





**Sri K. T. Rama Rao** Hon'ble Minister for MA & UD, Industries & IT E&C Government of Telangana





# Pattana Pragathi

A mission for enhancing liveability of towns in Telangana



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# 1

### From the desk of CDMA

Welcome to our latest edition of the Pattana Pragathi news-letter, which is aimed to keep you updated with recent development in urban areas of Telangana. As per the vision of the honourable Chief Minister, and under the decisive leadership of the honourable Minister, Municipal Administration and Urban Development Department (MA&UD), Government of Telangana, we have been making significant improvements in 'ease of doing business and 'ease of living' in all municipal areas in the State. Active participation of people, especially women and marginalised sections of the society and ensuring they are positively impacted are central to our programme implementation.

While our goal is to ensure comprehensive development of towns, palpable improvements, in the last six months, are made in the areas of urban greenery, cleanliness, citizen services, sanitation, faecal sludge and septage management, water supply, waste management, core municipal infrastructure and overall public health. I compliment all municipal functionaries for their hard work and for promoting innovative solutions to improve service delivery. Telangana is one of the few states in the country to introduce such an integrated and comprehensive approach to urban development. Having said that, we have to strive hard and rededicate ourselves to better our performance, meet the expectations of the public as per the citizen charter and ensure municipal service excellence.

Through this newsletter, we bring to you glimpses of your efforts with a purpose to learn, adapt and replicate on a mission mode. Peer learning is the cheapest and most effective way to replicate good practices and I encourage you all to collaborate and cooperate in your endeavours.

I would like to express my gratitude to Shri. K.T. Rama Rao Garu, Honorable Minister Municipal Administration and Urban Development Department for outlining the vision and inspiring elected representatives and municipal functionaries to strive harder. I would like to profoundly thank Shri Arvind Kumar, IAS, Principal Secretary, MA&UD for his leadership and guidance in achieving the desired results as envisaged by the Hon'ble Chief Minister.

I would also like to thank the Administrative Staff College of India (ASCI) for extending knowledge support in the implementation of various initiatives and for supporting in developing this newsletter.

Dr.N.Satyanarayana, IAS

CDMA, MA&UD, Government of Telangana



# Monitoring for Impact Pattana Pragathi - Toilet Monitoring System (PP-TMS) A unique ICT based system for monitoring public sanitation facilities

The Municipal Administration and Urban Development (MA&UD) Department, Government of Telangana has taken several citizen-centric sanitation improvement initiatives for enhancing the quality of life and public health in urban local bodies. Towards this, the government envisioned providing gender-friendly public convenience (toilets) – 1 for 1000 population in all the Urban Local Bodies (ULBs). This first-of-its-kind initiative has become a national benchmark and a new norm under Swachh Bharat Mission. In response to this policy direction, ULBs have constructed public toilets, community toilets, exclusive toilets for women (SHE toilets) and mobile toilets in adequate numbers to meet service level standards. Over 7000 new toilet seats are built are in use, the remaining toilet seats are at different stages of construction.

To support towns in ensuring timely completion of public conveniences with quality standards and to ensure good operation and maintenance of these facilities, the Commissioner and Directorate of Municipal Administration (CDMA) in partnership with the Administrative Staff College of India (ASCI) has developed a real-time ICT based monitoring system called Pattana Pragathi - Toilet Monitoring System (PP-TMS). This mobile-based monitoring tool was launched on 2nd October 2020 by Honorable Minister of Municipal Administration and Urban Development, Shri K.T. Rama Rao Garu. This system aims to help the State Administrators, Additional Collectors and Municipal Commissioners to track the progress and to ensure the quality and sustainability of public sanitation facilities.



"We have set a new benchmark in public toilets (1 per 1000 population) for the benefit of migrants, floating population, poor women and men. Over 11000 gender-segregated toilet seats were added to the existing stock during the COVID period. To ensure functionality of these facilities, we have developed PP-TMS, a state level monitoring system, a first of its kind initiative in India."

- Dr. N. Satyanarayana, IAS, CDMA, Government of Telangana.

