Performance Assessment System - Service Level Benchmarks (SLB)

Capacity building workshop on PAS-SLB information upload on

PAS portal - Conducted for Government of Gujarat, Maharashtra, Chhattisgarh and Jharkhand

Training on entering information on City finance portal - Maharashtra

Lake rejuvenation — Conducted for Government of Gujarat, Maharashtra, Chhattisgarh and

Jharkhand















Contents

Overview of PAS and SLB

- 1. Steps on entering SLB information on PAS portal
- 2 Data system strengthening-Improving reliability of Data
- 3 Entering SLB information on City Finance Portal
- 4 Lake management and Conservation







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Overview of PAS and SLB

- 1. Steps on entering SLB information on PAS portal
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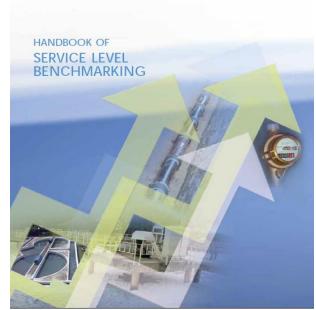


Service Level Benchmarks (SLBs)

- A common monitoring performance framework to strengthen focus on improving service delivery
- Initiative of the Ministry of Housing and Urban Affairs (erstwhile Ministry of Urban Development) launched in 2009

- 28 standard performance indicators for Urban Water Supply and Sanitation (UWSS):
 - Water supply 9
 - Sewage 9
 - Solid Waste Management 8
 - Storm Water Drainage 2











Importance of Service Level Benchmarks

- The 13th, 14th and 15th **FC endorsed** operationalizing of SLB **Process**
- It introduced a **performance-based grant**
- State governments must put in place standards for delivery of essential services provided by the ULBs for four services
- **State Government** must notify or cause all ULBs to **notify** by the end of a fiscal year the service standards and targets
- A notification must be **published in the state gazette** to ensure compliance

NOTIFICATION Urban Development and Urban Housing Department Sachivalaya, Gandhinagar. Dated the 04th May,2023

Commission

No. KV 88 of 2023 UDUHD/MIM/e-file/18/2022/4849/M Section; The Fifteenth Finance Commission has recommended that the Urban Local Bodies should put in place a system of benchmarking for basic services like water supply, sewerage, solid waste management and storm water drainage. To fulfil the condition of Fifteenth Finance Commission, it is necessary for Urban Local Bodies to notify every year the targets with respect to the above services to be achieved by the end of next fiscal year.

The Service Level Benchmarking with respect to the basic services like water supply, sewerage, solid waste management and storm water drainage of Urban Local Bodies for the year 2022-23 are shown in the Annexure appended with this notification.

By order and in the name of Governor of Gujarat,

Deputy Secretary Urban Development and Urban Housing Department

· The Principal Secretary to H.E. the Governor, Raj Bhavan, Gandhinagar.

- . The Additional Chief Secretary to the Hon'ble C.M., Office of the Hon'ble C.M., Swarnim Sankul-1, Sachivalaya, Gandhinagar.
- · The PPS to the Principal Secretary, Urban Development and Urban Housing Department, Sachivalaya, Gandhinagar
- · The PPS to the Secretary (Housing), Urban Development and Urban Housing Department, Sachivalaya, Gandhinagar
- · The Commissioner of Municipalities Administration, Gujarat State, Gandhinagar with a request to circulate this notification to Chief Officers of
- · The Additional Chief Executive Officer, Gujarat Urban Development Mission, Gandhinagar.







Financial incentives - Institutionalized through intergovernmental fund transfers



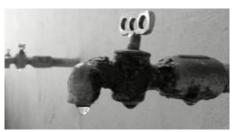
- The 13th, 14th and 15th Finance Commission of the national government endorsed operationalizing of SLB Process. It linked national government grants to cities to service level benchmarks
- State Governments notify by the end of a fiscal year the service level benchmarks and targets and inform the Ministry of Housing and Urban Affairs

13th FC: (FY 2010-15) USD 2.8 Billion **14th FC**: (FY 2015- 20) USD 10.9 Billion 15th FC: (FY 2021-26) USD 15.1 Billion

SLB indicators – Water Supply

9 Indicators





Indicators for Water supply services	Benchmark
Coverage of water supply connections	100%
Per capita supply of water	135 lpcd
Extent of metering of water connections	100%
Extent of Non- Revenue Water (NRW)	20%
Continuity of water supply	24 hours
Quality of water supplied	100%
Efficiency in redressal of customer complains	80%
Cost recovery in water supply services	100%
Efficiency in collection of water supply related charges	90%



SLB indicators – Wastewater

9 Indicators





Indicators for Wastewater services	Benchmark
Coverage of toilets	100%
Coverage of sewage network services	100%
Collection efficiency of the sewage network	100%
Adequacy of sewage treatment capacity	100%
Quality of sewage treatment	100%
Extent of reuse and recycling of sewage	20%
Efficiency in redressal of customer complains	80%
Extent of cost recovery in sewage management	100%
Efficiency in collection of sewage charges	90%

SLB indicators - Solid Waste

8 Indicators





Indicators for SWM services	Benchmark
Household level coverage of solid waste management services	100%
Efficiency of collection of municipal solid waste	100%
Extent of segregation of municipal solid waste	100%
Extent of municipal solid waste recovered	80%
Extent of scientific disposal of municipal solid waste	100%
Efficiency in redressal of customer complaints	80%
Extent of cost recovery in SWM services	100%
Efficiency in collection of SWM charges	90%



Publication of Gazette to avail FC grant

15th Finance Commission, Government of India

SERVICE LEVEL BENCHMARK AT A GLANCE (SLB)

Sr.No	Proposed Indicator	Benchmark	Present Status 2022-23	Target in Year 2023-24
1	WATER SUPPLY SERVICES પાણી પુરવઠો			
1.1	Coverage of water supply connections પાણી પુરવઠા ના જોડાણો દ્વારા આવરી વેવાયેલ વિસ્તાર (ટકા)	100.0%	60	70
1.2	Per capita supply of water માથા દીઠ પાણી પુરવઠો (લીટર)	135 lpcd	94	100
1.3	Extent of metering of water connections પાણી જોડાણ (કનેક્શન) ની મીટરની વ્યવસ્થા (ટકા)	100.0%	NA	NA
1.4	Extent of non revenue water (NRW) બિન ઉપજાવ પાણી પ્રમાણ (ટકા)	20.0%	18	16
1.5	Continuity of water supply પાણી પુરવઠાની નિરંતર સમય-મર્યાદા (કલાકમાં)	24 hours	2.5	3.0
1.6	Efficiency in redressal of customer complaints ગ્રાહક ફરીયાદ નિવારણની કાર્યક્ષમતા (ટકા)	80.0%	64	100
1.7	Quality of water supplied પાણી પુરવઠાની ગુણવત્તા (ટકા)	100.0%	100	100
1.8	Cost recovery in water supply services પાણી પુરવઠા પાછળ થયેલ ખર્ચ સામે ખર્ચની વસુલાત(ટકા)	100.0%	41	60
1.9	Efficiency in collection of water supply - related charges પાણી પુરવઠાના યાર્જ વસુલ કરવાની ક્ષમતા (ટકા)	90.0%	70	83
2	WASTE WATER MANAGEMENT (SEWERAGE AND SANITA ગંદા પાણીની વ્યવસ્થા (ગટર અને શૌયાલય)	TION)		
2.1	Coverage of toilets જાજરુ (શૌયાલય) નો વ્યાપ (ટકા)	100.0%	100	100

2.2	Coverage of sewage network services ગંદાપાણીનાં નિકાલ વ્યવસ્થાનાં નેટવર્કની સેવા (ટકા)	100.0%	54	65
2.3	Collection efficiency of sewage network ગંદાપાણીનો સંગ્રહ કરવા માટેની કાર્યક્ષમતા (ટકા)	100.0%	82	82
2.4	Adequacy of sewage treatment capacity ગંદાપાણીના શુદ્ધીકરણનું પુરતાપણું (ટકા)	100.0%	260	300
2.5	Quality of sewage treatment ગંદાપાણી શુદ્ધીકરણની ગુણવત્તા (ટકા)	100.0%	100	100
2.6	Extent of reuse and recycling of sewage શુદ્ધીકરણ્ર થયેલ પાણ્રીનો પુન:ઉપયોગ અને પુન:પ્રક્રિયાનો વિસ્તાર (ટકા)	20.0%	0	5
2.7	Extent of cost recovery in sewage management ગટર વ્યવસ્થાના ખર્ચ વસુવાતની આંશિક ક્ષમતા (ટકા)	100.0%	27	37
2.8	Efficiency in redressal of customer complaints ગંદાપાણીને વગતી ફરીયાદ નિવારણ (ટકા)	80.0%	100	100
2.9	Efficiency in collection of sewage charges ગટરના ચાર્જ વસૂવ કરવાની ક્ષમતા (ટકા)	90.0%	72	75
3	SOLID WASTE MANAGEMENT ધન કયરા વ્યવસ્થા			
3.1	Household level coverage of solid waste management services ધરદીઠ ધન કચરા વ્યવસ્થાપન સેવાનો વ્યાપ (ટકા)	100.0%	99	100
3.2	Efficiency of collection of municipal solid waste ધન કચરા એક્ત્રીકરણ કરવાની કાર્યક્ષમતા (ટકા)	100.0%	100	100
3.3	Extent of segregation of municipal solid waste ધન કચરો છુટો પાડવા (પુથ્થકરણ) ની માત્રા (ટકા)	100.0%	100	100
3.4	Extent of municipal solid waste recovered ધન કચરામાંથી પુન:ઉપયોગ માટેનો વિસ્તાર (ટકા)	80.0%	NA	NA
3.5	Extent of scientific disposal of municipal solid waste ધન કચરાનો વૈજ્ઞાનિક રીતે નિકાલ કરવાનો વ્યાપ (ટકા)	100.0%	NA	NA
3.6	Extent of cost recovery in SWM services ધન કચરાના સેવા સંયાવન પાછળ થયેલ ખર્ચની વસુલાત (ટકા)	100.0%	8	20
3.7	Efficiency in redressal of customer complaints જન ફરીયાદ નિવારણની કાર્યક્ષમતા (ટકા)	80.0%	100	100
3.8	Efficiency in collection of SWM charges ધન કચરાના યાર્જ વસુલ કરવાની કાર્યક્ષમતા (ટકા)	90.0%	71	83
4	STORM WATER DRAINAGE વરસાદી પાણીનો નિકાલ			
4.1	Coverage of storm water drainage network વરસાદી પાણીના નિકાલ માટે આવરી લેવાયેલ વિસ્તાર (ટકા)	100.0%	63	65
4.2	Incidence of water logging/flooding પાણી ભરાવા/પર બનાવોની સંખ્યા (સંખ્યા)	0.0%	1	0



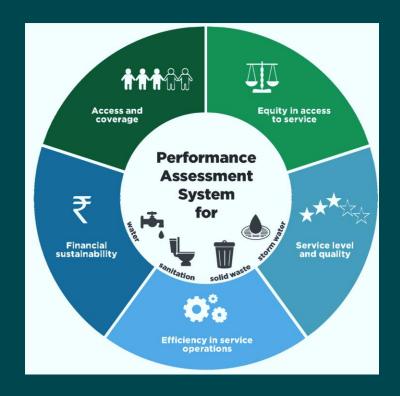




Performance Assessment System (PAS)

For

Operationalizing SLB





"YOU CANNOT IMPROVE WHAT YOU CANNOT MEASURE!"

