

Water for Asian Cities Programme

A UN-HABITAT Programme in Collaboration with ADB and the
Governments of Participating Countries in Asia

Expert Group Meeting on “Water, Sanitation and Waste”

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Presentation on Waste Management
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Business as Usual Waste Generation in Asia

Municipal solid waste generation amount per person per day and future predictions



Source: the Secretariat of the Basel Convention

Developing Asian Countries

Key Trends in Asian developing countries:

- Rapid economic growth (China & India)
- Accounts for more than 60% of the world's human population
- Increasing quantity of solid waste

In 2002, China generated about 945 Million tones of Industrial Solid Waste, while 136.5 Million tons of MSW (MSW data according to what is collected from urban centers)

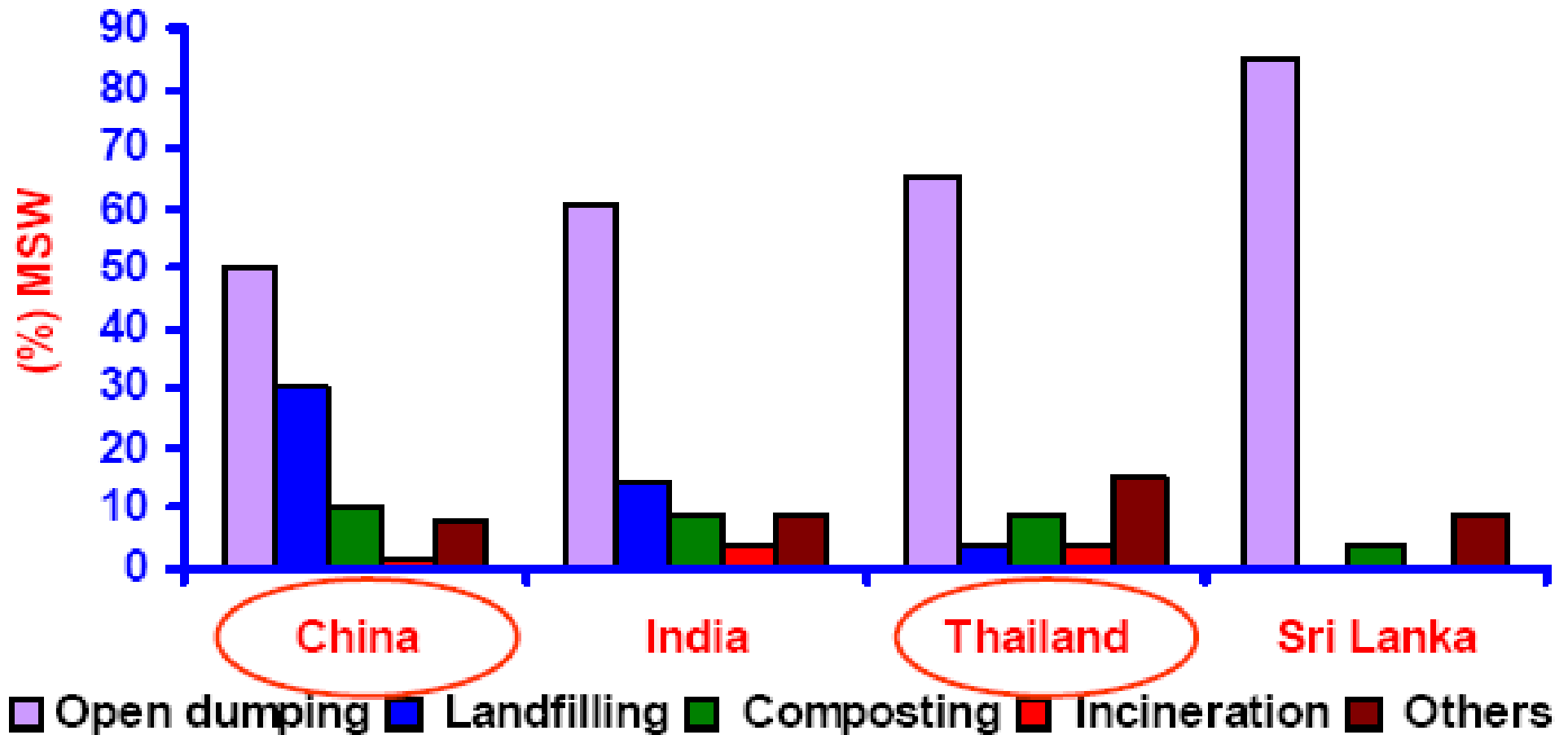
- Diversification in solid waste
- Trans-boundary movement of 3Rs-related goods, materials and products
- Weak legislation/ implementation

