit is 17.5 Million PKR which is around 91% (See, figure 17). The results implies that there is not only need to recover water supply tariffs but to implement a viable model of potential revenue surplus to enhance own source revenue. It is necessary for MC's self sufficiency to bear water supply expenditures without relying upon Government or external fundings. Therefore, there is need to come up with a viable source of own source revenue which essentially covers up all expenditures.

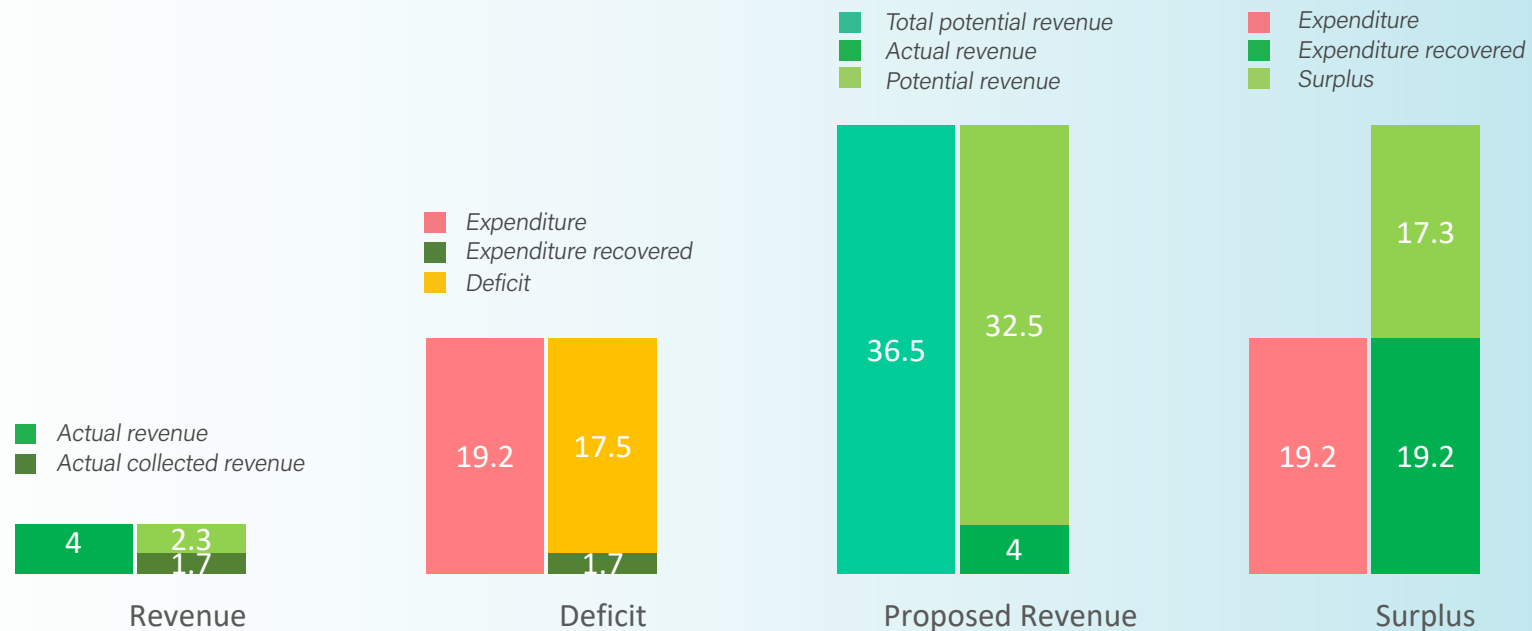
Proposed models for potential revenue surplus

A revenue deficit in water supply services occurs when the income generated from water tariffs and other related sources is not sufficient to cover the operational and maintenance costs of providing water. This deficit can lead to serious challenges for water utilities and the public. It often results in poor maintenance of infrastructure, frequent service disruptions, and reduced water quality due to the lack of funds for treatment and distribution. Over time, the deficit may force local governments to rely on subsidies or loans, which can strain public finances. Additionally, underpricing water discourages conservation and leads to wastage, further deepening the problem. Addressing this issue requires better tariff structures, efficient billing systems, and investment in infrastructure to ensure long-term sustainability and reliable service delivery.

Therefore, based upon the current condition of own source revenue, two potential model of revenues are proposed when implemented, result in revenue surplus. Models are presented with varying levels of recovery to assess the level of revenue is generated by each model on a specific level of tariff recovery by the local government. The models as as follows.

- Water tariff on domestic bores
- Water tariff on Marla categories

Figure 18: Proposed model for potential revenue surplus: Water tariff on domestic bores (Million PKR) - FY 2024-25



Proposed model for potential revenue surplus: Water tariff on domestic bores

This model produces total proposed revenue of 36.5 Million PKR (See figure 18). The model proposed that tariff will be imposed on identified connections, domestic and commercial bores, and sewerage connections on monthly basis and resulting tariff collection for 12 months will be added in actual present revenue. The model will successfully covers water supply expenses with out any revenue deficit. The success of any model depends on the level of recovery. This is the responsibility of the district and local governments to make sure 100% recovery is being made to ensure own source revenue surplus. Moreover, its a viable solution to impose tariffs on domestic bores along with sewerage and identified connections. Without imposition of tariffs, revenue streams will be in deficit and goal of self-sufficiency will not be attained. The breakdown of tariff calculation is given in table 02.

