Policy Framework for an Integrated Waste Management Plan in Maseru

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Introduction

This document forms part of a series of documents prepared in the 2nd phase of the development of an Integrated Solid Waste Management Programme for Maseru, Lesotho. Its purpose is to complement the relevant section of the Baseline Study (the main output of phase 1 of the project). It focuses on gaps in policies and strategies, and also aims to comment on potential interventions.

The document starts by providing a commentary on the relevant section of the Baseline Study. It proceeds to depict and discuss the policy tools and framework in which the ISWMP is developed. Next, the themes for the ISWMP are located in this institutional framework, and actors are identified for requisite actions. Finally, conclusions are presented.

This document has been authored by the team of Associate Professor Harro von Blottnitz at the University of Cape Town, in terms of a contract for the United Nations Environment Programme.

Commentary on Institutional Analysis in the Baseline Study

Having worked in Maseru for most of 2007, it is our understanding that the baseline study correctly depicts the current legislative and institutional framework as regards waste management in Maseru. The historical representation also appears correct, and is certainly adequate for the purposes of developing an ISWMP.

Key points that emerge are:

1) There is currently no existing law to give effect to the constitutionally guaranteed right to a clean and healthy environment. The 2001 Environment Act has been passed by the National Assembly but has not been enacted. An amended Bill was being discussed in the National Assembly during 2007.
2) That notwithstanding, the National Environment Secretariat is actively implementing measures to protect the country's environment.
3) The key arm of government responsible for ensuring hygiene in the City of Maseru is the Department of Health and Environment of the Maseru Metropolitan Council.
4) The Ministry of Local Government and Chieftainship has the mandate to support the efforts of local government.
5) Service delivery and environmental protection are important to Basotho.

It is worth recording that the baseline study in its institutional analysis does not comment on the question of responsibility for industrial waste arising out of the industrial development policy. It appears that there is a policy gap in this respect: The LNDC is responsible for the provision of infrastructure for new manufacturing industry for which it can also extract rentals, and the MOLG&C is responsible for waste removal for which it does, however, have to rely on allowances from the Treasury. This non-even playing field has led to delays in formalised waste removal, with interim industrial waste dumping leading to potentially serious pollution risks which now have to be mitigated at additional costs.

This latter observation is compounded by the lack of a formalised pollution prevention / cleaner production strategy. The establishment of a national cleaner production centre (under the UNIDO-UNEP programme) appears to still be several years away from realisation. It would be wise to rely on bilaterals to kicks-start preventative environmental management in the interim – e.g. with South Africa's NCPC, or via USAID.

Policy Tools and Framework

Against the policy background described in the Baseline study, it is important top note that the ISWMP project is one of three UN-driven programmes being implemented concurrently in Maseru. The other two are the 'Sustainable Maseru" Programme (UN Habitat) and the Public Private Partnership for the Urban Environment (UNDP). The three initiatives should relate to each other as depicted below. The PPPUE programme has elected to kick off its activities with work in waste collection, it is understood however, that it would contribute to a sustainable Maseru also in areas of urban environmental protection other than waste management. An Environmental Profile has been completed for the Sustainable Maseru Programme, and for the solid waste management aspects this drew heavily on the ISWMP baseline study.

