SOLID WASTE MANAGEMENT PLANNING



BANGLADESH, DAKHA



Community Participation in Waste Management

Dhaka is facing significant challenges related to land and water pollution, largely attributed to ineffective waste management systems and a lack of community engagement in sanitation services. In response, the city has implemented Community Participatory Waste Management Services at the ward level, the smallest administrative units within the municipal government. This community-based approach seeks to enhance waste management practices by actively involving local residents in the process. With Dhaka comprising 130 wards, each housing tens of thousands to hundreds of thousands of residents, managing waste collection citywide proved too complex. As a result, the waste management department has decentralized its operations, assigning cleaners and supervisors to oversee waste management services within each ward.

This transition to a ward-level focus, referred to as the Ward Based Approach (WBA), is designed to efficiently streamline waste management endeavors while promoting extensive community involvement to ensure a cleaner and more sustainable city. By narrowing the scope to specific wards, monitoring becomes more manageable, facilitating effective oversight. Moreover, the WBA facilitates smoother collaboration among government entities, residents, and private companies, thereby enhancing network connectivity and enabling comprehensive waste management services to encompass the entire ward area.

In addition to vital infrastructure enhancements such as the construction of ward offices and upgrades to waste collection and transportation equipment, the WBA placed a strong emphasis on raising awareness among residents. The goal was to foster active participation in waste management through a series of targeted awareness-raising initiatives and community-level cleaning campaigns. These efforts were instrumental in engaging residents and instilling a sense of responsibility towards maintaining a clean and sustainable environment within their communities.



Source: JICA-Net Library

IMPACTS TO ACHIEVE SDG 11.6.1



- Implementation period: Phase 1: June 2017 September 2019; Phase 2: December 2019 - May 2022.
- Ward Based Approach expansion rate in all 93 wards in Dhaka North City and Dhaka South City increased from 34% in 2017 to 82% in 2022. The increase in the number of ward SWM offices has made it possible to visualize the spread of the WBA, which has led to the strengthening of the foundation of field activities and the placement of new Conservancy Inspectors.
- The amount of waste collected increased from 4,997 ton/day to 5,287 ton/day in the two respective years.
- Waste collection rate increased from 80% in 2017 to 82% in 2020.
- By implementing the waste segregation pilot project, about 25 tons of recyclable materials were collected every month in a sanitary manner from about 7,000 people (about 2,000 target households).
- Total of 41 illegal dumping sites and/or non-collection areas (hotspots)
 were identified and waste collection improvement was carried out by two
 prototype RVs. As a result, the loading time was shortened from about 2030 minutes to about 5 minutes, and the sanitary environment around the
 collection site was improved.





Source: JICA-Net Library



INSTITUTIONAL SUSTAINABILITY

Institutional sustainability within the Ward Based Approach (WBA) framework involves decentralizing authority to the ward Solid Waste Management (SWM) offices, empowering ward Community Inspectors (CIs) to make autonomous decisions regarding field activities. While Conservancy Inspectors and Officers oversee WBA implementation under the Waste Management Department's management, delays in staff allocation have hindered effective management. To address these challenges, the WBA core group was established to bolster management support and enhance coordination among wards. Core group members, involved in the project since its inception, have undergone capacity development, ensuring continuity and sustainability of WBA initiatives. Through these institutional mechanisms, WBA endeavors aim to foster resilience and efficacy in waste management practices at the local level.

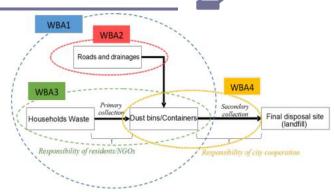
PLANNING & MONITORING

The WBA Core Group was established in Dhaka North City and Dhaka South City, playing a pivotal role in planning, monitoring and overseeing waste management initiatives. Meeting monthly, these core groups serve as the driving force behind the project's progress. Over the project duration from June 2017 to May 2022, a total of 109 WBA core group meetings and zone meetings were conducted. Of these, 69 meetings took place in Dhaka North City and 40 meetings in Dhaka South City, encompassing both WBA core group sessions and zone-wise meetings. This robust monitoring framework ensures regular communication and collaboration between stakeholders, facilitating effective decision-making and progress tracking in waste management efforts across both cities.

APPROPRIATE TECHNOLOGY

WBA Activities are implemented at the ward level and consist of:

- WBA1: construction and management of ward SWM office;
- WBA2: safety education for cleaners and establishment of a Safety and Sanitation Committee;
- WBA3: public-awareness raising;
- WBA4: improvement of waste collection services in each ward.











Source: JICA-Net Library

STAKEHOLDER INVOLVEMENT

Stakeholder involvement in Dhaka's waste management WBA has been extensive and multifaceted. Primarily, Dhaka City Corporation staff members have played a crucial role, particularly those within the Waste Management Department. This includes individuals ranging from the Chief Waste Management Officer and managers to Conservancy Officers, Supervising Inspectors (although currently abolished), Inspectors, engineers, and drivers. Additionally, residents who discharge waste have also been key stakeholders in the process. Efforts to enhance stakeholder engagement have included initiatives such as the cleaners' workshop, which has not only bolstered occupational safety and health awareness among cleaners but also addressed measures to combat the coronavirus infections. Through these collaborative efforts, stakeholders across various sectors have been actively involved in shaping and improving waste management practices in Dhaka.



Source: JICA-Net Library

SOURCES



- JICA-Net Library https://www.youtube.com/watch?v=R-SzuD4jEGI&ab_channel=JICA-NetLibrary
- Project for Strengthening of Solid Waste Management in Dhaka North City, Dhaka South City and Chittagong City in the People's Republic of Bangladesh – https://libopac.jica.go.jp/images/report/12336384.pdf
- Project for Strengthening of Solid Waste Management in Dhaka City People's Republic of Bangladesh – https://openjicareport.jica.go.jp/pdf/1000003616 01.pdf
- Dhaka Tribune https://www.dhakatribune.com/bangladesh/bangladesh-others/137986/waste-management-projects-gone-to-waste







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