National Solid Waste Management Strategy and its Employment Dimensions

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Solid Waste Management [SWM]

Definition

- SWM may be defined as the discipline associated with the control of generation, storage, collection, transfer and transport, processing, and disposal of solid waste in a manner that is in accordance with the best principles of public health, economics, engineering, conservation, aesthetics, and other environmental considerations and that is also responsive to public attitudes.
Legal Base of Solid Waste Management In Sri Lanka

- All Municipal solid wastes collected by Local Authorities are a property of them. Local Authorities shall have full power to sell or dispose of all such matter.
Legislation on SWM

- Local Authority Laws
- National Environmental Act No. 47 of 1980 Section 23
- Police Ordinance No 16 of 1865
- Section 68(g)
- Nuisance Ordinance No. 15 of 1862 Section 2(3) and 2(12)
Local Authority Laws

Municipal Council Ordinance No 16 of 1947
Sections 128, 129, 130

Urban Council Ordinance No 61 of 1939
Sections 118, 119, 120

Pradesheya Sabha Act No:15 of 1987, Sections 93, 94, 95
Six Functional Elements of a proper Waste Management System

1. Waste Generation
2. Waste Handling and Separation, Storage and Processing at the source
3. Collection
4. Separation, Processing and Transformation of MSW
5. Transfer and Transport
6. Final Disposal
Solid Waste Management

- National SWM Policy
- National Strategy for Solid Waste Management
Democratic Socialist Republic of Sri Lanka

National Policy on Solid Waste Management
2007

Ministry of Environment and Natural Resources
No. 82, “Sampathpaya”
Rajamallwatte Road, Battaramulla, Sri Lanka.
Policy Objectives

- To ensure environmental accountability and social responsibility of all waste generators, waste managers and service providers
- To actively involve individuals and all institutions in integrated and environmentally sound solid waste management practices
- To maximize resource recovery with a view to minimizing the amount of waste for disposal
- To minimize adverse environmental impacts due to waste disposal to ensure health and well being of the people and on ecosystems
Policy Statements

- Waste Management
- Capacity Building and Research & Development
- Institutional Arrangement
- Financial Mechanisms
- Legal Mechanisms
National Strategy for Solid Waste Management [NSSWM]

Main features

1. Prioritize waste avoidance over recycling and recycling over the other forms of environmentally sound disposal

2. Reuse non-avoidable waste as far as possible

3. Maintain the content of hazardous substances in waste at the lowest possible level and

4. Guarantee an environmentally sound residual waste treatment and disposal as basic prerequisites for human existence.
1. Waste Management
1. Solid waste will be managed in accordance with the 3R Principles with special emphasis on waste prevention approaches.

- 3R Principle: Reduce
  - Reuse
  - Recycle
Reuse
Recycle

PET

LDPE
Used plastics
Employment Dimensions

- Through opportunities in Eco-friendly packaging Industry

- By creating business opportunities for local industries (recycling paper, glass and plastics).
2. Landfilling will be limited to non-recyclable, non-compostable and inert material generated through the waste treatment process.

- Promote Composting
Employment Dimensions

- By promoting Compost Industry & launching Public-Private Partnership for composting process
- By rehabilitation of past dump sites for reuse and introduce **Refuse-Derived Fuel (RDF)** producing industries for innovators.
- By establishing final Disposal facilities for Municipal waste and hazardous/biomedical waste with fully trained staff to operate the facility in proper way.
- Creating Small and Medium scale Enterprises
- By creation of Industries with quality improvement for local paper, glass and plastic recycling industry
- By investigating opportunities for value addition to compost so as to ensure commercial viability of composting.
By Promoting Composting Industry
By creation of Industries with Waste Separation & Sorting
3. Development and implementation of sectoral policies in line with the National Policy will be made mandatory.

4. Importation of all types of post consumer waste will be prohibited.

5. Institutional strengthening and capacity building needs of stakeholders with special emphasis on Local Authorities will be addressed to promote effective waste management.
6. Hazardous biomedical/ healthcare waste will be managed so as to prevent environmental contamination and to minimize the risks to public and eco systems
Employment Dimensions

- Through the creation of industries for pre-treatment of healthcare waste into non-infectious material prior to final disposal.
- By the establishment of a National Healthcare Waste Support Center in the Ministry of Health with trained staff.
- By strengthening/establishing Health Care Waste Management Units with adequate staffing at all national and teaching hospitals.
7. Institutional mechanisms will be established to prevent hazardous biomedical/healthcare waste entering the municipal waste stream.

8. Public safety will be ensured through appropriate liability and compensation mechanisms.

9. Regular monitoring and evaluation systems will be established to ensure system improvement.

10. Annual performance reporting and effective monitoring mechanism will be set in place at local authority level.
Employment Dimensions

- By the establishment of Waste Management Units with trained staff officers to ensure implementation Monitoring and Evaluation.
2. Capacity Building, Research and Development
11. Awareness, education, training and capacity building on integrated waste management will be promoted at all levels.
12. Research and Development will be encouraged and promoted at appropriate levels.

13. Best Available Technologies (BAT) and Best Environment Practices (BEP) will be transferred to all sectors including informal sector.

16. Institutional frameworks for sound wastes management will be strengthened through improved inter agency co-ordination and empowerment of civil society groups
Sorting with Mechanical Biological Treatment (MBT)
14. Responsible public-private and community partnership will be promoted at appropriate level for service provision while recognizing that the SWM retains with local authorities as defined by the respective laws in the present context.

15. Social and corporate responsibility and accountability towards solid waste management will be ensured.

16. Institutional frameworks for sound wastes management will be strengthened through improved inter agency co-ordination and empowerment of civil society groups.
3. Financial Mechanisms
17. Sustainable financing mechanisms shall be made mandatory to ensure the sustainability of solid waste management programmes. (Capital)

18. Local Authorities shall ensure self-financing for waste management by effective revenue generation mechanisms. (O&M)

19. Appropriate financial incentive schemes will be explored and established to promote waste management
20. Carbon financing as provided by Kyoto Protocol will be promoted as an incentive for promoting waste management practices in line with the existing Clean Development Mechanism Policy.
Employment Dimensions

- By promotion of CDM projects in abandoned dump sites.
4. Legal Mechanisms
21. The existing regulatory mechanism will be strengthened through appropriate legal reforms.

22. Effective law enforcement will be ensured as means of maintaining the accountability of stakeholders.

23. Basel Convention commitments on trans-boundary movement of wastes will be honored to fulfill Sri Lanka’s obligations.
THANK YOU