### How does the system work?

The PP-TMS is developed as a three-part system to ensure all the public sanitation facilities in the state are well-designed and well-maintained.

#### **PP-TMS includes:**

- A web portal for uploading data on infrastructure, design features, operations and maintenance (0&M) plan of the facilities.
- A mobile app for weekly monitoring of the 0&M of the facilities
- A dashboard for viewing real-time analysis and reports.

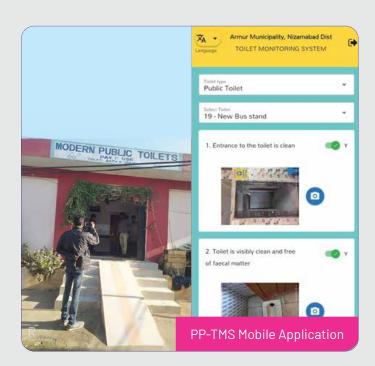
The dashboard provides a "cleanliness index" for a quick understanding of the quality of 0&M and the performance of toilets. The cleanliness index is calculated to rate the toilet based on the level of cleanliness and availability of essential facilities. The data input fields are based on a set of well-defined indicators in line with the national government ranking programs. In response to COVID, safety indicators such as availability of zero-touch hand sanitizing stations and availability of personal protective equipment (PPE) for caretakers and cleaning staffs are also monitored regularly.

Environmental engineer or equivalent of ULBs will periodically upload information on the web portal, whereas, the mobile app is used by the sanitary inspectors for assessing the maintenance of the toilet, twice a week (Tuesday and Friday). Photo evidence is needed for well-defined questions. Training programs are conducted for all the sanitary inspectors and environmental engineers on the usage and functionality of the web portal and the mobile app. More than 250 environmental engineers and sanitary inspectors have been trained on this application. Further, a helpline was made operational to support ULBs in using the application.

#### **Impact**

Municipalities across the state have enthusiastically responded and uploaded the toilet infrastructure details on the web portal. The application is being actively used by sanitary inspectors for monitoring the toilets. The status update reports are submitted to the city commissioner every week for performance review. WhatsApp groups are being used extensively to post bi-weekly status. Periodic review meetings are being held under the chairpersonship of CDMA with all the ULB officials to evaluate the developments.

This unique public convenience monitoring initiative at scale has been applauded by several state governments, national and international agencies and have expressed their interest for replication.





"We believe continuous review, measurement and evaluation are essential for effective implementation of integrated sanitation. The PP-TMS is actively used by all the ULB sanitary inspectors to monitor the PT/CTs in their ULBs and to improve the functionality of public toilets. Monitoring is being mainstreamed at the State and ULB level for greater impact."

- Mr. S. Vidhyadhar, Municipal Commissioner, Narsampet Municipality

#### PPTMS Won a National Award

PP-TMS won the Digital Technology Sabha Awards 2021 under Enterprise Applications Category. Digital Tech Sabha, honours these pathfinding initiatives and the leaders who have leveraged the power of technology in the service of our nation and its citizens in the most difficult time. They also look at how government departments are embarking on contactless solutions and are planning to use emerging technologies for service delivery improvement.





# Promoting Circular Economy in Municipal Waste Management Floral Waste Management in Telangana at Scale

Large quantities of flowers are used in places of worship and in many industries viz perfumes, cosmetics, food etc. The floral waste generated by these places of worship, market areas and industries are disposed along with the municipal solid waste causing land and water pollution. To ensure safe management of floral waste in Urban Local Bodies (ULBs) of Telangana, the Municipal Administration and Urban Development Department, Government of Telangana has signed an MOU on 2nd October, 2020 with Oorvi Sustainable Concepts Private Limited, a start-up incubated in Telangana, specialised in floral waste management.

The initiative named as 'Holy Waste' adopts a circular economy approach, and recycles floral waste into useful products such as charcoal-free incense, soaps, organic compost and a biodegradable packaging material. Oorvi uses innovative and environmentally sustainable technology and engages women self-help groups (SHGs)in their operations. This initiative not only is addressing solid waste disposal problem but also generating livelihood opportunities for women from marginalized communities.