Performance Assessment System (PAS) Program at CWAS for transforming urban water and sanitation in India

2005-2009 Major urban projects in India which focused mainly on infrastructure creation...



...but little was known about impact on service quality

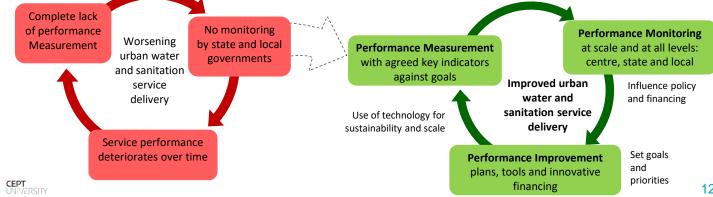


Data available with cities... but paper based disaggregated, nondigital, and not reported



MOVING FROM A VICIOUS TO A VIRTUOUS CYCLE

PAS intended to bring about a change in "laying pipes" to "improving services"



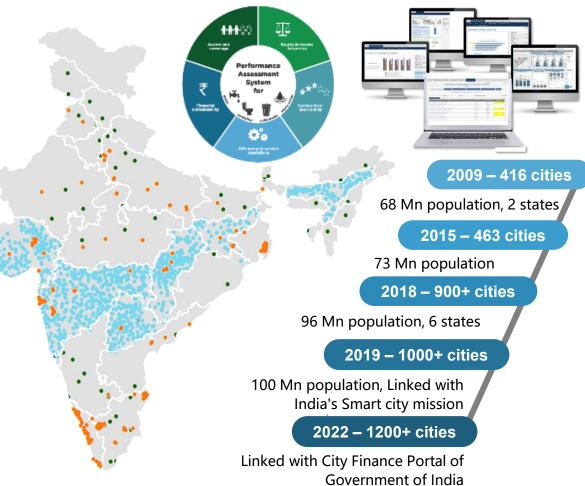
PAS – Performance Assessment System for UWSS in India

ABOUT PAS

- Digital platform for tracking SLB progress of the cities.
- Self assessment with inbuilt validation checks to measure the service delivery
- Framework suited to local context Focus on efficiency, equity and on-site sanitation
- No Pilots....operate at Scale to make an impact

NATIONALLY OWNED AND AT SCALE

- Not a 'project' but a 'programme' to mainstream it in governments
- Work with all three tiers of Governments to influence policies and implementation
- Started with 400+ cities in 2008-09, now scaled up to 1000+ cities across India
- One of the largest open access time series database for urban water and sanitation









Service level benchmarks: PAS - SLB+ Framework

Advice from Experts

- Better to be roughly right than be precisely wrong
- Setting up Benchmarking Pilots are easy –
 Scaling up to cover all ULBs is a challenge
- Build up on existing monitoring system
- Keep it SIMPLE, EASY to understand and implement
- Create financial incentives for use of Benchmarking





...to match with goals /targets of delivery of water supply and sanitation services

... for performance assessment

...drilled down indicators for actions for performance improvement





Digital systems necessary for achieving scale



Most data exists with cities...

...but paper based and fragmented – not collated, analyzed or reported



Developed PAS as an online platform



Industry-academic partnership with





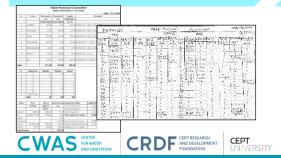


Features of Digital platform

- Online module for self reporting
- Inbuilt validation checks
- Scientific system for calculating indicators
- Comparative dashboards
- Local language supported

Made PAS an e-platform that enabled analysis

Raw Data



Information: Performance Measurement with indicators on PAS portal

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Home Performance Assessment Re	sources About Us Do	te Entry		
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Knowledge: City and State UWSS profiles, peer comparison



Government officials at both state and city levels are made conversant with the online data entry tool

Reduction in the time for tracking SLBs from 15 months to two months within five years.



Training on use of PAS portal (English Version)

CWAS-CROF-CEPT University

Guidelines for online tool for PAS portal



Hindi Video

English Video

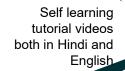
Manuals & quidance documents



Online document upload PAS-Portal

> **Training** videos on portal







1000+ ULB Officials trained every year



Data system Strengthening

Formats to capture reliable data on a suggested frequency



Handholding support

Sectoral Improvement planning Performance Improvement Plans(PIP)











YouTube [™]



Process of data collection and validation

Training

- State govt. appoint agency for data collection and validation
- Organized and conduct training for city officials

Data collection

- State govt. instruct cities to enter data online
- City officials enter data from their offices
- Agency : Follow up with cities

Data validation

- Inbuilt validation rules during data entry and at submission time
- After submission, 'sector experts' appointed by state government will do desk validation

Results publication

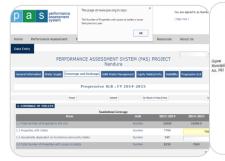
- SLB Gazette publication by state
- Analysis results published on website

Data verification

- Field Verification in selected cities
- Prepare data improvement plan / strategies

















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Overview of PAS and SLB

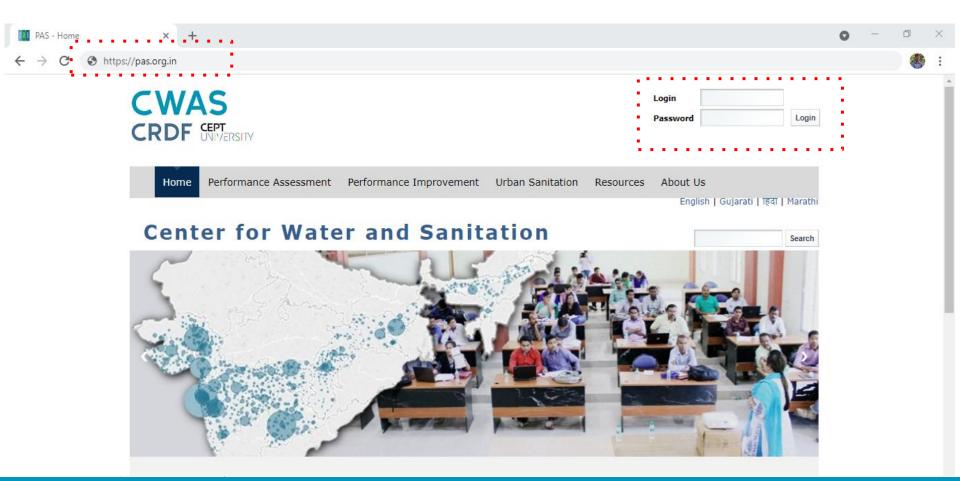
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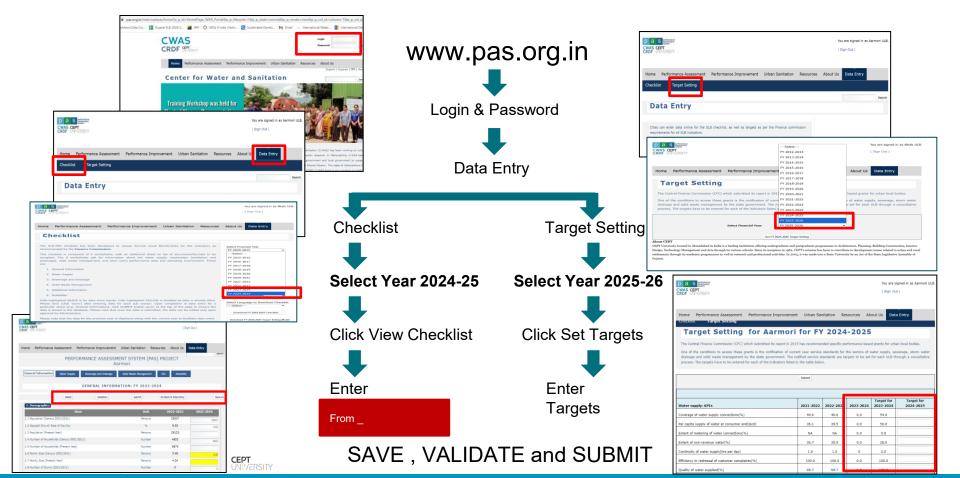




PAS-SLB web portal - www.pas.org.in



Step by step guide to enter the SLB information on PAS portal



Presentation for document upload on portal

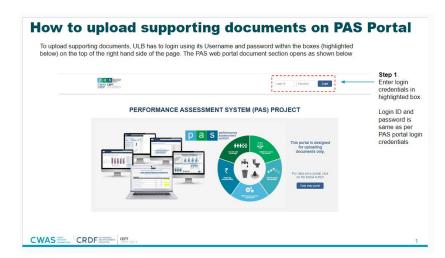
PAS Portal document upload section

Link:

https://docs.google.com/presentation/d/1asEwSeN3K4dc X86kpiqRWhmn2ssdUD9H/edit?usp=sharing&ouid=112455 029184602789110&rtpof=true&sd=true

QR Code:









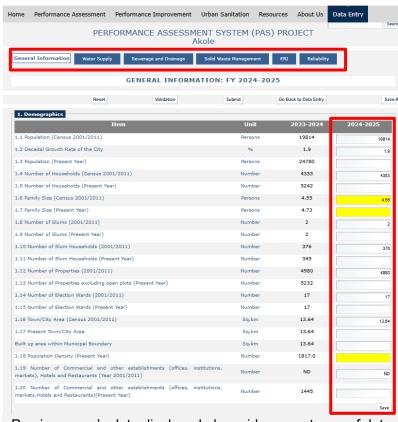
Example: Water supply service level indicators

Indicators (benchmarks)	Definition	Evidence/ Data Sources	Department
*Coverage of water supply connections (100%)	Households (HHs) with water supply connectionsTotal HHs in a city	 Water connection register at water supply department / Property / water tax software 	 Water supply department and tax department
*Coverage of WS connections in slum (100%)	HHs in the slum area with water supply connectionsTotal slum HHs in a city	 Water connection register at water supply department / Property/water tax software 	 Water supply department and tax department
**Per capita supply of water (135 lpcd) **Extent of Non- Revenue Water (20%)	 Total quantity of water produced at treatment plant Quantity of water supplied to consumers (Billed water + free supply) Total population in a city 	 Based on SCADA / log book report indicating flow meters' readings / based on pumping hours and discharge capacity at the treatment plant Billed water quantity – Based of water meter reading / calculate based on sample survey using bucket and stop watch method or estimate based on ferrule size and water discharge during supply hours in a day. 	Water supply department
**Extent of metering (100%)	 Total number of functional metered water connections Total number of water connections 	Water metering records	

