

# *Present status of Solid Waste Management and Challenges for Change*



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# Legislation on SWM

- **Local Governmental Laws**
- **National Environmental Act**
- **Police Department**

# Local Government Laws

Municipal Council ordinance  
Section 129,130,131

Urban Council Ordinance  
Section 118, 119, 120

Pradesheya Saba Act No:15 of 1987,  
Section 93, 94

## Management of Solid Waste In Sri Lanka

- All street refuse, house refuse, other similar wastes collected by Local Authorities under the provisions of this part shall be the **property of the council**, and the council shall have full power to sell or dispose of all such matter.

# Local Governmental Laws

Every Local Authority shall , from time to time provide places convenient for the proper disposal of all **street refuse, house refuse,** and **similar matter** removed in accordance with the provisions of the Law, and

for keeping all vehicles, animals, implements and other things required for that purpose and shall take all ensures that no such wastes removed in accordance with the provisions of the law is disposed of in such a way as to **cause a nuisance.**

**Therefore, the SWM is statutorily treated as a local government subject.**

- Local Authorities:
  - 23 municipal councils
  - 41 Urban councils
  - 271 Pradeshiya Sabhas

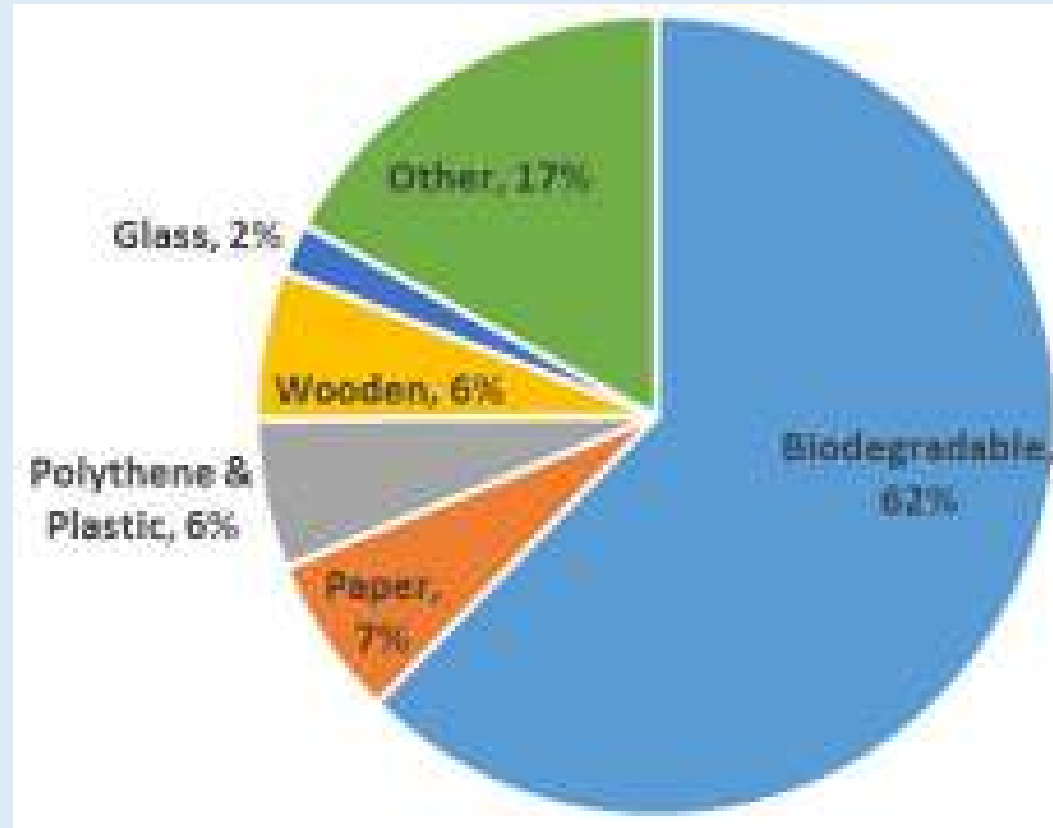
## Current Situation –Waste Generation

- Average per capita per day waste generation

<b>Local Authority</b>	<b>Quantity (Kg)</b>
<b>Colombo MC</b>	<b>0.80</b>
<b>Other MCs</b>	<b>0.65 – 0.80</b>
<b>UCs</b>	<b>0.45 – 0.65</b>
<b>PSs</b>	<b>0.2 – 0.45</b>

