# DEVELOPMENT OF NATIONAL WASTE MANAGEMENT STRATEGIES IN SRI LANKA

#### M J J Fernando

Deputy Director General (Education and Awareness)
Project Director – Project for Construction of Sanitary Landfill
Central Environmental Authority

#### Overview of the NSWMS

- First NSWMS developed in year 2000 not comprehensive one
- No Government Policy developed by 2000
- Government decided to develop a National Policy on Solid Waste Management (NPSWM) first and then review the existing strategy and to make necessary changes to make it align with the new policy.
- Hence NPSWM was developed in 2007 followed by NSWMS
- NSWMS was prepared in 2007 and covers a period of 10 years.
- It addresses two areas of waste management: municipal solid waste and biomedical waste

## Preparatory stage and organizational considerations

#### **Political Commitment**

- Highest level of political commitment was given by the Government
- Hon. Minister of Environment and Natural Resources assigned the task of developing both NPSWM followed by the NSWMS.

#### **Process of Developing NSWMS**

Parties involved, Coordination & Communication and Process of Consultation

- A National Review Committee was set-up in April 2006 to review first the strategy of 2000
- Regular meetings held and its final report prepared –
   September 2006
- It recommended the development of a National Policy followed by National Strategy
- A Drafting Committee was set-up to prepare the National Policy on SWM
- Regular meetings held and national stakeholder workshop organized to discuss the draft policy

#### **Process of Developing NSWMS**

- Parties involved, Coordination & Communication and Process of Consultation
- Working groups appointed and their findings discussed in the main session.
- A newspaper advertisement of published inviting views, comments from public. Very few public comments received.
- Final National Policy on SWM was approved by the Cabinet of Ministers in July 2007.
- Cabinet of Ministers directed to develop Strategies and Action Plan to implement the National Policy on SWM
- Same Drafting Committee was assigned the task

#### **Composition of NRC**

- Ministry of Environment
- Ministry of Local Government and Provincial Councils
- Central Environmental Authority (Chairman, CEA acted as Chairman of the Committee)
- Provincial Council (Western Province)
- Municipal Council, Colombo
- Experts from Universities
- Private Sector Company
   (involved in waste management)
- Non Governmental Organizations
- Freelance Experts



## Composition of Drafting Committee (Policy & Strategy)

- Ministry of Environment
- Ministry of Local Government and Provincial Councils
- Central Environmental Authority
- Ministry of Industries
- Two NGO representatives
- World Bank expert (Voluntary and personal basis)
- Academia from Universities

An Additional Secretary of the MOE served as the Chairman of the Committee

#### **Process of Developing Strategy**

#### **Meetings & Workshops**

- Brain storming meetings with the experts and officials of the sector held to develop draft document and also to develop a framework and the architecture of the strategy and Action plan
- A series of regular meetings of the Drafting Committee held
- 2-day residential National Workshop held from 22<sup>nd</sup> -23<sup>rd</sup>
   November 2007 to review and finalize the strategy.
- In this workshop several Working Groups appointed to discuss and submit recommendations to take-up in the plenary of the workshop on the following key areas

#### **Process of Developing Strategy**

- Waste management
- Capacity building , Research & Development
- Institutional arrangement
- Financial mechanisms
- Legal mechanisms

- All suggestions and recommendations considered for finalizing the strategy
- Time period for the planning process is only 3 months

#### **Process of Developing Strategy**

#### Scope, Objectives and Timing of the Strategy

- Strategy covers the MSW and Biomedical Waste only
- Objectives are aligned with the Policy Statements of the National Policy, as follows;
  - Waste Management
  - Capacity building, Research and Development
  - Institutional Arrangements
  - Financial Mechanisms
  - Legal Mechanisms
  - Strategy covers a period of 10 years

#### Relations with other Polices and Plans

- Maintains consistency with other policies such as;
  - Mahinda Chintana' the Government National Policy
    Statement presented at the Presidential Election 2005
  - National Policy & Strategy for Cleaner Production
  - ► National Wetland Policy and Strategies
  - National Environmental Policy
  - Sri Lanka Energy Policy and Strategies

#### **Baseline Data, Priorities and Targets**

- Baseline data extracted from the National SWM Database prepared in 2005 by the MOE
- It covers waste related data for all 311 LAS
- No time available to check and verify data due to short time given for the development of the strategy
- Only the MSW and Biomedical waste considered. other types
  of waste such as industrial waste, (other) hazardous waste etc
  not included
- The Strategy sets targets for activities on short- term (0-2 years), medium –term (3-5 years) and long- term (6-10 years) basis

#### Implementation of the Strategy and Action Plan

- 3 year National Project called 'Pilisaru National Solid Waste Management Project' setup in the CEA
- Approval of the Cabinet of Ministers granted in December 2007
- Project Period is from 1<sup>st</sup> January 2008
  - 31st December 2010
- Project period extended up to end of 2010
- 2013 later.
- Financial allocation set a part is
   Rs 5.6 billion (about 40.00 million US\$).
- Funds obtained from plastic CESS and environmental conservation levy