The Shamshabad municipality is one of the first ULBs to initiate comprehensive floral waste management programme. The municipality has extensively promoted segregation of

floral waste at market areas, temples, event halls, etc. A dedicated space is earmarked for processing and recycling the floral waste. Further, ULB has made arrangement for pick up from bulk waste generators. A roster has been designed to ensure regular and timely collection of the waste. The municipality has successfully engaged and trained SHG groups with the support of Oorvi Sustainable Concepts Pvt Ltd for converting wealth out of waste.

Based on this initial success, the office of CDMA has issued a direction to all ULBs to replicate this initiative by engaging active SHGs/ SLF (Self Level Federations) groups and with the capacity building support of Oorvi.

Plans are drawn to train women groups in segregating and processing the floral waste into raw material for the production of agarbahthis, dhoop sticks, soaps etc. Plans are also drawn to set up mini units to manufacture products in several municipalities. Vikarabad, Shadnagar, Bhongir and Vemulawada have committed to take up this activity on a priority.

All urban local bodies are encouraged to replicate this elegant and innovative initiative in a timebound manner.







# Public Spaces as Catalyst for Slum Upgrading Micropark Development in Warangal

The urban areas have a growing demand for community parks and public spaces for social interactions and cultural expression, improved health and wellbeing, environmental sustainability and increased citizen involvement. These spaces are used as a catalyst for community engagement in slum upgrading programs. Urban areas in India have not given due attention for developing community parks, especially in low-income settlements.

The importance of parks and recreation goes beyond adding green space for beautifying the community. Residents, children and senior citizens, in particular, all benefit from having a nearby park/play space. When children get outside, the positive effects of physical activity increase. Parks give neighbours especially teenagers, a place to meet each other in person.

Greater Warangal Municipal Corporation (GWMC) has piloted a community micro park in Mysaiah Nagar to improve the quality of life in the community. This park is build in an open area of 175 sq. yards which is ergonomically designed and developed using recycled material available with GWMC. The theme "wellbeing out of waste" was demonstrated in this park. Administrative Staff College of India (ASCI) had provided design and implementation support to GWMC. This low-cost park (costing about 4.9 lakhs) has a playground for children, sit out spaces for women and senior citizens, gender friendly toilets, etc. The park is also used to create awareness on solid waste management, sanitation and water conservation. The park was a big success from day one and the usage has been steady. Following the stupendous success of this initiative, GWMC is scaling up similar projects in several local income settlement areas. This initiative is cost effective, scalable and replicable in all ULBs in Telangana.









### Towards ODF ++ Towns at Scale

# Feacal Sludge Treatment Plants in Telangana

#### **BHONGIR**

• Capacity: 15 KLD FSTP

• Technology: Geobag coupled with Johkasou system (Japanese technology).

· Impacted population: 59,844



Facility was inaugurated by the Honourable Minister of MA&UD, Sri K.T.Rama Rao garu and Honourable Minister of Energy, Sri. G. Jagadish Reddy garu on 2<sup>nd</sup> October, 2021

#### **SIDDIPET**

• Capacity: 20 KLD FSTP

• Technology: Combined biological treatment with solar sludge drying and UV disinfection.

• Impacted population: 1,30,832



Facility was inaugurated by the Honourable Minister of Finance, Sri T. Hari Rao garu on 2<sup>nd</sup> February, 2021

#### **KAMAREDDY**

· Capacity: 30 KLD FSTP

• Technology: Combined biological treatment with solar sludge drying and decontamination technology.

• Impacted population: 1,17,152



Facility was inaugurated by the Honourable MLA of Kamareddy, Sr. Gampa Govardhan garu on 18<sup>th</sup> March, 2021.

# **NIRMAL**

• Capacity: 30 KLD FSTP

• Technology: Bio-Treatment MBBR technology with upgraded clarified and thermal treatment.

• Impacted population: 1,06,548



Facility was inaugurated by the Honourable Minister of Endowments, Land and Forest, Environment, Science and Technology of Telangana, Sri. Allola Indrakaran Reddy garu on 26th February, 2021.



