



## From plan to action: assessing integration and evolution of solid waste management policies in Kenya

Kenya has developed various policy frameworks to guide the management of solid waste. However, their focus on environment dominates over health outcomes, and major gaps exist in stipulating clear policy strategies and implementation mechanisms.

This study examined the extent to which current solid waste management policies in Kenya are integrated and how they address health outcomes. We looked at policy priorities and strategies on solid waste management since independence and policy integration across various issues and sectors.

Analysis of the policy landscape indicated that solid waste management policies in Kenya have evolved to more specificity in terms of focus, functions and scope. There is a huge shift from focusing on criminalising offences to promoting good practices; from generic acts of parliament to specific ones, and from centralised mandates to more decentralised responsibilities. However, explicit articulation of policy strategies and implementation mechanisms is inadequate.

Kenya's cities are growing rapidly, and so is the increase in waste generation. The current amount of waste generated in Kenya (about four million tonnes a year) is expected to double by 2030. In the capital, Nairobi, most solid waste is not well managed. It is estimated that about half of solid waste generated (1,500 tonnes a day) is not collected.

Improper solid waste management (collection, transfer, treatment, recycling, resource recovery and disposal of solid waste) has been linked to a wide range of risks including a stall in economic development, negative health outcomes, environmental degradation, and impacts on livelihoods.

We reviewed six sources of solid waste management policies in Kenya:

1. External policies (global and regional policies) endorsed by the country (eg The Declaration of the United Nations Conference on the Human Environment).
2. National laws that provide broad provisions (eg The Constitution of Kenya 2014).
3. Integrated policies that address many environmental issues (eg The Environmental Management and Coordination Act 1999, National Environmental Policy 2013).
4. Sector-specific acts (eg Public Health Act 1986, Factories Act 1987).
5. Issue-specific regulations (eg Water Quality Regulations 2006, Waste Management Regulation 2006).
6. Solid waste management (stand-alone) policies (eg National SWM Strategy 2014).

### Policy Pointers

- Clear coordination mechanisms are needed for solid waste management (SWM) policy making, implementation and evaluation.
- Enhanced capacity building of key actors in the government sector (infrastructural, financial and human resources) is crucial for successful implementation of the policies.
- Health rather than environmental outcomes should be at the heart of SWM policy frameworks.
- Policy interventions need to move from solely focusing on collection, transportation and disposal to include recycling and re-use, which could be a source of jobs and industry.

In recent decades, the Kenyan government has enacted a number of policy and legal frameworks to address the problem of solid waste management (SWM). It has also created institutions and systems at different levels of governance. However, effective, coordinated implementation of these policies remains a challenge. This is due to a dominant focus on environment over health outcomes, as well as a lack of explicit articulation of policy strategies and inadequate implementation mechanisms.

To explore the evolution and integration of these policies, we examined the levels of integration within and among SWM policy frameworks in Kenya, particularly as they addressed associated health challenges among vulnerable populations in urban areas. We also examined the gaps and overlaps among key SWM policies. This study also identified strategies that would improve synergy and maximise efficiency in the implementation of SWM policies in Kenya.

The main data sources for this study were national and sub-national SWM policy documents and policy reviews.

### Key findings

In the last two decades, there has been expansion in the breadth and depth of SWM policy frameworks. Kenya has approximately 77 statutes that relate to environmental concerns with the evolution of SWM policy frameworks beginning in the 1960s. The first policy text relevant to solid waste management in Kenya was the one in the penal code of 1948 that makes it an offence for anyone to voluntarily vitiate the atmosphere in any place, to make it noxious

