

## An Overview of Official Development Finance in Solid Waste Management

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# Introduction



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# Development co-operation in waste

## Think globally, act locally...



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# What is development co-operation?



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Activities undertaken involving national donors, their agencies and development banks to achieve development objectives (i.e. improving the economic and social welfare of the world's poorest).

It includes:

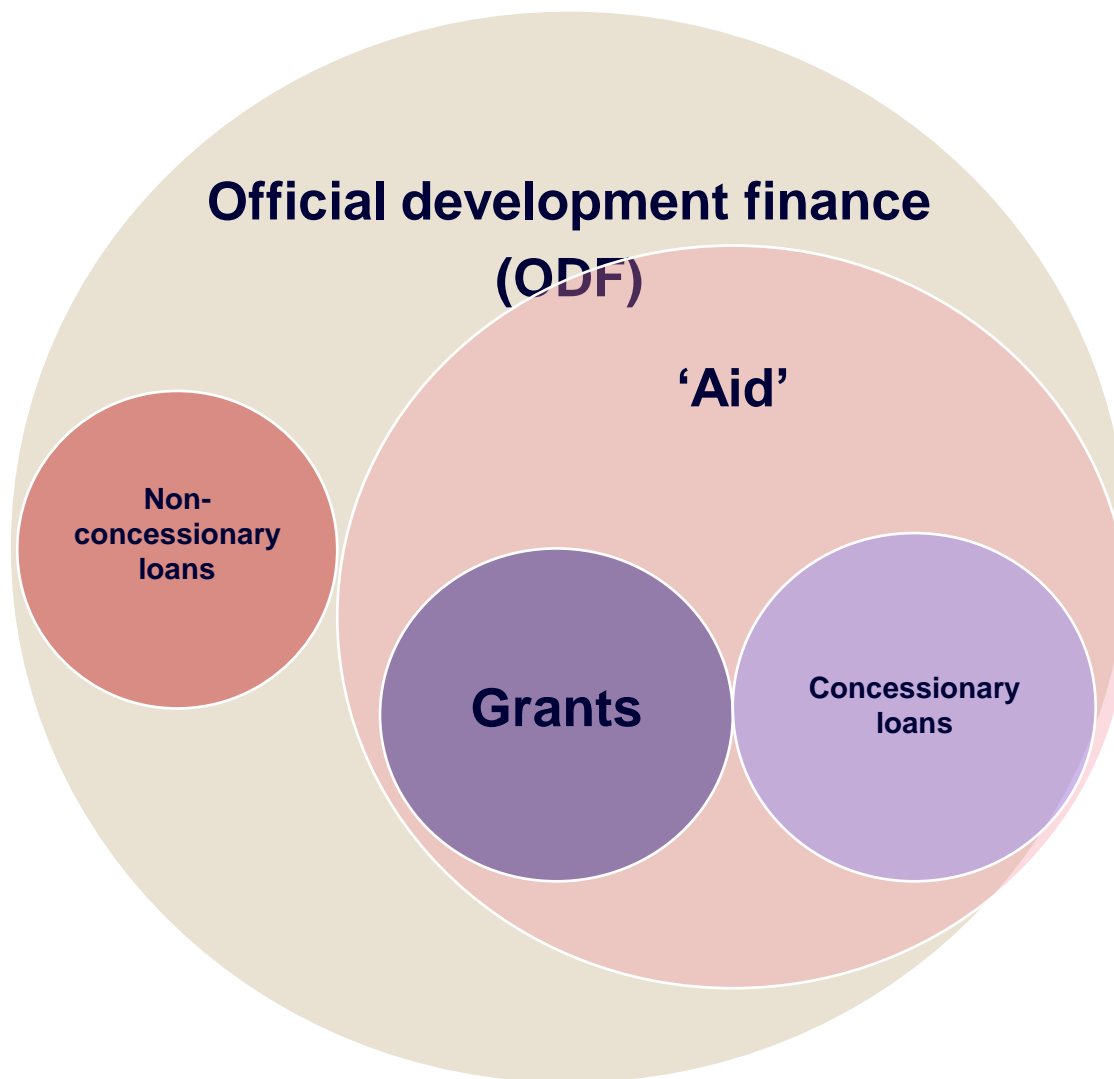
- Provision of grants and loans
- Technical assistance
- Equipment and other supplies
- Debt relief
- Emergency relief



# Measuring development co-operation using Official Development Finance flows



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# The Millennium Development Goals 2015



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Eradicate extreme poverty and hunger

