

Trikone Model

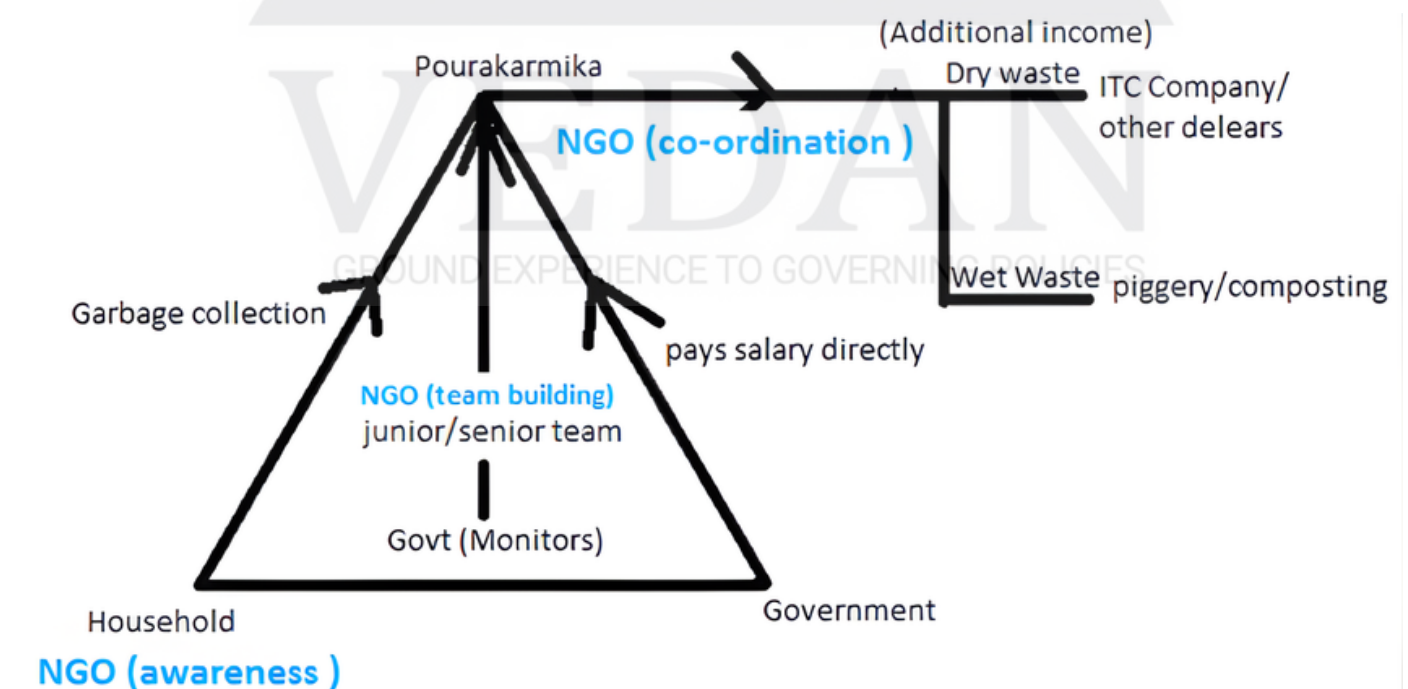
Story of 2015 – Experiment we did to build a sustainable Ward waste Management

“Waste, waste, waste...” — the word has become a part of our everyday conversations, especially in growing cities like **Bengaluru**. With shrinking landfill areas and poor waste management systems, garbage has become one of the biggest civic challenges of our time.

The larger issue, however, lies not in collection alone but in **our mindset** — we complain about drainage blocks and flooding without realizing that **it begins with how we dispose our waste**.

To address this problem at the root, we at **Vedan Trust** developed and piloted a new waste management methodology called the **TRIKONE MODEL** — a simple, low-cost, and community-driven approach that ensures waste is managed **right where it is generated**.

This model was implemented in **Janatha Colony, Amruthahalli**, Bengaluru in **June 2015** as a pilot to test its feasibility and impact.



About Janatha Colony

Janatha Colony is located in **Amruthahalli (Ward No. 7, Byatarayanapura Constituency)** in Bengaluru North. It has around **150 houses**, with residents belonging mostly to the **working-class community** — shopkeepers, domestic workers, and daily-wage earners.

For nearly two years, there had been **no regular garbage collection**. Waste was either dumped openly on the streets or burnt, creating an unhygienic environment. Drainage lines were clogged with plastic and decomposing waste, resulting in mosquito breeding and water stagnation.

Repeated complaints to **BBMP** officials yielded no results. The local residents felt neglected since the area generated “low-value waste.”

It was in these circumstances that the **TRIKONE MODEL** was conceived — to show that waste could be managed efficiently at the local level, without depending on large systems or contractors.

What is the TRIKONE MODEL?

The **TRIKONE MODEL** is a **self-sustaining triangle system** connecting **residents, Pourakarmikas, and NGOs**, with the **government** providing support and supervision.

Its principle is simple:

“Waste should get disposed of right where it gets produced.”

This eliminates the need for large vehicles, compactor trucks, or heavy infrastructure — drastically reducing cost and dependence on landfills.

