

# **ANNUAL REPORT 2013**



**Central Environmental Authority**  
**Ministry of Environment & Renewable Energy**

## **Vision**

**A clean & green environment  
Through service excellence**

## **Mission**

**Flagship of the nation in protecting  
&  
managing the quality of the environment  
by coordination, promotion, promoting public participation,  
enforcement, appropriate technological interventions,  
environmental education and awareness**

## **PREFACE**

---

The Annual Report 2013 has been prepared based on the information provided by the Directors/Heads of 15 Divisions/Units in the Head office, 09 Provincial Offices and Environmental Council. It is also included information and performance of special projects undertaken by the CEA. In this report, the information has been provided based on the key performance of key Divisions/ Units in the Head office and Provincial Offices.

In term of clause 14 of the financial Act No. 38 of 1971 and Guidelines of Good Governance, the CEA is required to prepare this Annual Report contains the information on performance of the Authority, annual accounts and the Auditor General's report.

The Planning & Monitoring Unit takes this opportunity to thank all Directors / Heads of the Divisions/ Units/ Provincial Offices and Project Directors for the cooperation and support extended by sending the required information.

Planning & Monitoring Unit

## **CHAIRMAN'S MESSAGE FOR ANNUAL REPORT 2013**

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It is my pleasure to present to you the annual report of the Central Environmental Authority (CEA) and audited accounts comprising the balance sheet, cash flow statement and the auditor General's report for the financial year ended on 31st December 2013.

As the central body to integrate environmental considerations in to the rapid development process of the country, CEA continued its efforts under various sections.

Maintain the quality of water bodies is a prime importance for the beneficial use of the people. But the practice of disposing industrial effluents is increasing rapidly making water resources deteriorate. Existing regulation No. 1534/18 dated 01.02.2008 shows that there are loopholes in protecting water bodies from various effluents. Therefore, CEA conducted a forum with specialists in the water and related sectors to review the anomalies in the present standards. In addition, CEA carried out Chemical Accidence Prevention and Preparedness Program aiming to build the capacity of relevant institutions in Sri Lanka to develop systems addressing chemical accident prevention and preparedness

The water quality monitoring laboratory of the Environmental Pollution Control (EPC) Division of the Central Environmental Authority (CEA) has been assigned to provide analytical services to the whole institute from its inception. Its main function is to monitor the quality of industrial effluents throughout the country. During the reporting period, CEA could be able to collect and analyses samples for EPL purposes, legal purposes and commercial purposes.

During the year 2013, Twining Program on Environmental Impact Assessment (EIA) between Japan and Sri Lanka was initiated with the Asian Environmental Compliance and Enforcement Network (AECEN). Under this program capacity development of officers involved in the EIAs and preparation of guidelines for selected sectors are expected. As an initial step to commence this program, a stakeholder workshop was held on 10<sup>th</sup> December 2013 at the Hotel Taj Samudra.

In order to make sure the optimum use of natural resources while minimizing the negative impact on the environment, the guide book on Natural Resources Management prepared in 1997, was reviewed and revised in consultation with stakeholder agencies and reprinted. Copies of the new print were distributed among all stakeholder agencies. On the other hand, CEA conducted awareness programs in many parts of the country to make stakeholders aware on Natural Resources Management.

During the year 2013, CEA prepared a Digital District Resources Profile containing compact disk for Kaluthara and Kegalle Districts which contains environmentally related information and Socio economic data of a district at divisional secretariat level. It is a great achievement of CEA because it provides novel information for industrialists as well as for policy makers.

In order to facilitate the implementation of Hazardous Waste Management regulations and providing solutions to the issues pertaining to the management of clinical wastes, CEA took initiatives to establish a centralized incinerator facility as a tripartite national project with the involvement of Sisili Hanaro Encare Pvt Ltd, Central Environmental Authority and Ministry of Health at Colombo East Base Hospital, Mulleriyawa. This facility bares the capacity of combusting six tons per day. This facility will cater for both public and private healthcare facilities in the country. In the meantime, Final Report on the National Chemical Profile of Sri Lanka and National Implementation Plan for the Chemical Management has been prepared and improvement of the quality of this report is in progress.