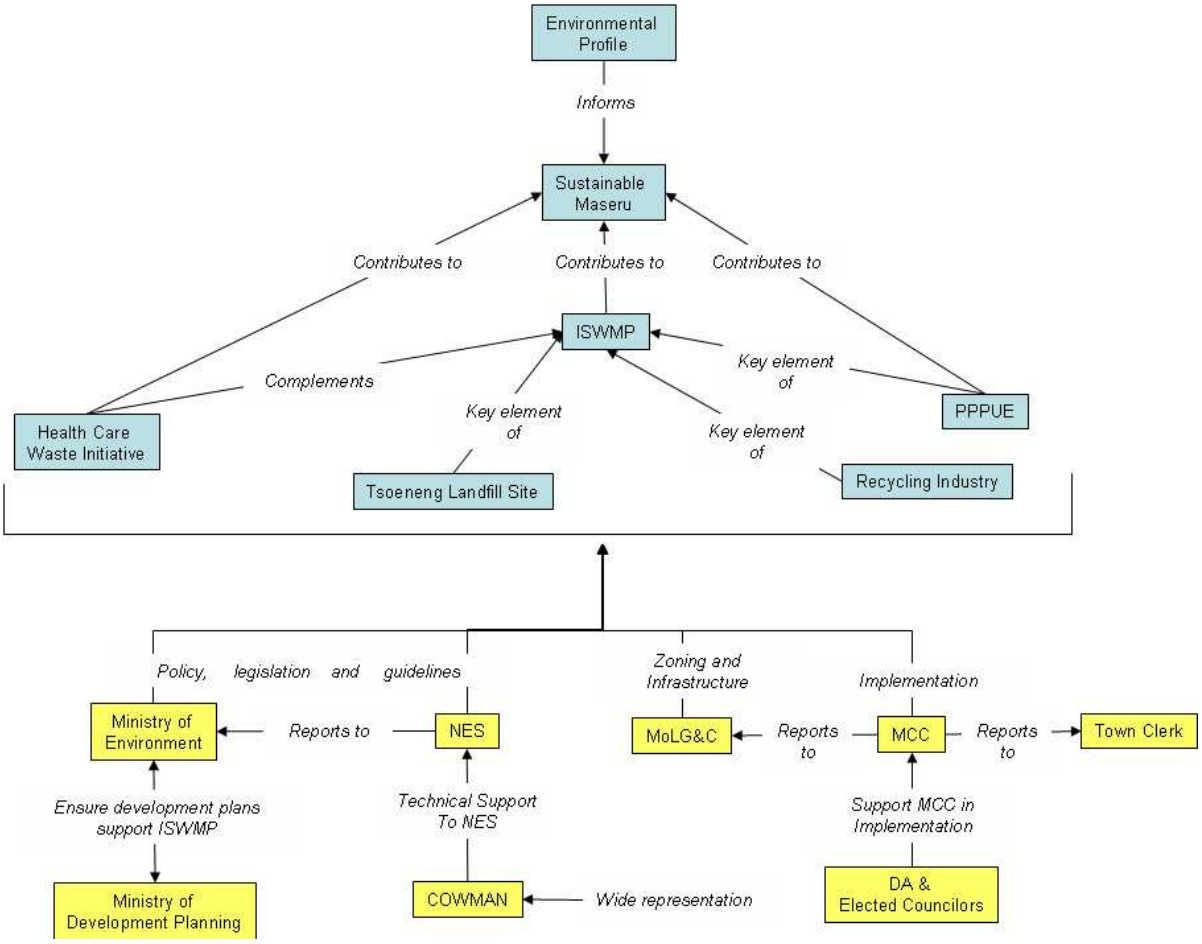

Figure 1: Governmental Structures and Activities, Projects & Plans Related to Waste Management

Other initiatives identified to be forming part of the institutional framework within which the ISWMP is being developed are the National Health Care Initiative, the steps taken in the development of a proper sanitary landfill for Maseru (located at Tsoeneng), as well as various activities of the private recycling firms. Of most significance for the development of the ISWMP however were various actions relating to solid waste collection, fast-tracked in the course of 2007 under the PPPUE. It is regrettable that plans for these efforts were not communicated to UNEP nor to its consultants during the ISWMP phase 2 kick-off visit in May 2007, nor at the first stakeholder

workshop in June 2007.

The main agencies and actors that need to be considered in the development of an ISWMP are identified in the lower half of Figure 1. Apart from those mentioned in the Baseline study, it is worth pointing out the activities of the Committee for Waste Management (COWMAN), as well as the increasingly active role which elected councillors are playing.

