

PAKISTAN'S WASTE MANAGEMENT PROBLEM

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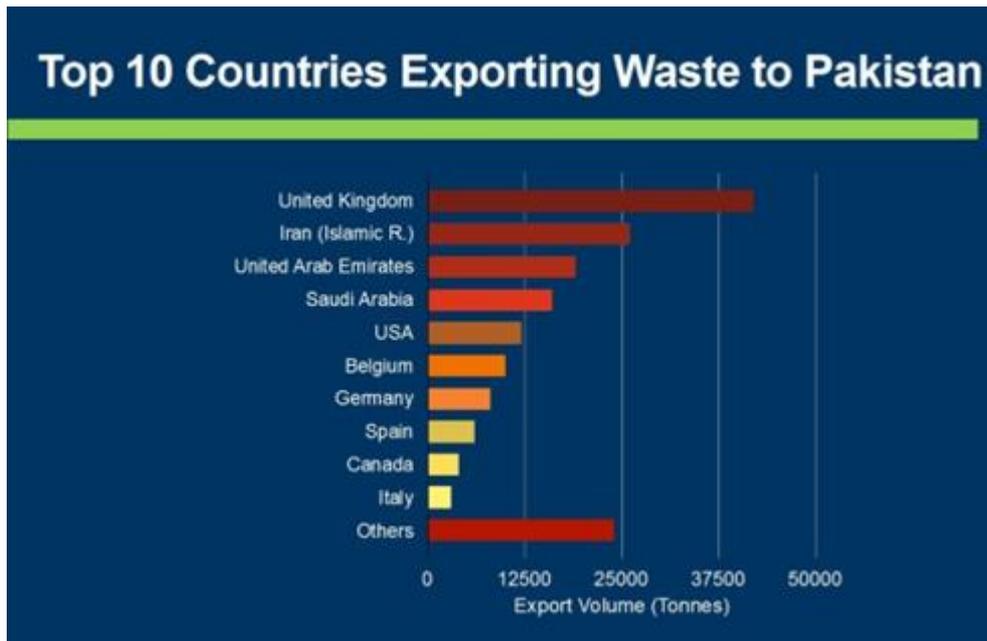
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Overview

Increasing pollution leading to environmental changes and economic cost related to waste in terms of health hazards and negative impact on infrastructure have changed the way authorities view waste management. Though waste management is a relatively new phenomenon, it has caught the attention of governments all over the globe. Today the term waste management covers collecting, sorting, processing, recycling, and reusing materials that would otherwise be considered as useless. It has moved from just being an environmental protection strategy to be an industry contributing to the economy. In Pakistan, sources of waste include households, commercial areas, institutions, construction and demolition sites, industrial areas, and agricultural disposals.¹

¹ Staff, "The State of Pakistan's Economy - Third Quarterly Report 2008-2009," SBP, Accessed July 4, 2022, <https://www.sbp.org.pk/reports/quarterly/fy09/third/Special-section-1.pdf>



Pakistan generates approximately 49.6 million tons of Municipal Solid Waste (MSW) a year, which has been increasing more than 2.4% annually. Like other developing countries, Pakistan lacks waste management infrastructure, creating serious environmental problems. Most municipal waste is either burned, dumped, or buried on vacant lots, threatening the health and welfare of the general population. According to government estimates 87,000 tons of solid waste is generated per week, mostly from major metropolitan areas. Karachi, Pakistan's largest city, generates more than 16,500 tons of municipal waste daily.²

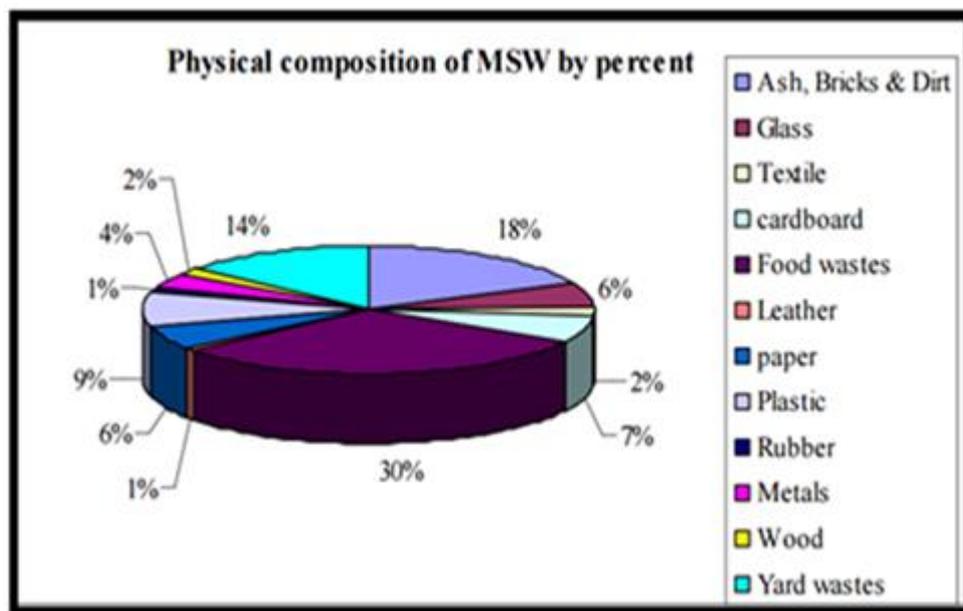


Figure: Composition of MSW in Pakistan

² "Waste Management," International Trade Administration, January 27, 2022, <https://www.trade.gov/country-commercial-guides/pakistan-waste-management>