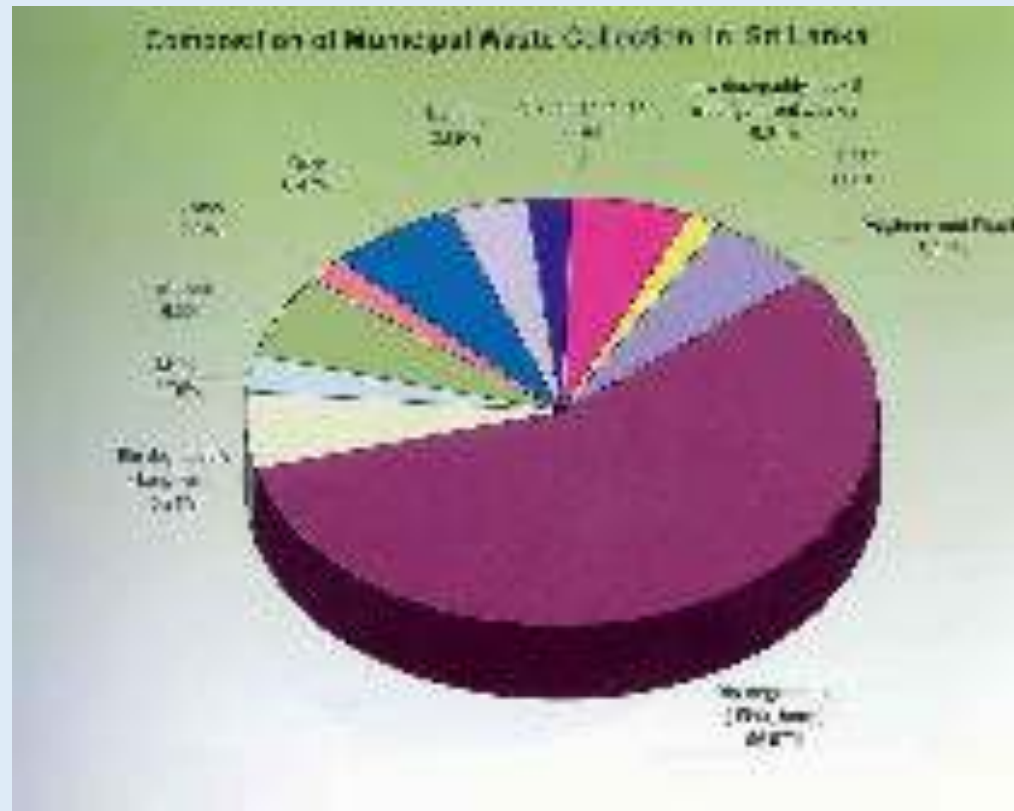
- Total solid waste generated in Sri Lanka is assumed to be around 6,400 tons/day (UNEP, 2001)
- Daily waste collection by LAs is estimated at 2683 tons

# Waste composition in Sri Lanka



# Composition of Waste Collection in Sri Lanka

- **Biodegradable (ST)**      **56.57%**
- **Bio-degradable (LT)**    **5.94%**
- **Paper**                      **6.47%**
- **Wooden**                    **6.35%**
- **Sawdust/Paddy husk**      **6.04%**
- **Polythene/plastic**        **5.91%**
- **Building**                  **3.89%**
- **Metal**                      **2.76%**
- **Slaughter house**         **2.34%**
- **Glass**                      **2.03%**
- **Others**                     **1.68%**



# **Solid Waste Management Problems**

- **No proper waste management & whatever available is weakly planned and implemented**
- **Unavailability of Suitable lands for waste disposal**
- **Lack of commitment by all parties concerned**
- **Lack of financial resources / assistance**
- **Weakness of collection system**
- **Lack of public awareness**
- **No proper collection system of recyclable waste**
- **Paying least attention for SW problems in the majority of LAs**