CEA is responsible for building awareness and providing education to the public towards harnessing their participation for the conservation of environment and make them more concern on environment. Therefore, CEA carried out various educational and awareness programs to make people aware about the environment and its importance. In addition, Under the theme “Think, eat, save, reduce your Food print” the World Environment Day - 2013 was held at the Temple Trees with the participation of more than 5000 School children including Environmental Pioneers with the participation of His Excellency Mahinda Rajapaksha, President of the Democratic Socialist Republic of Sri Lanka.

Waste collection from houses, commercial establishments and common places is one of the main responsibilities of a local authority with respect to waste management. Inadequate waste transport vehicles are the bottle neck which shall be rectified immediately. CEA procured 75 tractors and 77 trailers and distributed among local authorities and provincial councils. In the meantime, The CEA negotiates with the SANASA Development Bank with regard to the possibility of implementing a waste banking system.

Despite the fact that the plastic products are essential for our routine, plastic has become one of major threats for the environment due to its poor degradable nature. Therefore, CEA continued the National Post Consumer Plastic Waste Management Project (NPCPWMP) in 2013 also to manage the PCPW in an environmentally friendly manner. The project support to enrich plastic / polythene waste recycling industry while developing the plastic/polythene waste storage facilities among local authorities which are excellent in feasibility progress in country. Also the project is carrying out a contrived procedure to increase the plastic / polythene waste recycling capacity from 40% (at present) to 80% by the year 2016.

Usually, in every year we (CEA) use different strategies to manage the environment sustainably while the government and the private sector launch various development projects. The strategic model that was introduced by the CEA can be adopted by the developers to protect the environment.

I wish to thank the Director General, the Management staff and employees of the CEA for their contribution to achieve the CEA’s objectives and set goals during the review. I also take this opportunity to thanks the members of the Board of Management of CEA and members of the Environment Council for their corporation, guidance, advice and support given to me in the management of the affairs of the CEA. My appreciation also goes to the Secretary, Additional Secretaries and all the officers of the Ministry of Environment & Renewable Energy for their corporation, attention and advice. I would like to thank the Minister of Environment & Renewable Energy Hon. Susil Premjayantha for his excellent advice and guidance.

