



United Nations Development Programme  
Programme of Assistance to the Palestinian People



# UNDP/PAPP's EMERGENCY RESPONSE TO SOLID WASTE MANAGEMENT

## SITUATIONAL REPORT

*War-induced Impacts on the Waste Management Sector*

The ongoing war has led to the complete collapse of the solid waste management system in Gaza. There is no access to the two sanitary landfills, and as internally displaced persons (IDPs) move from place to place seeking refuge, waste accumulates at more than 141 temporary dumping sites. This situation poses serious risks to public health, the environment, and the dignity of affected communities.

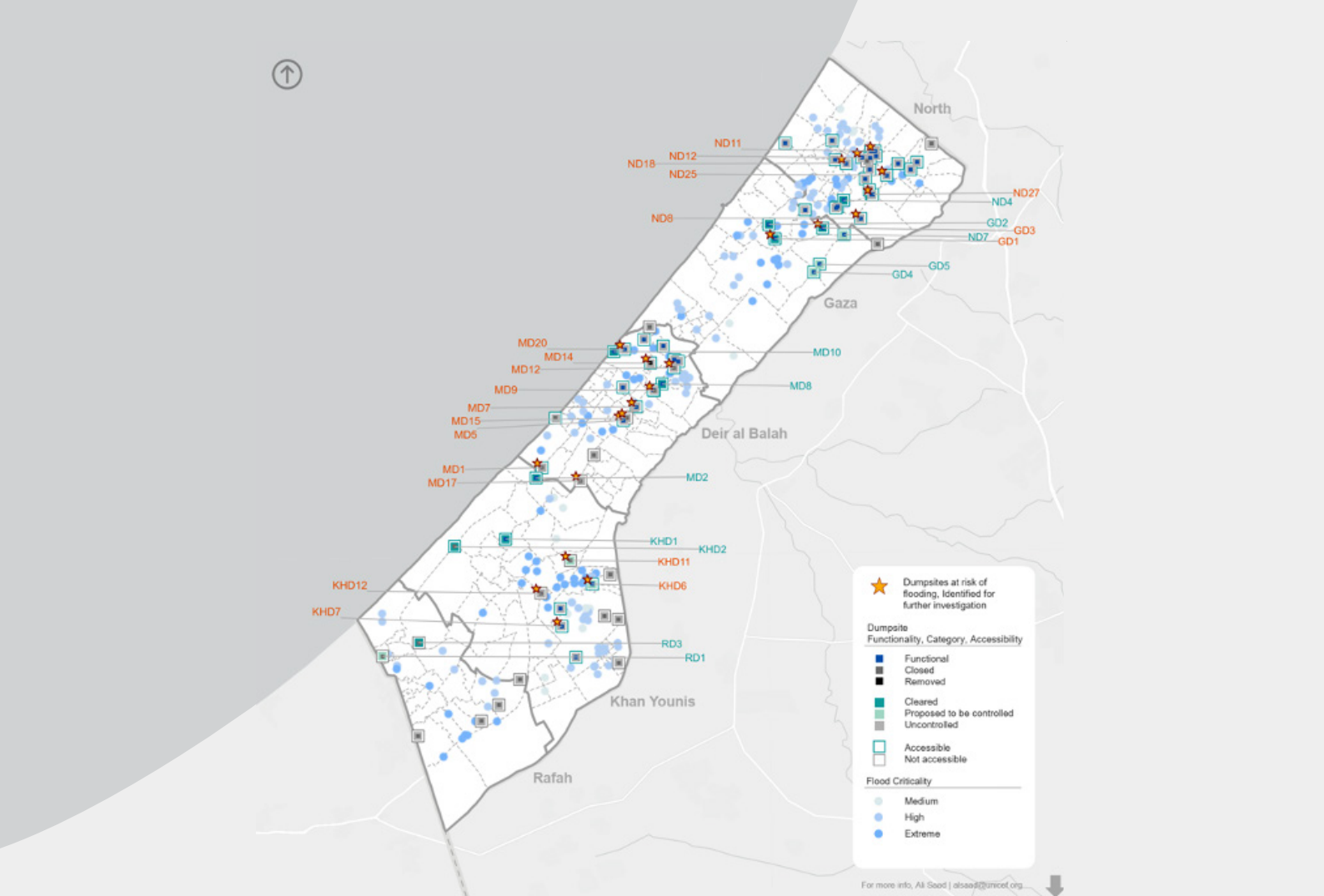
These challenges are exacerbated by the looming humanitarian needs of the winter season where 21 dumping sites are in flood-prone areas. During the rainy season, hazardous substances, including untreated feces and medical waste, can leach into the soil, contaminating the shallow aquifer. The crisis threatens long-term environmental damage as contaminants seep into groundwater and the coastal marine environment. The unmanaged waste also negatively impacts mental health and psycho-social challenges, particularly in overcrowded urban areas where displacement and deteriorating living conditions amplify the sense of crisis.

The UN Resident and Humanitarian Coordinator designated UNDP as the UN co-lead on solid waste management in June 2024; UNDP has since been managing the solid waste agenda in Gaza as part of the Water, Sanitation and Hygiene (WASH) cluster, led by UNICEF, and has established a Solid Waste Management Taskforce bringing together UN, INGOs and NGO partners.

In June 2024, UNDP completed the Gaza Insights - an assessment of the impact of the war on the solid waste management systems, as part of the broader UN response to design a strategy aimed at mitigating the risks from the solid waste crisis. Informed by the assessment, and coordinated by UNDP, the UN's response will focus on restoring solid waste management services, reducing public health risks, protecting the environment, and addressing the psychosocial impact of the solid waste crisis on the affected population. With winter approaching, there is an urgent need for a response at the appropriate scale to address the solid waste crisis.