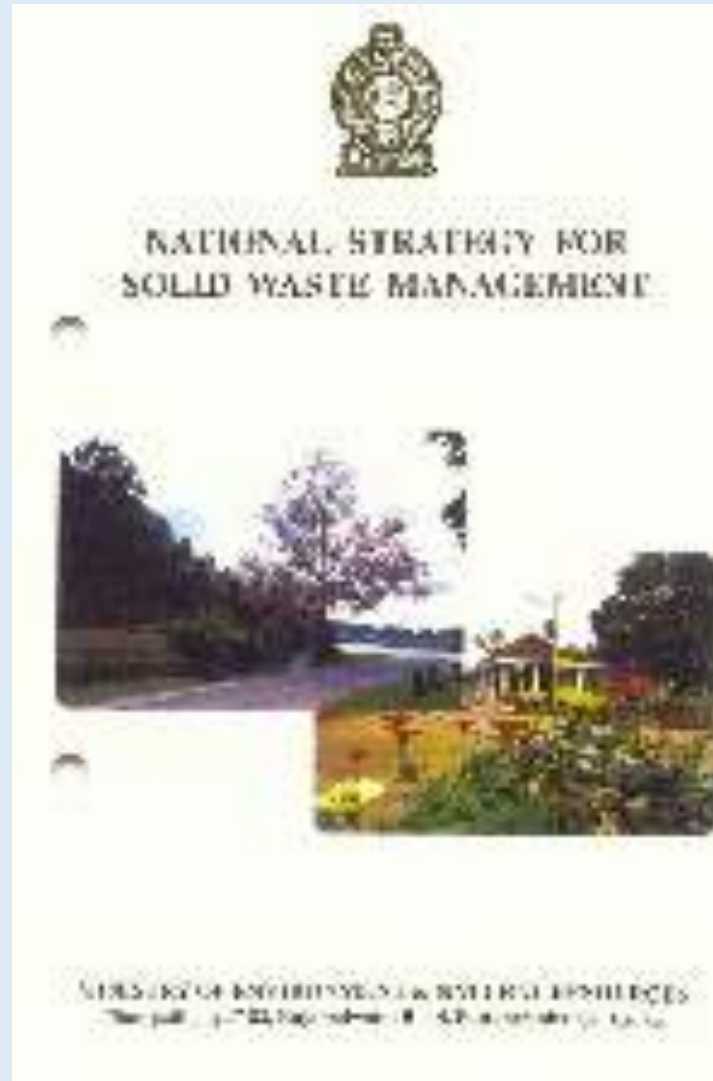
# **Solid Waste Management Problems**

- **Lack of Political will & conflicts of local level politics**
- **Lack of Institutional capability with technical expertise**
- **Legal provisions and role designation**
- **Overlap of administrative functions at national, regional and local level**
- **Outmoded laws and regulations**
- **Weak or total absence of monitoring by civic authorities / civil society**
- **Public apathy**

# Solid Waste Management

- National Policy on Solid Waste Management (August 2007)
- National Strategy on Solid Waste Management (January 2008)

# SWM Strategy



# National Policy on Solid Waste Management - 2007

- 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 minimize 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.

# Principles

- Solid waste management will be managed adhering to the waste management hierarchy where the emphasis is on reduction of waste generation, reuse, recycling, and resources recovery to the maximum extent possible followed by appropriate treatment and finally the disposal of residual waste.
- Adherence to National Environmental Standards developed under the provision of National Environmental Act (NEA) will be ensured.
- Application of market based instruments including “polluter pays” approach will be ensured.

## Contd....

- Resource maximization will be ensured by promoting sustainable production and consumption and enforcing producer responsibility approach throughout the product Life Cycle.
- Efficient law enforcement will be recognized as an essential means of effective Solid Waste Management.
- Partnership will be encouraged to ensure efficient and cost effective collection, transportation, storage and treatment of solid waste and disposal of residues.