#### Implementation of the Strategy and Action Plan

 All funds is to support LAS and government institutions and used to provide technical and financial support, infrastructure facilities, machineries, vehicles, equipments etc, on the following areas;



- Waste minimization
- 3R Concept (Reduce, Reuse, Recycle)
- Waste segregation
- Waste storage, transfer and transportation
- Intermediate Waste treatment (composting, biogas technology and energy recovery, if possible)
- Disposal of residual waste (sanitary land filling)

#### **Awareness Building**

- Apart from the main implementation activities of the Pilisaru Project, a considerable effort is made to make the public and other stakeholders aware of the proper SWM.
- The stakeholders / events targeted;
  - School children
  - Employees in the key public sector institutions
  - Private sector companies ( on demand driven basis)
  - Religious places (temples, churches, mosques and Kovils)
  - Nationally important events, cultural, historical and religious ceremonies

#### **Means of Awareness Building**

- Audio visual media
- Printed media (news paper advertisements)
- Attending exhibitions (National, Provincial and local level)
- Awareness materials
- Telecasting documentaries, docudrama,
   'Abirupana' programs (similar to Mr. Bean)
- Waste collection fairs conducted in schools
- Waste banking system introduced in schools





#### **Means of Awareness Building**

- Environmental Pioneer Program implemented in the schools by the CEA for last 24 years
- Poster, Essay, art, cartoon and debate competitions
- Free / subsidized rated distribution of waste management equipments / instruments/ material to public and government & religious places (Ex: Reusable cloth bags, household compost bins, waste segregation colour coded bins, waste collection bins and polybags etc)





#### **Implementation (Operation)**

#### Responsibility

- Waste is legally termed as a 'Property' of the Local Authority.
   Therefore, the implementation of waste management activities in a given local authority is the sole responsibility of that particular LA.
- However, other agencies extend their support and collaboration in the implementation process

#### **Coordination**

- National Level coordination is done by the Apex Body
- District level coordination –by District Coordination Committees (DCC).
- DCC is a political meeting attended by Political leaders of ruling and opposition parties, Local Authorities and senior government officials
- Generally, the DCC is held in every month.

#### **Monitoring of Progress at National Level**

- A National Steering Committee for Waste Management (also called 'Apex Body') appointed with the approval of the Cabinet of Ministers to advice, and monitor the progress.
  - Secretary to the Ministry of Environment
  - Secretary to the Ministry of Local Government and Provincial Councils
  - Chief Secretaries of all 9 Provinces
  - Urban Development Authority
  - National Planning Department of the Ministry of Finance and Planning
  - External Resources Department of the Ministry of Finance and Planning
  - Ministry of Industries
  - Commissioners of Department of Local Government
  - Academics from Universities
  - Representatives of the NGOs
  - Freelance experts of the waste management field

### Monitoring of Implementation (at Local & District Level)

 At local level, Divisional Environmental Officers and Senior Environmental Officers attached to Provincial / District Offices of the CEA

#### **Monitoring at Political Level**

- At district level, District Coordinating Committee, headed by the Chief Political Organizer
- This DCC is held monthly basis and attended by the provincial heads of the CEA.
- Issues are also surfaced at the Parliamentary Consultative
   Committee convened at the Parliament from time to time
- At the highest level by the Presidential Secretariat depending on the magnitude of the issue

#### **Updating of Strategy**

Before the implementation of new strategy( and the action plan), the status of SWM was poor in terms of application of 3R system, collection, transport and most importantly intermediate treatments and final disposal.

After nearly 5 years of implementation a drastic change has occurred in the SWM sector in Sri Lanka since the policy and the strategy gives a clear-cut direction towards environmentally friendly implementation.

Even though all the (middle-term) targets set-in in the strategy have not been achieved, a remarkable improvement has occurred and in the waste management sector due to very good performances in some of the areas; such as waste collection, recycling, transportation, home composting and intermediate treatments (composting and biogas generation).

#### **Updating of Strategy**

#### Tangible developments occurred in brief;

- Nearly 1/3 of the LAS (110) has facilities for composting of perishable waste
- Private sector has involved in recycling activities
- Presidential / National level Rewarding of best performing LAS, Public / Private sector agencies in the waste management sector
- Government decision to promote use of organic manure (Compost) along with the highly subsidized inorganic fertilizer
- Development of National Vocational Quality (NVQ) standards for the workers and other staff involved in waste management sector
- Establishment of a few sanitary landfills for disposal of residual waste
- development of interim standards for discharge of leachate from landfills and compost plants
- Growing interest in the waste to energy solutions
- Inclusion of the waste management in school curriculum form the primary school level
- Great awareness on waste management in the general public and school children

#### **Updating of Strategy**

It is felt that the policy and strategy need to be updated in view of the new issues emerged due to recent developments in the waste sector;

- Change of lifestyles and food habits (in main cities)
- Gradual change of waste composition
- Steady Increase in the waste quantities with population increase
- Growing interest in the waste incineration
- Redefining of targets set-in the strategy

## Thank You