Chairman

Central Environmental Authority



## Senior Management Team of the Central Environmental Authority

| Name                               | Designation                 | Qualifications   |
|------------------------------------|-----------------------------|--|
| <b>Mr. Wimal Rubasinghe (SLAS)</b> | Chairman                    | B.A PD Dip in MGT, Dip in Journalism, Mgt trained in UK  |
| <b>Dr. Saranga Alahapperuma</b>    | Director General            | MBBS, Dip in Journalism, Dip in Journalism (electronic Media)  |
| <b>Mr. K. H. Muthukudaarachchi</b> | DDG (EPC)                   | B. Sc, M. Sc,  |
| <b>Eng. J. M. U. Indraratne</b>    | DDG (HRD, Admn, Fin.)       | B. Sc (Eng.) Hons. MBA, C. Eng. FIE (SL) Grad. IE (Aus.)   |
| <b>Mr. U.K.D.G. Jayasinghe</b>     | DDG (EM & A)                | B. Sc, M. Sc   |
| <b>Mr. M.J.J. Fernando</b>         | DDG (EE&A)                  | B. Sc, M. Sc, PG. Diploma (RS & GIS)   |
| <b>Mr. M.K.S. Nanayakkara</b>      | Director (Finance)          | B.Com. (Hons.), Licentiate –SLICA, FPAF  |
| <b>Ms. Kanthi de Silva</b>         | Director (EIA)              | B. Sc, M. Sc   |
| <b>Mr. M.S.A.E Thismalpola</b>     | Director (HRD)              | Attorney –at – Law, PGD in HR  |
| <b>Mr. M.A.A.N Hemakumara</b>      | Director (Geo - Info)       | B. Sc , M. Sc  |
| <b>Mr. Neil Perera</b>             | Director (EE&A)             | BA, Econ. (Special), MA (Economics)Dip (General Management)  |
| <b>Ms. Manuja Wimalasena</b>       | Director (Legal)            | Attorney- at –Law, LLB (Sri Lanka), Notary Public, Commisioner for Oaths and Company Secretary   |
| <b>Mr. T.M.A.S.K Rodrigo</b>       | Director (NRM & Monitoring) | B. Sc , M. Sc (Forestry)   |
| <b>Dr. R. M. S. K. Rathnayake</b>  | Director (EPC)              | B.Sc. (Sp), Ph.D., Chtd. Chemist, Dip. Chemistry   |
| <b>Ms. Wasantha Wijesinghe</b>     | Director (Lab Services)     | B. Sc (Chemistry) Hons. M.Sc. (Analytical Chemistry), M.I Chem., (Chartered Chemist)   |
| <b>Mr. G.A. Weerasundara</b>       | Director (WM)               | B. Sc, M. Phil   |
| <b>Mr. R. Walpola</b>              | Director (Admn)             | B.A.Hons., MSSc (Sociology)  |
| <b>Ms. Kumari Kulatilake</b>       | Dy. Director (P&M)          | B.A (Gen)  |
| <b>Mr. Sunil De Silva</b>          | Programmer /Analyst         | B.Sc. (Gen.), PGD Computer Technology, M.Sc. (Computer Science), Chartered IT Professional Member of British Computer Society(MBCS CITP) |
| <b>Ms. A.C.P. Dabare</b>           | Senior Librarian            | B.A, Asso. Chtd. libB.A, Asso.Chtd. lib  |
| <b>Ms. U. Vithanachchi</b>         | Internal Auditor            | B. sc (Admin), SLICA, MAAT, HDM  |

| <b>Name</b>                    | <b>Designation</b>             | <b>Qualifications</b>  |
|--------------------------------|--------------------------------|--|
| <b>Mr. K.G.T.N. Kiriella</b>   | Director (CP)                  | B. Sc, M. Sc   |
| <b>Mr. K.A.P. Welikannage</b>  | Director (SaP)                 | B. Sc, M. Sc, MA, PGD (Envtl. Science),<br>Dip(HRM & Marketing)  |
| <b>Mr. M. Sivakumar</b>        | Director (EP)                  | B. Sc, M. Sc   |
| <b>Mr. H.S. Premachandra</b>   | Director (SuP)                 | B. Sc (sp) Hons, M. Sc, M.I. Biol, MIEPSL,<br>C. EnvP, MPMI (US) |
| <b>Ms. Devika Vithanage</b>    | Actg. Director (WP)            | B. Sc, M. Sc (Environmental Management),<br>PGD (Envtl. Science) |
| <b>Mr. Susantha Wedage</b>     | Dy. Director (UP)              | B. Sc, M. Sc   |
| <b>Ms. Vijitha Sathyakumar</b> | Asst. Director (NPO)           | B. Sc, M. Sc (NRM), PGD (Envtl. Science)                         |
| <b>Mr. R.G.M Anura</b>         | Actg. Asst. Director<br>(NCPO) | B. Sc, M. Sc   |

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## 1.0 Central Environmental Authority

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### 1.1 Introduction

The Central Environmental Authority (CEA) having established in 1981 under the National Environmental Act (NEA) No. 47 of 1980, completes thirty two years' service by 2013. The CEA operating under the purview of the Ministry of Environment & Renewable Energy is one of the main implementing arm of the national environmental policy. The Annual Report of 2013 contains the performance of the CEA including 09 Provincial Offices, 14 District Offices, one coordinating office and special Projects implemented by the CEA for 2013, an assessment of its successes and failures in order to provide a full account of the work carried out utilizing public funds and donor funds / grants.

