



DECENTRALIZED SOLID WASTE MANAGEMENT IN KUMBARAKOPPALU, MYSURU

MYSURU CITY CORPORATION

CITY PROFILE

MYSORE CITY MAP

- Mysuru is the second largest city in the state of Karnataka
- Capital of the former princely state of Mysore.
- Spread across an area of 128.42 km²
- An educational, commercial and administrative center, along with tourist and heritage center.
- 140 km from Bangalore
- Tourism is the major industry, while IT Sector has emerged as a major employer alongside the traditional industries.





City

- ▶ Population : 893062 (2011 Census)
- ▶ Number of wards : 65
- ▶ Number of zones : 09
- ▶ Households : 215061
- ▶ Non residential : 31946
- ▶ Waste Generation : 442TPD



ಪಾರಂಪರಿಕ ಕಟ್ಟಡ
ಮಹಾನಗರ ಪಾಲಿಕೆ ಕಛೇರಿ

Heritage Building
CORPORATION OFFICE

ನಗರ ಸಭೆ ಕಛೇರಿ ಉಪಯೋಗಕ್ಕಾಗಿ 1921ರಲ್ಲಿ ನಾಲ್ವಡಿ ಕೃಷ್ಣರಾಜ ಒಡೆಯರ್‌ರವರು ನಿರ್ಮಿಸಿದ ಈ ಕಟ್ಟಡದಲ್ಲಿ ಇಂದು ಮಹಾನಗರ ಪಾಲಿಕೆ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿದೆ. ಇಂಡೋ-ಸರಸೆನಿಕ್ ಶೈಲಿಯಲ್ಲಿರುವ ಎರಡು ಅಂತಸ್ತುಳ್ಳ ಈ ಕಟ್ಟಡ ಕಮಾನುಗಳಲ್ಲೂ ಮೊಗಸಾಲೆ, ಕಂಬಗಳೂ ಹಾಗೂ ಗುಮ್ಮಟಗಳೊಂದಿಗೆ ವಿಶೇಷ ವಾಸ್ತುಶಿಲ್ಪ ವಿನ್ಯಾಸ ಹೊಂದಿದೆ.

This building houses the City Corporation office. Maharaja Krishnaraja Wodeyar IV constructed it in 1921, to house the City Municipal Offices. The building which is in Indo-Saracenic style has a double-storey with arched openings and verandahs, an arched portico with slender columns, two minarets and trellis-work balconies.

ಮೈಸೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಸ್ವಚ್ಛತೆ ಕಾಪಾಡಿ - ಪರಂಪರೆ ಉಳಿಸಿ



Mysore City Corporation
Maintain Cleanliness - Save Heritage



PLANNING & DEVELOPMENT

- Planned Mysuru City started in middle of 19th Century.
- Municipal Committee for administrative purposes was formed in 1862.
- Sanitary Division in 1885.
- The city got India's First Urban Planning body in 1903 - The City Improvement Trust Board
- Street lights were provided in 1908.
- UGD system introduced in 1910.
- Comprehensive drainage scheme was prepared and executed by Sri. M. VISWESWARAIAH the then Chief Engineer between 1908 and 1910.
- Formation of CITB in 1903
- Status of City Corporation from 10.6.1977.
- At present Mysuru City Corporation governed by KMC Act 1976

MYSURU MADE IT CLEAN BECAUSE

- Open Defecation Free
- Proper Sanitation and Hygiene
- Efficient Sewerage and Drainage System
- **Scientific Solid Waste Management**
- Extensive IEC activities
- Safe, quality and Sufficient Drinking Water Supply