Urban residues

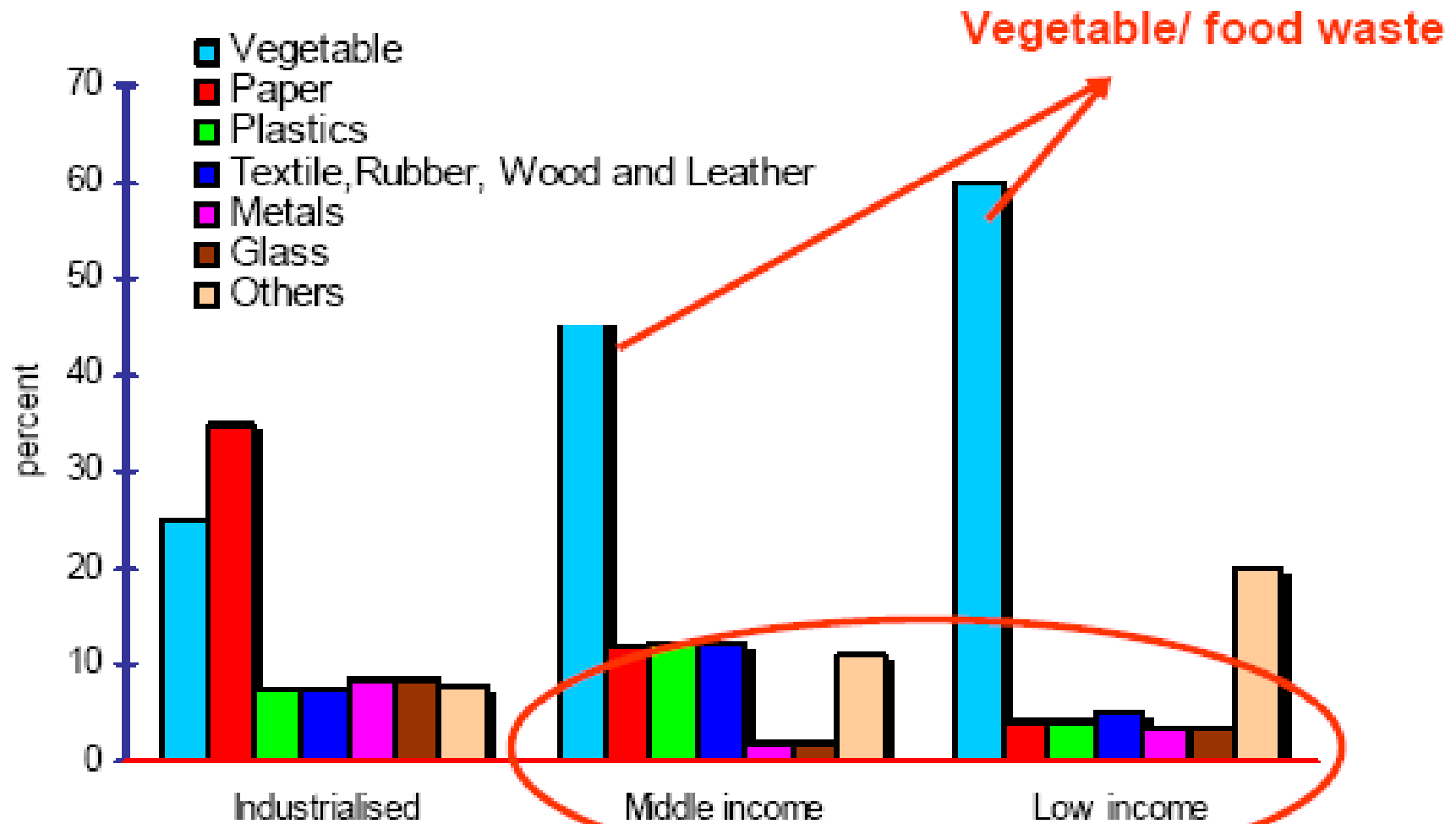


- Between one and two thirds of the solid waste generated is not collected.
- Polluting water courses
- Attracting scavengers