Achieve universal primary education

Promote gender equality and empower women

Reduce child mortality

Improve maternal health

Combat HIV/AIDS, malaria and other diseases

Ensure environmental sustainability

Global partnership for development

Green  
jobs

GHG  
mitigation

Informal  
sector

Spreads  
disease

Local  
env  
quality

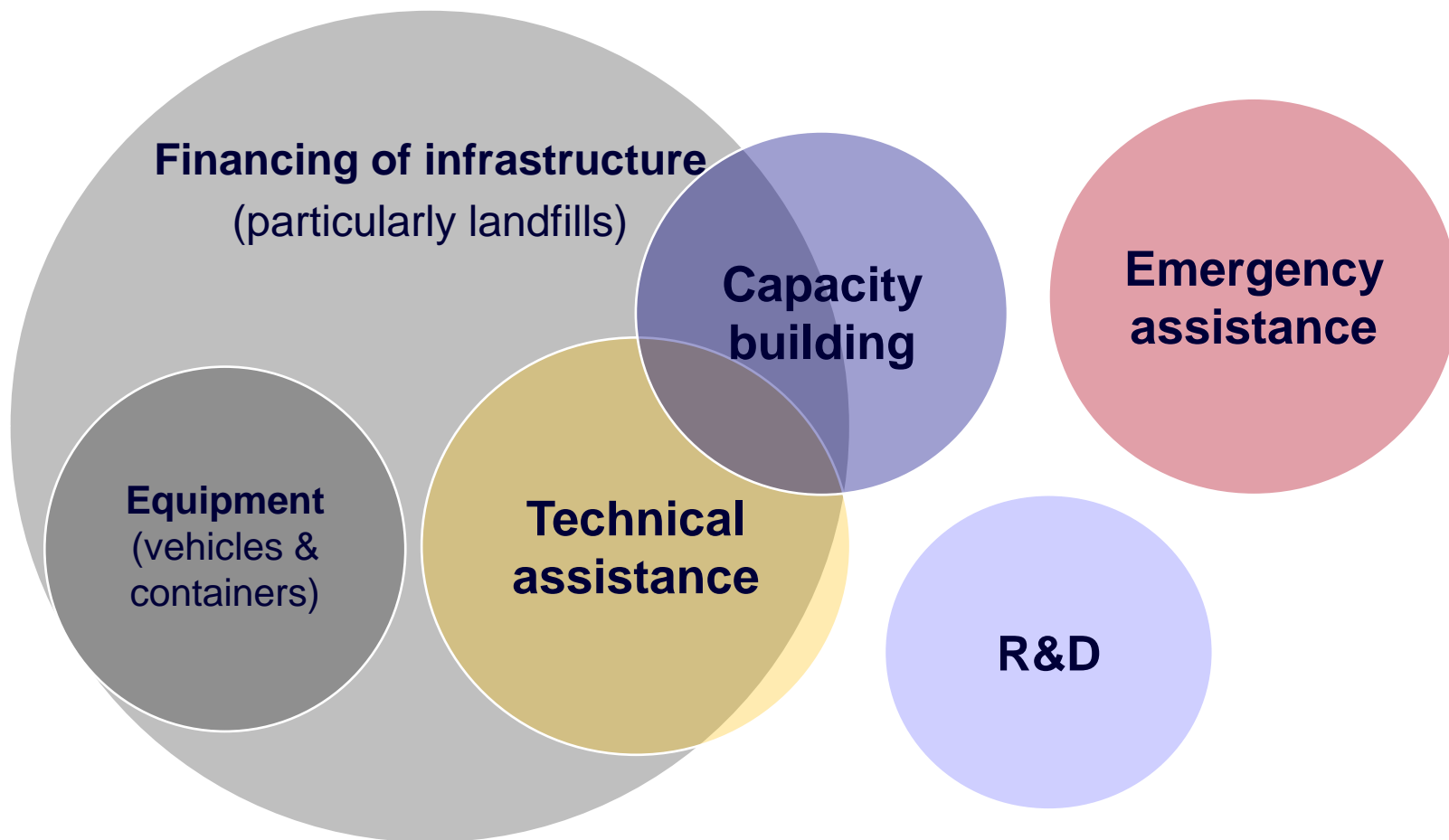
GHGs

Expected to be replaced by the Sustainable Development Goals

# What has development co-operation in the waste sector achieved?



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# How much development co-operation is there in the waste sector?



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- Limited data at sectoral level in development co-operation
- The most comprehensive is maintained by the OECD's Development Assistance Committee data which is extensive but has some problems and limitations:
  - Incorrect classifications
  - Waste projects part of cross-sector projects
  - Doesn't cover all non DAC members and development-related finance from private sources, particularly philanthropic sources
- Our approach: built a database of over 4,000 development assistance projects and assessed the relevance of each to the waste sector



# How much official development finance is spent on waste issues (1)?



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**Solid waste management:**  
**510M USD in 2012**  
or  
**\$0.09 per capita**