Table 02: Potential revenue surplus (Pattoki): Water tariff on domestic bores (PKR) - FY 2024-25

	Number	Tariff (Rs/month)	Duration (Months)	Revenue
Connections Identified	23	300	12	82,800
Bore Connections (Domestic)	15,501	100	12	18,601,200
Bore Connections (Commercial)	1,215	500	12	7,290,000
Sewerage Connections	10,809	50	12	6,485,600
Potential Revenue				32,459,400

NOTE: All revenue streams are calculated on yearly basis (12 months) for both models

(II) Proposed model for potential revenue surplus: Water tariff on Marla categories

Second model proposed that except domestic bores, tariff should be imposed on all Marla sizes, sewerage and commercial bores along with identified connection. The resulting tariff will be calculated on monthly basis and yearly revenue will be added in current revenue. This model provides revenue surplus of 39.6 Million PKR. In this model, households will be charged tariffs on the basis of the size of the property. The household are divided into 6 Marla categories. Success of the model depends on the recovery of tariffs, the more will be the recovery, the more will be the revenue. This not only the responsibility of the local governments to collect the tariffs, but also the responsibility lies on the shoulders of the citizen as well to regularly pay utility bills to make sure obligation on their part is fulfilled.

■ RAHIM YAR KHAN



Rahim Yar Khan City Profile: Rahim Yar Khan, located in Bahawalpur Division, is a key agricultural and industrial hub with a strong base in cotton ginning, flour mills, and oil mills. Despite its economic significance, the city faces critical water supply challenges, including brackish groundwater, over-extraction for irrigation, and contamination (notably arsenic). With only limited pockets of sweet water near canals, the majority of residents depend on tube wells and bores. The water scarcity and quality issues affect both households and agriculture, increasing costs and risks for local communities.

Municipal Committee Rahim Yar Khan: Established under the Punjab Local Government Act (PLGA) 2013, MC RYK is mandated to provide municipal services, including water supply, sanitation, solid waste management, and urban infrastructure development. A survey of 90,782 households revealed that only 5% (4,748) have active water supply connections, while 95% (79,190) rely on alternative arrangements and 8% reported dead or closed connections. The majority of connections (93%) are domestic, with a small share of commercial (6.5%) and other categories.

Water Supply – Service Gaps and Challenges: Water coverage in Rahim Yar Khan is only 6%, with average supply of 7 hours daily. The reliance on alternative arrangements is significant, with households using water bores (42%) and private tankers (41%) as the main sources. Although 59% of households with alternative arrangements lack access to supply lines, only 22% expressed unwillingness to take government connections, suggesting a demand-side opportunity if service reliability improves. Service perception among active users is mixed: 67% rated it “fair,” 24% “poor,” and 9% “good.” In terms of quality, 78% reported mixed satisfaction, 17% considered it clean, while 5% regarded it as contaminated. These findings highlight infrastructure gaps, quality concerns, and a lack of public trust in municipal services.

Provision of Water – Assessment & Revenue Potential: MC RYK’s water operations are fiscally unsustainable. In FY 2024–25, revenues total 5.1 Million PKR against expenditures of 55.8 Million PKR, leaving a deficit of 50.7 Million PKR (93%). To overcome this gap and ensure self-sufficiency, two models are proposed:

1. Tariff on Domestic Bores – imposing tariffs on domestic/commercial bores and sewerage connections could generate a surplus of 64.3 Million PKR.
2. Tariff on Property Size (Marla-Based) – charging households based on property size could generate a surplus of 120.6 Million PKR.



519,261

Population



82,949

Households



6.26

Household Size



4,711

Registered Connections



35

No of Turbines

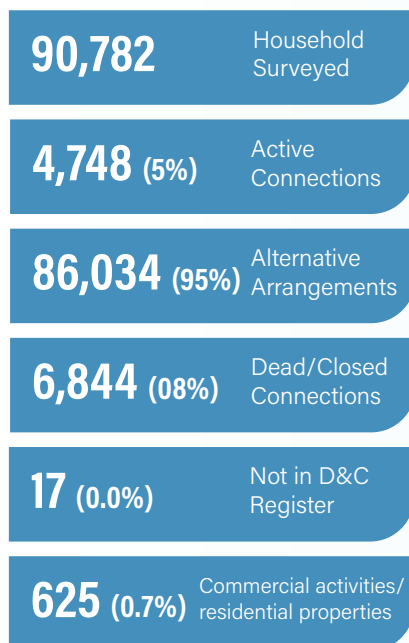


Figure 19: Active & Closed Connections & Alternative Arrangements (FY 2024-25)

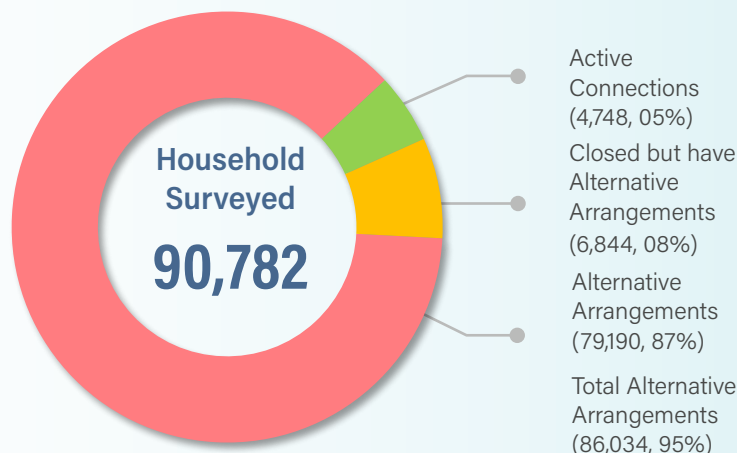
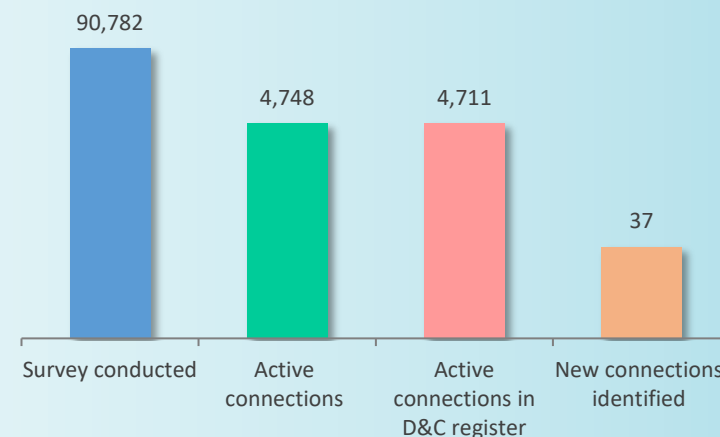


