

# CWAS @CEPT Water Governance

February 27<sup>th</sup>, 2020







# CEPT

1500 students

100 full time faculty members

300 visiting faculty members/  
professionals from industry

**FA**

**Faculty of architecture**  
1962  
design for private realm

**5**

**UG Programmes**

**FP**

**Faculty of planning**  
1972  
planning/policy making for public realm

**FT**

**Faculty of technology**  
1982  
building habitats and infrastructure

**18**

**PG Programmes**

**FD**

**Faculty of design**  
1991  
interiors, crafts, products,  
systems

**2**

**FM**

**Faculty of management**  
2014  
managing habitats & operations

**PhD Programmes**



# CRDF and C-WAS

**CEPT Research and Development Foundation (CRDF)** has been established by the University as a Section 8 company to manage their research and capacity building activities. There are nine domain-focused centers in the CRDF.

**CWAS began its work in 2009** with focus on improving water and sanitation services in India. It carries out activities related to action research and capacity building – working closely with city and state governments, enabling them to improve delivery of services.

C-WAS vision is to be a Pioneer and Thought Leader in developing new ideas, and be a Facilitator for delivery of water and sanitation services in efficient, effective and equitable manner. Our strength is in applying research to applications at local and policy levels.





# Main areas of our work

## Performance assessment of urban services



- Benchmarking urban water and sanitation service delivery in cities
- Develop a system that can be mainstreamed and sustained by state governments with own resources
- Support to 6 states; and Smart Cities Mission, MoHUA for 100 smart cities

## Sanitation city/state/ national governments



- Technical, Advisory, Implementation and monitoring support of ODF, ODF+, ODF++ policies and plans
- Support state government and local governments
- Capacity building and training workshops

## Financing water and sanitation



- Explore innovative financing options for urban sanitation and FSSM
- State sector finance assessment
- Lead the work on Municipal Strengthening for NFSSM Alliance

## Water security and governance



- Knowledge partner for water management practices and develop water security toolkits
- Knowledge partner for non-network drinking water supply
- Water4change: Integrated urban water management in fast growing secondary cities of India
- Municipal strengthening assessment and support

## Equity in service delivery



- Slum Free Action Plan for Ahmedabad
- Slum Atlas for Ahmedabad
- Pro-poor benchmarking of water and sanitation
- Citywide inclusive sanitation

# Major Activities (1/5)

## Performance Assessment System (PAS) project

Journey from 2009....sustained and growing



### Program Model:



### Scale and Impact:



[www.pas.org.in](http://www.pas.org.in)

The largest database on urban water sanitation services in India

**Started with 2 states,  
416 Cities  
68 Million population**



**Now 6 states,  
more than 900 cities  
96.5 Million population**

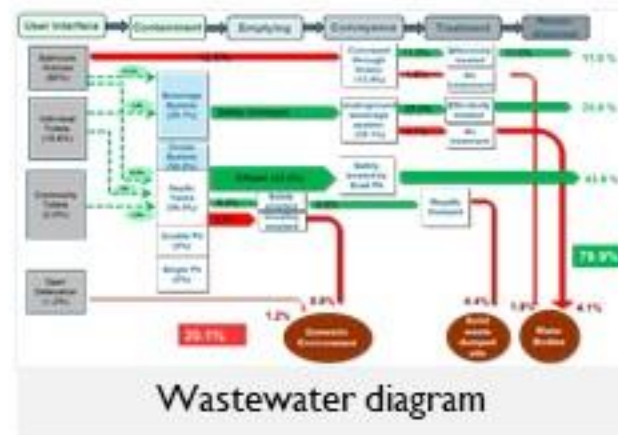
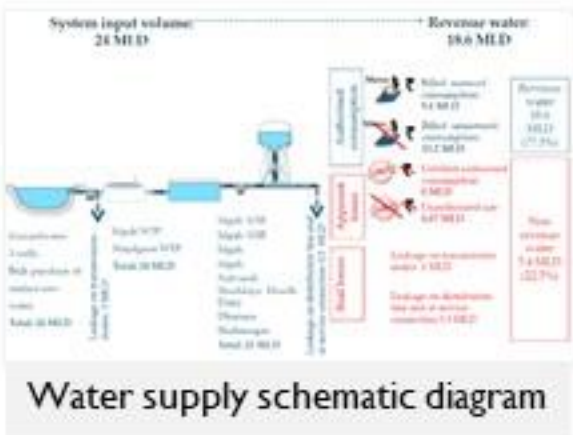
### Support to cities to improve performance