Plans by the COWMAN to set up Lesotho chapter of the Southern African Institute of Waste Management (akin to the Botswana chapter) would provide for much needed transfer of knowledge to waste management professionals operating in Lesotho.

Themes to guide an institutional arrangement – Actors and Actions

The draft ISWMP proposes 20 waste management actions within five proposed 5 themes, cutting across a number of government institutions. In order to identify clear lines of responsibility, they are grouped as shown in Table 1, with clear responsibilities to four government agencies.

Table 1: Themes, Lead Institutions and Actions

Theme	Lead Institution	Actions
Awareness, Education & information	NES	1.1, 1.2, 1.4, 3.3, 3.4, 5.1, 5.4
Collection, segregation & disposal	MCC	1.3, 2.1, 2.2, 2.3, 4.1, 4.2, 4.3, 5.5
Industrial development (Recycling & CP)	LNDC	3.2+parts of 1.2, 3.1
Policy & institutional mechanisms	MoLG&C	3.1, 3.5, 5.3

The summary table below gives the responsible lead institutions for the different actions.

Table 2: Lead Institutions by Actions

Action	**Organisation**
1.1	NES
1.2	NES
1.3	MCC DHE
1.4	NES
2.1	MCC DHE
2.2	MCC and LSPP (executives)
2.3	MCC DHE, PPPUE and private recyclers
3.1	MoLG&C (support), LNDC (promotion of private enterprise)
3.2	LNDC with BEDCO (Basotho Enterprises Corporation)
3.3	NES with MTICM
3.4	NES, MTICM and IWMSA
3.5	MoLG&C
4.1	MCC
4.2	MCC
4.3	MCC
5.1	NES and Education
5.2	NES and Industry
5.3	NES and MCC
5.4	NES and MCC
5.5	MCC

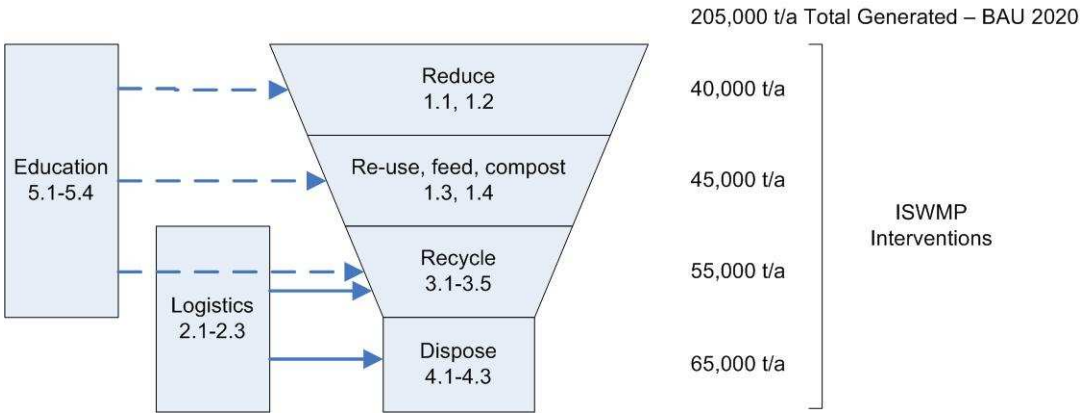

Figure 2: Maseru ISWMP Vision 2020 – Actions and Waste Management Hierarchy

As depicted in Figure 2, the actions defined in the ISWMP fit within the different levels of the waste management hierarchy, extended by logistics and education. The actions of pillar 1 fit within the upper two levels of the waste management hierarchy, namely reduce and reuse, feed, compost. The actions of pillar 2 are mainly concerned with waste management logistics. The five actions of pillar three fall within recycling activities, whereas the actions of pillar 4 are connected to energy recovery/disposal activities. Lastly, actions 5.1-5.4 are aimed at educational purposes. In a business-as-usual scenario, at total amount of 205,000 t/a of waste would be generated in Maseru in 2020. By taking into account the actions defined in the ISWMP, 40,000 t/a of waste should be prevented from generation by waste reduction measures. Furthermore, 45,000 t/a would be reused, fed and composted, and 55,000 t/a would be recycled. Finally, only 65,000 t/a should be disposed of by landfilling/energy recovery.