## Contd...

- Appropriate resource mobilization strategies will be explored and sustainable financing mechanisms for solid waste management will be promoted.
- Sustainability of participation of all stakeholder groups in the entire waste management process will be ensured.

# Statements

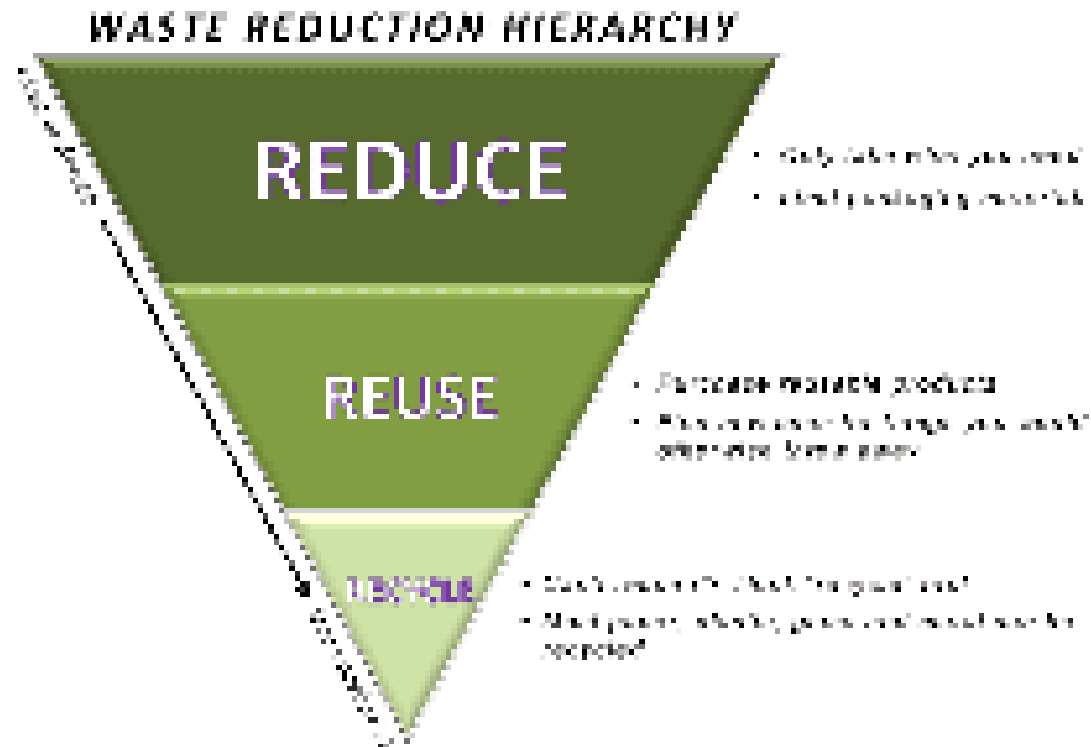
- At present the municipal solid waste as well as hazardous biomedical/healthcare waste is disposed together without adhering to accept environmentally sound waste disposal practices. This has brought about tremendous negative environmental consequences as well as hazard to the health and well being of the people. In order to remedy the situation, type of waste, the municipal solid wastes as well as the hazardous biomedical/healthcare waste need to be addressed together under the present policy.

## Contd...

- The major difficulties faced by the Local Authorities are the lack of infrastructure facilities and suitable lands required for SWM. Therefore, the provision of infrastructure facilities and suitable lands become essential prerequisites for integrated SWM.

# Future Direction of Waste Management Policy

- Introduce 3R system to **Reduce** waste Generation



# Waste Management

- Solid waste will be managed in accordance with the 3R principle with special emphasis on waste preventive approaches.
- Land filling will be limited to non recyclable, noncompstable and inert material generated through waste treatment processes.
- Development and implementation of sub sectoral policies in line with the National Policy shall be made mandatory.
- Importation of all types of post – consumer waste will be prohibited.

