



**Sri K. Chandrashekar Rao**  
Hon'ble Chief Minister, Govt. of TELANGANA

# Urban Bytes

FOOTPRINTS FOR CHANGE



**Sri K.T. Rama Rao**  
Hon'ble Minister For MA&UD, Industries, Mining, IT & NRI AFFAIRS, Govt. of TELANGANA

Newsletter

Issue : 5

15<sup>th</sup> - 31<sup>st</sup> March 2017

Hyderabad

## Content

Feature Article .....	1
Newsmakers .....	3
Events .....	3

## Feature Article

### Challenges in achieving 24x7 water supply

24 hours water supply is far dream a few Indian cities have been able to achieve it. Despite the fact that there is often enough water to do so most cities and towns supply water for just a few hours a day, and sometimes only a few days a week.

- Malkapur, Gujrat town that now supplies water to its residents 24/7 from 2012
- Malvinagar, command area in New Delhi successfully implemented conversion from intermittent to continuous water supply
- Belgaum, Hubli regions in Karnataka is now transformed and supplying 24/7 water supply
- Nagpur and several other cities are on the path to ensuring 24/7 water supply

Mission Bhagheeratha is the State's flagship Programme that envisages provision of treated water to all the ULBs in the Telangana state by relying on water resources from Srisailem, Sriram Sagar Project, Komuram Bheem Project, Paleru Reservoir, Jurala Dam and Nizam Sagar Project. The main objective is to provide safe drinking water to rural & urban areas of the state. The Telangana Government's endeavour is to provide piped water supply to provide 100 liters of clean drinking water per person in rural households and 150 liters per person in urban households. The project is priced at estimated cost of Rs. 35,000 Crs, the project envisages laying 1.26 lakh km of pipeline network that will reach 25,000 rural habitations and 67 Urban Local Bodies across the state of Telangana.

Aligning to the State's mission and as mandated by the Government of India AMRUT guidelines the State government has under taken comprehensive water supply programme wherein Service Level Improvement plans (SLIPS) were done in the 12 AMRUT cities namely

- |               |                 |               |
|---------------|-----------------|---------------|
| 1. Hyderabad  | 2. Warangal     | 3. Karimnagar |
| 4. Ramagundam | 5. Nizamabad    | 6. Khammam    |
| 7. Siddipet   | 8. Mahabubnagar | 9. Nalgonda   |
| 10. Suryapet  | 11. Miryalaguda | 12. Adilabad. |

## From Director's Desk

Dear readers,

I am glad to present you the fifth issue of our Urban Bytes newsletter. The fortnight has indeed been very hectic and challenging with the 72 ULBs on a property tax collection drive. While results are satisfying, new strategies are being worked upon to spike revenue collections at the ULB level.

The feature article in this edition focusses on another challenge faced and that is achieving 24x7 water supply. The article cites examples of cities where water supply projects are implemented in full swing. It also elaborates on the Service Level Improvement plans (SLIPS) of 12 AMRUT cities for comprehensive water supply.

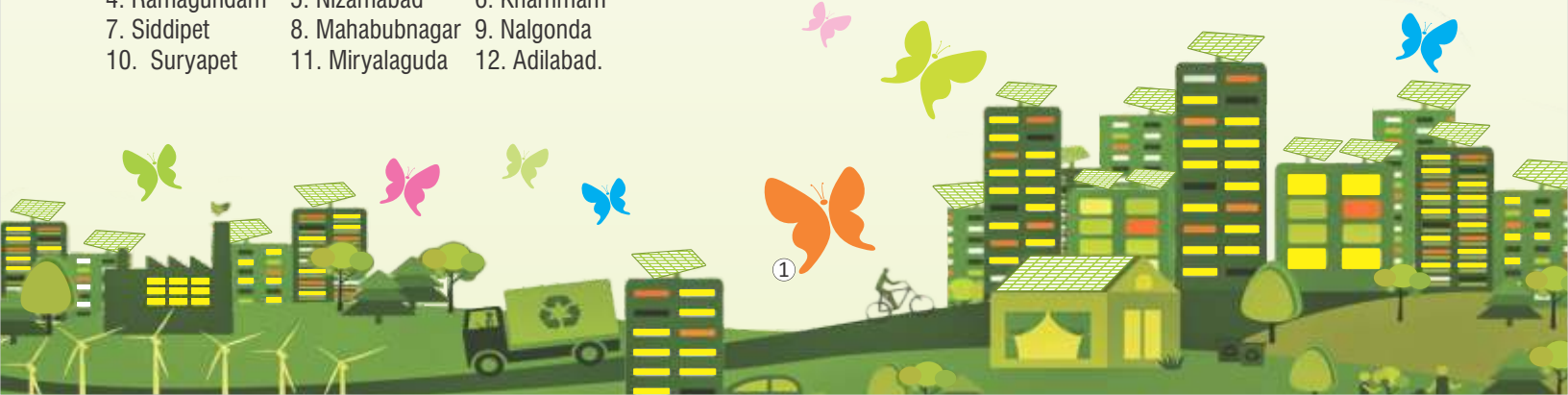
Under the Newsmaker's section, the IEC campaigns for cleaner greener and healthier cities in partnership with the Telangana Samskruthika Saradhalu (TSS) and performance of ULBs in property tax collection for the year 2016-17. In the events section, we have the vulnerability mapping exercise being done by Health Community Resource Persons (CRPs) and urban ASHA workers in 41 ULBs.