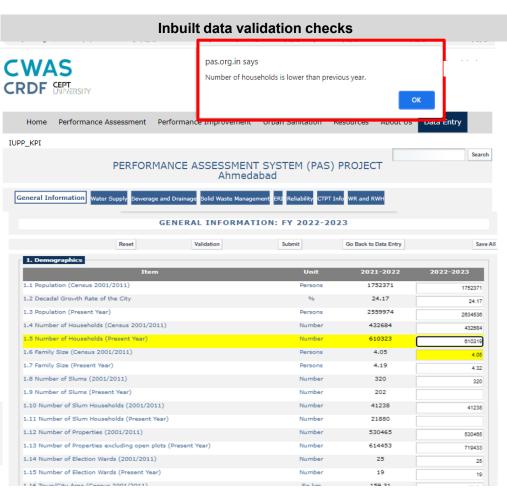




Inbuilt data validation checks



Previous year's data displayed alongside current year of data entry-Options to save each sub section within a sheet; useful in case of connectivity issues during data entry. **Data should** be entered in a given sequence of sheets



ULB, Regional and State officials can track the progress through portal

Chief officers can download the gazette using online portal

www.pas.org.in

ULB Login &

1

Data Entry

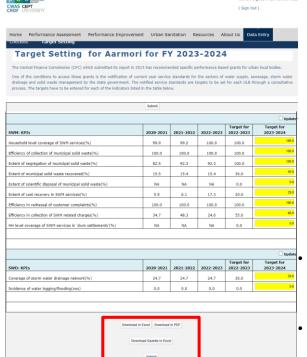
1

Target Setting

1

Select Year 2024-25

Download gazette in Excel/Download PDF



State and regional officials can check the progress of data entry and also can download state and regional level data and reports using their respective login IDs



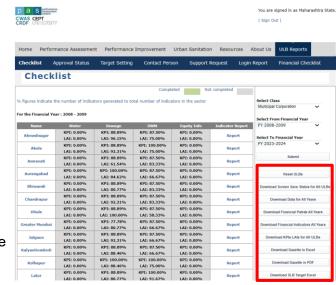
ULB reports

Select class*

Select Year 2024-25

Download data save status report- to check the % data entered by the ULB

- Download all year data
- Download Gazette in excel/PDF









Tutorial videos for PAS portal data submission

PAS Portal Tutorial Videos

Link:

https://www.youtube.com/playlist?list=PLslvqc6RUWFJED

MXVe9BeF8ZWPt-Jcz___

QR Code: (Hindi)



PAS Portal Tutorial Videos

Link:

https://www.youtube.com/playlist?list=PLslvqc6

RUWFKm4GbuNlWTkJxYQaphoXNR

QR Code: (English)



Guidelines for online tool for PAS portal

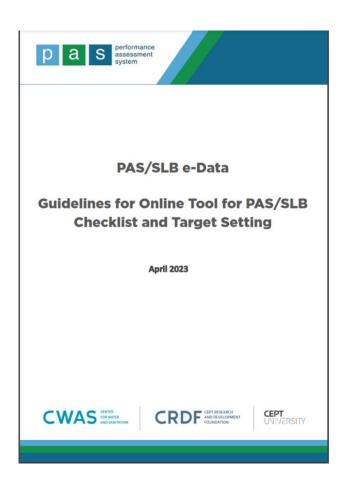
Guidelines for online tool for PAS/ SLB – Checklist and Target Setting

Link:

https://cwas.org.in/resources/file_manager/Online%20data %20entry%20and%20checklist%20guidelines%20and%20val idation_27%20april%202023.pdf

QR Code:







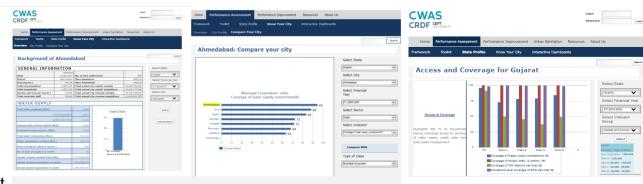




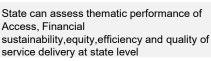
Key results and dashboards available on PAS-SLB portal

SLB dashboard:

- Track performance over time
 and Compare performance with peers
- Review the year wise improvement of the ULB using know your city tab – that gives an Overview of the city, City
 Profile, and Comparison of the city.
- State can assess thematic performance on <u>state profile</u> tab.
- Identify areas for improvement- using interactive dashboards



Know your ULB and Compare Your ULB helps each ULB to understand the basic details and SLB indicators and allows to compare itself with another ULB based on its respective class or state.





Customized dashboard to view state and ULB level analysis



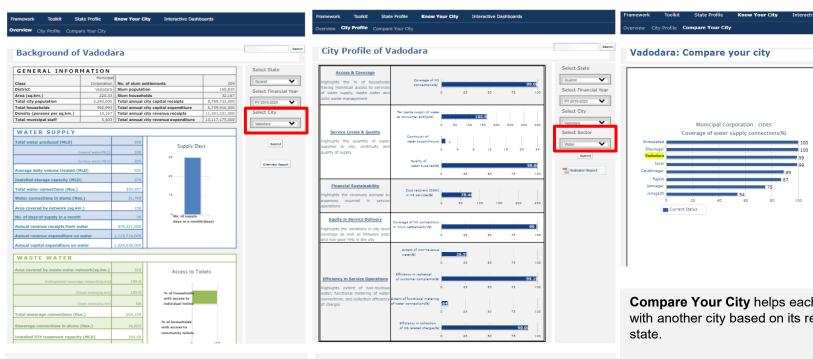
Interactive dashboard







Know your city



An Overview of the city is given across all the sectors for all indicator groups.

The City Profile is generated for each city and sector based on key indicators as mentioned in Framework.

Compare Your City helps each city compare itself with another city based on its respective class or

All the sectorial indicators can be compared







Select State

Select City

Select Sector

Select Indicator

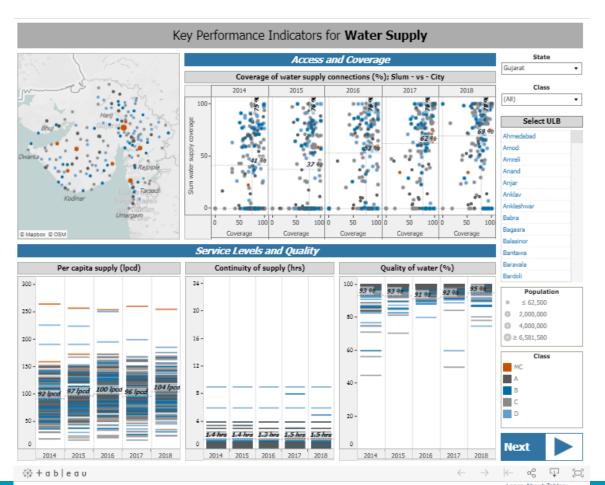
O District OClass

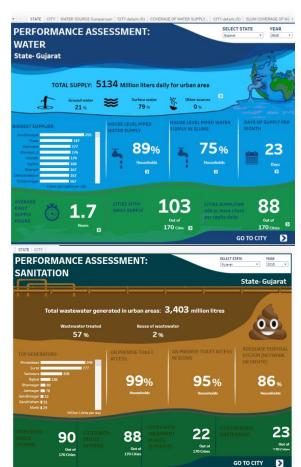
Compare Cities

Type of Class

Select Financial Year

State Urban Water and Sanitation Profile





Use of PAS

Routine Monitoring

Time series information on PAS dashboard -

- Performance measurement
- Investment programs and
- Identifying area of focus





Ministry of Urban Development Government of India

Research and Advocacy

Academicians and students of planning or technology colleges have used this information for research purpose.





Service Improvement Plans

State and City refers PAS data for -

- DPRs
- City water balance plans (AMRUT)
- Action plans for solid waste management (SBM)
- Jal Jeevan Mission (water quality)





Decision making

- Financial decision related to WASH budget allocation and utilization of funds.
- Infrastructure planning and analyze the outcomes of investments -DMA

Compliance

16th FC

a s

NGT



AMRUT portal: Domestic Tap Connections, Volume of water produced



SBM portal: waste generation, OSS,CT/PT











Contents

Overview of PAS and SLB

- 1. Steps on entering SLB information on PAS portal
- 2 Data system strengthening-Improving reliability of Data
- **Entering SLB information on City Finance Portal**
- 4 Lake management and Conservation







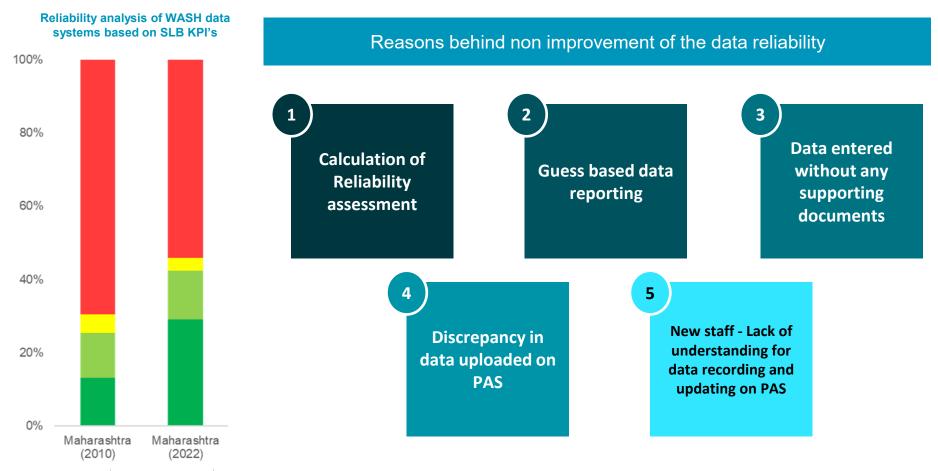


Improving reliability of data





Over the decade the indicator with higher reliable data has NOT increased









1. Correct method of capturing reliability grade on PAS portal

Ougetion

Issue/ Challenge

- Wrong capturing of reliability in reliability sheet
- Copy and paste previous year data

Solutions:

- Do not select multiple options
- Read the options carefully and then select
- Read MoHUA guideline for better understanding



Question	Options	ı IN	ı A	l B	C	<u> </u>
Reliability count of an indicator		416	270	117		29
	1.Through household surveys (1-5 yrs)		272			
HHs served with individual water supply	2. Number of residential connections	 	 	369		
connections	Road covered by network length	 	 	i I	210	
	Area covered by distribution network	 	 	 		160
How are records of	1. Computerised OR	l I	198			l
HHs served by water supply maintained?	2. Only Manual	 	317			

Ontions

1-M-1-Y-1-D-1-C-1-D

	supply, wastewater, SWM and SWD	2022-2023	2023-2024
.1 What is the basis of estimation of	T	lyes	
	1.Through household surveys (1-5 yrs)	TES	Select 🔪
	2.Through property tax/billing records	YES	Select 💉
	3. Number of residential connections	YES	-Select 🔻
HHs served with individual water supply connections	4. Past trends/surveys	YES	-Select 🔻
	5. Area covered by distribution network	YES	Select 🔹
	6. Road covered by network length	YES	Select 🔻
	1. Through household surveys (1-5 yrs)	YES	-Select 🔻
Properties served with toilets (individual + community)	2. Through property tax records	YES	-Select 🔹
	3. Area covered by toilet facilities	YES	-Select N

	Description of method
Lowest level of reliability (D)	Estimation of households covered on the basis of geographical area of the city covered with the pipeline network, as a surrogate indicator for water supply coverage.
Intermediate level (C)	Estimation of households covered on the basis of road length in the city covered by the pipeline network, as a surrogate indicator for water supply coverage.
Intermediate level (B)	Estimation of households covered computed as the total number of connections (for which data are maintained) as a percentage of the estimated number of households on the basis of population (total population divided by average household size).
Highest/preferred level of reliability (A)	Calculation based on the actual number of households with direct service connections (for which data are maintained); and the total number of households as revealed in ground level surveys. Data are periodically updated on the basis of building units approved, and new household level water connections provided.