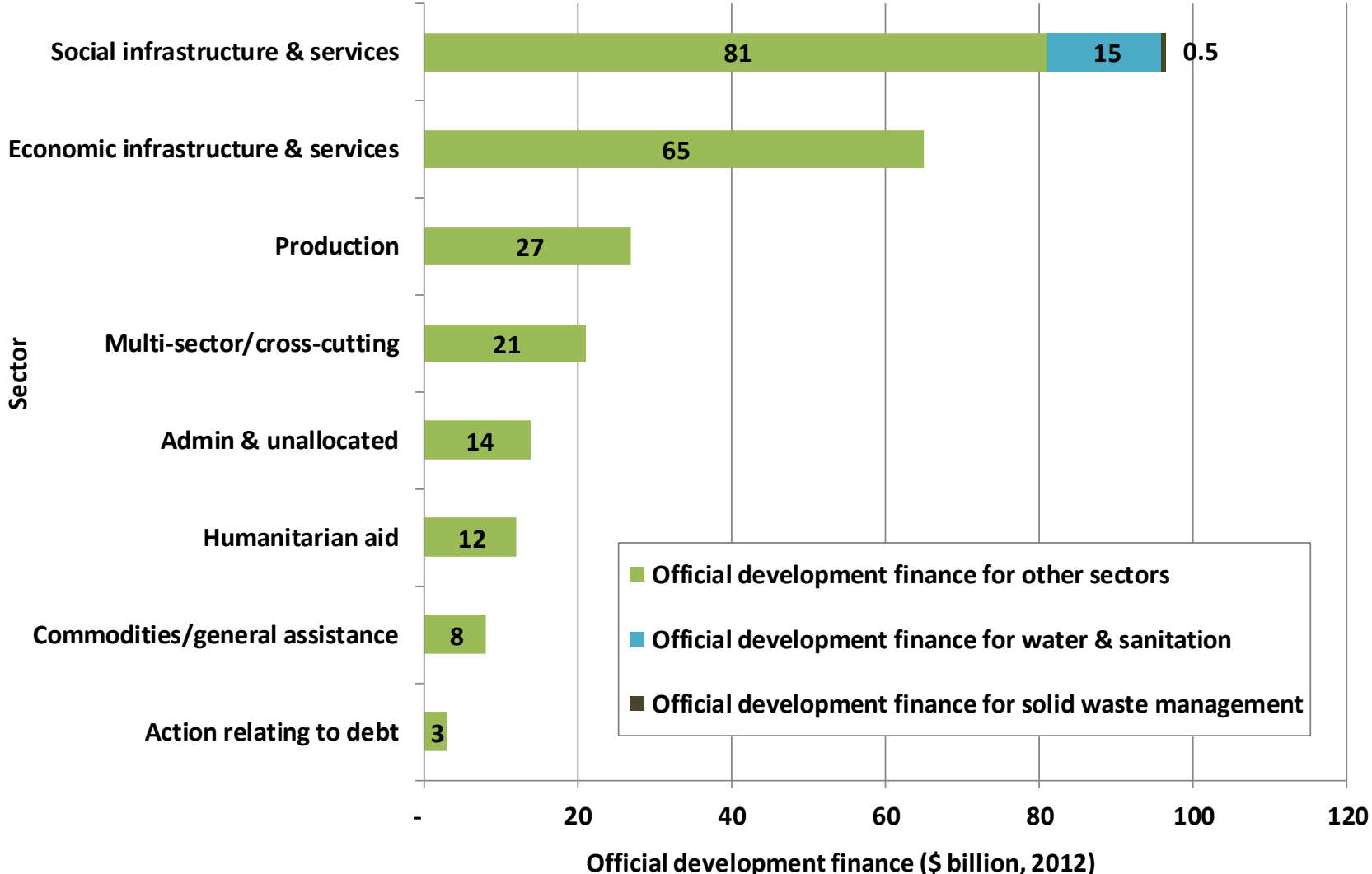
**Water & sanitation:**  
**15 billion USD in 2012**  
or  
**\$2.43 per capita**