### 1.2 Objective

On the recommendation of the CEA, the NEA No 47 of 1980 has been amended in 1988 and 2000 by National Environmental (Amendment) Act No 56 of 1988 and by National Environmental (Amendment) Act No. 53 of 2000 respectively. The main powers embodied in the National Environment Act of 1980 are:

- ❖ To regulate, maintain and control the types, constituents and effects of waste, discharge, emissions, deposits or other sources of pollution which are of danger or potential danger to the quality of the environment through the implementation of Environmental Protection License (EPL) scheme under the National Environment Act.
- ❖ To protect natural resource base on the country by ensuring environmentally sound development interventions through systematically assessed environmental implications, using Environmental Impact Assessment (EIA) as a tool.
- ❖ To make people conscious of the local, national and global environmental problems with a view to motivate and to harness public support and participation, particularly the participation of school children in protecting the environment.
- ❖ To be the centre of information on environment related data and information, providing its services to wider cliental needs.

### 1.3 Powers, Functions and Duties

Of the powers, functions and duties stipulated in the National Environmental Act No. 47 of 1980, the CEA presently focuses mainly on the following key functions, powers and duties;

- a) To administer the provisions of the National Environmental Act and the regulations made there under.
- b) To undertake surveys and investigations as to the causes, nature, extent of pollution and to assist and co-operate with other persons or bodies carrying out similar surveys or investigations.
- c) To conduct, promote and co-ordinate research in relation to any aspects of environmental degradation or the prevention thereof, and to develop criteria for the protection and improvement of the environment.
- d) To specify standards, norms and criteria for the protection of beneficial uses of the environment.
- e) To publish reports and information with respect to any aspect of environmental protection and management.
- f) To provide information and education to the public regarding the protection and improvement of the environment.

The CEA has been entrusted with wider regulatory powers since its inception by amending the National Environmental Act in 1988 and in the year 2000.

The principal powers entrusted with these amendments include *inter alia* the following;

- a) To require activities resulting in the discharge of pollutants to the environment to do so under the authority of a licence issued by the CEA, in accordance with standards and criteria stipulated by the Authority.
- b) To require certain prescribed development projects which may result in significant adverse impacts on the environment to undertake Environmental Impact Assessment prior to their implementation.
- c) To gazette the activities which will discharge, deposit or emit waste into the environment as “Prescribed Activities” and to ensure that no person shall carry on any prescribed activity except under a license issued by the Authority and in accordance with standards and other criteria as may be prescribed under this act

## 1.4 The Members of the Authority

The authority consists of three members appointed by H.E. the President in consultation with the Minister of Environment, two of whom shall have adequate expertise and qualifications in the subject of environment. One of the other members should possess adequate administrative skills and experience in environmental management. Of the three members, one is appointed by H.E. The President, as Chairman of the Authority.

Mr. Wimal Rubasinghe was appointed by H.E the President as Chairman of the CEA with effect from 21.11.2012 since the Mr. Charitha Herath was promoted as the secretary of Mass Media and Communication Ministry on the same day. Prof. M. Lalith De Silva & Mr. Saman De Silva were appointed by H.E the president as members of the Board of the CEA with effect from 07.05.2010.

Since then, the Board of CEA comprise of the following Members;

|                          |   |                         |
|--------------------------|---|-------------------------|
| Mr. Wimal Rubasinghe     | - | Chairman, CEA           |
| Prof. M. Lalith De Silva | - | Member of the Authority |
| Mr. Saman De Silva       | - | Member of the Authority |

Director General of the CEA, Dr. Saranga Alahapperuma acts as the Secretary of the Board under the powers provided in NEA.