Lots of programmes are lined up for the new financial year and I shall keep you all posted. I thank you for the support and response and invite you to contribute and share your experiences in urban development with us.

Happy reading!

Sincerely,

**Dr. T.K. Sreedevi**



As per the SLIPs the implementation strategy as shown in the image beside was taken up to achieve 24x7 water supply in the 12 AMRUT cities. The AMRUT objectives mandate that

- Provision of 140 LPCD to all ULB's
- Universal coverage of Pipelines
- Efficiency in Distribution, Quality water and Reduction of NRW Extent to 20%
- Extension of household and Bulk flow Meter connections

In order to the above objectives the following implementation strategy was adopted.



## 1. Water Audit in 12 ULBs

In order to achieve desired service level benchmarks, the ULBs have conducted Water Audits and prepared action plans to fill the service gaps. Some of the salient features and average indicators as observed in the water audit are

- Non-Revenue water(NRW), large amount of water is loss due to high pressures and due to zero pressures during non-supply intervals contaminants will enter the supply lines, through leakage points.
- NRW accounts for 50 per cent of water production in ULBs in contrast to the 5 per cent in Singapore.
- Treated water that is lost due to leaks amounts to a considerable loss and

Average GAPS on 12 ULB'S			
	Present Status	MoUD BenchMark	GAP
Coverage of Water supply connections	53%	100%	47%
Per capita supply of water	101.4 LPCD	140 LPCD	38.6LPCD
Extent of Meter connections	2%	100%	98%
Extent of NRW	41%	20%	-21%
Quality of water supplied	95.74%	100%	4%
Cost Recovery in water supply services	42%	100%	58%
Efficiency in collection of water supply	61%	90%	29%
Pipe Distribution Network(kms)	12404.30	17388.97	4984.67

## 2. Service Level Gap Analysis

Service level gaps was assessed in the 12 AMRUT cities for universal coverage of water supply. The baseline information and survey data of the water supply system has been analysed to understand the means to transform the infrastructure to draw treated water from water source and from water supplied through Mission Bhagheeratha. This is to develop the adequate storage and distribution network within the towns so that 24x7 water supply can be achieved.

## 3. Water demand gap analysis

In order to achieve 24x7 water supply it is important to understand the water source and water demand to fill the gap. The water supply & demand gap analysis was conducted in 12 AMRUT ULBs to develop the storage plants and reservoirs. The table below illustrates the demand gap analysis

Water Supply & Demand Gap Analysis(MLD)				
ULB	Water supplied at present(MLD)	Water Demand MLD (2021)	Water GAP(MLD)	Alternative Source on Gaps
RAMAGUNDAM	13	44.78	31.78	TSWSP have committed to supply 66MLD by June 2017
Miryalaguda	10	20.1	10.1	Treated Water will be supplied by TWSC (10.1 MLD)
Mahaboob nagar	17	40	23	30 MLD will be supplied by TWSC after completion of projects
Adilabad	12	22.2	10.2	Source water available for Demand
GHMC	1627.7263	3247.88178	1620.15548	262 MGD Projects going on HMWSSB
Kharimnager	48	76	28	HUDCO commissioned Projects
KHAMMAM	73	63.14	-9.86	Surplus (TWG will Supply 28.80 MLD)
Nalgonda	19.5	27	7.5	Treated Water will be supplied by TDWC
NIZAMABAD	73	55	-18	Existing is adequate to meet the required prorate supply
Siddipet	13	20	7	GAP Will be filled by water Supply Grid
Suryapet	23.28	23.28	0	Existing Source is adequate to meet the required prorate supply
Warangal	181.79	179.1	-2.69	Existing source is adequate to treat and meet the required prorate supply