**All ODF:**  
**230 billion USD in 2012**  
or  
**\$31 per capita**



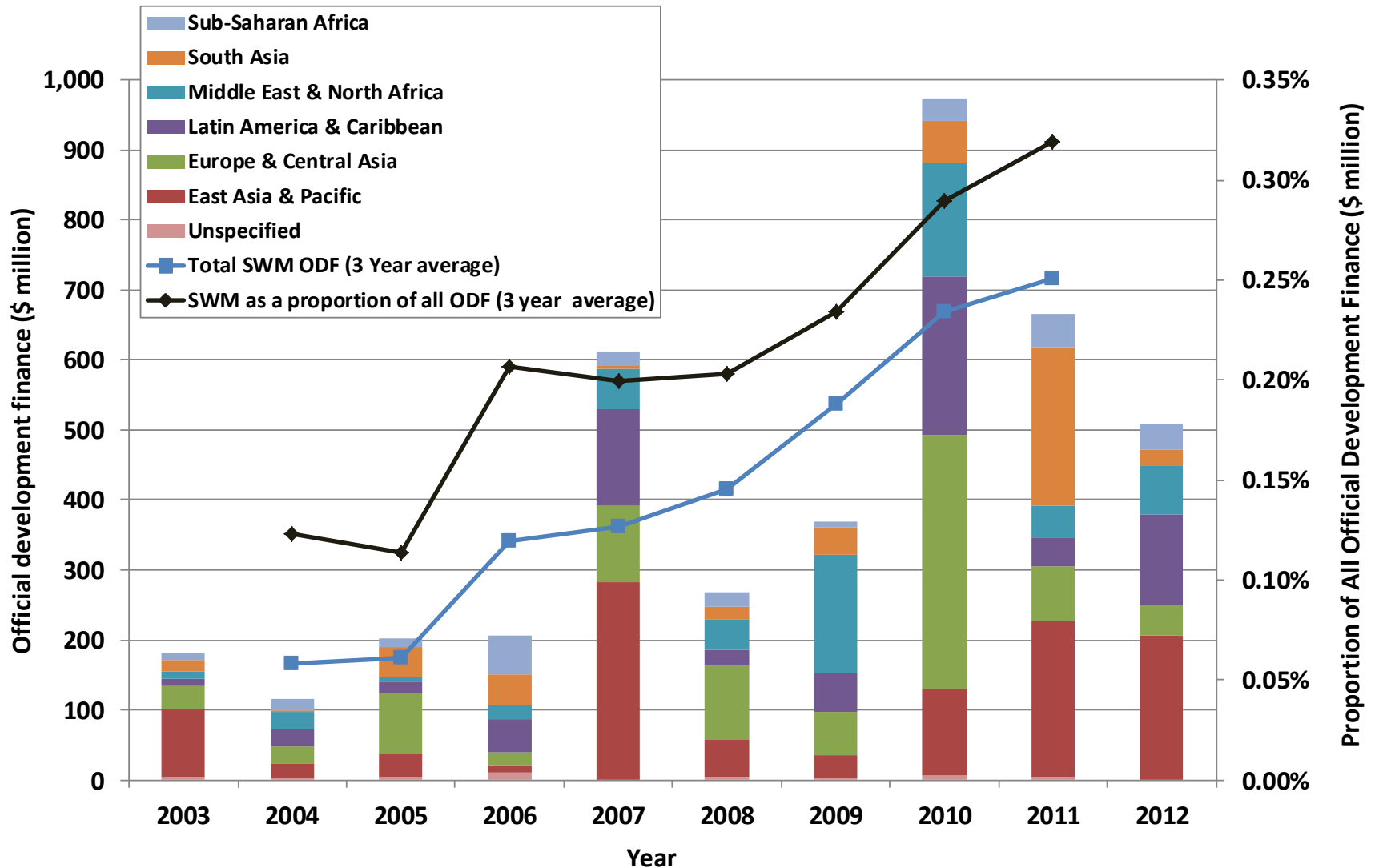
# How much official development finance is spent on waste issues (2)?