Figure 20: Reconciliation of D&C Register and Household Survey (FY 2024-25)



Active & closed connections & alternative water supply arrangements

Total number of water supply household survey conducted were 90,782. Households with active water supply connections accounted for 4,748, which are 05% of the total households surveyed. Dead or closed water supply connections were 6,844, 08%, however, citizens have arranged alternative sources to acquire water supply. Similarly, households who don't have water supply and relying upon alternative arrangements accounted for 86,034, 95% (See figure 19).

Reconciliation of D&C register and household survey

Number of registered connections found in D&C register were 4,711. These connections were verified and reconciled with the active water supply connections identified in household survey. The results indicate that 4,711 active water supply connections were reconciled in both water supply D&C register and water supply household survey and 37 new connections found (See figure 20).

Figure 21: Types of water supply connections (FY 2024-25)

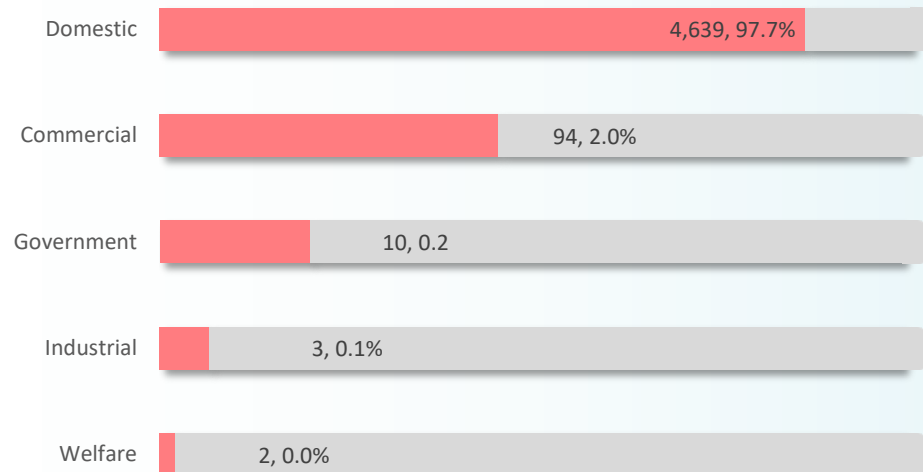
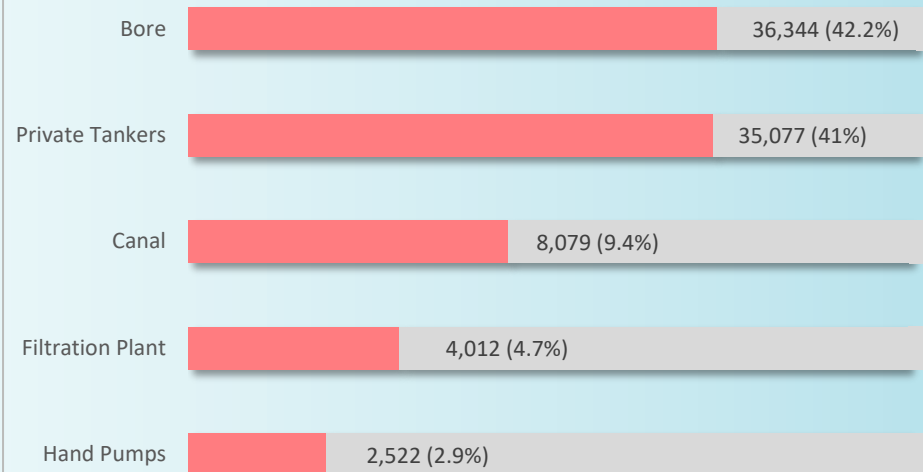


Figure 22: Types of water supply alternative arrangements (FY 2024-25)