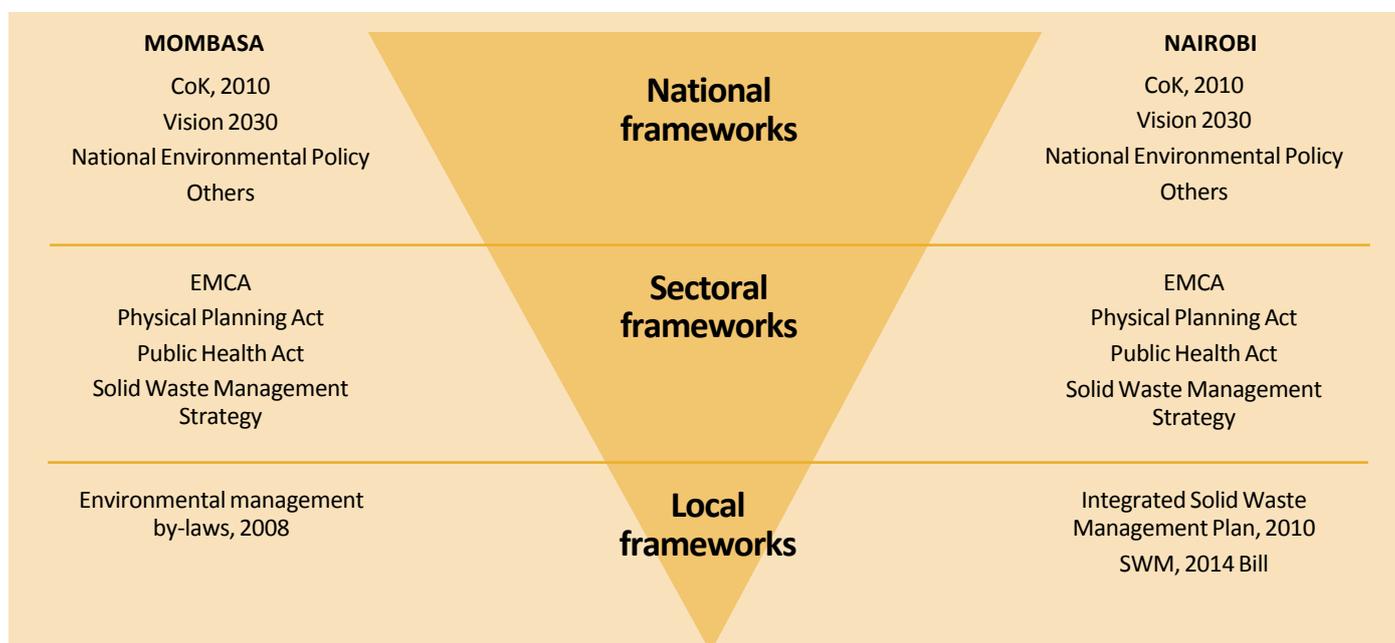
to the health of persons in general dwelling or carrying on business in the neighbourhood or passing along a public way (in Section 192); and to corrupt or foul the water of any public spring or reservoir, to render it less fit for the purpose for which it is ordinarily used (in Section 191) (6).

The Environmental Management and Coordination Act 1999 (EMCA) was enacted to provide a structured approach to environmental management in Kenya. It laid the foundation for the development of other policies and strategies relevant to the environment and health of a population. Once the EMCA was enforced, the environmental provisions within the sectoral laws were reinforced to better manage Kenya’s deteriorating environment.

However, the emphasis has been on environmental issues to the exclusion of health concerns. Several theme-specific regulations were developed and enacted following the endorsement of EMCA, eg Water Quality Regulations and the Environmental Impact Assessment Regulation. Although each of these has a component relevant to SWM, protection of the environment was their primary focus. The promotion of health and prevention of disease did not receive direct attention in these regulations.

The devolution of national level SWM policy frameworks to counties has been weak. For example, in Nairobi County, although SWM by-laws, plans and bills are in place, enforcement and implementation are weak. But in Mombasa County, SWM interventions rely heavily on national-level policy frameworks and a few SWM by-laws were developed several years ago. While

**Figure 1: Hierarchy of SWM policy frameworks in Kenya**



the national-level policy frameworks could be relevant to the overall guidance of SWM in the country, their devolution to county-level policy frameworks demonstrates internalisation and streamlining of the national policies into county-level governance and administration systems. County authorities should focus on effective implementation of local-level SWM policies to avert the deficiencies in SWM in urban centres.

The first form of segmentation of SWM was to streamline SWM into specific sectors through functional acts. For example, the Factories Act 1987 addresses the generation and disposal of waste in factories. The second form of segmentation was into specific issues. For example, the Hazardous Substances Regulation 2007 focuses on the disposal of hazardous wastes.

Segmentation of SWM policies into sector-specific and issue-specific functions has resulted in weak linkages between policies, compounding the deficiencies in implementation. Issue-specific policies are applicable across sectors and sector-specific policies focus on the sector-wide processes. Despite this, segmentation does not provide guidance on how the two realms work together.