# How much official development finance is spent on waste issues (3)?



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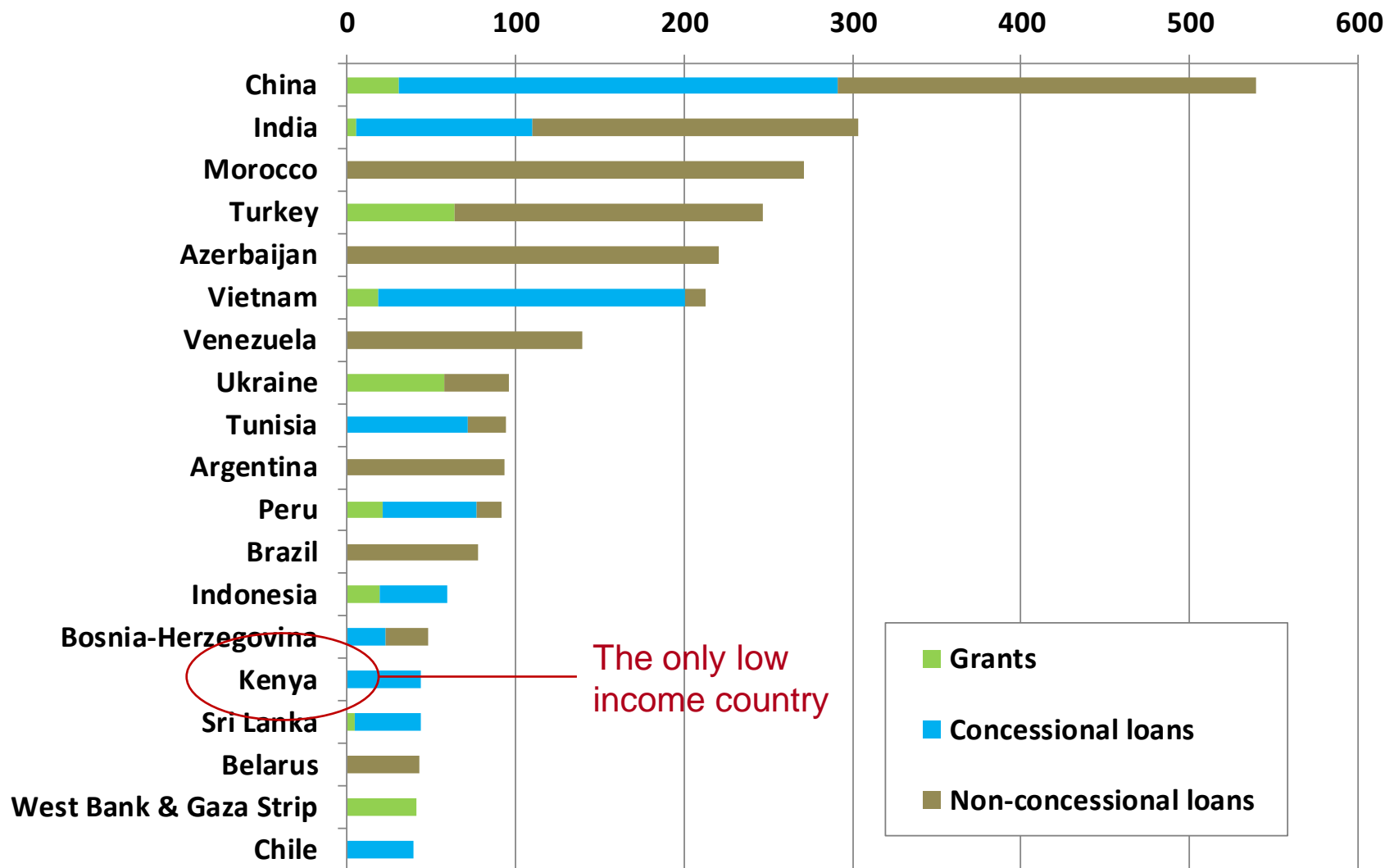