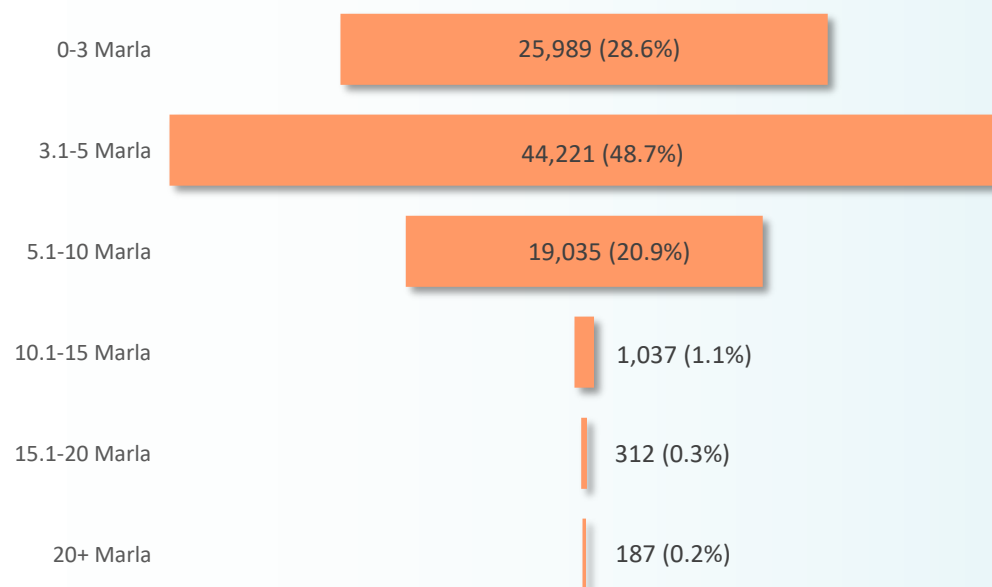


Types of water supply connections

Of the total intact water supply connections 97.7% (4,639) are domestic and used by households for domestic purpose. This implies that most of the water supply is utilized for domestic use. Similarly, 2.0% (94) connections are of commercial nature followed by Government, welfare, and industrial (See figure 21). The survey results implies that MC Rahim Yar Khan is majorly responsible for provision of water supply as a municipal service to general public (See figure 21)

Types of water supply alternative arrangements

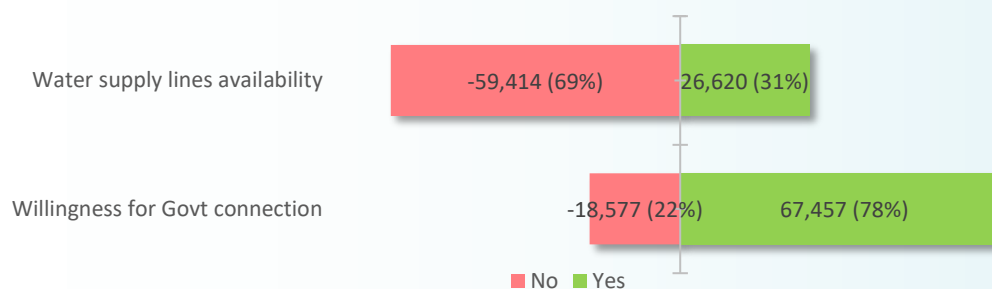
Majority of the households in Rahim Yar Khan rely upon alternative arrangements for water supply. A water bore is the most commonly used for that purpose. Survey reveals that 36,344 (42%) households use water bore to fulfill their water consumption needs followed by private tankers (35,077, 41%) and other sources such as filtration plants, hand pumps, and canal (See figure 22).

Figure 23: Property Sizes (FY 2024-25)

Property sizes:

Assessment of property size is an important factor which can be considered while assessing improvement in potential water supply revenue streams and imposition of water supply tariffs. Therefore, analysis on property sizes was performed and the results reveal that majority of the households (44,221, 48.7%) resides in the property sizes comprised of three to five Marla houses followed by up to three Marla 25,989, 28.6% and 5 to 10 Marla (19,035, 20.9%).

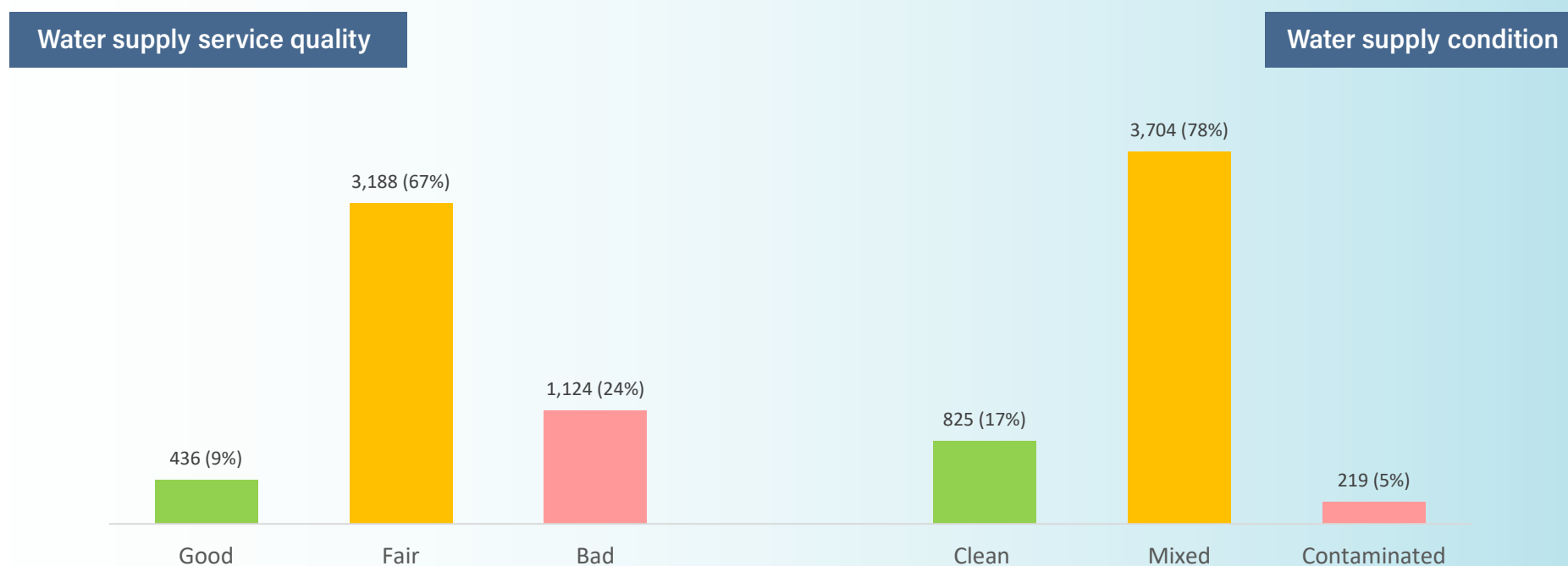
Survey results implies that majority of the population in the city is middle class. Although households with property size of above 10 Marla exist in the city, however, their number is minimal and don't represent large portion of the households in the city (See figure 23).

