

Chapter 1 : Southern African Development Community :: Waste Management

The detailed report on the management of solid waste in South Africa examines current conditions and developments as well as factors that influence the success of the sector.

Waste Management Waste Management Waste management, pollution, inadequate access to sanitation services and poor urban conditions are identified as some of the major challenges to development in the SADC region. In order to address these challenges the Southern African Development Community SADC is committed to promoting sound environmental management through pollution control, waste management and environmental education. The rising quality of life and high rates of resource consumption patterns have had an unintended and negative impact on the urban environment. They have resulted in generation of wastes beyond the handling capacities of the majority of waste management authorities. The majority of SADC cities are now grappling with the problems of high volumes of waste, low capacity to management and the high costs involved in the management. This is further exacerbated by the lack of proper disposal technologies and methodologies, inadequate manpower and equipment. This coupled with poor enforcement results in rampant illegal dumping of domestic and industrial waste that is a common practice. This has had serious health and environmental impacts resulting from littering, generation of foul smell and proliferation of pests and insects that transmit diseases. Information about the kinds of wastes and amounts generated in SADC Member States is not routinely collected and reported at present. However, SADC is taking steps to improve understanding about household, industrial, agricultural and e-wastes and the associated challenges they present. Households At the household level, wastes that consist of biodegradable materials, paper, gravel, metal and glass are recoverable, reusable and recyclable. Plastic recycling is increasingly a focus because discarded plastic can become a nuisance, block drains and causes flooding during the rainy season. One such action is improvements to household waste separation, collection and disposal by Waste management facilities will have to be licensed and must appoint waste management officers responsible for abiding by legislation. Lack of access to sanitation facilities, especially in urban areas and urban slums, has serious health implications. In efforts to improve this number and meet the Millennium Development Goals, the SADC Regional Water Supply and Sanitation Programme is in place to facilitate the development of a regional framework for water supply and sanitation. The framework includes institutional strengthening, rationalisation, knowledge management, and monitoring and evaluation systems. There is generally a lack of awareness on the effects of hazardous chemicals and institutional frameworks for dealing with the sound management of chemicals are underdeveloped. Legislation that bans the release of these wastes into the environment is often in place but governments cannot afford the personnel and analytical equipment to enforce it. Furthermore, there is need for increased worker awareness about personal protective equipment and handling of toxic wastes and agricultural chemicals. Agricultural pollution by farm chemicals, particularly pesticides, contaminates drinking water and affects those who handle the chemicals. Good progress is being made. E-Waste Consumer Electronic goods are all-pervasive in society, and the rapid and increasing pace of technological developments means that this equipment becomes obsolete quicker, meaning more and more of this kind of waste is being generated. Furthermore, these goods often include parts that are made from or that generate toxic substances when broken-down or disassembled. This waste is known as E-Waste and it is becoming a growing and increasingly serious problem worldwide. These guidelines allow for identification of various sources of e-waste and prescribe procedures for e-Waste handling. The guidelines also call for the establishment of a SADC e-Waste Recycling Plant that recycles waste in an environmentally sound manner.

Chapter 2 : Funding proposals for the effective management of waste | Infrastructure news

The increasing practices of littering, dumping and burning of solid waste by households (and industries though not extensively dealt with in this study) in South Africa has led to the finding that municipal solid waste is being irresponsibly managed.