# Which countries receive ODF on waste management (1)?



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SWM Official development finance (Million USD, 2003-12, loans and grants over \$4M)



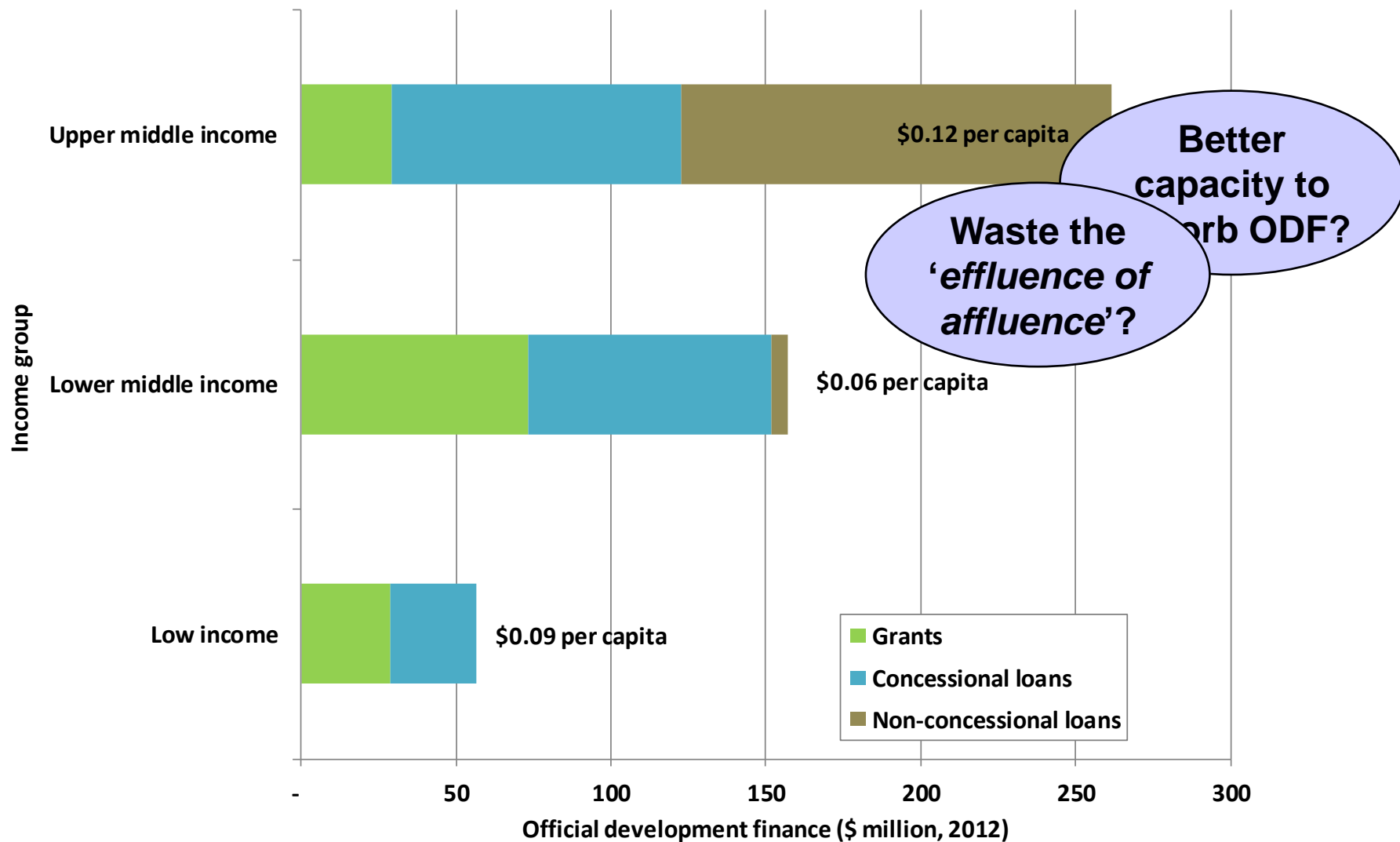




# Which countries receive ODF on waste management (3)?



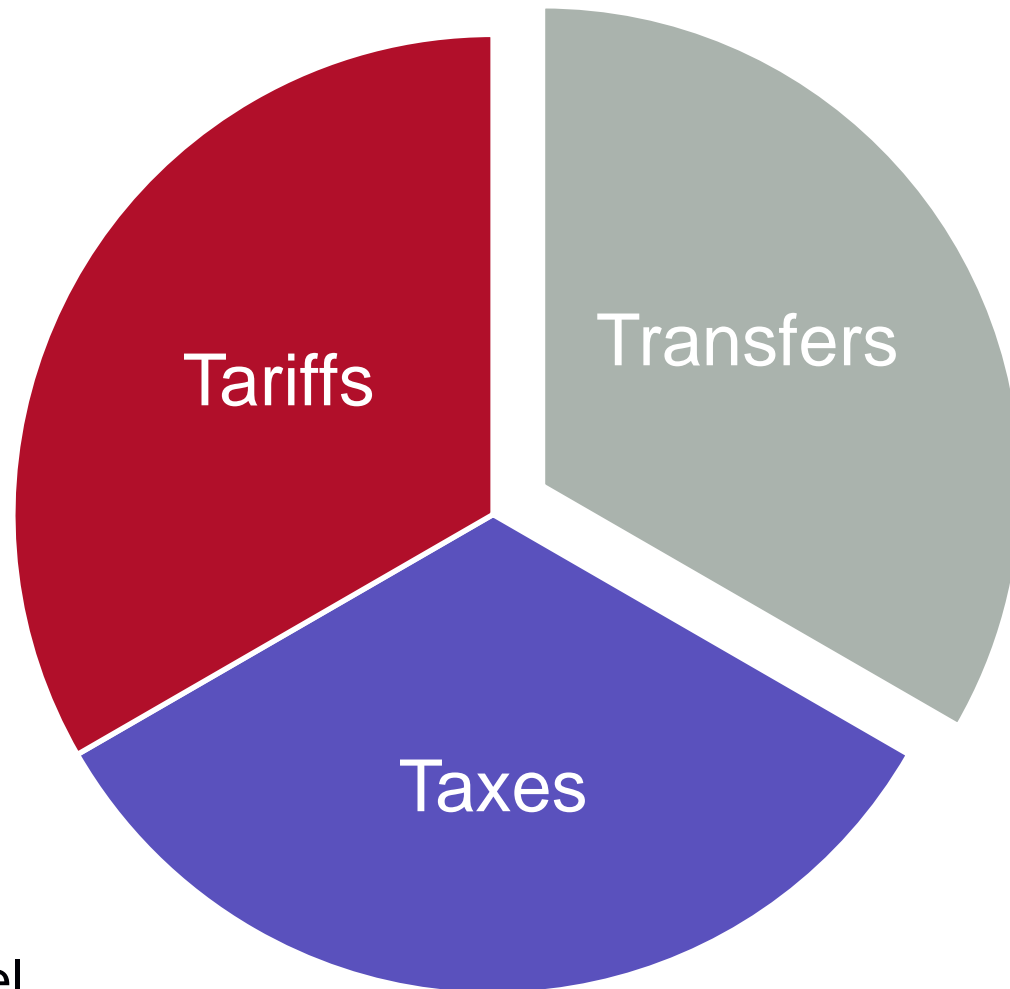
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# Financing waste management sustainably