National level policies aspire to zero waste, but studies have revealed that the problem of SWM is significant in many urban areas of Kenya. In coastal towns, even though legislation is in place, enforcement and compliance remain limited at best.

The roles of various stakeholders and actors in SWM are clearly defined in the policy

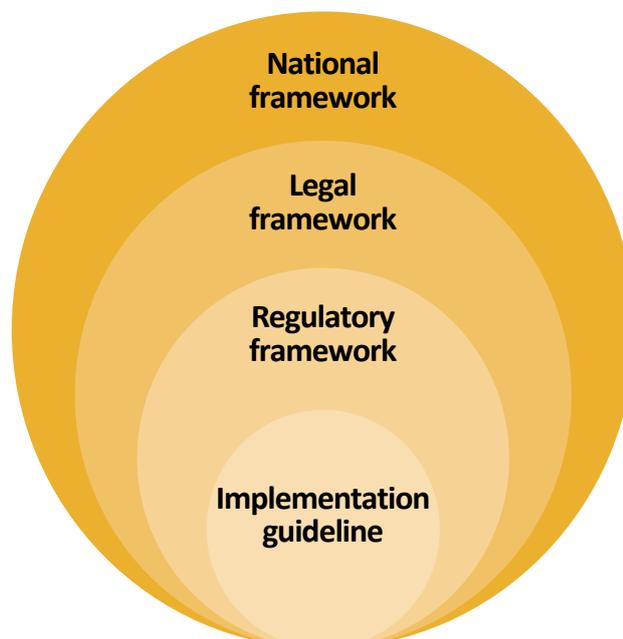
*“Solid waste management practices need to adopt an integrated approach between the different stages and the various stakeholders.”*

frameworks, but poorly operationalised; coordination mechanisms are not well stated in the policy guidelines. The model of public-private partnership is also not clear from the reviewed policy frameworks. Policy-making processes driven by government are top-down approaches with limited participation from various stakeholders from the private sector, communities, and those whose livelihoods depend on poor SWM.

Another missing link between policy and practice is that SWM policies and their implementation mechanisms do not take into account the ever-changing dynamics of solid waste management. Policies are not substantiated, reiterated, or reviewed with evidence of what works and what does not. There is also insufficient institutional capacity and resources to streamline and enforce the implementation of recommended SWM procedures and practices.

The overall evolution of SWM policy architecture in Kenya looks well informed by the global policy dynamics in environment and waste management. However, apart from linkages through closeness and time of development and endorsement of the policies, there is no concrete and direct

**Figure 2: Categories of SWM policy frameworks in Kenya**



evidence about this influence. Citations of global and regional policies, as well as their reaffirmations in the national policy frameworks, would have provided better evidence for the impact of global policy dynamics in national SWM policies.

### Conclusions

The findings of this policy review have important implications for policy, practice and research. The implementation of current SWM policies and the development of future policies need to pay adequate attention to policy integration at all levels, which is critical for

effective and efficient response to the problem of SWM in Kenya and other African countries.

SWM practices need to adopt an integrated approach between the different stages and the various stakeholders. The devolution and segmentation of the policy frameworks are not well aligned to each other and the institutional mechanisms converge in a top-down approach. Opportunities for integration at implementation need to be created. Further research is needed to illustrate why the current level of policy integration has become a reality and how it can be improved in a sustainable manner in future.

This briefing is based on the two original articles:

Haregu, TN, Mberu, B and Ziraba, AK (2016) Integration of Solid Waste Management Policies in Kenya: Analysis of coherence, gaps and overlaps. *African Population Studies*, 30 (2). Supplement: 2876-2885. <http://aps.journals.ac.za/pub/article/view/889>

Haregu, TN, Ziraba, AK, Aboderin, A, Amugsi, D, Muindi, K and Mberu, B (2017) An assessment of the evolution of Kenya's solid waste management policies and their implementation in Nairobi and Mombasa: analysis of policies and practices. *Environment and Urbanization*, 29 (2). 10.1177/0956247817700294

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The African Population and Health Research Center (APHRC) is an African-led institution committed to generating evidence to inform decision making on the most critical challenges facing the continent. Based in Nairobi, Kenya, APHRC works across sub-Saharan Africa through three integrated programmatic divisions: research which emphasises health and wellbeing; research capacity strengthening to deepen the skills of African scholars; and policy engagement and communications to support greater uptake of evidence in policy and decision making in Africa.



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