# Gender Integration in Sanitation through Livelihoods for Women in Telangana Operations & Maintenance of Public Sanitation Systems

The Government of Telangana (GoT) has prioritized sanitation and the health of its citizens through the provision of toilets in households and public places. With the belief that women can play a key role in promoting and sustaining sanitation improvements, the GoT has undertaken a structured approach to encourage their formal participation in sanitation decision making and service delivery. The engagement of women in sanitation livelihoods can directly contribute to gender integration, empowerment, and financial independence.

Towards this objective, a directive to engage women Slum Level Federation (SLF) members for operations and maintenance (0&M) of public sanitation facilities (public /community/mobile toilets) was issued. A per-seat price of Rs. 2500 (excluding taxes) per month was finalized to financially benefit the SLF members. With the support from Administrative Staff College of India (ASCI), a model contract detailing the scope of work, roles and responsibilities was developed and circulated to all Urban Local Bodies (ULBs) to promote standardization and quick uptake.

Mission for Elimination of Poverty in Municipal Areas (MEPMA) in partnership with ASCI developed training and certification programs to support this initiative. A total of Over 1500 women were trained on the importance of safe sanitation, gender integration in sanitation, contract terms, service standards, O&M procedures, usage of personal protective equipment, record keeping, monitoring mechanisms, business skills etc. Participants include Town Mission



Coordinators (TMCs), Town Level Federation (TLF) members, Resource Persons (RPs) and Community Officers (COs) from all the ULBs. A certificate-based training was also conducted for SLFs who were later awarded with 0&M contracts. For the members who did not qualify in the evaluation, a second round of training was conducted. The state had also issued a notification to the ULBs to engage the trained/certified SLF members for the 0&M of public sanitation facilities.

As of March 2021, more than 170 0&M contracts were issued to SLFs. This unique initiative has emerged as a good practice for others states to replicate. National and international development partners appreciated this initiative as it is directly contributing to SDG 5 and SDG 6.

### Training Program on Operation and Maintenance of Public Sanitation Facilities





#### **Feedback**



"We are grateful to Government of Telangana for providing us livelihood opportunities through sanitation improvement. A dedicated public toilet for the women was highly appreciated. We would like to extend our gratitude to Dr N Satyanarayana sir for conducting training programs and seminars which motivated us in operating & maintaining toilets. These toilets are like a home to us. Today, more than 70 ladies use the community toilet every day."

- Ms. Savitha, Self-help group member



# Greening Telangana for Environmental Protection Harita Haram

#### Introduction

The Commissioner and Director of Municipal Administration (CDMA) is one of the implementing agencies of the Harita Haram programme, a flagship initiative of the Government of Telangana. This ambitious programme is aimed to plant 230 Crore plants (100 Crores Plants in the Forest area and 130 Crores plants in the non-Forest area) by involving stakeholders, to improve ecosystem of Telangana in a natural and cost-effective way.

All the ULBs of Telangana are implementing the Haritha Haram on a mission mode. Public representatives, citizens, NGOs and students are actively participating in this mission.

#### **Government Commitment**

Through the Municipal Act 2019, the Government has made the public representatives accountable for greening the area they are representing and made it mandatory for them to ensure that at least 85% of the plants that are planted survive.

### **Allocation of Budget**

The Government made it mandatory to earmark 10% of the Municipal General Budget exclusively for greening the towns through the Municipal Act, 2019.

#### **Administrative Support**

Green action plans were prepared by the District Level Coordination Committees, headed by the District Collectors. Green cells were established in all the ULBs across the state for implementation of Haritha Haram program in the Municipalities.

#### **Plant Material**

In addition to the existing 178 central nurseries, another 675 new nurseries are under development. Apart from that, 110 nurseries are developed by women Self Help Groups (SHGs) to cater to the plantation requirements of the concerned ULBs. The women members will earn rupees 10 per plant as additional income and they can work at their leisure without disturbing their routine responsibilities and activities.