Nov 13, Articles , Waste With the majority of municipalities facing serious economic, social and environmental challenges related to solid waste management, innovative solutions for financing this management are needed to address this. In South Africa, issues and problems of waste management have been acknowledged and brought under the microscope through efforts such as the promulgation of the National Environmental Management: Waste Act, Act No. The gradual increase of waste generation in the country, has contributed to the historical backlog of inadequate waste services, leading to unpleasant living conditions and an unhealthy environment. Increased emphasis is placed on operational waste management, environmental aspects and the legislative framework, but little effort is put into examining the funding mechanisms and policies affecting solid waste services. The FFC is an independent, objective and unbiased constitutional advisory institution, tasked with advising and making recommendations to the State on financial and fiscal matters. Funding models In , the Department of Environmental Affairs DEA stressed concern over the cost of solid waste management and the lack of an established funding model, which has a direct impact on the amount of funding allocated to municipalities. In addition, when funds are available to develop the infrastructure, the money is usually insufficient to operate and maintain the facilities. The one funding option, the Municipal Infrastructure Grant MIG , in most cases does not cater for operational expenditure, and municipalities have to find innovative ways to fund and generate revenue in order to build, operate and maintain these facilities. Traditionally, municipalities generate revenue through user charges such as levies and rates, but in most cases these revenue sources are inadequate and are becoming unaffordable for poor communities – further adding to the increased need for tighter waste management alternatives and funding mechanisms. Waste management But before funding mechanisms can be properly addressed, it is important to take a step back and look at how the country is managing its solid waste. The study investigated the option of incineration versus landfilling; zooming in on recovery and reuse along the way. Regardless of the extent of recycling or resource recovery, there are always some wastes that must be disposed of in landfills, for example, non-compostable residuals. Most developing countries like South Africa employ open dumping as their form of land disposal. The study also confirmed a point many people are familiar with – illegal disposal methods such as street dumping and combustion are commonly practised in rural or lower-income regions, mainly due to the lack of knowledge around climate change. It is in these areas where the bulk of funding for long-term solid waste management should be allocated. Sustainable development Interwaste, for example, recognises an aversion to waste disposal by landfill and has resulted in not only a strong desire but an innate need for the diversion of waste from typical waste management practices, which has resulted in competitive, environmentally sound solutions. Disposal of waste by landfill is, however, a common practice in the country, becoming problematic as the population grows. The harsh reality is that landfills will be around for a while, especially in developing countries, and it is important to approach the design and lifecycle thereof with sustainable solutions. As part of the contract, new contaminated stormwater channels along the toe of the new cell were designed, as well as clean stormwater cut-off channels running parallel with the contaminated stormwater channels. The layer works for the landfill comprised of: All the stormwater run-off from the waste body side slopes drain into the contaminated stormwater channels from where it gravitates into the existing contaminated stormwater storage dam. From here, it can be pumped to a top loader facility to be used for dust suppression should it be required. All the clean stormwater is collected in the clean stormwater channel and diverted around the landfill into the existing river. At the third annual Waste Khoro held in October last year, it was clear that the effective and efficient management of waste is fundamental to the sustainability of any society. The Waste Khoro is the culmination of waste management officers and experts, with the objectives of setting a platform for the efficient implementation of the Waste Act and to discuss challenges and lessons

learned from the Act, among other important factors. The main focus of the third Khoro centre don budgeting and the actual costings associated with waste management services, the promotion of the waste hierarchy, acceleration of public awareness on waste management, best practices in the management of waste disposal sites, creation of job opportunities for the youth in waste management, and the development of Integrated Waste Management Plans IWMP. The event kicked off with talks from the DEA, and reviewed institutional arrangements arising from municipalities. Discussions were divided into six strategic categories, namely: Full cost accounting and efficient budgeting for waste services: Promoting recycling and separation at source: Accelerating public awareness on waste: Best practice in management of waste disposal sites: Mainstreaming youth jobs in waste management: Maximising the integrated waste management planning regime: Conclusions emerging from the conference found that the efficient management of waste is a major challenge for municipalities across the country. The complexity thereof calls for a comprehensive and multisectoral approach with a proactive dimension in order to reduce not only the amount of waste generated, but also to redirect the behaviour of communities toward a new level of positive participation in improving and maintaining a healthy, ecologically protected environment.

Chapter 3 : Postgraduate degrees in waste management now offered in South Africa | CSIR

study about South Africa's integrated pollution and waste management system, a strategy was suggested to enable South Africa overcome the waste management problem under the apartheid rule.

Chapter 4 : Averda SA | Waste Management Solutions South Africa

Informal solid waste recycling has increasingly become part of the urban landscape in many South African cities and towns. In the city of Johannesburg, for example, waste.

Chapter 5 : Solid Waste Management :: South Africa

Solid waste management Chapter ii provided the authorities responsible for waste management in South Africa with new challenges.

Chapter 6 : Solid Waste Management jobs in South Africa | racedaydvl.com

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Chapter 7 : South African Waste Information Centre

Waste Management is a challenge in most municipalities in South Africa. This is a growing trend and continues to be an issue for the Public and Municipal Officials.