Fig 24: Availability of water supply lines and willingness for Govt. Connection (FY 2024-25)

Availability of water supply lines and willingness for Govt. Connection

Of the total households with alternative arrangements 69% of the households don't have access to the water supply lines. Lack of water supply infrastructure is a key challenge in provision of water supply to citizen. Moreover, 22% of the households rely upon alternative arrangements for water supply and they are not willing to take Government water supply connection (See figure 24).

Figure 25: Water supply service condition and quality of active connections (FY 2024-25)

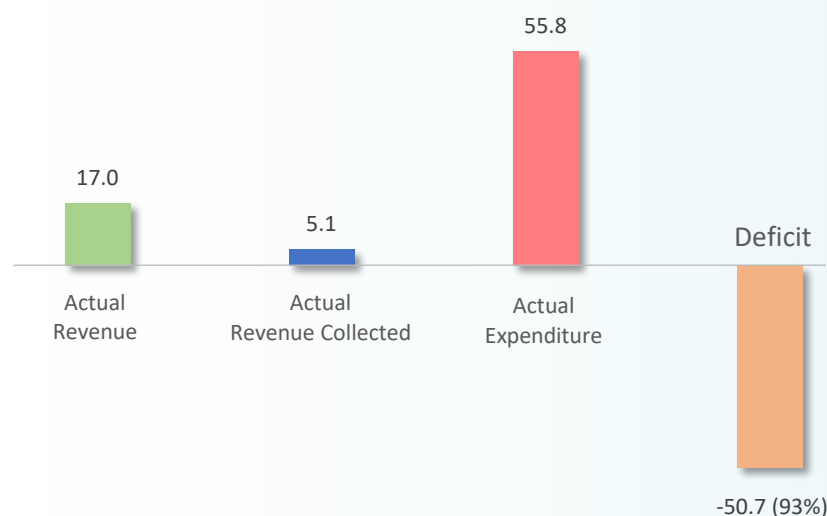


Water supply service condition

Water service quality refers to how well a water supply system meets the needs of users in terms of customer satisfaction. Perception about water service condition among households with active (4,748) water supply connection was fair (3,188, 67%) followed by those who rated bad (1,124, 24%). Similarly, only 09% of the household stated that the water supply service condition was good (See figure 25).

Water supply quality

Households were investigated about the water quality in terms of safe, clean, and reliable delivery of water in compliance with health and safety standards. Majority of the households 78% (3,704) has mixed opinion about water supply service quality followed by those who perceived water supply is clean (825, 17%). Moreover, 05% of the respondents considered water supply contaminated (See figure 25).

Figure 26: Revenue Deficit (Million PKR) - FY 2024-25

Revenue deficit

Present condition of water supply own source revenue is not satisfactory. Revenue is in deficit for the FY 2024-25. The actual revenue is 5.1 Million PKR and expenditures are 55.8 Million PKR. The MC Rahim Yar Khan is not in position to cover its expenditures with its current own source revenue. The total deficit is 50.7 Million PKR which is around 93% (See figure 26). The results implies that there is not only need to recover water supply tariffs but to implement a viable model of potential revenue surplus to enhance own source revenue. It is necessary for MC's self sufficiency to bear water supply expenditures without relying upon Government or external fundings. Therefore, there is need to come up with a viable source of own source revenue which essentially covers up all expenditures.

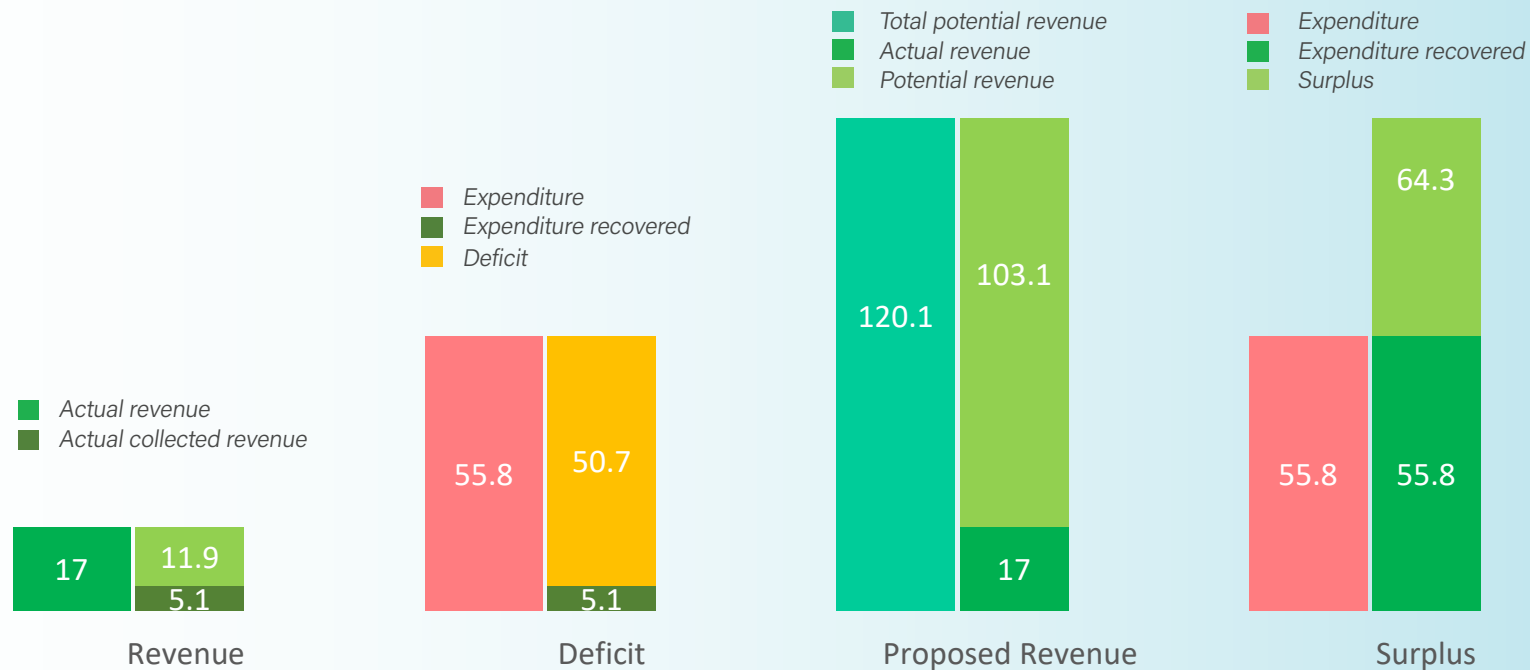
Proposed models for potential revenue surplus

