

Challenges of municipal solid waste management in South Asia: Learning from post-crisis governance initiatives



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Proposed project

- Submitted to the R4D (Swiss Programme for Research on Global Issues for Development) by SNSF and SDC
 - Scientific Research <-> Practical Relevance
- Inter- and trans-disciplinary team
 - Disciplines: Geography, political science, sociology, development studies, engineering
 - Academic co-investigators from IIT-Bombay, NCCR-Kathmandu, University of Colombo, EAWAG, UNIL
 - Non-academic partners (NGOs): CED-Trivandrum, CIUD-Kathmandu, Janathakshan-Colombo

Starting point

“The problem (of MSWM) cannot be reduced to technological, formal-institutional and financial issues... MSWM is not only a ‘global challenge for engineers’ (Jayasinghe 2013) but ... also necessitates an understanding of a diversity of political and sociocultural factors that affect waste management at various stages.”

Sociocultural factors

- E.g., India: influence of (Hindu) ideas of purity

- Aversion to touching waste («impure»)

- Caste/community dimension: Waste work delegated to low castes and Muslim communities
- Social class dimension: waste segregation at source deficient particularly in higher income households
- Gender dimension: waste segregation at source, bringing waste to collection points considered women’s work (unpaid household labor, domestic labor)



Source: «Citizen Matters»
(urban news magazine from Bangalore)

Political factors



- Disincentives
 - Forcing people to segregate waste at source can be politically unpopular
 - NIMBY-type opposition
- Incentives
 - Image of cleanliness (city clean-up drives just before elections to gain political capital)
 - Pressure from higher-level bureaucracy
 - Garbage strikes

Specific research questions

- How to encourage households to segregate waste at source?
- How to motivate political stakeholders to adopt environmentally friendly SWM?

[Overall project goals]

To render the material waste chain more local and circular
(environmental friendly SWM)



To strengthen horizontal and downwards accountabilities of SWM
(participatory SWM)

[SDGs in R4D proposal guidelines]

- Explain ... which nexus/trade-offs of the Agenda 2030 for Sustainable Development will be addressed.
- Detail which multi-sectoral interactions within the 2030 Agenda will be looked at through the research project.

Links of local-circular and participatory SWM to SDGs

- 11: Sustainable cities and communities
 - 11.6: reducing environmental impact of cities
- 12: Responsible consumption and production
 - 12.4: environmentally sound management of all wastes
 - 12.5: reduce waste generation through prevention, reduction, recycling and reuse
- 13: Climate change
 - Reduce methane emissions from unmanaged landfills (no specific SDG target)
 - 6.3: improve water quality by eliminating dumping amongst other things
- 6: Clean water and sanitation
- 3: Good health and well-being
 - 3.9: reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 8: Decent work...
 - 8.8: promote safe working environments, particularly for those in precarious employment
- 5: Gender equality
 - Recognize and value unpaid ... domestic work through ... the promotion of shared responsibility within the household
- 17: Partnerships for the goals
 - 17.9: Capacity building through N-S, S-S and triangular cooperation

Links to SDG 11

SDG 11: make cities and human settlements inclusive, safe, resilient and sustainable

- Inclusion/exclusion
- Safety
- Resilience
- Sustainability

Research project

- Environmental justice (e.g., reducing waste and hazards at centralized dumpsites; dealing with wastes locally)
- Spatial justice (e.g., improving access to garbage collection for poorer neighbourhoods / households)
- Livelihoods (integration of informal workers in improved SWM systems)
- Gender sensitivity (avoiding increased work burden on women and girls)
- «Capacity building» → mutual learning from local experiences
- Attention to political processes, including conflictual ones



Thank you