Reliability of Measurement

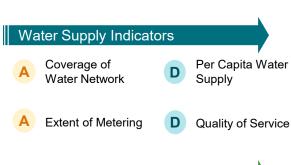
Source: PAS-SLB Maharashtra state, 2022

SLB handbook explains the frequency of data capturing



Highest/Preferred level of Reliability (A) for all the 28 indicators is based on either of the below measurement type:

- HHs survey
- Operational Record/Log keeping
- Multiple options of data recording
- Digitized data formats/equipment of measuring



- Per Capita Water
- Continuity of Service
- Extent of NRW

Daily

Frequency of Measurement

Annual

Complaint Redressal

Collection of Charges Cost Recovery

Sewage Management Indicators

Coverage of Toilets

& Reuse

Extent of Recycle

- Coverage of Sewerage network
- Collection Efficiency of Sewerage Network
- Adequacy of Treatment Plants
- Complaint Redressal

- Collection of Charges
- Cost Recovery

Solid waste Management Indicators

- Coverage of D2D service
- Collection of MSW

Quality of Service

Extent of Segregation Extent of Scientific Disposal

- - Extent of Reuse & Recovery
- Complaint Redressal

Cost Recovery

Collection of Charges







Adopt a digital systems for improving data reliability



Real time Approach

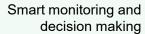
Automized data capturing and monitoring through IOT

Automation at service points





Applications and Dashboards





- Less human interventions.
- Smooth communication and analysis of data.



Hybrid Approach

Digitized + Manual data capturing and monitoring



Mechanized devices

Digitized record keepi



Standardized data formats

Budget friendly and sustainable.



Manual Approach

Data capturing and monitoring through standard manual methods



Household survey / capturing service-related data

Hands on field assessment





Manual data formats and recording

- Highly human intensive.
- Difficult to manage data records.







2. Data Systems Strengthening – Guess-based data uploading

Issue/ Challenge

 Guess based data uploading on the portal

Solution

 Use formats shared to capture the data on regular basis- on a frequency suggested by MoHUA

KPI	Main Form	Supporting Form	Frequency of data	Auto calculated/
			calculation	Enter data
Coverage of water supply service & Extent	Form WS01: Coverage of water supply service		Yearly Format	Auto calculated
of metering		Form WS01A: Population Forecast	Yearly Format	Enter data
		Form WS01B: Number of households with water supply connection	Yearly Format	Enter data
Per capita water supplied	Form WS02: Per capita water supplied		Monthly Format	Auto calculated
		Form WS02A: Quantum of treated water supply-Method 1 (with meter)	Daily Format	Enter data
		Form WS02B: Quantum of treated water supply-Method 2 (without	Monthly Format	Auto calculated
		Form WS02C: Pumping details	<u>Daily Format</u>	Enter data
Extent of Non-revenue water	Form WS04: Extent of Non-revenue water		Monthly Format	Auto calculated
		Form WS04A: Total Quantum of water Billed	Monthly Format	Auto calculated
		Form WS04B: Quantum of water received by Valve operation and	Monthly Format	Auto calculated
Continuity of water supply	Form WS05: Continuity of water supply		Monthly Format	Auto calculated
		Form WS05A: Duration of water supply by valve operations	Daily Format	Enter data
		Form WS05B: Consumer end survey	Quarterly Format	Enter data
Quality of water supplied	Form WS06: Quality of water supplied		Monthly Format	Auto calculated
		Form WS06A: Water quality monthly report	<u>Daily Format</u>	Enter data
		Form WS06B: Frequency of required water quality tests	Sample form	
Efficiency of consumer complaint redressal	Form WS07: Efficiency of consumer complaint		Monthly Format	Enter data
Cost recovery in water supply services	Form WS08: Cost recovery in water supply services		Yearly Format	Enter data
Efficiency in collection of water supply	Form WS09: Efficiency in collection of water supply		Monthly Format	Enter data
related charges	related charges			
Coverage of water supply connections in	Form WS10: Coverage of water supply connections		Yearly Format	Auto calculated
slum		Form SLUM01: Services in slums (Slum level information)	Sample form	Enter data
		Form SLUM02: Slum Household Survey Form	Sample form	

https://drive.google.com/drive/folders/1zdgse9TpgILIRFA_FrMvbnkpNFJQeSXb?usp=sharing







Use simple formats shared to capture accurate data

Use simple formats shared to capture accurate data of all 28 KPIs- enter data

- Chief officers and City engineers To train your staff on how to capture data
- State can conduct workshop on this

Formats for all types of cities

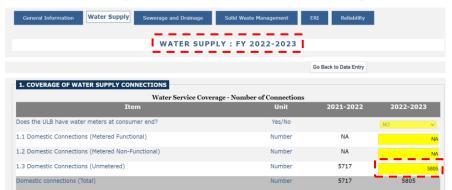
- 1. Metered and Non-metered cities
- 2. Sewered and Non-sewered cities
- Digital formats that can be embedded in IOT to generated App
- Also used in a printed version to enter data manually

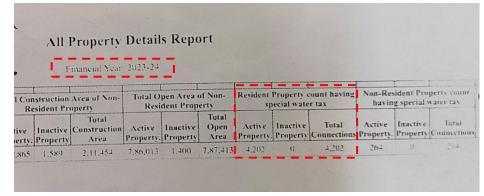
		Monthly Format		
	Form WS	05: Continuity of wa of water supply dui	ter supply	
About: This form water quantity de Form WS05A.	would collect data elivered to generate	of water supply dur e continuity of water	ration with approp r. Source of this inf	riate pressure and ormation will be
Name of Urban Local Body:	ABC Muni	ABC Municipal Council		
			For Year:	
Location:	Municipal Head o			
Calculated by:	Municipal Engine	er / City Engineer		-
Frequency of recording:	Daily	þ Monthly	□ Quarterly	□ Yearly
Reported to:	Chief officer			
Frequency of reporting:	□ Daily	Monthly	 Quarterly 	þ Yearly
	Month	Water supply duration	Total days in the month	Average water supply duration per day
Column	Α	В	С	D
Unit	-	Hours	days	Hours/day
Source	-	Form WS05A	-	(B/C)
1	April	15.67	30	0.52
2	May	20.67	31	0.67
3	June	20.00	30	0.67
4	July	20.67	31	0.67
5	August	20.67	31	0.67
6	September	20.00	30	0.67
7	October	20.67	31	0.67
8	November	20.00	30	0.67
9	December	20.68	31	0.67
10	January	20.67	31	0.67
11	February	19.33	29	0.67
12	March	20.67	31	0.67
Average				0.65
.,				Minutes/day
				39.28





Data Systems Strengthening - Discrepancy in data





Issue/ Challenge

 Discrepancy in data uploaded on PAS

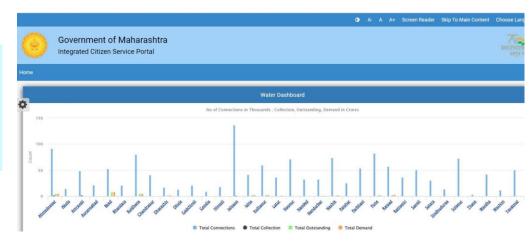
Solution

- Data should be checked by city engineers
- It should be in alignment with the IBWP portal, SBM and AMRUT Portals- State should check











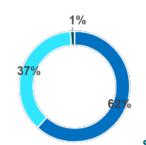




Strengthening Data Accuracy: Data submission by ULBs

Frequency analysis of documents submitted by ULBs for various indicators





_Census Population Projections report Population survey records Blank

44% Certified copy of water connections register (summary report)



mission dashboards like AMRUT



DPR of a water supply project (prepared by an external agency)



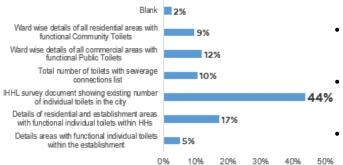
Total water supply connection in the city

Illegal Water Connection Survey Report

Register maintained by water supply department (Digitized/Manual)

Water tax/user charges report from IWBP/MAINET

Total population of the city (Present Year) Docs submitted by ULBs



Total no. of toilets in the city

Strengthening Data Accuracy: Standardizing ULB Submissions"

- A frequency analysis was conducted for all indicators based on ULB data submissions.
- The infographic highlights three key indicators and the documents submitted as proof.
 - For total water supply connections. most ULBs submitted a certified copy of the water connections register.
 - Standardizing document submission will improve data accuracy and reliability.
 - A circular from the DMA office should be issued to ensure uniform data submission.

Circular for Number of toilets in the city



वसे 2005 मध्ये भारत बरकारच्या राजिमींग तथा शवरी बार्व मंत्रालयाने (MoHUA) नागरी C. C. mar arrown and and and arrow intil this obs off the array as नागरी स्वासिक स्वराज्य बंदवा ५०१० पादन SLB हेरा PAS पोर्टनवर भरत अकेर

राज्य आयम SLE संतरीर विविध वंदिकार्य की उद्दिए निव्हित करायाएडी एरडाई अधिएकत भारतीय व्यामिक व्यक्तम्य वंद्या (AILSG) वांच्या मचनीने पहिल 2012 नक्ष्मे आवस्त अपि नगर परिवर ਗਤਮਕਾਰੇ ਨੇ ਨੇ ਕੁਝ ਸਮਾਦ ਫੈਕਾ ਆਦਿ ਨੇ ਨੇ ਕੁਆਂਡੇ ਲੇਵੇਲੋਵੀ ਹੁਣਿਏ ਆਦਿ ਸ਼ਾਦਾ ਫੈਰੋਕਸ ਕਾਰਦਿਸ਼ਿਤੇ

क्वारिक्तीय वर्ष नागरी। क्यानिक काराज्य कंक्सा १५ वा विश्व आयोग अंतर्गेट PAS वेटिंडव पाद्विती घटन खड़ेज. १५ का विक समोगाव्या सर्टीनुमार, सर्व नागरी स्थानिक स्वराज्य संस्थांनी पाणीपरण्याः स्वत्काता भागि चनस्त्रारा व्यवस्थापनाची पंत्रेष्टित Services Level Benchmark (SLE)