A revenue deficit in water supply services occurs when the income generated from water tariffs and other related sources is not sufficient to cover the operational and maintenance costs of providing water. This deficit can lead to serious challenges for water utilities and the public. It often results in poor maintenance of infrastructure, frequent service disruptions, and reduced water quality due to the lack of funds for treatment and distribution. Over time, the deficit may force local governments to rely on subsidies or loans, which can strain public finances. Additionally, underpricing water discourages conservation and leads to wastage, further deepening the problem. Addressing this issue requires better tariff structures, efficient billing systems, and investment in infrastructure to ensure long-term sustainability and reliable service delivery.

Therefore, based upon the current condition of own source revenue, two potential model of revenues are proposed when implemented, result in revenue surplus. Models are presented with varying levels of recovery to assess the level of revenue is generated by each model on a specific level of tariff recovery by the local government. The models as follows.

- Water tariff on domestic bores
- Water tariff on Marla categories

Figure 27: Proposed model for potential revenue surplus: Water tariff on domestic bores (Million PKR) FY 2024-25



Proposed model for potential revenue surplus: Water tariff on domestic bores

This model produces revenue surplus of 64.3 Million PKR (See figure 27). The model proposed that tariff will be imposed on identified connections, domestic and commercial bores, and sewerage connections on monthly basis and resulting tariff collection for 12 months will be added in actual present revenue. The model will successfully covers water supply expenses with out any revenue deficit. The success of any model depends on the level of recovery. This is the responsibility of the district and local governments to make sure 100% recovery is being made to ensure own source revenue surplus. Moreover, its a viable solution to impose tariffs on domestic bores along with sewerage and identified connections. Without imposition of tariffs, revenue streams will be in deficit and goal of self-sufficiency will not be attained. The breakdown of tariff calculation is given in table 03.

Table 03: Potential revenue surplus (Rahim Yar Khan): Water tariff on domestic bores (PKR) - FY 2024-25

	Number	Tariff (Rs/month)	Duration (Months)	Revenue
Connections Identified	17	300	12	61,200
Bore Connections (Domestic)	34,548	100	12	41,457,600
Bore Connections (Commercial)	1,796	500	12	10,776,000
Sewerage Connections	84,706	50	12	50,823,600
Potential Revenue				103,118,400

NOTE: All revenue streams are calculated on yearly basis (12 months) for both models

Proposed model for potential revenue surplus (Rahim Yar Khan): Water tariff on Marla categories

Second model proposed that except domestic bores, tariff should be imposed on all Marla sizes, sewerage and commercial bores along with identified connection. The resulting tariff will be calculated on monthly basis and yearly revenue will be added in current revenue. This model provides revenue surplus of 120.6 Million PKR. In this model, households will be charged tariffs on the basis of the size of the property. The household are divided into 6 Marla categories. Success of the model depends on the recovery of tariffs, the more will be the recovery, the more will be the revenue. This not only the responsibility of the local governments to collect the tariffs, but also the responsibility lies on the shoulders of the citizen as well to regularly pay utility bills to make sure obligation on their part is fulfilled.



DATA ANALYSIS

Building Control Survey



 **SAMBRIAL**



Sambrial City Profile: Sambrial (Sialkot District) sits along the Upper Chenab Canal and anchors a manufacturing corridor supporting Sialkot's export industries (sports goods, surgical instruments, leather). A dry port and a dense SME ecosystem drive land-use conversion pressure (residential, commercial) and rapid construction activity; making robust building control a primary revenue and compliance lever.

Municipal Committee Sambrial (MC Sambrial): Constituted under PLGA 2013, MC Sambrial oversees building control, approvals, land-use regulation, and urban services. A city-wide building control survey (Zones A–D) identified 24k buildings (8.8k residential; 15k commercial units/shops). Approved map coverage is low: Residential 22% approved, 1% applied, 78% unapproved; Commercial 47% approved, a small applied pipeline, and 52% unapproved. Land-use conformity is largely compliant (91% permitted, 9% permissible) with a small prohibited subset (36 buildings). Street canvassing covered 5,461 residential streets and 4,482 commercial streets (Lists A+B), indicating strong field verification.

Building Control – Compliance Gaps & Land-Use Status

- Large unapproved stock: The majority of residential plans remain unapproved; commercial compliance is better but still leaves a sizable unregulated base.
- Thin pipeline (few “applied” cases) signals friction in the approval process (forms, fees, or time-lines).
- Land-use pressures: Active commercial corridors create conversion risk (permissible uses) that must be priced and regulated.
- Data actions needed: Reconcile survey counts vs. registers; flag duplicates; link each property to a geo-referenced parcel and unique ID to prevent rework.