MUNICIPAL SOLID WASTE MANAGEMENT

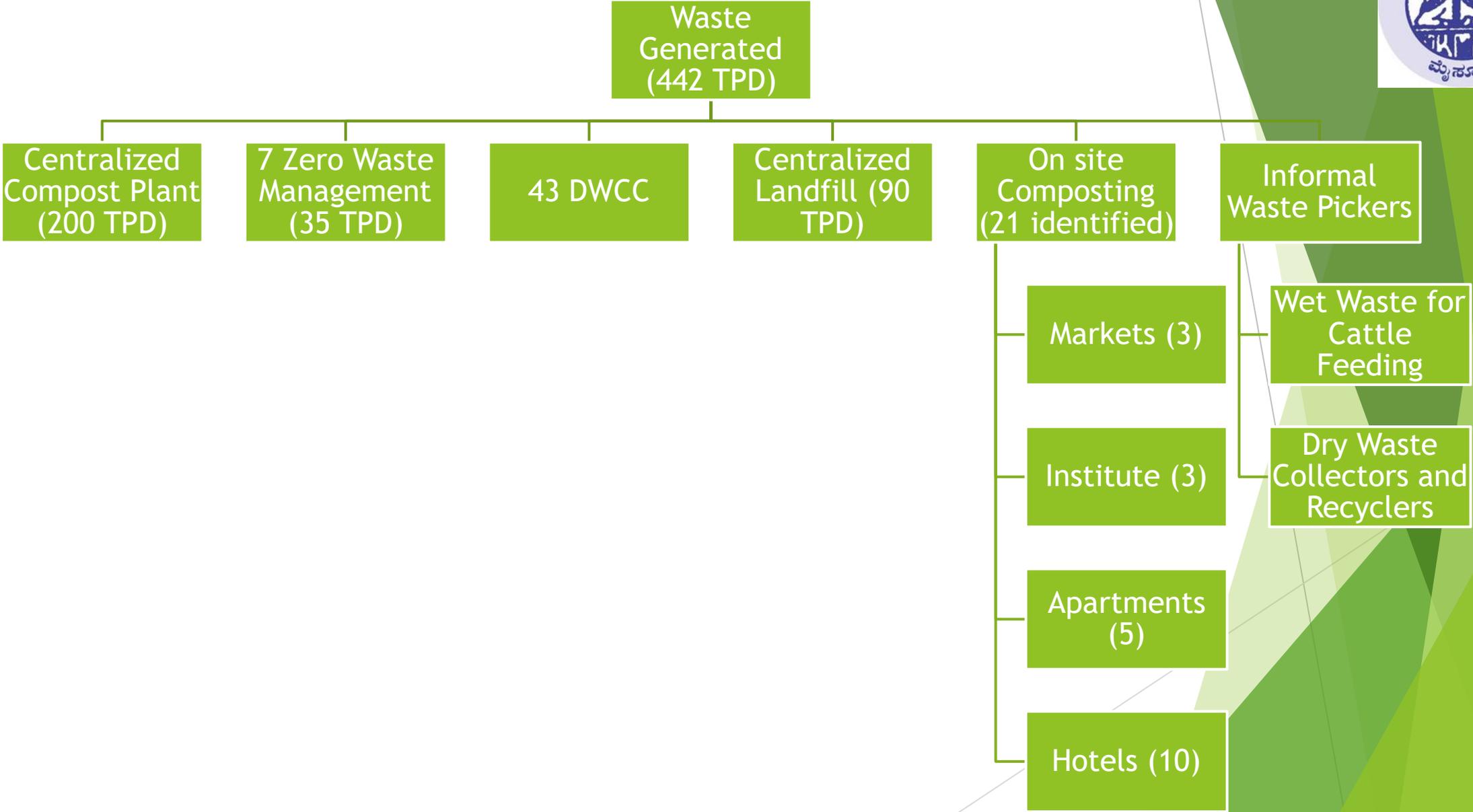
Refers to a systematic process that comprises of

1. **Waste segregation and storage at source**
2. Primary collection
3. Secondary storage
4. Transportation
5. Secondary segregation
6. Resource recovery
7. Processing
8. Treatment and
9. **Final disposal of solid waste/Rejects**

CRADLE
TO
GRAVE

The Manual on Municipal Solid Waste Management, 2000 published by MoUD and revised from time-to-time, may be referenced for DPR formulation and implementation