### 3. Engineering Methods to Increase the Efficiency of Revenue

- The pre-requisite for 24\*7 supply is provision of meters for all service connections and bulk flow meters in the distribution network and transmission mains
- A leak proof and well maintained distribution network shall be placed along with required storage in the towns
- District metering areas(DMAs) have to be created in the distribution network and bulk flow meters installed to localize and identify the quantum of water supplied to each DMA



### 4. Implementation Plan to transform under AMRUT

The Government of India has issued administrative sanction for comprehensive Water Supply projects in 35 ULBs including 10 AMRUT ULBs and the tenders are invited by ENC(PH) on Modified Annuity mode of tendering, which includes components approved/ proposed in the three SAAPs.

#### Funding

- Rs. 559.98 crores proposed for the year 2017-2020 to build Infrastructure on Water Supply
- Rs. 137 crores is estimated for Household meter connections (where 100 crores nearly for Hyderabad city)

### 5. O&M methods for Sustainability

- Digitalization of distribution networks and House Service Connections (HSCs)
- Installation of Supervisory Control and Data Acquisition (SCADA) for better maintenance and monitoring
- Introduction of telescopic billing system to cater poor people
- Effective collection mechanism along with grievance redressal (launching a mobile application which is being implemented in Bangalore by a technology start-up company called Next Drop)

#### The Merits & Impact of achieving 24x7 water supply

- Reduces the time and money spent by citizens to store water
- Water supply will be provided as per quality standards as external pollutants cannot enter pipeline as the pipeline is under pressure
- NRW and O&M costs will be reduced when leakages are fixed instantly.
- As the time spent on collection of water by poor people reduce dramatically their productive/ working hours goes up and this directly results in better earnings which shall result in improved life style.

For effective implementation of 24x7 supply water auditing, Installation of bulk meter and HSCs need to be installed with meters is very essential. In Telangana, water demand gap can be filled through mission Bhagheeratha . With the proper implementation of 24x7 water supply the pipe network coverage will go up to 100% and NRW will be around 20% as all the households forced to take connections and efficient maintenance of water supply. The per capita level of water consumption is bound to 145 LPCD in the 12 AMRUT cities as they will be able to achieve the benchmarked service level water can be served to the poor and door to door without a delay by wasting the public valuable time, which results in the increase of increasing of working hours and income.

## News Makers

### IEC campaign for Cleaner Greener and a Healthier cities



Effective IEC campaign is very crucial to bring a behavioural change among people either in preventing open defecation, promotion of hygiene or segregation of waste. The State Mission Director of Swachh Bharat has partnered with Telangana Samskruthika Saradhalu (TSS) to rollout a mass IEC campaign across all it 72 ULBs through cultural troupes with the native flavour. The primary focus achieve status in remaining 43 ULBs and promotion of waste reparation through massive awareness drives across the ULBs of state. The performing artists of the TSS have churned out songs,

s, street plays etc. To kick-off the campaign events were conducted on 23rd to 25th March 2017 in Medak, Miryalguda and Nalgonda. Around 800-1000 SHG women and citizens participated in the event each of the cities. Effective communication medium through songs and skits emphasizing the ortance of segregating dry, wet and domestic hazardous and the importance of usage of toilets dry and waste were conducted for the SHG women. Exposure visits for Dry Waste Resource Centre were conduct to orient them on the advantages of segregation and the livelihood opportunities in establishing such enterprises.