Assessment & Revenue Potential: The building control survey in Sambrial reveals a significant revenue opportunity of 993 Million PKR from unapproved residential and commercial buildings, as well as conversion fees. Of this, approximately 249 Million PKR is attributable to unapproved residential units, 689 Million PKR from commercial buildings, and 56 Million PKR through conversion charges. This potential represents a substantial avenue for enhancing municipal own source revenue by legalizing existing stock, strengthening compliance, and institutionalizing fee recovery mechanisms to finance essential urban services sustainably.



119,571

Population



19,731

Households



6.06

Household Size



21,000

Est. Total Buildings



8,878

Approved Buildings

Buildings Identified

23,997

Residential: 8,761
Commercial/Shops: 14,971
Others: 265

Approved Map Status

8,878

Residential: 1,835
Commercial/Shops: 7,043
Other Buildings: 48

Applied Map Status

154

Residential: 85
Commercial/Shops: 69
Other Buildings: 4

Unapproved Map Status

14,700

Residential: 6,841
Commercial/Shops: 7,859
Other Buildings: 213

**SURVEYS
CONDUCTED**

Zone A

10,511

Building surveyed

Zone B

3,205

Building surveyed

Zone C

6,828

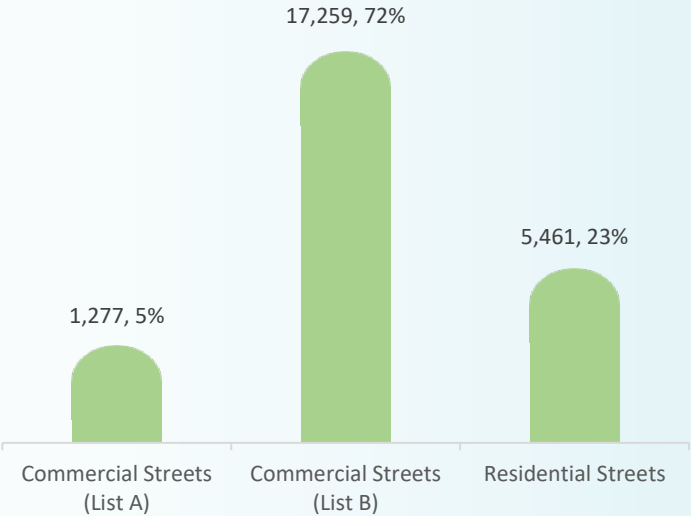
Building surveyed

Zone D

3,453

Building surveyed

Figure 28: Commercial and residential streets visited (FY 2024-25)



City was divided in four zones to conduct building control survey. The zones were classified into A, B, C, and D zones. Total of 23,997 buildings were identified during building control survey. 8,761 were residential buildings, whereas, 14,971 building were commercial and 265 were in other categories. Similarly, approved maps status shows that only 1,835 residential buildings have approved maps and commercial buildings/shops with approved maps account for 7043. Only 85 residential and 69 commercial buildings were applied for maps. Total unapproved buildings in the city were 14,700 which is a huge number. Moreover, both commercial and residential streets adjustment to both residential and commercial buildings were visited. Total of 5,461 residential streets visited. Commercial streets in list A were 1,277 whereas list B accounts for 17,259 streets (See figure 28)

Figure 29: Residential building map status (FY 2024-25)

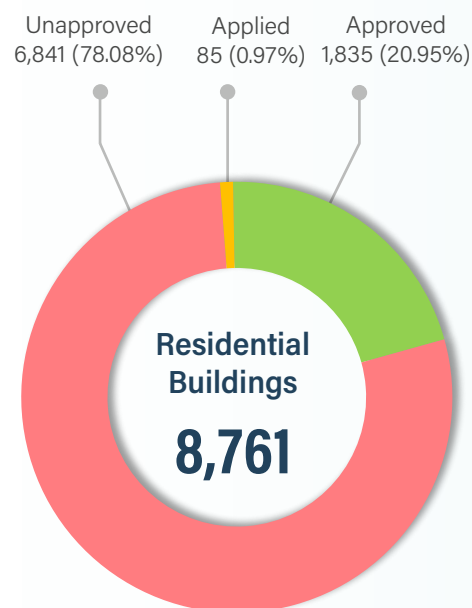


Figure 30: Commercial building/Shops map status (FY 2024-25)



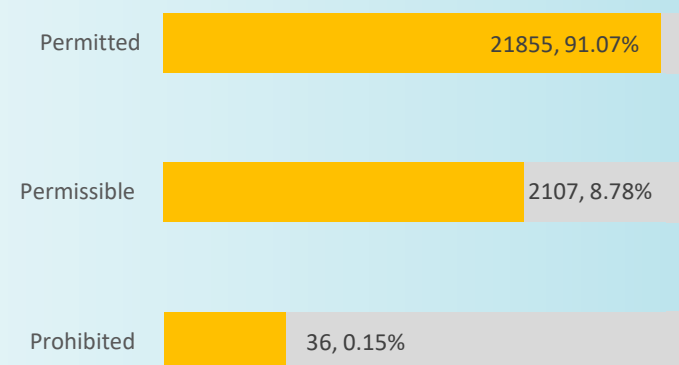
Permitted Use: The land use which is allowed in each land use class under the rules

Permissible Use: The land use, though not permitted, may be allowed by the planning and design committee, subject to the payment of the fee

Prohibited Use: The land use which is neither permitted nor permissible

Reference: Punjab Land Rule Use (2020)

Fig. 31: Building legal status (FY 2024-25)



Map status of residential and commercial buildings and legal status

Large number of both residential and commercial building plans are unapproved. Out of 8,761 residential building, 78% (6,841) are unapproved. Only 20.59% (1,835) buildings were legally approved and 85 buildings were applied for the approval of maps (See figure 29). Similar results were found for commercial buildings. Out of 14,971 commercial buildings, approved buildings were 7,043 (47%), whereas, 52% of the buildings were unapproved and require approval of building plans. Moreover, Only 69 commercial buildings were applied for the approval. Hence, there is need to legalized the status of buildings with approval of both residential and commercial building plans (See, Fig 30). Moreover, 91.07% of the buildings were permitted for residential and commercial activities and 8.78% were declared permissible. Only 36 buildings were declared prohibited for any residential or commercial activity (See, figure 31).

