

# Sustainable waste models for local change

## Turkey's zero waste success inspires change

### PERSPECTIVE

Waste management has turned into an environmental and social crisis in Iran, with 58,000 tons of waste being generated daily, 75% of which is buried in an unjustified manner. Meanwhile, the neighboring country of Turkey has successfully implemented the "Zero Waste" plan, setting an example for the world.

According to Euronews, Mohammad Baqer Qalibaf, the speaker of the Iranian Parliament, recently stated in an open session of the parliament, "There are very simple issues with no financial or technological difficulties that have not been solved yet. Waste is one of them. If we cannot solve the waste problem, what can we solve?"

Waste management in Iran has even received people's complaints and police intervention. Recently, the inability to manage waste has taken on a strange form, with northern Iranian cities dumping their waste in the city of Damavand. This is while in 2024, Iran ranked 121st in the world in controlled waste management.

The speaker of the Parliament further said that only the central city of Isfahan separates waste at the source, whereas in other parts of Iran, a crisis is unfolding.

Meanwhile, the Turkish first lady has launched a movement, called "Zero Waste", in her country since 2017. It was approved by the UN in early 2023, which even named March 30th after it.

### Graveyard for waste

Speaker Qalibaf, who was once the mayor of the capital and responsible for Tehran's waste management, once talked about generating electricity from waste incineration in Tehran during the presidential election campaign in 2017. However, such a project never saw the light of day and its true merits remained unknown.

The Agriculture, Water, Natural Resources, and Environment Committee of the Iranian Parliament has recently submitted a report on the status of waste management in the country. According to the report, the

occupation of land for waste burial, water pollution due to leachate penetration, the production of greenhouse gases, and not using the resources for recycling cause annual damage of 1070 billion Rials to the environment, excluding the costs of treating diseases caused by improper waste disposal.

The report also expresses that 58,000 tons of waste are generated daily in Iran, 75% of which is buried in an unjustified manner. Shina Ansari, the vice president of Iran and the head of the Department of Environment (DoE), also said in the same parliamentary session where the report was presented that 93% of urban waste in Iran is disposed of in an unhygienic and piling manner. She said

that annually, nearly 21 million tons of ordinary waste, 150,000 tons of hospital waste, 35 million tons of industrial waste, 170 million tons of agricultural waste, 8 million tons of hazardous waste, and 150 million tons of construction waste are produced.

One of the largest landfills in Iran is in Aradkooh in southern Tehran, which has been cited several times as the source of bad smells that fill the road from the airport to Tehran. NASA published a report in October 2022, describing the Aradkooh region as one of the largest methane-producing areas in the Middle East. Dariush Gholizadeh, the head of the National Center for Air and Climate Change at the DoE, confirmed that the methane-emitting cloud in southern Tehran

cannot be denied.

There is no transparent performance report available on the Aradkooh site, which is the largest and most important waste management site in Iran for hospital waste. However, the Aradkooh waste incineration site can seemingly only process 200 tons of Tehran's waste, which is about 5% of the city's 7,000 tons of waste. It is said that only some Iranian cities including Tehran, Nowshahr, Shiraz, and Mashhad have waste incineration facilities.

### Temporary landfills become permanent

Many of the landfills that no executive or administration has been able to deal with were initially temporary, but over the decades, they have become a complex problem. For example, the Saravan landfill in southern Rasht, which discharges 15 liters of leachate into the ground and neighboring

rivers every second, was once defined as a temporary landfill. This landfill started operating on five hectares of forest land allocated in July 1984 as a temporary measure, but over 40 years, it has expanded to 25 hectares.

In April 2022, the people of Saravan protested against the foul smell and its effects. Tired of the foul smell and environmental consequences, they gathered in April 2022 to protest against the dumping of waste. When none of the officials paid attention to their protests, the people blocked the path of the garbage trucks, and the police intervened, arresting some of the protesters. After that, Ahmad Vahidi, the then-Minister of Interior, promised to solve the problem within a year, but the problem still persists.

Another landfill, located near the Kalshur River and its wetlands in Nishapur, was also initially allocated as a temporary site for waste disposal 30 years ago, but since then, it has become a permanent one. This site, which could have been a tourist destination for the people of Nis-

hapur, has become a source of pollution.

Another problematic landfill is the Amol landfill, which is located near a lake. The late Iranian president Ebrahim Raisi had set a one-month deadline to relocate it in 2022, but his order was never implemented, and the problem persists.

The leachate from the Amol landfill, as well as those in Amol City, Babol City's Anjili, and Azadshahr City, has polluted the forests and soil of the northern provinces. Narges Azari, the former head of the environmental and urban affairs department at the Center for Strategic Research, in an interview with the Farsi-language Payam-e Ma newspaper, said, "We are witnessing the most expensive and ineffective waste management in [the northern province of] Gilan." Other examples of improper landfills include Sofeyreh in Ahvaz and Barmshour in Shiraz.

Despite the fact that the Waste Management Act was passed in 2004 and its executive bylaw was developed in 2005, there has been no significant improvement in waste management. It seems that the way waste disposal charges are determined and their ineffectiveness in



Waste is piled up in the Amol landfill next to a lush forest in Northern Iran.  
● HASSAN SHIRVANI/IRNA