t o  
seg  
the  
skit  
  
i n  
imp  
wet

## Property Tax

Property tax & water charges are one of the major sources of income for an urban local body. It comprises of 25% of total income and 47% of the ULB's own revenues. The Director Municipal Administration has launched an intensive property tax drives for collection of the property tax for the financial year 2016-17 across all the 72 ULBs of the state. Special nodal officers were nominated for each district to monitor on a day to day basis and video conference reviews were conducted by the DMA to monitor the progress. Measures like GIS based property tax in 34 ULBs has witnessed an increased demand for current financial year 2016-17 from Rs 282.73 Cr to Rs.330.77 Cr which accounts to about 18% jump with a collection of 86.04% amounting to 289.58 Cr as compared to 85.86% i.e., 243.04 Cr in the year 2015-16. Siddipet, Peerzadiguda, Boduppal, Shamshabad(NAC), Peddapalli, Metapally municipalities have achieved 100% followed by Armoor, Shadnagar, Narayanpet and Bhongir municipalities amongst the top 10 performers. 15 ULBs are above 95% and 20 ULBs above 90% collection respectively. The total revenue to the ULBs has resulted by bringing in the 15442 unassessed and 189419 underassessed



## Events

Sri. K. T Rama Rao, Hon'ble Minister, MA&UD along with Sri.Harish Rao Hon'ble Minister Irrigation, Marketing and legislative affairs and Smt M. Padma Devender Reddy Hon'ble Deputy Speaker of Legislative Assembly reviewed the HoDs of the MA&UD department and Municipal Commissioners of Medak district on 27th March 2017. The Minister urged the HoDs and Municipal Commissioners to put in more strenuous efforts in infrastructure related developmental works.



Sri. Vijay Kumar, Under Secretary and team of officials from Ministry of Urban Development (MoUD) Gol visited Nalgonda and Suryapet on 17th March 2017. The team had reviewed the implementation of the Central Government schemes; i.e. Swachh Bharat Mission (SBM) and AMRUT. They had also reviewed the water supply schemes, measured taken by cities to reduce the percentage of Non-Revenue Water to less than 20%, property tax collection and qualitative aspects of existing parks. The team had suggested to arrange a site board in the parks with Logo of AMRUT Scheme.



## Vulnerability Mapping Survey by MEPMA Health CRPs in 41 ULBs:

MEPMA has undertaken the survey on Vulnerability mapping in 41 ULBs. The survey is being rolled out by the Health Community Resource Persons (CRPs) and urban ASHA workers. The survey covers four critical vulnerability areas of the urban poor which are social, economic, health and environment.

Vulnerability mapping on the mentioned parameters is being conducted in two phases, in the 1st phase the survey will be conducted with rag pickers, street children, people involved in begging, sex workers, transgenders, elderly poor, widow/deserted women, women/child headed households, differently abled persons, people suffering with - HIV/AIDS, TB, leprosy, people with mental illness, people living in institutions like night shelters, homeless recovery shelters, beggars home, leprosy homes and sanitary workers, rickshaw pullers, head loaders, construction workers, daily wage laborers and domestic workers.



### Contact Details

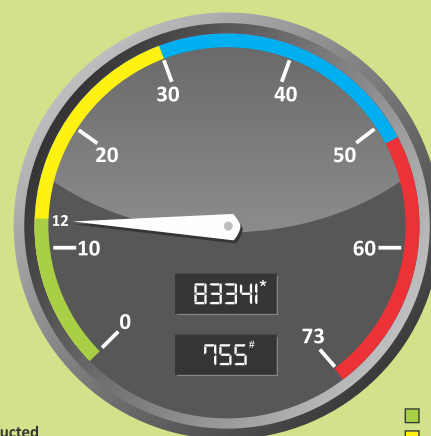


**Dr. T.K. Sreedevi, IAS**  
**Director Municipal Administration**  
 640, AC Gaurds, Opp to PTI Building  
 Hyderabad – 500004  
 Phone: 040-23302150  
 Email: cdma@cdma.gov.in  
 Website: www.cdma.telangana.gov.in  
 Twitter: cdma@cdmatelangana

Edited by :  
**V. Venugopal**  
**K. Phalgun kumar**  
**Lavanya Gotety**

Feedback/suggestions:  
 urbanbytescdma@gmail.com

### ODF METER



\* No. of Toilets Constructed  
 # No. of ODF Wards  
 12 No. of ODF Cities

■ ODF Achieved  
■ ODF in Pipeline  
■ ODF by 31st March 2017  
■ ODF by 15th May 2017