Figure 32: Potential revenue (Million PKR) - FY 2024-25

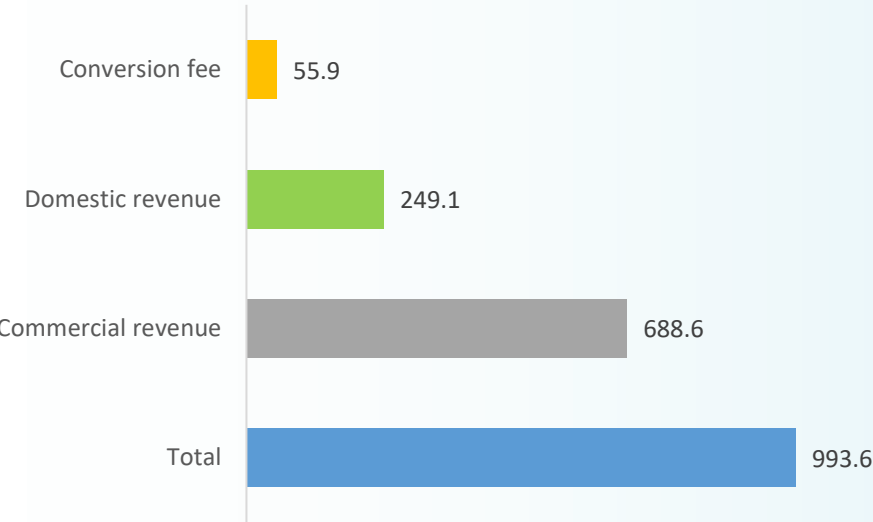


Table 04: Potential Revenue (PKR) - FY 2024-25

Unapproved Buildings	Number	Formula	Revenue
Residential	6,841	Covered Area in Sqft * Per Sqft fee (Res.)	249,081,394
Commercial	7,859	Covered Area in Sqft * Per Sqft fee (Com.)	688,642,853
Conversion fee	155	DC Rate Per Marla * Building Size * 10%	55,891,900
Potential Revenue			993,616,147

Potential revenue

Municipal Committees are responsible for approving building plans within their local areas. This involves reviewing submitted plans to ensure they comply with local building bylaws and regulations. Building plan approval within a Municipal Committee’s jurisdiction contributes to the committee’s “own source revenue” through fees and charges associated with the approval process. This revenue helps fund various municipal services and development projects within the area. Potential revenue from unapproved residential and commercial buildings and conversion fee is accounted for 993 Million PKR. Commercial revenue is high as 689 Million PKR. Whereas, residential revenue is 249 Million PKR (See figure 32). The calculation for both residential and commercial revenue is provided in Table 04.

RECOMMENDATIONS



Recommendations for Strengthening Municipal Water Supply and Building Control and Land Use Conversion

1. Water supply and sale:

Actionable Recommendations

- Conduct a comprehensive audit of all water turbines, including energy efficiency and maintenance costs.
- Install water meters across households and commercial units to control wastage and improve billing accuracy.
- Digitize records and introduce e-billing and e-payment platforms to improve transparency and recovery.
- Introduce sanitation fees for all households and commercial units to expand revenue streams.
- Institutionalize quarterly water quality testing with strict monitoring and transparent reporting.
- Strengthen HR capacity in MC water wings with staffing norms, specialized training (metering, billing, maintenance), and performance incentives tied to recovery.

2. Building Control, Plans, and Conversion Fees

Actionable Recommendations

- Undertake comprehensive mapping of all residential and commercial buildings to regularize unapproved structures with penalties or compliance pathways.
- Launch a digital one-window building control system for online applications, automated scrutiny, e-payments, and transparent timelines.
- Integrate approvals with utility service connections (water, electricity, gas) to enforce compliance.
- Introduce geo-tagged building registries for real-time monitoring of urban expansion.
- Carry out risk-based inspections, prioritizing high-value corridors and multi-storey buildings, with NOCs contingent on fee clearance.
- Revise conversion policies to capture revenue from land-use changes (residential, commercial, FAR/height increases), indexed to location bands.
- Build MC staff Capacity in urban planning, GIS tools, and enforcement, supported by partnerships with planning schools and donor agencies.

Cross-Cutting and Governance Reforms

Institutional Strengthening

- Institutionalize the **survey methodology** as a recurring exercise to update baselines for water and building revenue.
- Develop a **provincial OSR dashboard** for real-time performance tracking across water, construction, and conversion fee revenue streams.
- Strengthen the role of **District Planning & Design Committees (DPDCs)** to monitor and fast-track building approvals.

Citizen Engagement & Donor Support

- Systematically engage citizens to build trust and willingness to pay through awareness campaigns, feedback platforms, and grievance redressal mechanisms.
- Encourage donor investments in critical gaps such as **water metering, infrastructure rehabilitation, and digital building control systems.**
- Promote knowledge exchange with international models:

This combined framework ensures that policy reform, operational action, institutional strengthening, and citizen engagement are aligned. It provides a road-map for MCs to not only mobilize own source revenues (OSR) but also to improve service delivery, transparency, and urban resilience.