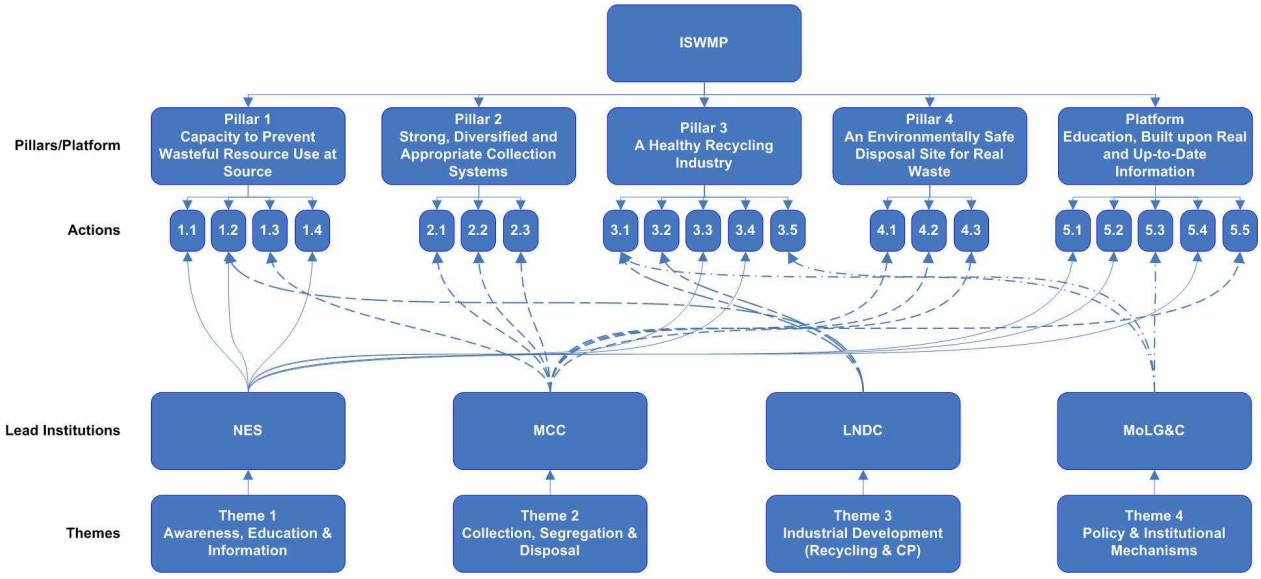

Figure 3: ISWMP – Relationships Pillars/Platform, Actions, Lead Institutions and Themes

Four lead institutions will be responsible for the implementation of the different actions proposed in the ISWMP. The flow-chart in Figure 3 depicts the relationship between the pillars and platform of the ISWMP and their related activities. Seen from the bottom-up, lead institutions are driven by themes for action in order to implement the actions proposed in the plan.

Conclusions

This brief document has reviewed the policy and institutional framework within which Maseru's Integrated Solid Waste Management Plan is being developed. The review represents the consultant's understanding of the status of these frameworks in 2007, and it is expected that there will be developments in both. Such developments will require the future ISWMP steering committee to ensure that the ISWMP remains firmly grounded in any new policy initiatives, and is strengthened, rather than replaced by other projects.

Following the analysis, a brief description has been presented of the proposed institutional mechanism for the ISWMP. It should be obvious that the ISWMP has been designed so as to fit in with the existing institutions, harnessing their respective strengths, but also being critically dependent on a good co-operation between them. Similarly, synergies need to be sought between the three UN-sponsored programmes being simultaneously introduced in Maseru.