MSW Disposal Methods Practiced in some Asian Countries



Waste composition: Domination of Organic Waste

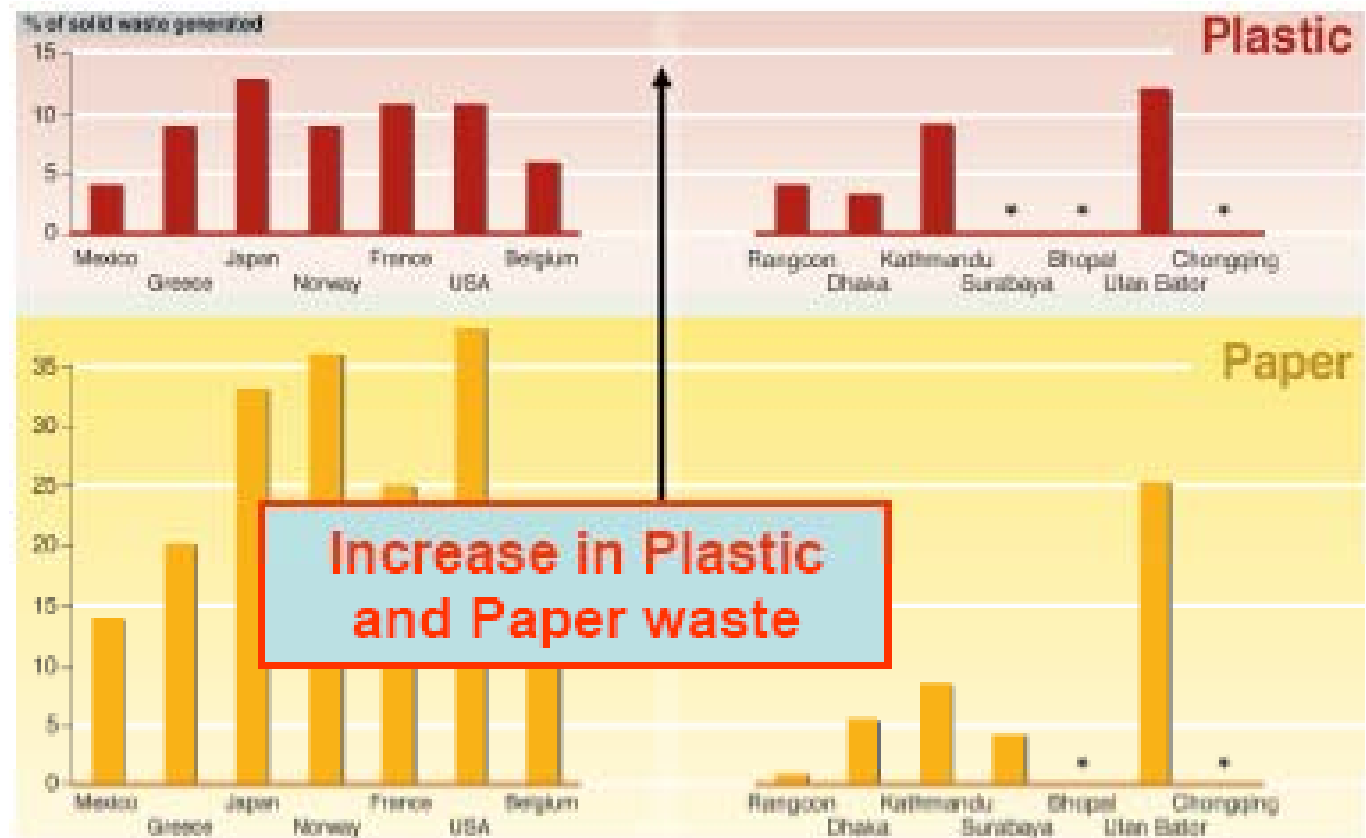


Comparison of organic and inorganic components in the MSW of high, middle, and low-income countries

Emerging Municipal Waste Problems in Developing Asian regions

Non-biodegradable fractions of waste

- Packaging waste/ paper carton
- Plastic carry bags
- E-waste



Common Mode of Resource Recovery and Recycling



Popular Concepts: Waste Reduction

Product stewardship:

- Multi-stakeholder approach: manufacturer to end users

Extended Producer Responsibility (EPR):

- producer-pay principal
- higher cost price of the product (recycling charge included)

Local governments need to provide support either through

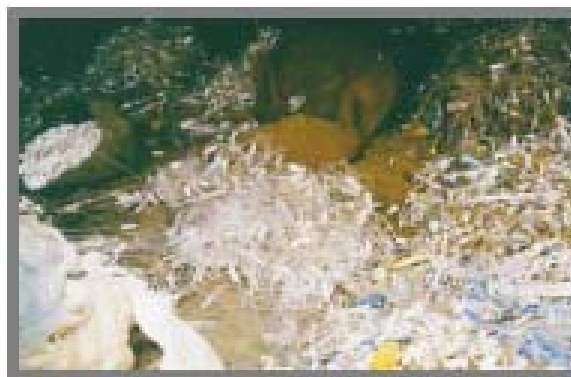
- Subsidies
- Tax incentives

to help the manufacturers for recycling cost

Immediate actions required! Health Care (Medical) Waste

Prevailing Disposal Options:

- Municipal dumpsites/ Junk dealers!
- (Inefficient - Incineration technology)



Innovative Business model for waste management

- Framework for a policy on waste management
 - Waste is resource
 - Waste has energy
 - Waste brings revenue
 - Waste reduction means cost and energy savings
- Introduce 3R (Reduce, Reuse, Recycle)
- Public-Private Partnership options for implementing 3R (Reduce, Reuse, Recycle)

The way forward...

- **Vision for municipal waste management**
 - role of the stakeholders (national and local governments, private sector, local community)
 - Financing modalities
 - Environmental targets
- **Accelerate 3R (Reduce, Reuse, Recycle) within developing countries**
 - Role of multilateral institutions/ developed countries
 - Financing, technology transfer, Pilot projects, and scaling up pilot initiatives

EVERYTHING IS RECYCLABLE,



EXCEPT TIME

IT IS TIME TO ACT NOW

UN  **HABITAT**
FOR A BETTER URBAN FUTURE

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**Thanks for your
Attention. . . .**