How It Works

Pourakarmikas (Sanitation Workers):

- Collect segregated wet and dry waste from households using simple pushcarts.
- Sell dry waste to vendors for extra income.
- Compost wet waste locally or hand it over to nearby piggery units.

NGO (Vedan Trust):

- Conduct awareness campaigns on segregation.
- Form two community teams:
- Junior Team (Children): Trained as “Waste Ambassadors” through Chinnara Koota sessions held on weekends.
- Senior Team (Adults): Responsible for monitoring Pourakarmika work and ensuring compliance.

Government:

- Pay Pourakarmikas directly.
- Respond to grievances and ensure smooth coordination.

Benefits of the Model

1. Waste is treated locally — reducing transportation costs.
2. Composting units handle up to 70 kg/day, manageable for small communities.
3. Pourakarmikas earn extra income through sale of recyclables and compost.
4. Reduces landfill burden and saves government expenditure.
5. Encourages responsibility and ownership among residents.
6. Supports local piggeries through wet waste feed.
7. Promotes the Swachh Bharat Mission at the community level.

Carrot & Stick Policy

To ensure behavioral change, we introduced a carrot-and-stick approach:

- Stick: Fine of ₹100 for first-time offenders and ₹500 for repeat offenders dumping waste in blackspots.
- Carrot: Recognition and certificates for children and residents who actively followed segregation and monitored others.

Implementation Process

Foundation Stage (June 2015):

- Met the Health Inspector, who agreed to pilot the model in Janatha Colony.
- Received pushcarts, gloves, and bins from BBMP.
- Conducted a door-to-door survey of 130 households with the help of local children.
- Appointed Mr. Muniappa to collect segregated waste daily.
- Each household contributed ₹1 per day for his services.
- Distributed pamphlets explaining waste segregation and collection schedule:



Door to door awareness campaign on waste segregation

Day	Type of Waste Collected
Monday	Wet waste
Tuesday	Dry & sanitary waste
Wednesday	Wet waste
Thursday	Wet waste
Friday	Dry & sanitary waste
Saturday	Wet waste

Residents were informed that blackspot dumping would attract fines.

Execution Stage:

- Collection began on **June 30, 2015**.
- On the first day, **25% segregation** was achieved.
- Volunteers accompanied Muniappa daily to ensure compliance.
- Within two weeks, segregation improved to **60%**.

Neighboring layouts, **Venkatappa and Vatappa**, requested inclusion, expanding the model to over **325 households**.



Garbage collection from the household;



people waiting to give the garbage



collected garbage loaded to the auto.

Wind-up Stage:

- Despite success, **contractor opposition** forced the pilot to stop after four months.
- Contractors delayed or denied waste vehicle support, fearing the new model would bypass their system.
- By the end of July 2015, operations were suspended, though residents expressed strong interest in continuing.

Results Achieved

- **60% segregation** achieved (from 25% on day one).
- Residents became aware of their waste responsibilities.
- Senior teams actively monitored waste disposal and educated offenders.
- A site for composting was identified and made ready for use.

Challenges & Learnings

1. Lack of documented agreements with contractors, vendors, and Pourakarmikas.
2. Need for stronger community ownership and local government backing.
3. Building the Junior Team took time due to limited funds and volunteers.

Next Steps

1. Based on the success of this short-term pilot, one of the senior team members has offered land to restart the project.
2. Vedan Trust has approached **GKVK (Gandhi Krishi Vignan Kendra)** for scientific composting support.
3. Plans are underway to resume the **Chinnara Koota** sessions for children and to conduct **mass awareness drives** using projectors and visual storytelling.

Conclusion

1. The TRIKONE MODEL has shown that even in a small community, **waste can be managed locally with collective effort.**
2. Within just 30 days, a community that had no waste system achieved over **60% segregation** — purely through awareness, participation, and collaboration.
3. Although the project faced setbacks due to systemic challenges, it demonstrated that **real change begins at the household level.**
4. When people understand their civic responsibility and children become the ambassadors of cleanliness, the city moves one step closer to the vision of a **Swachh Bharat.**

Children Lead the Change in Amruthahalli

Vedan Trust organized an **awareness program on waste segregation in Amruthahalli** on **28th August 2016**, where the real heroes turned out to be the **children of the community.**

When Children Became Changemakers

Around **120 students** from the locality gathered for the two-hour session, supported by **six volunteers** from the Vedan team. Announcements were made through **school networks and the nearby temple speaker**, inviting children to come and learn how they could make a difference right from their homes.

Armed with curiosity and notebooks, the children participated in an interactive workshop designed to help them understand the **three types of waste — Wet, Dry, and Reject waste**. A powerful video showing **20 kilograms of plastic removed from a cow's stomach** left a lasting impression on them.

The volunteers explained how **segregation at the source** protects the environment, improves recycling, and safeguards the health of waste workers. Children eagerly shared their thoughts about the **Swachh Bharat Abhiyan**, expressed concern over Bengaluru not ranking among the cleanest cities, and pledged to **begin segregation in their own homes**.



Impact



The session transformed awareness into **action**.

Children, who once saw waste as a burden, began to see it as a **responsibility**. They went back to their homes, taught their parents about segregation, and became the **first link in building a Zero Waste community**.

This small initiative in Amruthahalli showed that **change begins at home — and often, with the youngest members of the family**.