Appendix: Institutional Analysis section of the Baseline Study

4.3 Institutional Framework

In the early 1970s, according to the sanitary service and refuse removal regulation (1972), sanitary and refuse removal services in Lesotho were limited to government institutions and premises and few of other settlements. However, later in the 1980s, with the urban growth, waste began to be a recognized problem as a broader environmental concern hence institutions such as the National Environment Council and the National Environment Secretariat (NES) were established in 1992 and mandated to look at the environment and its protection.

The period of late 1980s and early 1990s was marked by campaigns of 'Keep Lesotho Clean' as a remedial attempt to cleanse the country of litter (NES, 1997). Some NGOs and some private sector institutions took part in these campaigns, which also included an educational element of how water can be managed and/or options that can be considered such as recycling to minimize waste at household levels.

The Government of Lesotho (GoL) amended its Constitution (in 1993). It is through this amendment that Lesotho created a mandate for the protection of the environment. Section 36 of the Constitution of Lesotho stipulates that; "Lesotho shall adopt policies designed to protect and enhance the natural and cultural environment of Lesotho for the benefit of both present and future generations, and endeavour to assure to all citizens a sound and safe environment adequate for their health and well-being." It is through the Constitution that it is the right of every citizen to reside in a clean and pollution free environment thus surety of ISWMS would have met this requirement as indicated in the Constitution.

When waste management study was commissioned in 1997 through NES, the outcome confirmed that there was no formal waste management system in Lesotho. However, it recognized some attempts which were done such as the establishment of a National Rural Sanitation Programme (NRSP) in 1987, whose objectives were to promote proper use and maintenance of improved pit latrines and higher standards of personal and domestic hygiene NES (1997).

According to Carl Bro International (1999), waste management in Lesotho is characterized by the following:

- no comprehensive waste management policy
- very limited legal and institutional framework concerning solid waste
- nearly no solid waste management system involving coordinated recycling and insufficient collection system;
- random and illegal dump sites are used for disposal
- Limited awareness causing increased littering of solid waste.

Although there is no formal treatment of municipal waste, there are waste recovery centres. A number of private companies are now actively involved in some aspects of waste management, particularly in collection, sorting, and occasional exporting.

Tracing the legal systems and the establishment of relevant management structures, the following Acts and regulations in their respective time periods were passed to control pollution in Lesotho's towns, Maseru included. It must be acknowledged that the Acts and regulations mentioned here are not supported by any waste management policy, strategy or even guidelines. Table 4.1 below shows the legal instruments.

Table 4.1: Laws and regulations relevant to waste management

1970	Public Health Order	Regulates waste from community, business & industrial groups
1972	Sanitary Services & Waste Removal Regulations	Promote sanitation services & waste removal within municipal boundaries
1980	Town & Country Planning Act	Controls zoning e.g. where to dispose waste
1983	Urban Government Act	Promotes public health, welfare, sanitation services, amenities & waste removal within municipal boundaries
1992	Labour Code Order	Protects workers against hazardous waste & pollution
2001	Environment Act	Protects environment against hazardous waste; provides for licensing of certain activities related to waste management; addresses issues of transboundary movement of hazardous waste, management of waste in general, acquisition of waste disposal site, licensing of operating a landfill, etc.

Source: Survey data (2006)

To date, a number of waste regulations are being drafted for example, hazardous and chemical regulations. It must also be noted that the Environment Act 15 of 2001 has still not yet come into force even though it is aimed at protecting the environment and the wellbeing of all citizens.

Lesotho is also a signatory to conventions, treaties and protocols aimed at protecting the environment against contamination and the government intends to translate these into actions which will sustain care for and management of the environment in general (Vision 2020). Some of the conventions most relevant to waste management are as follows:

- Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal was ratified on the 29th August 2002, and the Focal point is Mr. T. Tšasanyane (Senior Environment Officer – Pollution Control) Department of Environment.

- Stockholm Convention on Persistent Organic Pollutans (POPs) was ratified on the 23rd January 2001, and the Focal point is Mr. T. Tšasanyane (Senior Environment Officer – Pollution Control) Department of Environment.