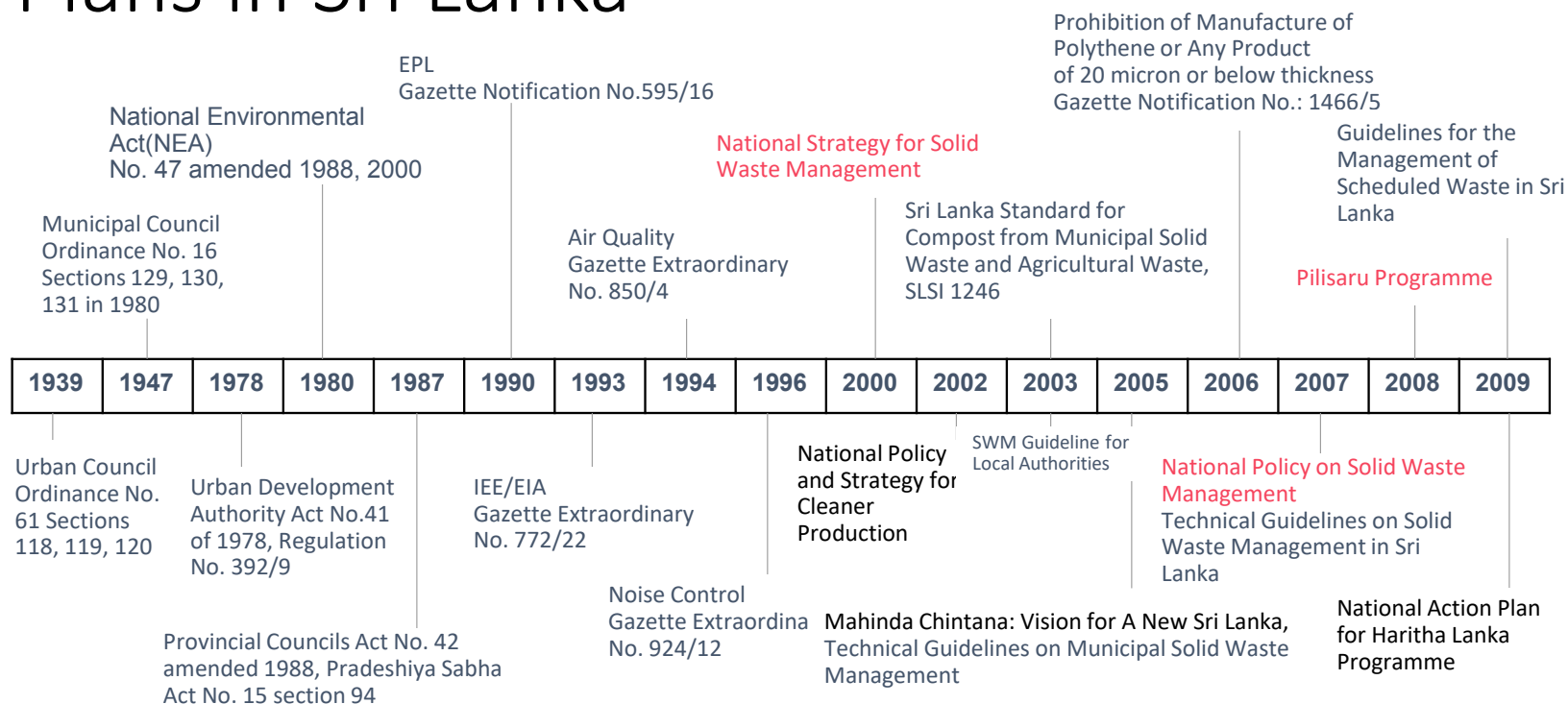
## Contd...

- Institutional strengthening and capacity building needs of stake holders with special emphasis on Local Authorities will be addressed to promote effective waste management.
- Hazardous/Biomedical / Healthcare waste will be managed so as to prevent environmental contamination and to minimize the risks to public and ecosystem.
- Institutional mechanisms will be established to prevent hazardous biomedical/healthcare waste entering into the municipal waste streams.

## Contd...

- Public safety will be ensured through appropriate liability and compensation mechanisms.
- Regular monitoring and evaluation system will be established to ensure system improvements.
- Annual performance reporting and effective monitoring mechanisms will be set in place at LA level.

