Waste Management

The management of Municipal Solid Waste (MSW) has become one of the most critical environmental issues across the countries nowadays. Various unfavorable environmental impacts such as the generation of greenhouse gases, soil pollution, generation and leakage of toxic leachate may occur due to improper management of MSW.

Similar to other countries, MSW management in Iran also encounters some major challenges which include high generation rate of waste, lack of systematic program for waste reduction, low rate of source separation and recycling, unsanitary waste disposal which results in soil and underground water contamination, and low level of public awareness and participation of the general public in waste minimization, segregation, and recycling activities.

With an approximate population of 9 million people, metropolitan Tehran generates nearly 7,000 tons of MSW per day, making MSW management a vital pillar of urban and environmental planning for the municipality. The activities of both legal and illegal players in the waste management sector, the reduction of MSW at the source, and the expansion of composting and recycling programs, are among the most important issues that Tehran's Waste Management Organization (TWMO) must address.

On the other hand, the onset and spread of COVID-19 has had both immediate and more long-term impacts on Tehran's waste management. The composition and volume of wastes (both domestic and contaminated healthcare waste) as well as the financial situation of TWMO during the pandemic, including costs and incomes, are issues that The project was funded by Government of Japan with further support and collaboration of the Bangkok Regional Hub (BRH), TWMO, and UN-Habitat.

UNDP is also planning further solid waste management projects in the Caspian region of Iran to improve their solid waste management.
Challenges

- High consumption and high generation of waste per capita.
- High proportion of non-recyclable containers.
- Poor separation of waste at landfills results in slippage and contamination of the water table by organic and chemical waste.
- Low rate of recycling and reusing.
- Low level of public awareness and participation of public in waste minimization, segregation, and recycling activities.

Key Achievement to Date

- Conducting feasibility study on Tehran's waste management and identification of relevant baselines.
- Customizing and procuring 52 Reverse Vending Machines for Tehran municipality with total recycling capacity of 316,000 bottles per day.
- Developing a gamification application to be installed on waste management platform to increase people engagement.

Future Plans

- Preparing contingency plan for Tehran mega city in response to the COVID-19 outbreak and the risk of future pandemics.
- Vocational training of 1,750 individuals (to minimize risk of COVID-19 infections / risk of transmission) in three different target groups including (a) Health-care employees, (b) Municipality personnel, and (c) Contractors and MSMEs working in sanitary waste collecting sections.
- Public awareness campaign on safe waste management practices during COVID-19 and any other future pandemics for three target groups including (a) women and housewives, (b) students and youth, and (c) institutional and commercial employees. The campaign will be implemented through organizing webinars for more than 1,200 individuals, broadcasting training packages from radio, broadcasting animation clips through social media, distribution of 615,000 brochure in supermarkets, advertising the brochure from 300 metro station screens.
- Purchasing 8,850 waste containers with different sizes of 120, 240, 360, 660, and 1,100 liters for promotion of source separation and consequently waste reduction.