- Bamako Convention, on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, was signed on the 1st June 1991, and the Focal point is Mr. T. Tšasanyane (Senior Environment Officer – Pollution Control) Department of Environment.

- Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals & Pesticides in International Trade (PIC) has been neither signed nor ratified,

and the focal point is Mr. L. Ramatekoa (Environment Officer – Pollution Control) Department of Environment.

The MCC Department of Health and Environment is responsible for the promotion of public health, welfare, the development of sanitary and amenity facilities within the municipality. The MCC is also responsible for making by-laws to regulate activities taking place within its boundaries, with the aim of maintaining the health, well-being and safety of the City's inhabitants, and preventing nuisances, including pollution. However, the enforcement of these by-laws has not been successfully implemented, as currently only draft versions exist, which are not legally binding.

The national macro-economic policies, namely; the Poverty Reduction Strategy (PRS) and Vision 2020 and Millennium Development Goal (MDGs) explicitly declare the management and conservation of the environment to be one of the nation's top eight (8) development goals for the next 3 - 15 years (goals number 8 and goal number 6 respectively). The MDGs address eradication of poverty as well as maintaining sustainable development as the top seven MDGs with the latter as goal.1 whereas the former as goal.7.

Through PRS, Basotho have referred to the lack of capacity of the municipality to manage waste as one of the four main areas of environmental concern needing careful monitoring. It states that unless the municipal waste management capacity grows in tandem with the population, it will be overwhelmed, and poor disposal practices (particularly in peri-urban areas) will result in an unacceptable environmental health risk.

As a way of managing and conserving the environment, including the management of solid waste, Basotho have proposed (under PRS) the following strategies:

- develop a proper waste management system to strengthen the management of solid and liquid waste and control air pollution
- raise public awareness and promote environmental education
- develop and enforce pollution control and waste management regulations and guidelines
- establish a well-capacitated Environmental Department through implementation of the Environment Act of 2001.

According to their vision for 2020, Basotho aspire to institutional and legal frameworks that will promote and protect a healthy and sustainable environment. In the matrix for Vision 2020, where solid waste management has been cited as one of the key indicators for a well-managed environment, Lesotho has committed itself to keeping its waste generation rate at roughly 150 000 tons per year, and to recovering 70% of such waste by the year 2010, 75% by 2015 and 79% by 2020. Although these figures are over-ambitious, they are evidence that Lesotho has a desire to reduce its waste generation rates and recover more waste. The possible recovery may be 30% by 2015.

At present, the Environment Act of 2001 is being revised and waste management is one of the components due to be addressed by the Act. Environmental Impact Assessments (EIA) will be required to ensure that Developers/Proponents indicate proper waste management techniques both for on-site and off-site waste management. To ensure effective law administration, the EIA regulations are currently being drafted whereby monitoring strategies for waste management will

also have to be proposed during the EIA process, which, on implementation, will lead to a constructive auditing process. The EIA process will ensure the rights of all communities to a safe and healthy environment.

Regarding air pollution control, the Government of Lesotho (GoL) intends to ban the burning of used car tyres as a first step towards safeguarding air quality (PRS). In order to address the management both of air and water pollution, environmental quality standards frameworks have been developed (Department of Environment, 2004). These are intended to trigger a process stimulating development of a number of environmental guidelines and standards, as well as minimum standards, including those of waste management[3], and ensure that these are adhered to. Using the South African model, waste management standards are expected to cover the minimum requirements for waste handling (including storage and transport), classification and disposal of hazardous waste; waste disposal by landfill; and monitoring at waste disposal facilities.

The GoL intends to increase public awareness and environmental education efforts through the formal educational system. This comes from a realisation that, in order for environmental awareness to translate into action, it has to be deeply embedded in every Mosotho, which is a task that can only be achieved as the next generation moves through the school system. Thus, the school curriculum should include an environmental education component. Adults will also be sensitised through awareness campaigns (Vision 2020; PRS).