## The key findings include:

| SOLID WASTE MANAGEMENT:   | BEFORE THE WAR | LATEST ASSESSMENT<br><small>(available equipment, not destroyed)</small>  |
|---|----------------|---|
| <br><b>MAJOR LANDFILLS</b>                         | 2              | <b>ZERO</b><br><small>Both landfills are inaccessible. 72 large and 69 small temporary dumping sites have been created.</small> |
| <br><b>WASTE COLLECTION AND TRANSFER VEHICLES</b> | 261            | 51  |
| <br><b>WASTE CONTAINERS</b>                       | 7,300          | 1,300   |
| <br><b>LANDFILL MACHINERY UNITS</b>               | 18             | 2   |
| MEDICAL WASTE MANAGEMENT:   | BEFORE THE WAR | LATEST ASSESSMENT<br><small>(available equipment, not destroyed)</small>  |
| <br><b>MEDICAL WASTE COLLECTION VEHICLES</b>      | 5              | <b>1</b><br><small>(damaged, but can function)</small>  |
| <br><b>MEDICAL WASTE DISINFECTION MICROWAVES</b>  | 2              | <b>ZERO</b>   |



*Mapping of Identified Dumping Sites and Flood-Prone Areas*

**The immediate needs include access to the major landfills, fuel supply, and funding for new equipment in order to resume solid waste management activities. As part of UNDP's co-lead role in coordinating the response, including through the Solid Waste Management Taskforce, UNDP is currently providing the following localized activities which need to be urgently expanded to achieve the necessary impact in Gaza:**

- As part of the UN's winterization plan in Gaza, UNDP conducted a solid waste assessment in collaboration with UNICEF, which identified 21 temporary dumping sites out of the 141 created during the war as being located in flood-prone areas where 30,000 cubic meters need to be removed from 7 sites as first priority. These sites are at high risk of being impacted by the upcoming rainy season, potentially affecting the surrounding environment and the IDPs. The map above shows the locations of these 21 sites. In response, UNDP is focusing on removing waste from these and other temporary dumping sites, particularly in flood-prone areas and streams. The first phase has been completed with the removal of 1,000 cubic meters of waste from the Wadi Esalga stream. However, access to other critical sites remains a significant challenge.
- UNDP, in collaboration with its counterparts, is implementing two projects that currently collect an estimated 680 tons of waste per day from the area south of Wadi Gaza. Between 1 January and end of September 2024, these projects collected 160,000 tons of waste. They collect around 60% of the daily 1,100 ton/day waste generation in the south of Gaza. Through UNDP's contribution, the collected waste is being disposed of at three deconflicted dumping sites located in Khan Younis, Deir Al-Balah, and Nuseirat out of the 10 deconflicted dumping sites available across the Gaza Strip.
- UNDP is working with a contractor in Gaza that conducts regular maintenance on 20 waste collection vehicles each month, ensuring that they are operational.
- As part of its immediate response efforts, in August 2024 UNDP secured approval from COGAT for an initial 15 waste containers to enter Gaza. The containers have now been delivered to support waste management efforts on the ground, with the capacity to rapidly scale up to 100 containers to address immediate needs as soon as COGAT approval is provided, and with an eventual larger scale-up when funding and approvals are in place.
- UNDP is preparing to rent 12 pieces of heavy machinery through the private sector to transfer waste from critical temporary dumping sites near IDP shelters to more distant disposal sites. This intervention aims to mitigate public health risks associated with waste accumulation





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**The needs are far greater. UNDP and its partners need access to the major landfills, fuel supply, and funding. UNDP is calling for US\$62 million to scale up solid waste management operations to help prevent catastrophic public health impact over the next 18 months.**

While municipalities, Joint Service Councils (JSCs) and the United Nations Relief and Works Agency (UNRWA) continue to play a critical and leading role in managing waste, UNDP is committed to further scaling up ongoing efforts contributing to address the solid waste management crisis in Gaza and key challenges therein. This includes complementing ongoing efforts by engaging the private sector (e.g., rental of vehicles) to handle 25% of waste collection and transport in 2024, increasing to 50% in 2025 - thus expanding capacity of local service providers for waste collection. Specifically, UNDP's Solid Waste Management proposal builds on capability to assess, coordinate, restore and scale-up the waste management system in Gaza and address basic human needs, through four pillars:

- **Proper Waste Collection:** Rebuild the fleet of required waste collection vehicles, including spare parts, fuel supply, and the delivery of waste containers, cleaning tools and PPE for waste collection workers.
- **Controlled Disposal Sites:** Operate the dumping sites utilising rented equipment available, provide landfill machinery, rehabilitate temporary dumping sites, deliver compacting machines for baling tin cans, ensure the supply of fuel and pesticides.
- **Medical Waste Treatment:** Rehabilitate the medical waste treatment facility in South of Gaza and construct an additional medical waste treatment facility in North Gaza, provide 4 medical waste collection vehicles, deliver 2 medical waste disinfection microwaves, build 2 medical waste treatment incinerators, provide hospital autoclaves, laundries and dryer machines, cleaning materials, PPE and training for medical waste treatment workers.
- **Institutional Capacity of Service Providers:** Strengthen the capacity of institutions managing waste facilities, build the IT, HR and other critical systems, as well as increase public awareness on hazards and prevention.



**US\$62 million for 18 months**