#### **Achievements**

Over 38,76,477 plants in 1,184 different sites were planted under Pattana Prakruthi Vanalu (Urban Foresting) to create oxygen-rich, healthy microclimate zones for the benefit of citizens living around these locations. Further, flowering, fruit-bearing, medicinal, and shade bearingspecies were planted near walking zones for improving the environment and aesthetics.



Over 1,66,48,822 plants were distributed to the households for homestead plantingplantation, including fruit bearing, flowering and medicinal plants, so as to improve the public health in a natural way. In addition, 53,20,087 sampling saplingswere planted as avenue plantation, covering either side of the main roads and colony roads. Over 3,441 ilnstitutions were also covered with 9,88,696 plants. Commissioners are advised to sustain the programme through good 0&M practices and citizen engagement.

# **Nurseries within Municipalities**





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# **Integrated Markets**

The Hon'ble Chief Minister has envisioned establishing integrated vegetarian and non-vegetarian markets at prime locations in towns, to facilitate local economic growth and convenience to public. The purpose of this initiative is to provide fresh produce viz vegetables, fruits, flowers, and meat products at a single place in a hygienic environment and accessible to citizens. Plans are drawn to establish at least one integrated veg and non-veg market in each town based on the availability of area and population.

The "Integrated Veg & Non-Veg Market" infrastructure includes separate stalls for Veg and Non-Veg products,

stalls for fruits and flowers, parking facility, loading and unloading platform, toilets for ladies & gents, lighting, greenery along with compound wall and office rooms. These facilities will help the citizens shop peacefully in a lively environment and will cater to the basic needs of the citizens.

A total of 147 integrated veg & non-veg markets are proposed to be taken in the ULBs. Over 43 units have been taken up for development so far.

### Veg and Non-Veg Market (Integrated Market) - Siddipet









#### Veg and Non-Veg Market (Integrated Market) - Gajwel





# Micro level Monitoring and Awareness Nagara Deepika

The municipality of Shamshabad has initiated a unique "Micro-Level Monitoring and Awareness Program" for the door to door collection and segregation of waste at source by engaging SHG women and named them as Nagara Deepika's.

These Nagara Deepikas are women were trained on different aspects of solid waste management such as micro level monitoring of door to door collection, sensitization of households on source segregation, not to litter on roads and open places and its negative effects (like garbage burning). These Nagara Deepikas follow the door to door collections, where they counsel and record the segregation waste category.

#### Household waste segregation category:

- 1. If the household givessegregated waste -
- 2. If the household gives mixed waste X
- 3. If the household doesn't give waste 0

ITC-WOW has been providing technical support to the municipality in community awareness programs on source segregation of waste. Nagara Deepikas act as a liaison between the municipality and citizen. The objective is to identify and report gaps in the door to door collection, partition for segregation and transportation of segregated waste and ensure that every household segregates their waste into wet, dry and hazardous waste. All these measures have helped the Shamshabad municipality to increase the source segregation of waste from 15% to 75% within two months.

### Salient features of the Program:

- Micro level monitoring on the door to door auto collection attendance to ensure 100% coverage of each household
- Each Nagara Deepika covers around 500 households
- Ensure segregation of waste at the household level
- Eliminate Garbage vulnerable points (GVPs) and roadside littering
- Sensitization households on SS2021 citizen feedback
- Ensure transportation of segregated dry waste to DRCC center
- Report issues related to drain overflow, littering, burning of waste to the officials on an everyday basis.

### Scalability:

The Shamshabad municipality has a total of 25 wards and around 13,076 households. Initially, this program was started in 10 wards by appointing 12 Nagara Deepikas. Upon its after initial success, the municipality appointed 17 more Nagara Deepikas to scale up the program for the entire town. Presently, the waste is segregated in more than 75% of households, and door to door collecting drivers are earning around Rs. 300 by selling dry waste.

#### Model DRCC:



The Dry Resource Collection Centre (DRCC) at Shamshabad municipality is operated by the SHG women. It has a separate partition for different materials along with name boards for every partition, a price list board and a log book to keep a record of waste. In addition, every alternate day a DCM load (around 2 tons) of the dry waste is sent to vendors for recycling.



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