Waste Management

The inadequate management of chemicals and waste can pose serious threats to human health and the environment and undermine economic and social development. At greatest risk are the world’s poorest and most vulnerable people. The quantities of non-hazardous waste including municipal waste, pose serious management challenges in all developing countries. Uncontrolled burning, with resulting toxic releases, and other unsustainable waste management practices prevail in many countries.

Certain types of chemicals, by-product releases and hazardous waste can accumulate in dangerous levels in humans leading to adverse reproductive, developmental, immunological, hormonal as well as carcinogenic effects. Mothers can pass these toxic chemicals on to their children, both prenatally and through breastfeeding. Managing chemicals properly can help safeguard maternal health and the health of future generations.

On the ground, UNDP assists developing countries with waste management programmes to reduce the vulnerability of the poor to health and environmental damage from unsound management practices, integrate sound chemicals and waste management as part of the environmental agenda and into national environmental and poverty reduction planning frameworks in more than ten countries, and increase countries’ access to the best available waste management practices and technologies.

UNDP manages a number of hazardous waste streams that have been long-standing environmental liabilities with significant human health implications, such as stockpiles of hazardous waste and highly contaminated sites, as well as the disposal of consumer appliances, among other wastes.

UNDP’S WASTE MANAGEMENT PORTFOLIO AT A GLANCE

- Through funds mainly leveraged from the Global Environment Facility (GEF), UNDP’s hazardous waste portfolio is valued at almost US$ 80 million\(^1\). These projects focus on PCB containing waste, municipal waste, healthcare waste, consumer appliance waste, and obsolete pesticides.

- In partnership with Basel/PACE and Sweden, UNDP is assisting four developing countries to manage electronic waste in an environmentally sound manner.

- Responding to country demand, twenty two UNDP country offices are engaged in projects on non-hazardous waste streams in municipalities.\(^2\)

- Partnering with public, private, bilateral and multilateral donors, UNDP is supporting six countries to reduce greenhouse gases (GHG) emissions by managing stocks of unwanted ozone depleting substances (ODS).

\(^1\) Including co-financing, UNDP’s hazardous waste portfolio is valued at US$ 230m.

\(^2\) Source: UNDP financial and human resources software system (Atlas).

Obsolete Pesticides and Polychlorinated Biphenyls (PCBs)

UNDP assists countries in the development of their capacity to implement projects for the sound management and disposal of obsolete pesticides and polychlorinated biphenyls (PCBs). UNDP has pesticide waste initiatives in China, Georgia, Honduras, Nicaragua and Vietnam.

UNDP also supports sizeable Persistent Organic Pollutants (POPs) waste management programmes in Argentina, Brazil, China, Ghana, Kazakhstan, Kyrgyzstan, Latvia, Mexico, Morocco, Rwanda, Slovak Republic, Uruguay and Vietnam. There is still a substantial amount of PCBs in use in power equipment such as transformers, owing to the exemption made in many countries that allows for their contained use until end-of-life of what can be quite long-lasting equipment.
In the area of PCBs, UNDP supports partner countries in:

- Strengthening legal frameworks and improving enforcement capacity.
- Improving PCB management practices (such as handling, storage, and transport).
- Ensuring safe disposal of PCBs in collaboration with PCB-containing equipment holders.

Healthcare waste management
The health sector is a major source of dioxins and mercury in the global environment primarily as a result of rudimentary medical waste incineration practices and the breakage and improper disposal of mercury-containing devices such as thermometers and blood-pressure meters. In partnership with the World Health Organization (WHO) and other stakeholders and donors, UNDP’s healthcare waste management programme in Argentina, India, Latvia, Lebanon, Philippines, Senegal and Vietnam seeks to protect public health at the local level as well as the global environment by preventing dioxin and mercury release.

Consumer appliance and e-waste
Post-consumer appliance and electronic waste (e-waste) contain hazardous substances, but can also generate valuable resources (such as copper and gold) for recycling. In developing countries, due to the prevalence of an informal sector, recycling/waste management operations are unsafe and unsustainable, potentially exposing people to hazardous substances and risky operations. In cooperation with the Basel Convention/PACE, UNDP has assisted Burkina Faso, Jordan, El Salvador, and Serbia to survey computing equipment and propose actions on the management of e-waste.

Ozone depleting substances waste
UNDP assists countries in finding solutions to manage and dispose of ozone depleting chemicals and chemicals-related waste. Despite the huge success of the Montreal Protocol in phasing-out ozone depleting substances (ODS), a significant amount of ODS are still found in banks of refrigeration equipment and insulation foams. These substances have high global warming potential and contribute to climate change if appropriate disposal measures are not taken. UNDP is currently assisting countries to combine and sequence different sources of funds to help address ODS waste management and destruction. With funds from the Multilateral Fund for the Implementation of the Montreal Protocol (MLF), the Global Environment Facility (GEF), and private sector and bilateral donors, UNDP is implementing pilot projects in Brazil, Cuba, Colombia, Georgia, Ghana and India.

Municipal solid waste
UNDP’s programmes on sound waste management for non-hazardous municipal waste streams are decentralized to UNDP country offices and anchored in the country’s needs. The majority of UNDP’s country level activities consist of waste policy and planning support at various levels of government (including national, state, and municipal). Such policy formulation initiatives are typically coupled with regulatory strengthening measures and institutional capacity-building to ensure sustainability. Some initiatives involve private-public partnerships and the engagement of small and medium-sized enterprises in waste management.

For more information visit:
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