Issue

On June 30, 2022, it was revealed to the Senate Standing Committee on Climate Change that Pakistan has become the top importer of waste in the world which was a matter of grave concern. Waste is mostly exported by developed countries to developing countries where it is used in secondary and recycling industries. Major part of Asia consists of developing countries like Pakistan, which are the potential markets for secondary and recycled material. Pakistan has ratified the Basel, Rotterdam, and Stockholm conventions, but weak institutional capacity continues to be a hurdle in the implementation of these international agreements. Pakistan annually imports 80,000 tonnes of bundled waste from around the world, which has been causing environmental and health problems as well as contaminating the surface water and groundwater supplies.³

Pakistan is a signatory to the Paris Agreement and has committed in its Nationally Determined Contribution (NDC) to reducing 20% of anticipated greenhouse gas (GHG) emissions in 2030, subject to the availability of international funding to meet the abatement cost. However, the emission estimates for the waste sector are marred by uncertainties and no mitigation actions have been devised. The country's current system of municipal waste management is far from satisfactory. The services are, by and large, provided by municipalities and limited to partial collection and open dumping or burning. Moreover, a substantial increase in waste generation in the coming years is foreseen due to rapid population growth, urbanization, and economic development. Overall, about 50% of this generated waste is collected.⁴

All major cities face enormous challenges on how to manage urban waste. Bureaucratic hurdles, lack of urban planning, inadequate waste management equipment, and low public awareness contribute to the problem. Unfortunately, none of the cities in Pakistan has a proper solid waste management system right from the collection of solid waste up to its proper disposal. Much of the uncollected waste poses serious risk to public health through clogging of drains, formation of stagnant ponds, and providing breeding ground for mosquitoes and flies with consequent risk of malaria and cholera.

³ Rizwan Shehzad, "Pakistan top destination of waste import," Tribune, July 1, 2022, <https://tribune.com.pk/story/2364078/pakistan-top-destination-of-waste-import>

⁴ Nasir Javed and Melanie Hobson, "Solid Waste Management Sector in Pakistan March 2022 A Reform Road Map for Policy Makers," ADB, March 2022, <https://www.adb.org/sites/default/files/publication/784421/solid-waste-management-pakistan-road-map.pdf>

In addition, because of the lack of adequate disposal sites much of the collected waste finds its way in dumping grounds, open pits, ponds, rivers, and agricultural lands.

Settlement Area	Waste Quantity					
	Generated		Collected	Transported	Treated	Disposed of
	Daily (kg per capita per day)		Yearly (million metric tons per year)		(% of waste generated)	
Large cities (11)	0.55	9.44	80	80	20	80-100 ^a
Medium-sized and small cities ^b	0.42	4.44	50-70	50-70	10	90-100
Rural communities	0.33	13.72	20	20	20	80-100
Total		27.58				

kg = kilogram.

Figure: Waste Generation, Treatment, and Disposal Estimates, Pakistan

Main problems regarding solid waste management in Pakistan

- There is no proper waste collection system
- Waste is dumped on the streets
- Different types of waste are not collected separately
- There are no controlled sanitary landfill sites
- Citizens are not aware of the relationship between ways of disposing of wastes and the resulting environmental and public health problems

Conclusion

The Federal Cabinet on June 28, 2022, approved the country's first ever National Hazardous Waste Management Policy after consultation with all provinces. A National Action Plan for the implementation of the Policy will be framed within three months. According to the Minister of

⁵ "Solid Waste Management in Pakistan," Climate and Clean Air Coalition, Accessed on July 1, 2022, <https://www.waste.ccacoalition.org/sites/default/files/files/brief-swm-pak.pdf>

Climate Change Sherry Rehman a country wide system of responsible disposal of hazardous waste including plastics, hospital waste and electronics waste will be established and a mechanism will be devised to stop illegal dumping of foreign solid waste and garbage in the country. The policy will help protect the country's environment by managing the solid waste which is polluting land and water and causing health issues and is a step in the right direction.⁶

Furthermore, United Nations Environment Program (UNEP) is doing a 3-year (2019-2022) project with the government which will provide an opportunity for the Ministry of Climate Change to strengthen its institutional capacity and to develop proper legislations and a national policy for chemicals and hazardous waste management that will facilitate the adoption and implementation of the relevant chemicals related Conventions to which Pakistan is Party.⁷

Overall, there is an urgent need to manage waste from the time it is created to its safe disposal. The public and local municipal authorities need to work together. It is important to create awareness about the consequences of pollution so that people become conscious of the need to deal with this problem. The country needs robust environmental laws for solid waste management and their efficient implementation and shift its focus towards less waste creation and effective recycling.

⁶ "National Hazardous Waste Management Policy approved," Radio Pakistan, June 28, 2022, <https://radio.gov.pk/28-06-2022/first-ever-national-hazardous-waste-management-policy-approved>

⁷ "Pakistan pursues transformative chemicals and waste management project," UNEP, October 17, 2019, https://www.unep.org/news-and-stories/story/pakistan-pursues-transformative-chemicals-and-waste-management-project?_ga=2.236125191.763101948.1656925318-1763457568.1656925318