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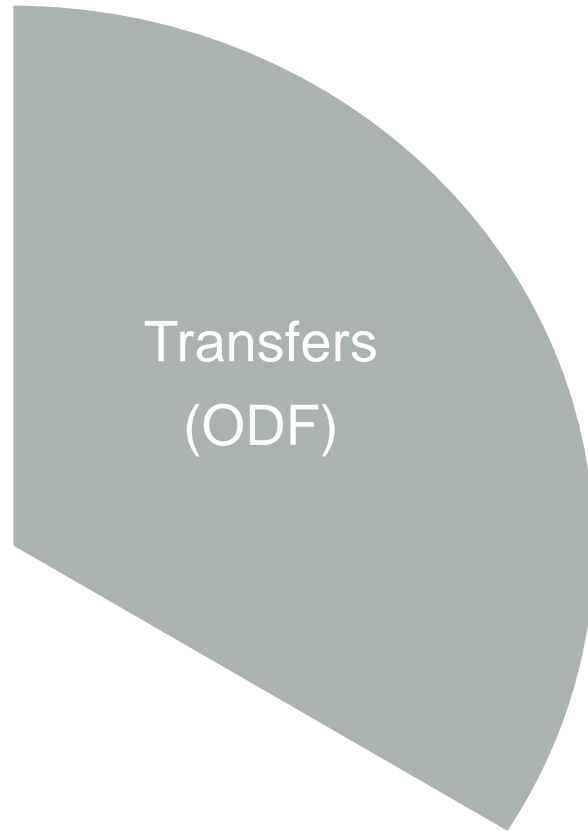


The '3Ts' model  
(GLAAS 2012)

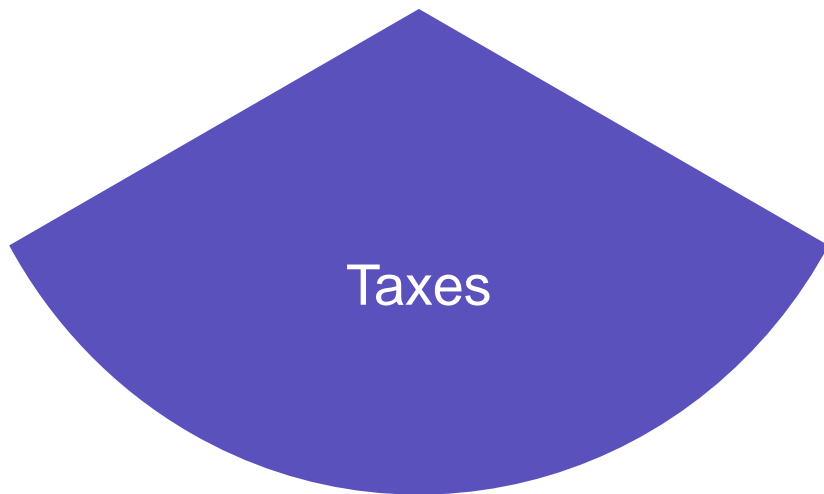
# Transfers (Official development finance)



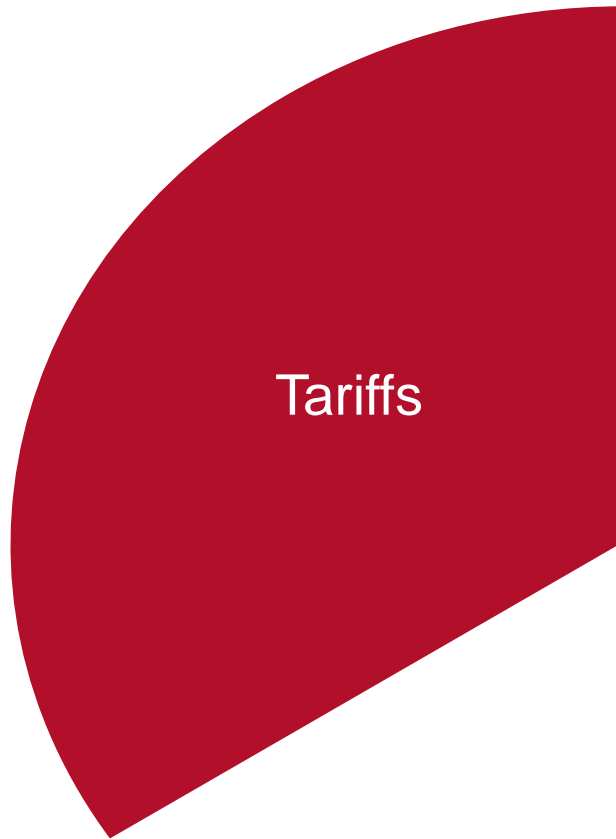
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- Different contexts will require different forms of ODF
- Grant funding for emergency situations and contexts with minimal waste management infrastructure
- Loans for contexts requiring capital investment



- Requires a 'willingness to pay'
- Good institutions and governance needed for tax collection to support waste management



## User fees

- Requires a 'willingness to pay' to be established
- Combine with electricity or water bills
- ...'pay as you throw'?



# Collection costs vs disposal costs



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Income	Costs
Low	Collection costs 80-90% of municipality budget. Small proportion allocated to disposal.
Middle	Collection costs 50-80% of municipality budget. Mechanised collection fleet Larger proportion allocated to disposal.
High	Collection costs represent less than 10% of municipality budget. Collection costs optimised. Majority of cost on treatment and disposal.