> देखाबाजी जनगरका वेकांबाडी (Water Supple Services) नद निर्देशांक निवित्त केले होते. अधिक संवायनगरकोरे (CDMA) Center for Water and Sanitation, CRDF, CEPT Universit€ परिवा पाराम्याने SLB क्या स्थापन केया शांति SLB क्याने वेड्डोवेडी प्रतिष्ठे शांति पास्त्र केवेच्या कागनिरीये प्रनराष्ट्रजीकर केले. कामरिटी ग्रजांकर प्रणाजी (Performance Assessment Systems) प्रकरण SLS देश प्रतिष्ठ केला गेला आणि आसादि केला जानी

वापरिकरीय वर्ष नावरी व्यापिक स्थापक बंदमा १५ वा विश्व आसीव अंतरीय PAS सीमीक्य माविती परत अवेत १५ वा वित्र अयोगाच्या अनियार वर्ष नागी व्यक्ति व्याप्त वंदर

व्यानिक व्यराज्य वंद्यांनार्वेत भरतेत्वा नाहितीचे इनएक्लोकन करताना अग्रे वाड्यन वाले (भरतेची नाविती परिपादिः असङ् नाती त्यानिक त्यानक वंत्यांनाफैन भरतेच्या नावितीचे प्रनावकीक करताना अबे आवद्यन आजे कि भरतेजी माहिती परिएर्णनः अनुक नाही. PAS पीर्टन माहिती भरतान

and and individual sales while take of individual toilets in the cit# Number of toilets in the city

राष्ट्रिती चरताना वर्षे व्यानक व्यापन्य वंद्यांनी IHHL surve of document showing the existing and the state of t अचुक आहे वाले अवलोकन करने लागि नाहिती अचुक आहे हे एहताहरूवाय योगे जाईल

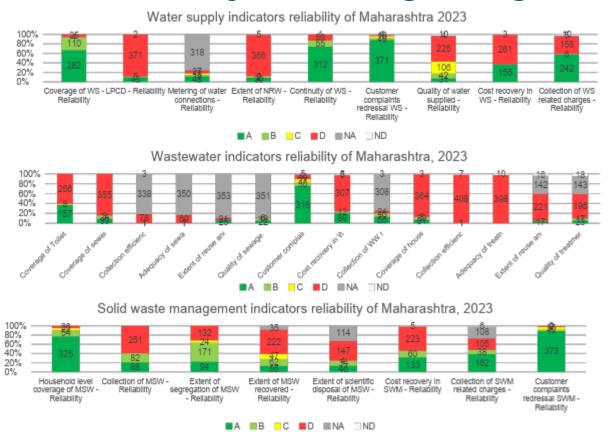
प्रवेच Number of tolets in the cité वंदर्शीय गाविनी वादर करवाना वीवन वासी दिसेल ਕੜਾ ਜ਼ਰੂ ਕੀਵਾਵਾਂ ਕੋਰੀਕਵਕ ਬਾਰਿਕੀਕੀ ਵਾਰਕੀ ਕਰਦਾਰ ਗੈਜੇ ਕਾਵੇਕ ...



नाहिती अनुक आहे याचे अवतीकर करणे आणि नाहिती अनुक आहे हे पहलाहण्याय दीये जाहेत . तथेच Severage Connection चंदर्शीत नाहिती चादर करताना चोचत काली विकेच्या रूप्या या जीवार

Circular for Number of sewerage connections

Improving the reliability of capturing the data is the first step towards data system strengthening



- Need to focus on improving the data systems of indicators like LPCD,NRW, Quality of water supply – Lead to improving overall water supply services Sanitation and Solid waste sector needs more focus in capturing the data.
- Despite improvement due to absence of reliable system on capturing the data, the improvement is not evitable, or the missing links can not be identified easily.

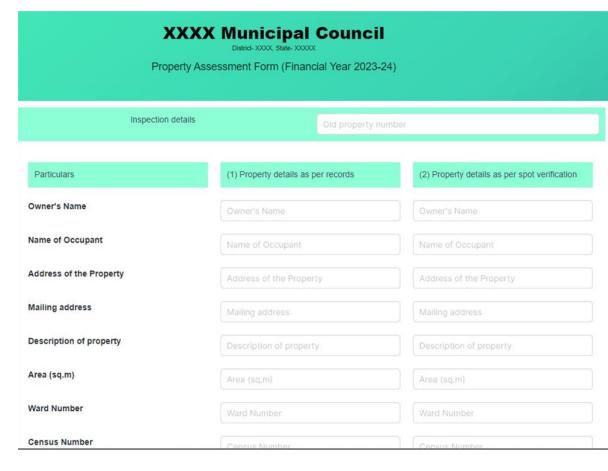






Data Systems Strengthening – Digitised Property Assessment form

- ULBs are not conducting property assessments at the interval of 4 years
- Current property assessment forms do not capture details about the toilets, disposal systems, RWH and solar systems installed
- Digitised property assessment form which can be used by all the cities
- State and Cities can contact us to use this format

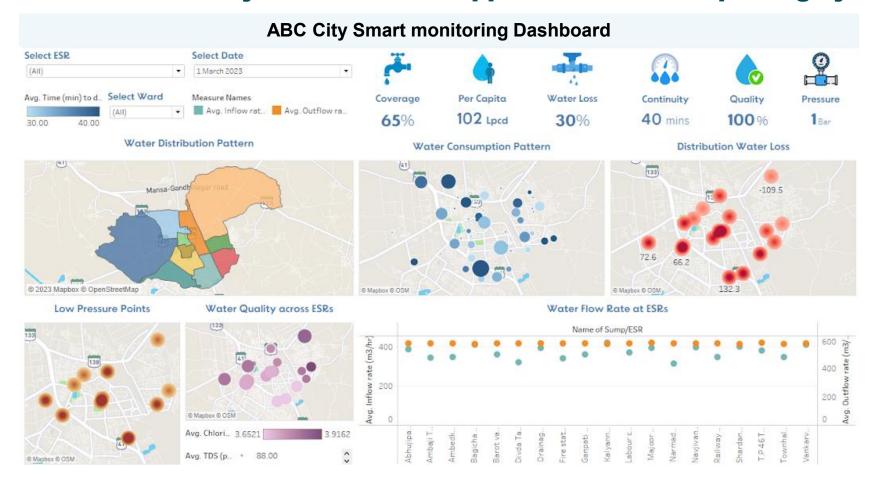








Dashboard of a city with real time approach of data capturing system







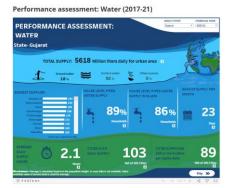
Support from CWAS



Planning of pilot study and on ground demonstration of exercise



Sensitization and capacity building of the ULB officials





Standard Operating Procedure (SOP) for Routine Water Quality Surveillance in ULBs in Gujarat





Technical assistance to the ULB team and help in scaling up





Action to be taken by ULBs

- Complete the SLB activities for FY 2024-25
- ULB will submit the supporting documents on shared portal after getting it approved by chief officer
- In case of absence of the supporting document city should start capturing data using the formats shared- conduct trainings
- Strengthening water supply and sanitation data by introducing digital tracking system and by linking with property tax assessment system
- Budget making process should reflect the projects lead to service level improvement
- City should conduct capacity building workshops for their ground level staff on how to capture data using shared formats
- Should train new staffs on how to enter data and how to use the data
- Should use the data for decision making and improve the service delivery- city can assess city performance from PAS- know your city dashboards

Reliable data can be effectively generated and then can be used for routine decision making and improving the service delivery at both state and city level.

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City Finance Portal Data Submission

Training to ULBs for Data Submission

January 2025

Directorate of Municipal Administration, Maharashtra
Center for Water and Sanitation (CWAS), CEPT University



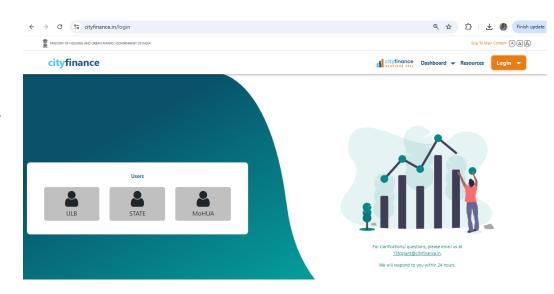






City Finance Portal: For operationalization of 15th FC guidelines

- In May 2020, MoHUA implemented and launched www.cityfinance.in, which is the national municipal finance portal and serves as a framework of standardized, timely and credible financial information on India's cities (urban local bodies).
- Facilitates benchmarking, comparison and peer learning between ULBs on a range of financial and operational performance indicators.





Grants recommended under 15th FC

Urban areas have been grouped into two broad categories for recommending grants namely

 Category-I: Million Plus cities (MPC) cities which include urban agglomeration/cities with more than one million (10 lakh) population.

Category-II: Non-million plus cities (NMPC) which include cities other than million plus cities. The category-wise distribution of the grant is as under,

Category – I	Category – II			
MPC	NMPC			
Grants to MPCs is linked to	Untied Grants	Tied Grants		
meeting the Service Level Benchmark	40% Grants	60% Grants		

Marking scheme for Grant release

- MoH&UA will assess the performance of cities in Water supply & Sanitation against 4 service level indicators and in SWM against 2 service level indicators as per details given below.
- On the basis of the marks obtained by each ULB/UA, MoH&UA will recommend the share of grant to be
 disbursed to each ULB/UA. The service level indicators and the maximum marks that ULB can score for
 each service level indicators against the achievement of the self assessed target

Sr. No	Service Level Indicators	Max Marks
1	Service Level Indicators for water supply and sanitation	60
1.1	HHs covered with piped water supply	20
1.2	Piped water supply in lpcd	10
1.3	Reduction in NRW	10
1.4	HHs level coverage for sewerage and septage services	20
2.	Service level indicators for SWM	40
2.1	GFC Star rating	30
2.2	Sanitation including management of Fecal sludge	10
- mm	Total (1+2)	100

City Finance Portal - https://cityfinance.in/login

PAS-SLB web portal - www.pas.org.in

















Dashboard ▼ Resources 15th FC Grants XVI FC Data Collection Rankings'22 Form



_	
ιÊ	SLBs for Water Supply and Sanitation

Resources

Entry Level Conditions

- Detailed Utilisation garage
- Annual Accounts
- Details of Property

 Tax and User

 Charges

Performance Conditions

- Open Defecation Free (ODF)
- Garbage Free City (GFC)

Water Supply

# Sections/Indicators Actual Indicator 2023-24 Target Indicator 2024-25	
1 Coverage of water supply connections 100 %	%
Per capita supply of water(lpcd) 135 Ipcd 135	lpcd
3 Extent of metering of water connections 1	%
4 Extent of non-revenue water (NRW) 5	%
5 Continuity of water supply 1 Hours/day 1	Hours/day
6 Efficiency in redressal of customer complaints 100 100	%
7 Quality of water supplied 100 %	%







