

Tehran faces ethical and environmental obligation to reduce its food waste



Composting and anaerobic digestion are effective methods for recycling food waste into valuable resources like nutrient-rich soil amendments and biogas. These processes help close the loop in the food system and promote a circular economy.

Approximately one-third of all food produced globally is wasted or lost.
● THE CONVERSATION

Social Desk EXCLUSIVE

Deputy of human environment of the general department of the environment of Tehran Province revealed in a recent radio interview that over 60 percent of waste generated in Tehran is related to food waste and wet waste.

Ebadati expressed concern over the substantial amount of urban and household waste released into Tehran's streams and canals daily, which ultimately pollutes surface water sources and infiltrates agricultural lands in the south of Tehran. This unmanaged waste contributes to the proliferation of animals and vermin, exac-

the quality of manufactured goods. This can be achieved by altering consumer behavior, avoiding extravagance, and managing consumption. The deputy of human environment also emphasized the importance of education and culture-building initiatives for citizens.

While municipalities have the capacity to provide ed-

globally is wasted or lost, amounting to nearly 1.3 billion tons per year. This waste has far-reaching consequences, including environmental degradation, economic losses, and exacerbation of global hunger. Food waste contributes to greenhouse gas emissions, as decomposing organic matter releases methane, a potent greenhouse gas. Additionally, the production, transportation, and disposal of wasted food consume valuable resources such as water, energy, and land, further straining the environment.

The financial implications of food waste are also staggering. The Food and Agriculture Organization (FAO) estimates that the global cost of food waste is around \$940 billion per year. This figure includes the cost of producing, transporting, and disposing of wasted food, as well as the lost potential for feeding millions of people.

With nearly 690 million people suffering from hunger worldwide, reducing food waste could significantly alleviate this crisis. By redirecting wasted food to those in need, we can work towards achieving the United Nations' Sustainable Development Goal of Zero Hunger by 2030.

In order to reduce the amount of food wasted, governments and NGOs must play a more significant role. They can educate the consumers and change their behavior for the better. Educating consumers about the environmental and social impacts of food waste is crucial. Encouraging responsible consumption habits, such as meal planning, proper food storage, and mindful shopping, can help reduce waste at the household level. NGOs can also engage themselves, along with governing bodies, in food rescue and redistribution.

The US-based organization Feeding America and British-based organization The Real Junk Food Project collect surplus food from retailers, restaurants, and farms and redistribute it to those

connects neighbors and local businesses to share surplus food, preventing it from going to waste. One more thing that could substantially help the situation is collaboration between the stakeholders.



Composting is an effective method for recycling food waste into valuable resources.
● OTTAWA COMMUNITY FOOD PARTNERSHIP



The Real Junk Food Project is an organization that uses food that would otherwise have been discarded from supermarkets, restaurants, and other independent food suppliers to produce meals that are sold in its cafes and other food outlets with a pay what you want approach, which aims to make its food accessible to everyone.
● JILL MEAD/
THE GUARDIAN

Zohreh Ebadati emphasized the need for proper waste management to mitigate the negative environmental impacts.

"Waste production is an inevitable outcome of daily household, agricultural, industrial, and medical activities," Ebadati said. The improper disposal of municipal and household waste can contaminate both surface and underground water sources, posing significant environmental risks.

erminating the issue of waste pollution.

The official highlighted the importance of employing correct methods at waste burial centers to prevent further environmental damage, including water, soil, and air pollution. She noted that the per capita waste production in Tehran is between 760 and 790 grams per day, significantly higher than the global average of 300 grams per day. This alarming statistic underscores the necessity for scientific and precise waste collection and management methods to minimize environmental harm. Ebadati identified wet waste management as particularly challenging due to the production of leachate.

To address this issue, she advocated for reducing waste production and improving

education, Ebadati believes that current efforts are insufficient. She further pointed out that the separation of waste at the source is deemed effective in reducing landfill volume and minimizing environmental impacts. Food waste has now become a global concern, with cities like Tehran grappling with the consequences of improper waste management. As highlighted in the interview with Zohreh Ebadati, over 60 percent of waste generated in Tehran is related to food waste and wet waste. This alarming statistic underscores the need for innovative solutions to reduce food waste and promote sustainable living.

The issue of food waste is not unique to Tehran. According to the United Nations, approximately one-third of all food produced

in need. These initiatives not only reduce food waste but also address food insecurity. These organizations could serve as great examples of what can be achieved through rethinking food and waste management.

Another thing that could be done about the huge amount of food waste is recycling.

Composting and anaerobic digestion are effective methods for recycling food waste into valuable resources like nutrient-rich soil amendments and biogas. These processes help close the loop in the food system and promote a circular economy. Innovative technologies can also play a crucial role. Emerging technologies, such as smart packaging and food waste tracking apps, can help consumers and businesses monitor and reduce their food waste. For example, Ollo, a food-sharing app,

Collaboration between various stakeholders, including farmers, food manufacturers, retailers, and non-governmental organizations, is essential for developing comprehensive strategies to reduce food waste. By sharing knowledge, resources, and best practices, these stakeholders can create a more efficient and sustainable food supply chain.

Preventing food waste in the supply chain is also an imperative. Investing in infrastructure and technology to optimize the food supply chain can help prevent food waste before it occurs. For example, cold storage facilities can extend the shelf life of perishable goods, while precision agriculture techniques can help farmers produce the right amount of food to meet demand. Standardization of the date label could go a long way in terms of prevent-

ing food waste. Confusion surrounding date labels on food products often leads to unnecessary waste. Standardizing date labels and providing clear guidance on their meaning can help consumers make informed decisions about food safety and quality, reducing the amount of food discarded prematurely.

Launching campaigns that will eventually aware and educate the public is another strategy that could help us with managing the amount of food wasted. Raising public awareness about the issue of food waste is crucial for driving change. For example, campaigns like the "Love Food Hate Waste" initiative in the United Kingdom provide practical tips and resources for consumers to reduce their food waste, while also highlighting the broader environmental and social implications of the issue. Promoting local food systems can also help reduce food waste by shortening the supply chain and fostering a stronger connection between consumers and producers. By supporting local farmers' markets, community-supported agriculture programs, and farm-to-table initiatives, consumers can contribute to a more

sustainable and resilient food system.

Addressing the global and local food waste crisis requires a concerted effort from all sectors of society. By implementing innovative solutions and fostering collaboration between stakeholders, we can work towards a more sustainable and equitable food system that benefits both people and the planet.

As we continue to face the challenges of a growing population, climate change, and resource scarcity, reducing food waste is not only an ethical imperative but also a practical necessity. By embracing these solutions and working together, we can hopefully help create a brighter future for generations to come.