World Bank (2012)

# Waste management costs



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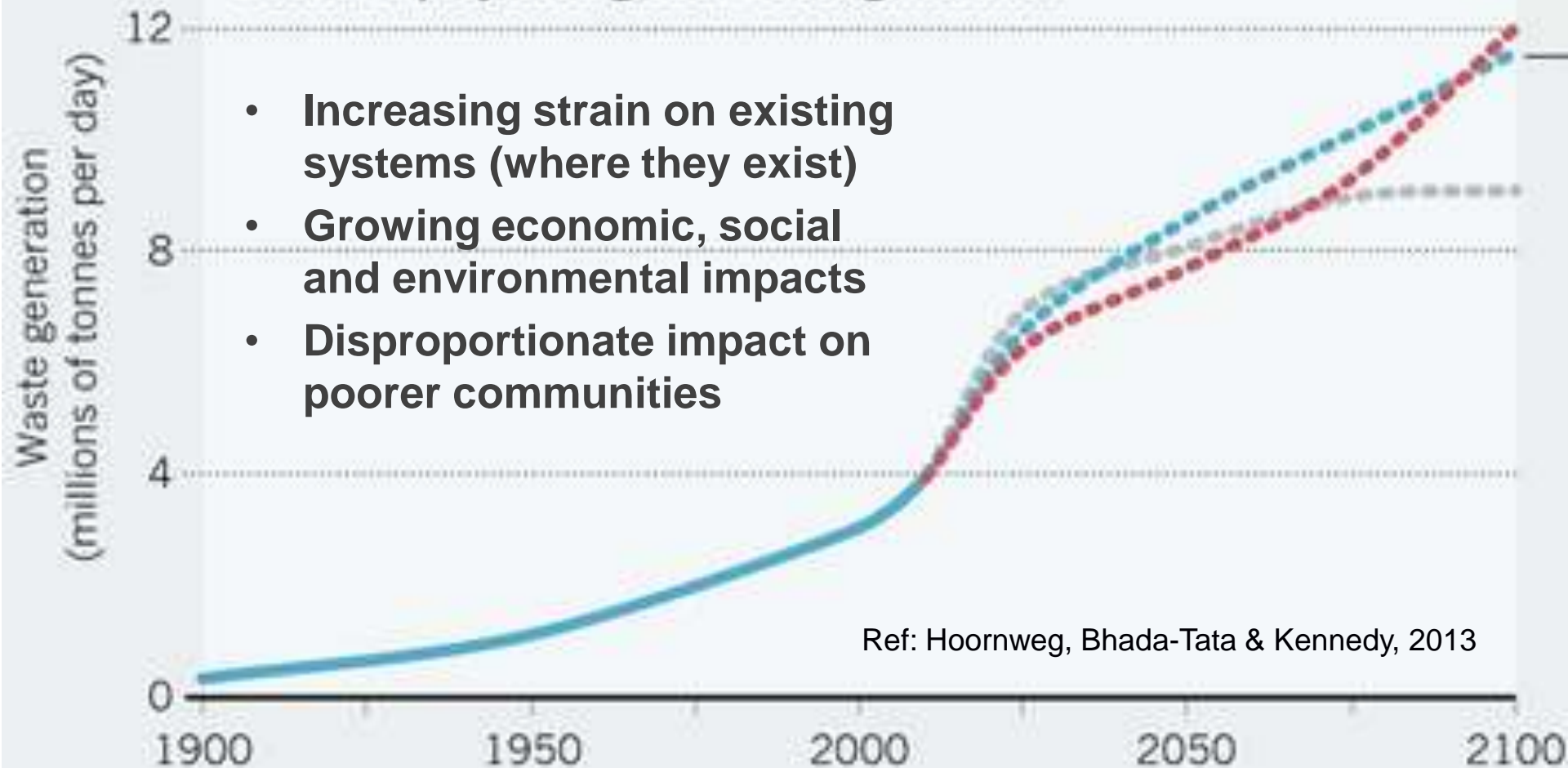
	Low income (USD/t)	Lower Middle income (USD/t)	Upper middle income (USD/t)	High Income (USD/t)
Collection	20-50	30-75	40-90	85-250
Sanitary landfill	10-30	15-40	25-65	40-100
Open dumping	2-8	3-10	NA	NA
Composting	5-30	10-40	20-75	35-90
Waste-to-energy	NA	40-100	60-150	70-200
Anaerobic digestion	NA	20-80	50-100	65-100

World Bank (2012)

# Peak waste...



Past and projected global waste generation



# To conclude (1):



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Investment in the sector is likely to need to increase significantly:

- Estimated cost of SWM globally: \$205 billion
- **Expected to increase to \$376 billion by 2025**



## To conclude (2):



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- We need to a better understanding of the costs and benefits of waste management systems, including the external costs and benefits.
  - This is needed to make the case to support action on waste and resource management





## To conclude (3):



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Capacity building is critical to ensure the skills and capacity to develop and sustain good waste and resource management.

- Supporting training programmes
- Exchanging experiences and information
- An on-going process of building and maintaining skills.



# Obrigado. Thank you for listening



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