Alert: Points to remember

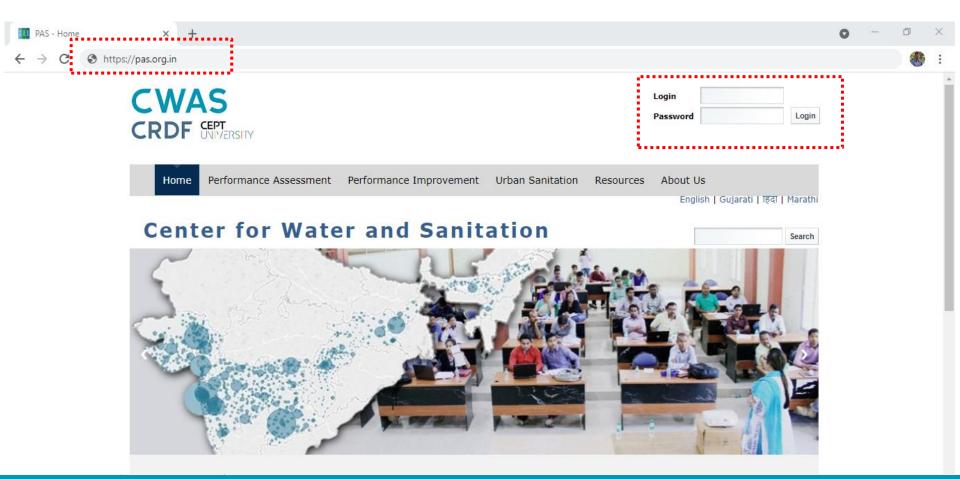
• 28 SLB indicator value to be enter for current year on City Finance Portal

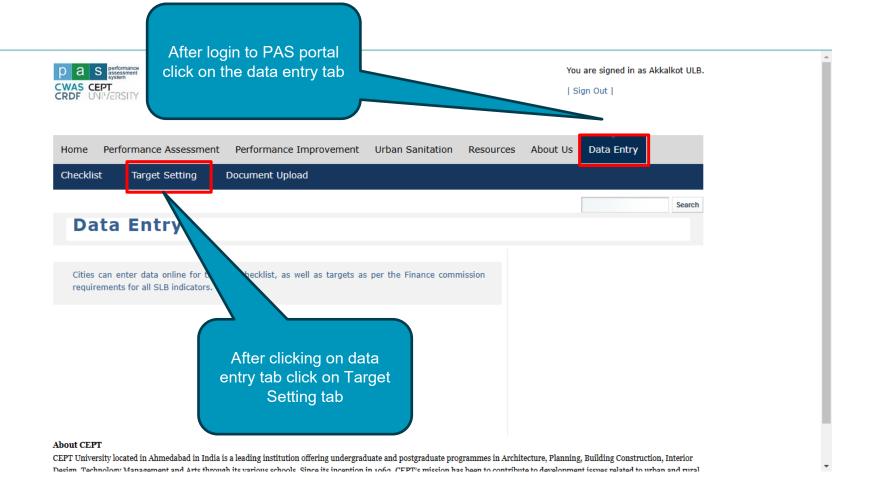
Actual indicator for current year to be put as per the result derived from PAS Portal

Review the target again – need to be achieved to receive the grants



Login to PAS-SLB web portal - www.pas.org.in

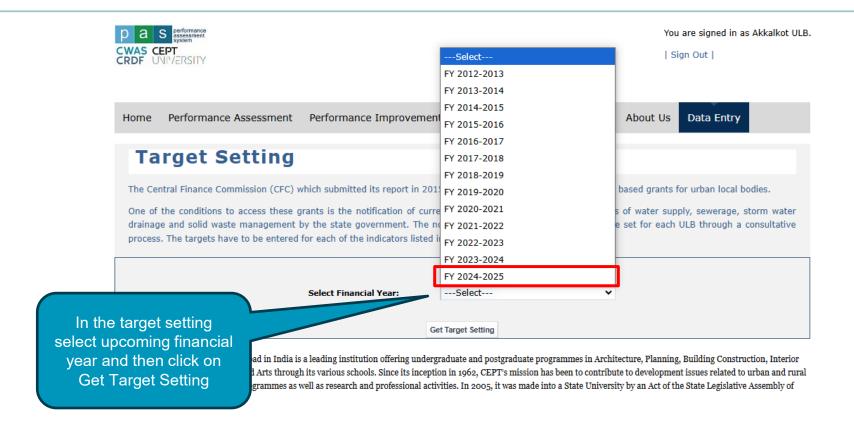










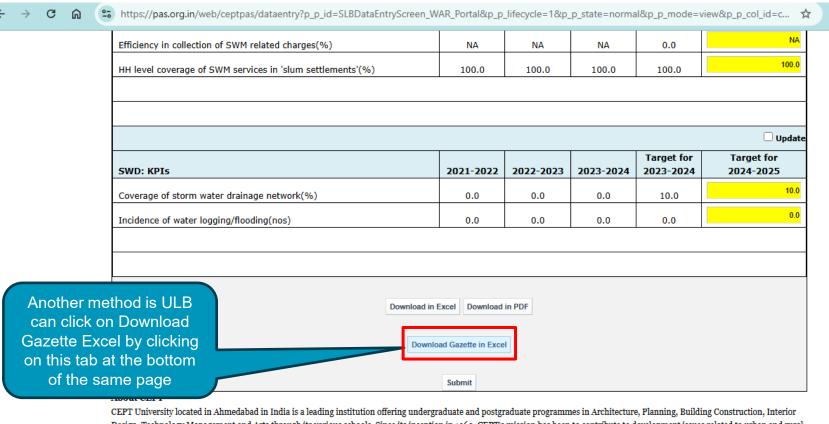






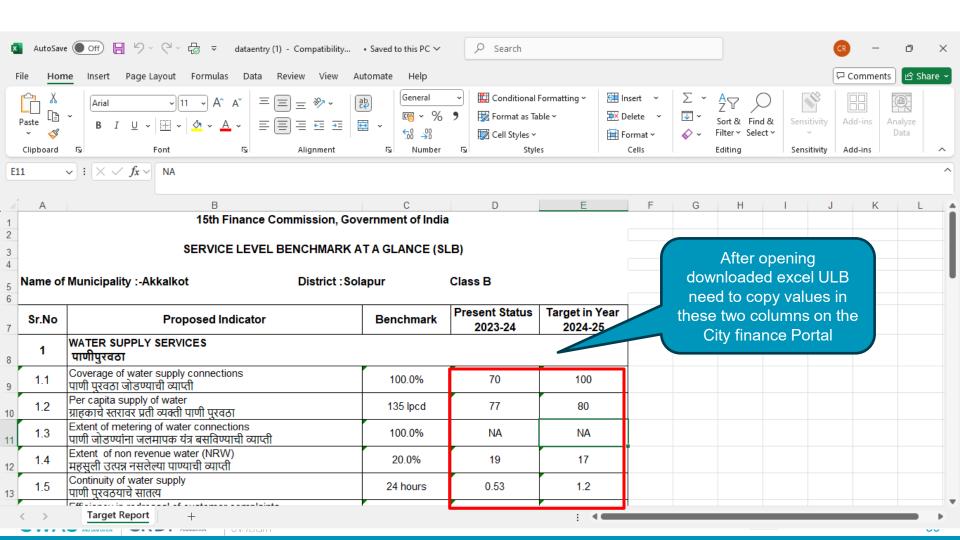






Design, Technology Management and Arts through its various schools. Since its inception in 1962, CEPT's mission has been to contribute to development issues related to urban and rural settlements through its academic programmes as well as research and professional activities. In 2005, it was made into a State University by an Act of the State Legislative Assembly of Gujarat.





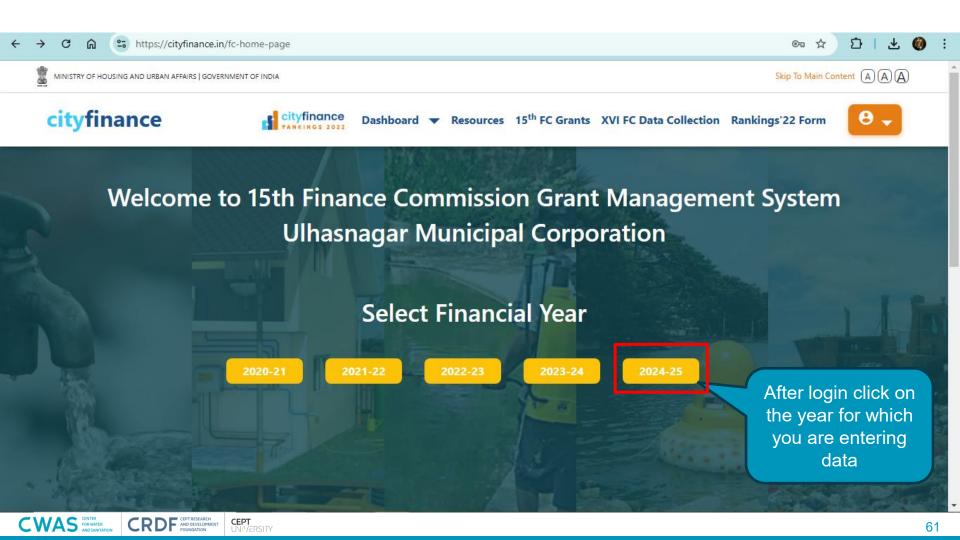
Login to City Finance Portal - https://cityfinance.in/login

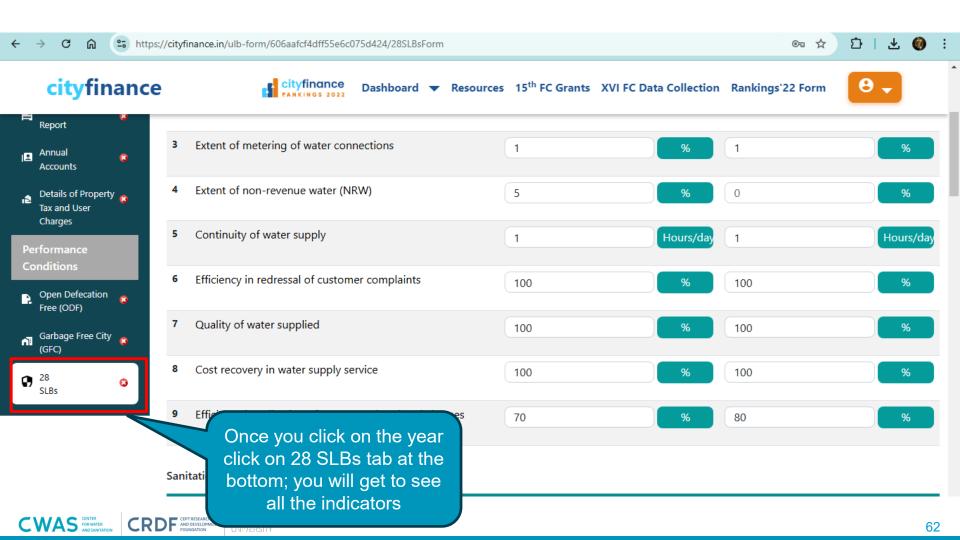


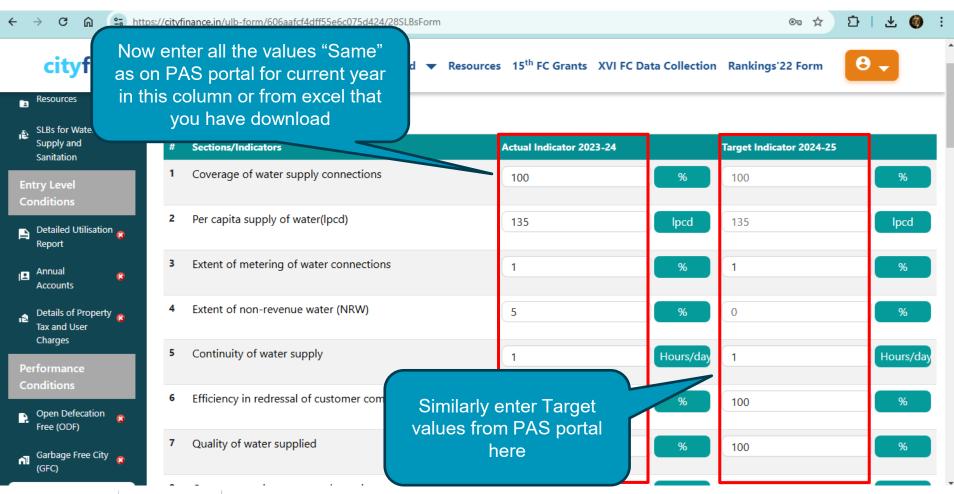


















The Central Finance Commission (CFC) which submitted its report in 2015 has recommended specific performance based grants for urban local bodies.