- 24x7 water supply plan for cities
- Open Defecation Free and City sanitation plan
- Water audit studies
- Drinking water quality surveillance studies
- Information system improvements
- E-governance system

Country wide rolled out in 100 smart cities (MoHUA) and Focus towards data driven governance



# Various Dashboards



# Major Activities (2/5)



## Support to Wai and Sinnar for Sanitation Improvement

Comprehensive City Sanitation planning



*1st cities in India to implement citywide scheduled emptying of septic tanks*

1

Scheduled emptying of septic tanks

2

Involving private sector for emptying operations

3

Levying a sanitation tax to support operations

4

Faecal sludge and septage treatment facility (FSTP)

5

Use of own (DBO) / philanthropy funds for FSTPs

6

Online monitoring systems for FSSM – emptying and treatment

7

Reuse of treated wastewater

8

Municipal council commitment and leadership

9

Gender inclusivity in sanitation

10

Involvement of SHGs

11

San workers training

12

Equitable services for slums and vulnerable areas





# Major Activities (3/5)

## Support to Government of Maharashtra for FSSM and Urban Sanitation



### Policy and Strategic Support

Support in developing policy, guidelines, strategies for implementation of SMMUA programme

- ODF , ODF+ ODF++ framework
- State Resolutions
- ODF Handbook
- Sanitation Sustainability Charter Guidelines
- FSSM Policy and Guidebook
- Guidelines for toilet and septic tank design

### Technical Support

Providing technical support in day-day operations of the mission

- Review / monitoring of mission
- Resource Material compilation
- Presentations at Workshops
- Exploring Sanitation credit
- Peer learnings from cities
- Peer learnings for other states
- Follow up with cities on targets

### Strengthening Local Government Capacity

Support to ULBs for achieving ODF, ODF+ and ODF++ status

- Capacity building and training workshops for city officials for
  - Attaining ODF status
  - 3rd party validation process
  - Sustaining ODF status
  - Developing FSSM plans
  - Implementing FSSM Plans
- Tools developed..saniplan, sanitab, sanitrak.....and training of stakeholders in using these tools

State become ODF on 1<sup>st</sup> Oct, 2017 and now aspires to become ODF+/++  
311 FSTPs under implementation



# Major Activities (4/5)

## Financing Water and Sanitation



## Knowledge Partner for Urban Water Security

1. Knowledge Management and Advocacy Partnership for Participatory Ground Water Management in Bhuj and preparation of Water security toolkit- through **Arghyam funding**



2. Knowledge Partner for research and policy advocacy in urban geographies of country for policy change in urban drinking water solutions to serve the underserved for socio-economic impact on the urban water ecosystem- **Piramal Foundation**

3. **Water4Chnge**, a research project jointly funded by the **Department of Science and Technology, GOI (DST)** and the **Netherlands Organization for Scientific Research (NWO)** on Urban Water Systems to move towards sustainable and integrated urban water management systems.



# Major Activities (5/5)

## Water Service Improvement Plans



- Developed low cost method to assess non-revenue water
- roadmap for continuous water supply
- Focusing on drinking water quality surveillance

## R-U linkage for Treatment and Reuse



- 170 out of 278 Census Towns (CTs) can co-treat their faecal sludge in nearby cities with STP/FSTP covering 70% of CT population can be covered
- Reuse of Water from STP and FSTPs in Rural areas

## Governance and Financing

- Support to State finance commissions in Gujarat and Maharashtra:
- Support to DoM, GoG: Improving Financial Health of Municipalities in Gujarat
- Introduce Performance based grant system for ULBs
- State UWSS investment plan and preparing schemes for the Gujarat state budget
- Schemes on improving UWSS service delivery and water security for state budgets for urban Gujarat



# Performance Assessment and Improvement Tools



## Performance Assessment Toolkit

A packaged toolkit to assess performance of broad functions of the city, like water supply services, waste water management, solid waste management, and finance



## SaniPlan

The Model facilitates the development of a financially viable plan of action for improvements in delivery of UWSS services



## IFSM Toolkit

A packaged toolkit for citywide assessment of various key areas that need to be studied for developing IFSM plan



## SaniTab

An android based app for sanitation surveys at household level



## IFSM Planning & Business Model

This model facilitate to identify financing investments for implementing FSSM through various approaches and business models



## SaniTrack

Online system for monitoring scheduled de-sludging and FSTP operations in a city



## FSSM Finance Requirement tool

Tool provides capital and O & M investment requirements for AMRUT, non-AMRUT and census towns in India till 2022



## Target Setting model

The model assists city officials to set realistic and achievable targets for service level improvement



# Partners and Collaborations

## Funding partners



## Government partners



## Research and implementation partners

