Power of Community Waste Management in Plotted Colonies



The three-year project, launched as a pilot for future replication, commenced in 2020 to instil behaviour change so that at least 75% of people segregate their waste in their own homes, and to divert at least half of its 55 MT of daily waste from the landfill.

ukesh Yadav, former Ward Manager of Gurugram's Ward 32, is adamant to bring change and reduce the amount of waste that goes to the city's landfill.

The Bandhwari landfill is created to absorb the 2,000 metric tonnes (MT) of waste generated in Gurugram and in neighbouring Faridabad. But it is a tragic inevitability, as Mukesh Yadav attests. "We cannot create another Bandhwari. Gurugram's wet waste has got to be composted".

Yadav is well placed to expound on the subject. As the head of Sushant Lok's decentralised wet waste processing unit, he's one of thousands of citizens in Ward 32 inspired by the Alag Karo project to recognise sustainable waste management as the city's last chance to slow down the alarming pace at which its air, land and



Door to Door Awareness in Horizontal Colony













Handing Over of Segregated Waste by Households

water are being poisoned. The three-year project, launched as a pilot for future replication, commenced in 2020 to instil behaviour change so that at least 75% of people segregate their waste in their own homes, and to divert at least half of its 54T of daily waste from the landfill.

"Sustainable waste management demands the engagement of communities, commitment of RWAs, volunteers and Urban Local Bodies (ULBs), and infrastructure for collection, transportation and wet waste processing," explains Sonia Garga, Project Head in Saahas. While the project has witnessed thumping successes, it has also faced repeated hurdles in the components Garga sites as critical. The biggest challenges, some of them ongoing, arose in the ward's four horizontal colonies -- Sun City, South City, Sushant Lok and Sector 45, which house a combination of bulk waste generating groups of homes, commercial establishments, local markets, and even villages.

Ward 32 is an assortment of condominiums, commercial establishments and horizontal colonies. Implementation in the first two categories, while not without its impediments, was relatively smooth since they're led by cohesive Residents Welfare Associations (RWAs) that generate funds or comply with strict industrial norms. A key difference between condos and horizontal colonies is that RWAs in the former exert greater control over policy formulation and implementation. The residents pay the RWA a monthly maintenance fee and generally demonstrate greater cohesion in their collective community goals. In horizontal colonies, on

"Sustainable waste management demands the engagement of communities, commitment of RWAs, volunteers and Urban Local Bodies (ULBs), and infrastructure for collection, transportation and wet waste processing," Alag Karo's concerted awareness raising efforts with residents in their homes, parks, markets and malls, and its appealing Information, Education and Communication (IEC) material raised source segregation from 10% to about 70%, the other hand, residents own and maintain individual plots. Membership to the RWA and maintenance fees are optional, because of which RWAs exercise limited control. They're required by laws pertaining to Bulk Waste Generators (BWGs) to process their wet waste onsite but many are restricted by a dearth of funds and internal disagreements. The sense of community is lower because horizontals tend to be more scattered, dispersed and less structured. "It's like fighting a battle without an army to back you up," Garga explains.

Alag Karo's concerted awareness raising efforts with residents in their homes, parks, markets and malls, and its appealing Information, Education and Communication (IEC) material raised source segregation from 10% to about 70%, although most segregate in two (wet and dry) rather than the four (including domestic hazardous and e-waste) categories mandated by the Solid Waste Management Rules, 2016. The change was driven by hyperlocal messages reinforced through a weeklong radio campaign and at community events with games, competitions and nukkad nataks performed with gusto both by the team and local children. Housemaids were trained in both Hindi and Bengali, the primary language for many of them, although the colonies' multiple entry points and the maids' different timings made them difficult to track.



Street View of Independent Plotted Colony in Ward 32



Top View of Segregated Waste Collection in a Partitioned Vehicle

The high turnover of waste workers within agencies, and changes of agencies themselves, frequently resulted in the project's duplication of effort and resources.

The waste workers lived in squalid conditions on monthly earnings ranging between INR 10,000–15,000. With the waste they handle now segregated, their work has reduced, working conditions improved, incomes increased from the higher volume of uncontaminated recyclables they can sell, and frequency of injuries lessened. In Sun City, the waste workers have been trained on using an IT tool being piloted to further transparency and efficiency at every level of waste management.

Waste processing in the four colonies has improved significantly as well. In Sun City, whose RWA sought an end-to-end waste management solution, construction is underway on Gurgaon's first distributed biogas model. Partly subsidised by the project, it will process 500 kg of wet waste generated by the colony's 2,000 households every day. In Sushant Lok, where about 3.5MT of dry waste is collected, the unit managed by Mukesh Yadav processes about 2MT of wet waste every day. This wet waste is turned it into compost that is distributed free of cost to RWAs and residents. The hurdles notwithstanding, his city would be able to potentially take steps to mitigate the growth of Bandhwari.

With the waste they handle now segregated, their work has reduced, working conditions improved, incomes increased from the higher volume of uncontaminated recyclables they can sell, and frequency of injuries lessened.