One of the conditions to access these grants is the notification of current year service standards for the sectors of water supply, sewerage, storm water drainage and solid waste management by the state government. The notified service standards are targets to be set for each ULB through a consultative process. The targets have to be entered for each of the indicators listed in the table below.

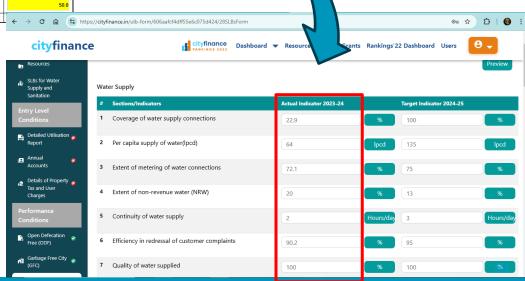
	Submit				
					Update
Water supply: KPIs	2021-2022	2022-2023	2023-2024	Target for 2023-2024	Target
Coverage of water supply connections(%)	22.5	23.9	22.9	30.0	25.0
Per capita supply of water at consumer end(lpcd)	62.5	63.0	63.5	70.0	70.0
Extent of metering of water connections(%)	77.8	78.9	72.1	80.0	75.0
Extent of non-revenue water(%)	16.0	15.3	20.0	15.0	20.0
Continuity of water supply(hrs per day)	2.0	2.0	2.0	2.0	2.5
Efficiency in redressal of customer complaints(%)	79.7	67.2	90.2	68.0	95.0
Quality of water supplied(%)	100.0	100.0	100.0	100.0	100.0
Cost recovery in water supply services(%)	61.3	56.4	47.6	60.0	50.0
Efficiency in collection of water supply related charges(%)	53.8	47.1	42.8	50.0	50.0
					4 2 0 0 0

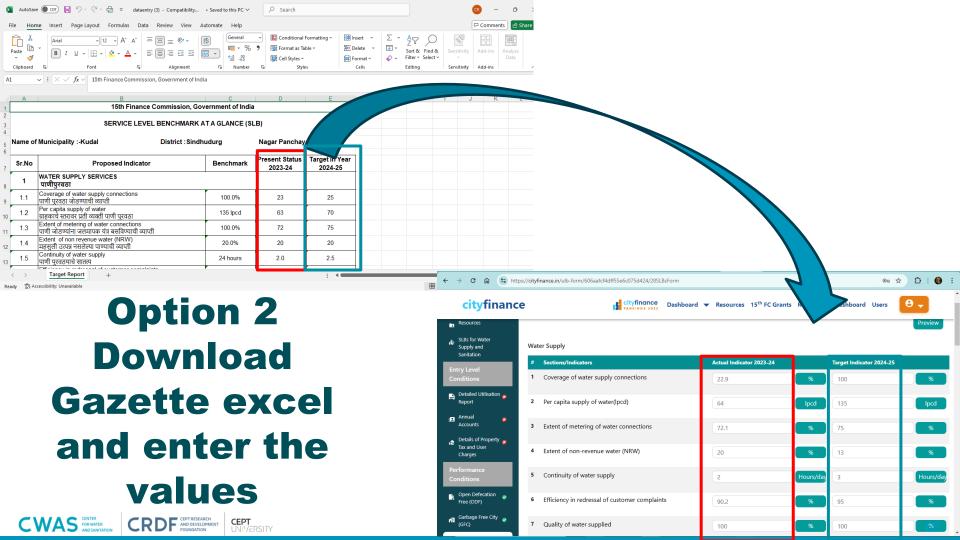
Option 1 Enter same values as on PAS Portal

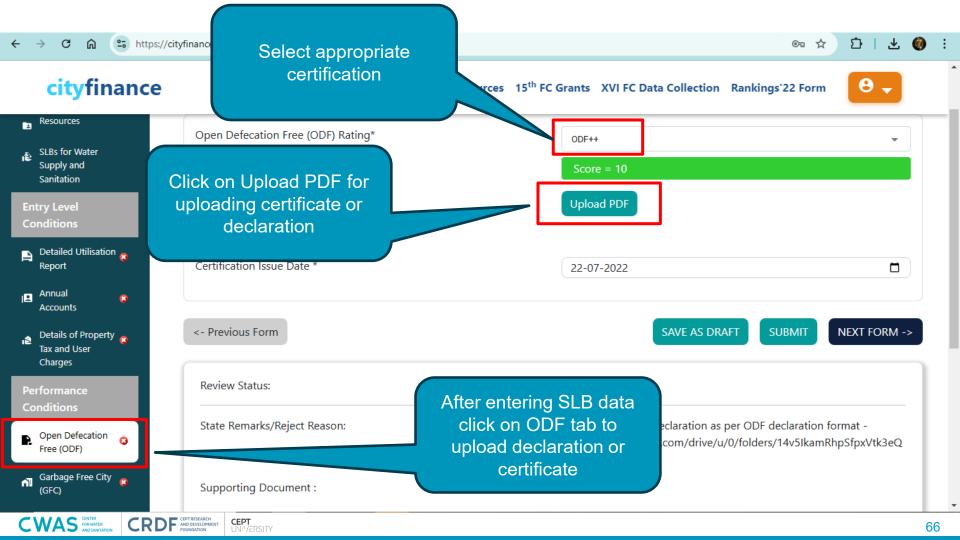












If ULBs don't have ODF or GFC certificate please click on this link to download declaration - https://drive.google.com/drive/u/0/folders/14v5lkam RhpSfpxVtk3eQnluO6Ale3qGd

















Don't change the years in the declaration, just select the proper ODF certification for you ULB, mention name of CO and then sign the declaration and upload it

Please print on the ULB letterhead

Date: xx/xx/xxx

To whom so ever it may concern

I, [Name of the CO], below signing authority, hereby declare that the ODF assessment for the year 2024-25 s pending for [Name of Council/Nagar Panchayat/Corporation].

Further, I hereby declare that [Name of Council/Nagar Panchayat/Corporation] is ODF/ODF+/ODF++/water plus/Non ODF certified in Open defecation free cities category in the year 2023-24. I have personally verified these results from the Ministry of Housing and Urban Afiairs swachhatam portal.

[Sign & Stamp]

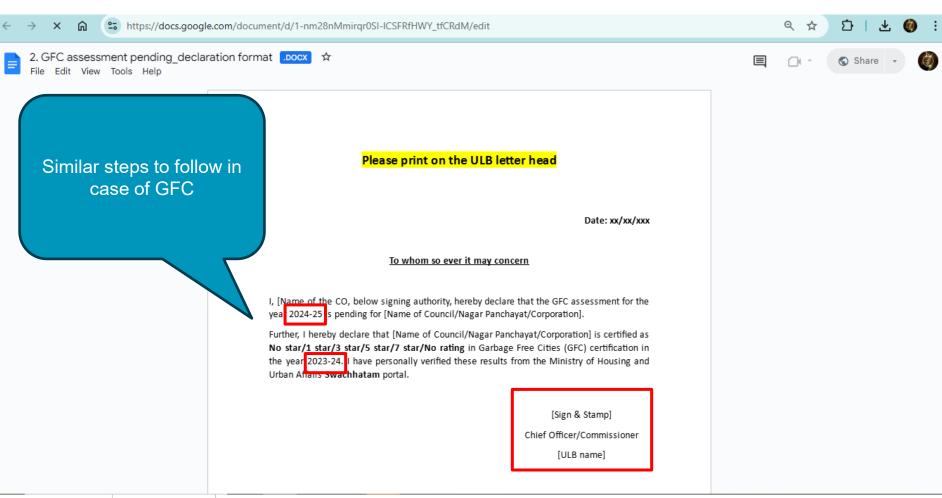
Chief Officer/Commissioner

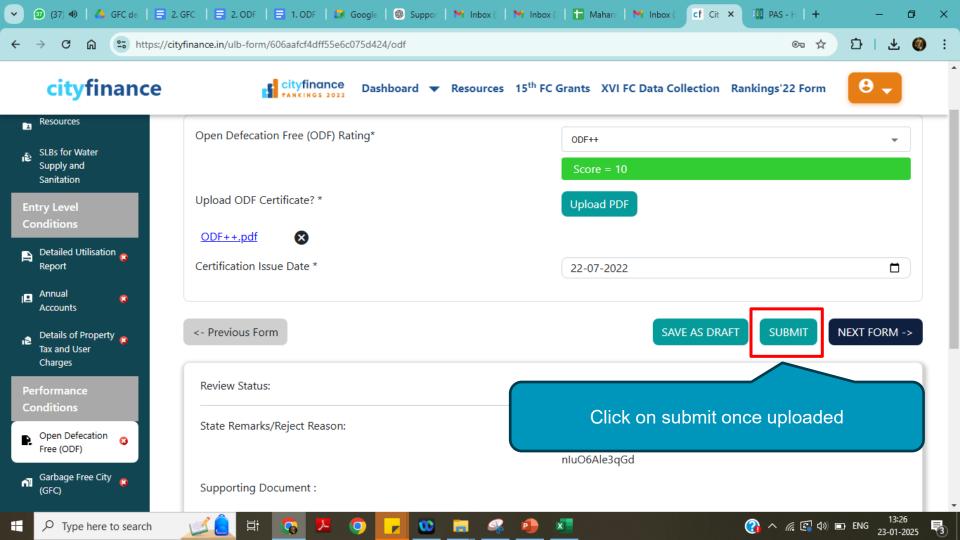
[ULB name]











Examples of ODF & GFC declarations



कुडाळ नगरपंचायत, कुडाळ तालुका-कुडाळ, जिल्हा-सिंधुदर्ग



email-kudalnagarpanchayat@gmail.comफोन नं. (02362) 222236

Date: 17/01/2025

To whom so ever it may concern

I, Arvind Anand Natu, below signing authority, hereby declare that the ODF assessment for the year 2024-25 is pending for Kudal Nagarpanchayat, we have applied for ODF++ on Ministry of Housing and Urban Affairs Swachhatam portal on dated 28/11/2024

Further, I hereby declare that Kudal Nagarpanchayat is ODF++ certified in Open defecation free cities category in the year 2023-24. I have personally verified these results from the Ministry of Housing and Urban Affairs Swachhatam portal.