SOLID WASTE FLOW IN MYSURU



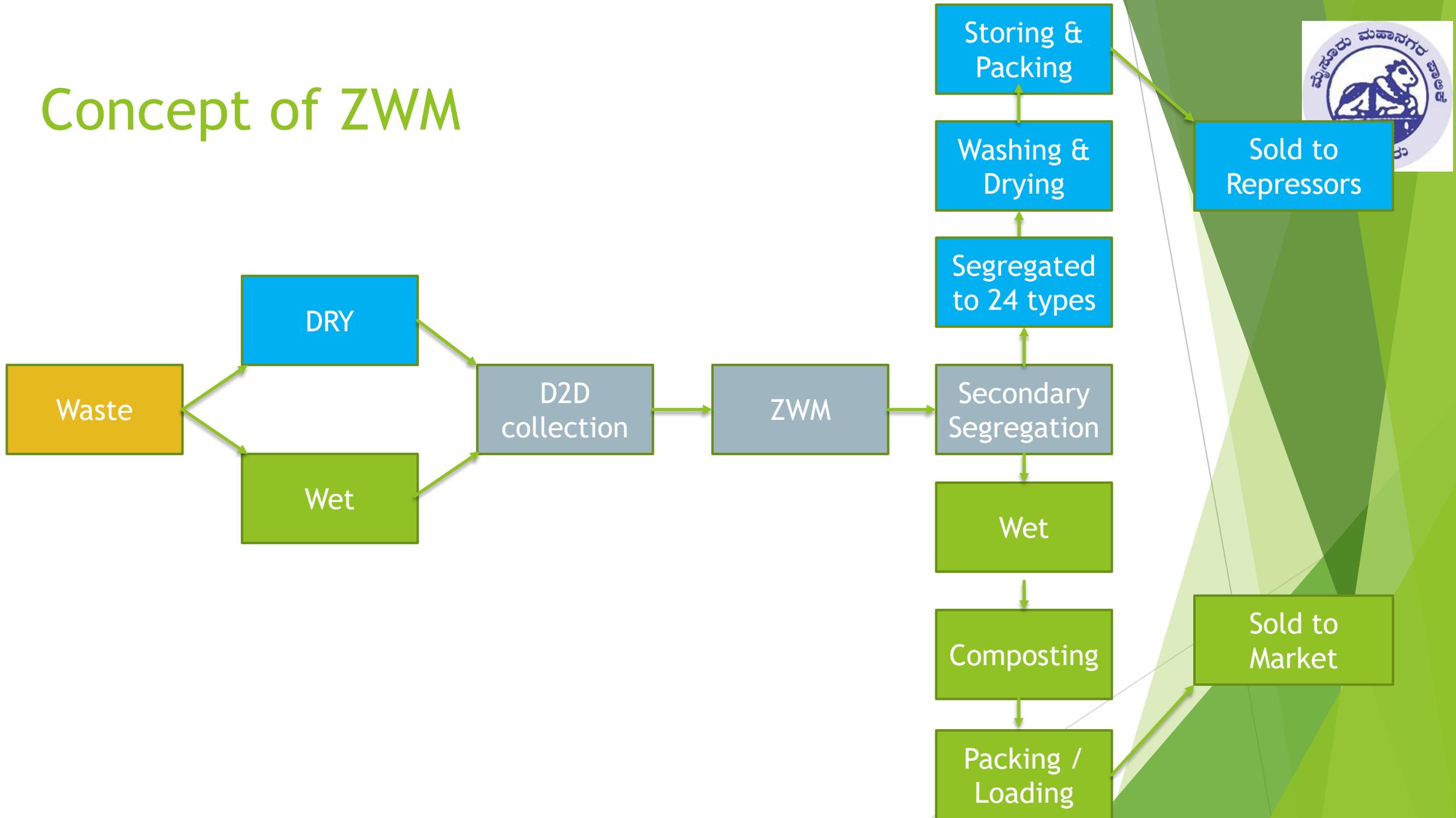
SCALABLE BEST PRACTICES

Zero Waste Management Units



- ▶ Also called Decentralized Waste Management
- ▶ Scheme: JNNURM
- ▶ Constructed in 2009
- ▶ Total = 09; Working = 07
- ▶ Capacity = 5TPD (Max); (>5TPD EC is essential)
- ▶ Inert / Residue / Non Recyclables : 2 – 4% (Landfill)
- ▶ Infrastructure & Vehicle – MCC
- ▶ O&M : NGO / Self Help Groups / Sthri Shakti Sangha
- ▶ Man Power: 1(Supervisor) + 9 (Workers) = 10

Concept of ZWM





ZWM Facility

- ▶ Area = 1.5 to 4 Acres
- ▶ Office for Administrative work
- ▶ Sheds – Receiving, Segregation, Processing and Storage
- ▶ Compost Pits / tanks
- ▶ Expenses : Electricity, Maintenance and Miscellaneous = 12,000/month
- ▶ Financial Support from MCC = 95,000/month
- ▶ Revenue generated by sale of Recyclables = 15,000 to 30,000 / month
- ▶ No. of Wards handled by each ZWM = 5 (Avg.)



DECENTRALIZED WASTE MANAGEMENT IN KUMBARAKOPPAL



Mysore City Corporation in association with Federation of Mysore City Wards Parliament has established a decentralized Solid waste treatment plant at Kumbarakoppal in 2010.



"SWACHHATA HI SEVA" National award conferred to RWA of Federation of Mysuru City Corporation Ward Parliament Mysuru on 2nd October 2017 at Vijnana Bhavana, New Delhi, Sri D. Madegowda, Dr. K.S. Nagapathi, President and Vice-President of Federation receiving the award from Sri Hardeep Singh Puri, Hon. Minister of Urban Development, GOI, Dr. Naagaraj, HO, MCC and Sri Somesh, representing for DMA, Govt. of Karnataka.



Salient features of ZWM Unit



- ▶ segregated Municipal solid waste i.e Wet and Dry Wastes are being collected from 10000 houses.
- ▶ Further Secondary Segregation of Wet and Dry wastes are being carried out manually in the plant.
- ▶ The wet waste is converted into organic manure by aerobic composting method.
- ▶ Cow dung slurry sprinkled over the wet waste to enhance the digestion process and to avoid odor problem.



Salient features of ZWM Unit



- ▶ Dry waste is further segregated into 25 to 30 types and sold to recycling units.
- ▶ This is one of the best examples of Public private partnership model (PPP model).
- ▶ They have involved Self help Groups and Sthree Shakthi to enhance source segregation and proper door to door waste collection and to regular monitoring of solid waste management activities.
- ▶ They will create awareness to the residents about source segregation and other best practices.



Storage of segregated dry waste in ZWM plant



Training for SHG on source segregation by Federation of Mysore City Wards Parliament(NGO)





IMPACTS AND SUSTAINABILITY

- ▶ **Diverting Major Quantity of Waste Reaching Open Dump**
- ▶ **It save time and cost of transportation**
- ▶ **Reduces waste sent to landfill**
- ▶ **Resource Recovery**
- ▶ **Creates Employment**
- ▶ **Place for Research Project on SWM**
- ▶ **Increases the efficiency of waste processing**
- ▶ **Increases the sale of city compost by creating network to farmers**

THANK YOU