# Legal and Regulatory Framework, and Plans in Sri Lanka



**More specific, concrete and up-to-dated System would be needed.**

# Implementation of SWM Plans for Successful Implementation

- Policy Instruments
- Legislative Instrument
- Economic Instruments
- Communicative Instruments (Information and Education)
- Organization / Institutional Instrument

# Challenges for Change policy instruments

- Lack of specific long term goal, poor stakeholder participation
- Views of LAs are not reflected in the current strategy and policy

## Legislative Instruments

- No waste Laws

## Economic Instruments

- No waste fee system

## Communication Instruments Information and Education

- No Information system and Lack of Experts in most of LAs

## Organizational / Institutional Instruments

- No SWM Department in most LAs

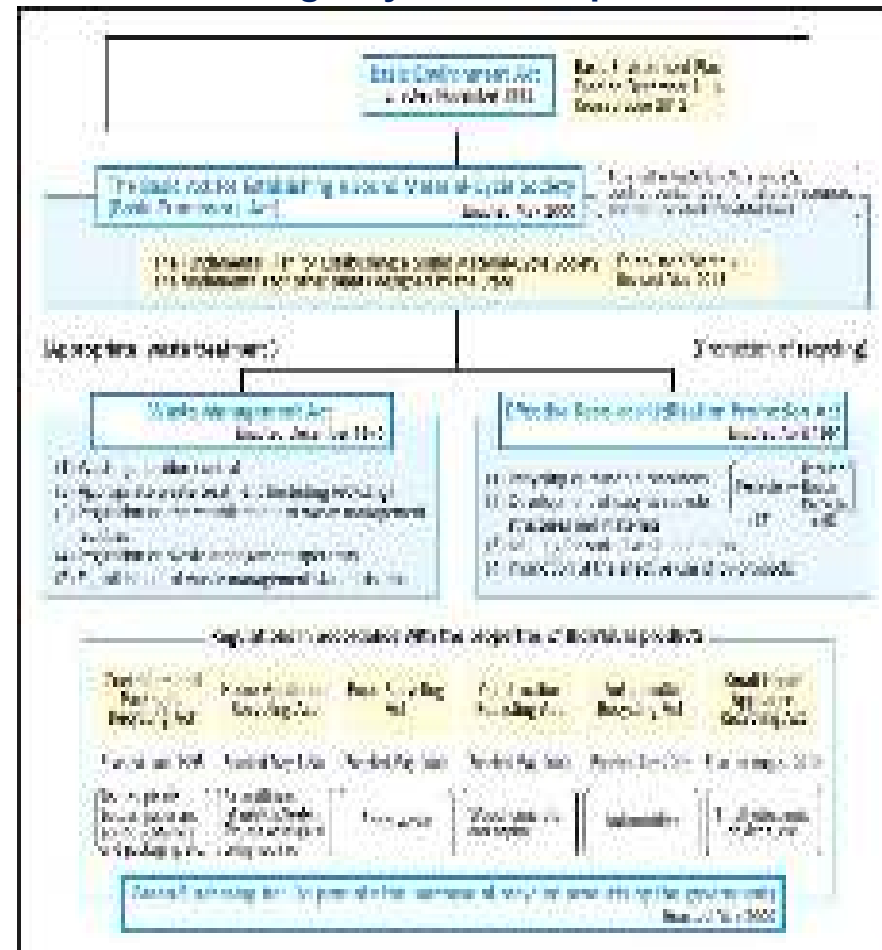
# A Case of Japan

Rapid economic growth made obvious the **need for a change in the legislative framework of the country**, since the Public Cleansing Law was not enough by itself to deal with the keep growing waste amounts and types.

This led in 1970 to the establishment of the Waste Management Law (Waste Management and Cleansing Law now), comprising the first step toward the establishment of today's waste management system.

**The Law regularly revised since 1970**

## Legal system of Japan



Source: ISWA(2012) Solid Waste: guidelines for successful planning, International Solid Waste Association  
 MoE (2014) History and Current State of Waste Management in Japan, Ministry of the Environment in Japan