Chief Officer Kudal Nagarpanchaya

ODF Declaration uploaded by ULB

शिरोळ नगरपरिषद,शिरोळ

ता.शिरोळ ,जि -कोल्हापूर कोन ने: (०२३२२) २३६४६९, ईःमेल आवडी npshirol2018@gmail.com



जा.क्र.शिनप/७७ /2025

A. 93/09/2004

To whom so ever it may concern

I Mr. Nishikant Parchandrao , below signing authority, hereby declare that GFC assessment for the year 2024-25 is pending for **Shirol Municipal Council**

Further, I hereby declare that **Shirol Municipal Council** is certified **No star** in Garbage Free Cities (GFC) certification in the year 2023-74. I have personally verified these results from the Ministry of Housing and Urban Affairs **Swachhatam** portal.



(Mr. Nishikant Parchandrao) Chief Officer Shirol Municipal Council

GFC Declaration uploaded by ULB



Contents

Overview of PAS and SLB

- 1. Steps on entering SLB information on PAS portal
- 2 Data system strengthening-Improving reliability of Data
- 3 Entering SLB information on City Finance Portal
- 4 Lake management and Conservation







Lake Management and Conservation













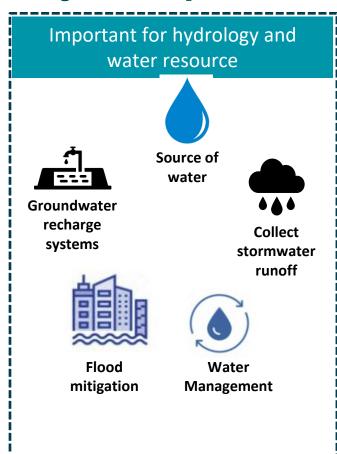
Lake Management and Conservation

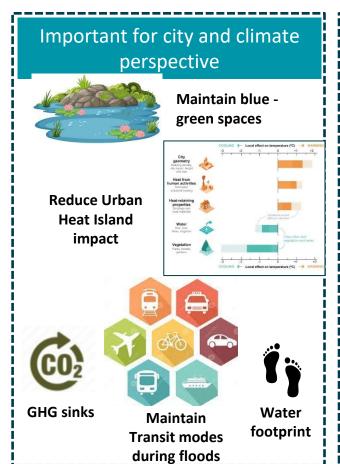


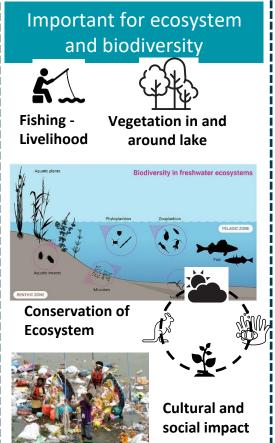




Why is it important to conserve lakes?



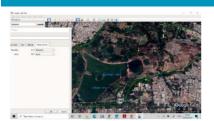






What should be done for conserving lakes ??

Lake boundary mapping



Developing database and mapping the lake area, including the lakes in the development plan.

Lake cleaning and revival



Cleaning of solid waste floating and diverting the drains disposing the wastewater in lakes.

Developing the lake surrounding areas





Planting tress around the lake area to reduce the soil erosion and ensuring good water quality of lakes.

Frequent lake water quality testing



To ensure good water quality and reduce adverse impact on the aquatic life. Also secure the water resource.







How to do it?

Lake and surrounding Mapping

- Basic tools like Google Earth can be used to map the lake area and also a field survey to map the water depth
- Validation with the Government land records to assess change in lake area over time
- Including local community in mapping the lakes.

Lake Surrounding Area Development

- Tree plantation around the lake area
- Adding the buffer area to the lake
- Adding the drain diversion to stop wastewater discharge in lakes

Quarterly Water Quality Testing

- Testing basic water quality parameters such as pH, temperature, DO, COD, BOD, Total and Faecal Coliform, Turbidity, Total suspended solids, and total dissolved solids
- Fixing point locations for quarterly water quality testing.





Lake Revival Strategies



De-weeding of lake



Desilting of lake



Aeriation and Plant bed in



Removal of solid waste from lake surface



Lake fencing with regulated access



Walkway, tree plantation, and lawn



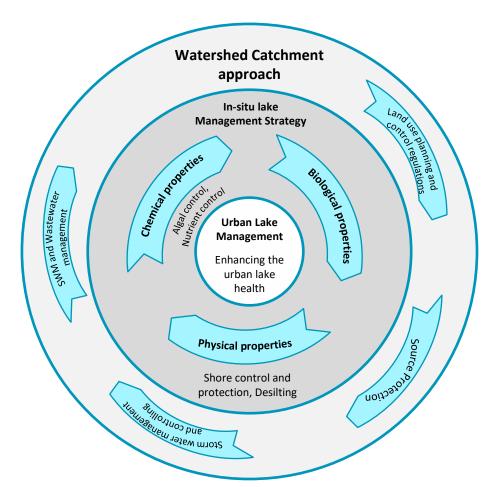


Urban lake management plan

- Land use planning and control regulations to Prevent encroachments and reduce urban runoff
- Source protection to prevent pollutants from entering at the origin (e.g., drains, inlets)
- Stormwater management and control by installing silt traps and infiltration systems
- Solid Waste Management (SWM) and wastewater management by stop dumping waste and ensure sewage interception



Helps in maintaining good lake health







How to interpret Water Quality of lakes?

No.	Direct change in the parameters	Interpretation of quality	Suggestive actions	
1	Low – pH, DO,	Potential of wastewater discharge	Check for potential sewage flow and take actions to eliminate it	
	High – Temperature, BOD, Salinity, TSS, DOC, CDOM, total coliform			
2	Low – pH, DO, Electrical Conductivity (EC)	Potential of industrial discharge	Check and identify nearby industries and take actions to divert their effluent disposal	
	High – COD, Temperature, Salinity, TSS, DOC, pH, Arsenic, Lead, Mercury			
3	Low – pH, DO,	Potential of agriculture discharge	Check for agricultural effluent pollution. May need dredging and planting vegetation around the lake.	
	High – Turbidity, COD, BOD, Salinity, TDS, TSS, CDOM, Chlorophyll A, nutrients			
4	Low – DO, pH	Could lead to death of fish and aquatic lives	Deploy portable surface or diffused aerators, use pumps to agitate surface water	
	High – BOD, Temperature, Turbidity			
5	Low – DO (at night), Secchi Depth (Turbidity)	Potential of algal bloom	Install aeration or oxygenation systems, use mechanical means for removal of algae	
	High – Chlorophyll, Phosphorus, Nitrogen, Temp.			









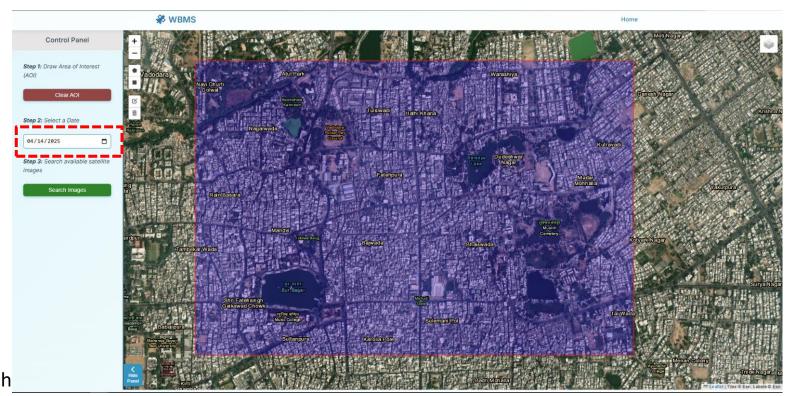
Lake Identification and Water Quality Assessment Tool





Water Quality Assessment Tool

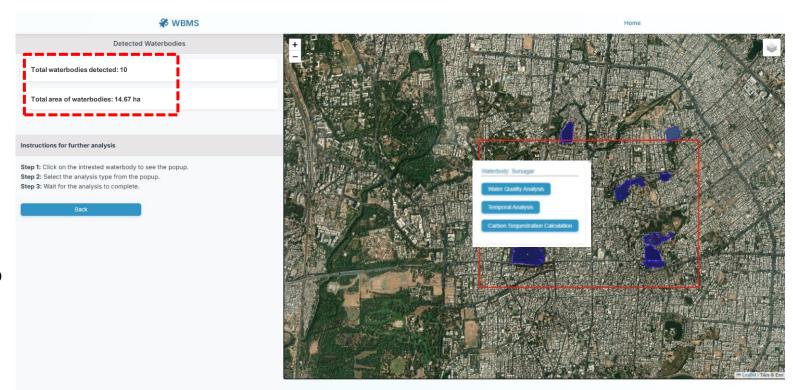
- Zoom to the city or area you want to select
- Select area of interest (AOI)
- Select date want to see water quality of lakes for that date
- Click on Search





Water Quality Assessment Tool

- This will give total count and area of water bodies in the selected AOI
- Click on any of the waterbody to see water quality of the same

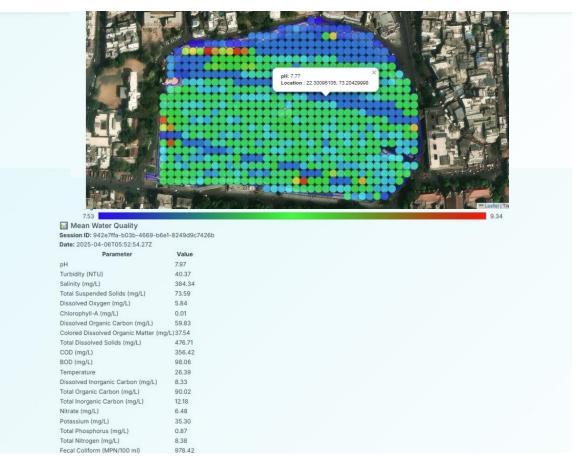






Water Quality Assessment Tool

- It will give estimated water quality values for 20 parameters such as BOD, COD, DO, TSS, Turbidity, TDS, Chlorophyll-a etc.
- You can select any point on the image, and it will give estimated result of water quality for that portion of the lake.









Thank you

CWAS FOR WATER AND SANITATION

CRDF AND DEVELOPMENT FOUNDATION

CEPT UNIVERSITY

cwas@cept.ac.in

cwas.org.in

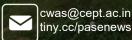


About us

The Center for Water and Sanitation (CWAS) is a part of CEPT Research and Development Foundation (CRDF) at CEPT University. CWAS undertakes action-research, implementation support, capacity building and advocacy in the field of urban water and sanitation. Acting as a thought catalyst and facilitator, CWAS works closely with all levels of governments - national, state and local to support them in delivering water and sanitation services in an efficient, effective and equitable manner.



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