UN HABITAT
FOR A BETTER URBAN FUTURE

Sustainable Urbanization and Waste Management in the Developing World
持続可能な都市化と廃棄物の現状

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Urbanization

- World population growth
- World urbanization rate
- Population growth in developing countries
- Urbanization rate in developing countries
- Issues: rapid and uncontrolled population growth without proper planning, in particular in urban basic services such as waste.

More waste in cities

- The number of people living and working in cities are increasing
- The amount of waste generated per person is rising, together with increase in wealth
- The amount of waste from businesses is increasing
- The substance in waste are increasing in complexity and variety
- Total 2 billion tons in 2006 to estimated 5.9 billion tons in 2025

Issues of waste management in rapidly growing cities

- Public health – six times as higher acute respiratory infections and diarrhea in areas with no regular waste collection
- Environment protection – severe affect to eco systems
- Resource management (lack of resources and knowledge including financing and 3R: reduce, reuse, recycling)

Achieving MDGs through Sustainable Waste Management

MDGs	Achieving MDGs through improved sustainable waste management
1. Eradicate extreme poverty and hunger	Informal-sector self-employment in waste collection and recycling currently provides sustainable livelihoods to millions of people who would otherwise have no stable source of income and would be most susceptible to extreme poverty and hunger. City authorities can both promote recycling and create more opportunities for the informal sector to provide waste collection services in unserved areas and thereby help eradicate extreme poverty and hunger.
2. Achieve universal primary education	Waste management activities contribute indirectly to education through income generated by the parents. Many waste-pickers earn sufficient income to send their children to school and do so with pride. The poorest waste-pickers do engage their children for picking and sorting waste; but in instances where NGOs are involved, classes are organized for these children, after their working hours, and parents are informed about the need and the benefits of primary education.
3. Promote gender equality and empower women	A substantial percentage of informal-sector waste collectors and waste-pickers are women. Efforts to improve solid waste management services and enhanced recycling can include improvement and equal working conditions for men and women by creating financial and other arrangements that build capacity and empower women.
4. Reduce child mortality	Effective solid waste collection and environmentally sound disposal practices are basic public health protection strategies. Children living in households without an effective waste collection service suffer significantly higher rates of, for example, diarrhoea and acute respiratory infections, which are among the main causes of childhood deaths. Cooperation with informal-sector waste collectors and recyclers will improve their livelihoods and reduce child labour and, hence, direct contact of children with the wastes.
5. Improve maternal health	Almost all women waste-pickers have no maternal healthcare available to them. Enhanced recycling may directly/indirectly improve maternal health through achieving improved living standards among households engaged in the sector.
6. Combat HIV/AIDS, malaria and other diseases	Originally, municipal waste management activities started due to public health concerns. The reasons are almost self-evident: uncollected waste clogs drains, causes flooding and provides breeding and feeding grounds for mosquitoes, flies and rodents, which cause diarrhoea, malaria, and various infectious and parasitic diseases. Mixing healthcare wastes with municipal solid waste and its uncontrolled collection and disposal can result in various infections, including hepatitis and HIV. Reliable and regular waste collection will reduce access of animals to waste and potential for clogging of drains. Proper waste management measures can practically eliminate risks associated with healthcare waste.
7. Ensure environmental sustainability	Few activities confront people with their attitudes and practices regarding sustainability as waste management does. Reduce, reuse, recycle is yet to realize its full potential as a guiding principle for environmental sustainability through conservation of natural resources and energy savings, as well as through reduction of greenhouse gases (GHGs) and other emissions.
8. Develop a global partnership for development	Through cooperation and exchange, developed and developing countries can develop and implement strategies for municipal services and job creation where unemployed youth will find decent and productive work and lead a dignified and good life.

2030 Agenda for Sustainable Development Goals

Goal 1. End poverty in all its forms everywhere

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts*

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development