The Board held 11 meetings guiding and directing a number of major issues relating to Environmental Management during the year under review.

## 1.5. Environmental Council

### 1.5.1 Introduction

The Environmental Council was established under section 7 of the National Environmental Act; No. 47 of 1980 as amended.

#### Main Roles of the Environmental Council

According to the aforementioned act, major functions of the Environmental Council are as follows.

- (a) Generally advising the Central Environmental Authority on matters pertaining to its responsibilities, powers, duties and functions.
- (b) Advising the Central Environmental Authority on any matter referred to the Council by the Authority.

### Structure of the Environmental Council

As per stated by the National Environmental Act; No.47 of 1980 as amended, the Environmental Council consists of a set of members appointed by the Ministry of Environment. During the year 2013, eleventh session was conducted by the Environmental Council as follows.

#### 11<sup>th</sup> Session

The following members had been appointed by the Hon. Minister of Environment for 11<sup>th</sup> session of the Environmental Council.

| <b>Members of the Council</b>                          | <b>Name of the member</b>   |
|--|-----------------------------|
| <b>Government Officials</b>                            |                             |
| Ministry of Local Government & Provincial Council      | Mr. W M P G Wickramasinghe  |
| Ministry of Finance & Planning                         | Mr. C N Wijesekera          |
| Ministry of Lands and Land Development                 | Mrs. Shanthi Fernando       |
| Ministry of Industrial Development                     | Mr. A. K. Seneviratne       |
| Ministry of Highways & Road Development                | Ms. S. A. D. S. Subasinghe  |
| Ministry of Technology and Research                    | Mr. P. S. Gunasekera        |
| Ministry of State Resources and Enterprise Development | Mrs. M A Nalini             |
| Ministry of Co-operatives and Internal Trade           | Ms. D. C. N. A. Kumarasingh |
| Ministry of Railway & Transport                        | Mr. U.N. Mallawarachchi     |
| Ministry of Power & Energy                             | Ms. Indrani Withanage       |
| Ministry of Power & Energy                             | Mr. J G L S Jayewardena     |
| Ministry of Health & Nutrition                         | Dr. Ananda Jayalal          |
| Ministry of External Affairs                           | Mrs. Samantha Jayasooriya   |
| Ministry of Fisheries & Aquatic Resources              | Mr. Indra Ranasinghe        |
| Ministry of Agriculture Development                    | Ms. L. U. N. Sumanasekera   |
| Ministry of Economic Development                       | Ms. N B Hema Dharmawardena  |
| Ministry of Economic Development                       | Ms. M. A. S. Perera         |

|                                 |  |
|---------------------------------|--|
| Ministry of Education           | Ms. B L D Balasooriya                  |
| Central Environmental Authority | Ms. Ramani Ellepola - <b>Secretary</b> |
| Central Environmental Authority | Dr. Saranga Alahapperuma - Secretary   |

#### **Experts on Environment Protection and Management**

|   |  |
|---|--|
| Presidents' Counsel                     | Mr. Palitha Kumarasinghe - <b>Chairman</b> |
| Professor, University of Peradeniya     | Prof. Shantha Hennayeka                    |
| Senior Lecturer, University of Kelaniya | Mr. A. G. Amarasinghe                      |
| Attorney-at-law                         | Mr. Jagath Gunawardene                     |
| Social and Environmental Specialist     | Mr. Nandasena Maddugoda                    |
| Attorney-at-law                         | Mr. Bandusena Liyanage                     |

#### **Representatives from Volunteer Organizations**

|  |                             |
|--|-----------------------------|
| Sri Lanka Environmental Journalist Forum | Dr. Dharman Wickramaratna   |
| President, ITPSL                         | Mr. Hemantha K. Jayasundara |
| Attorney-at-law                          | Mr. Indika Jayathileka      |

#### **Meetings held:**

| Meeting No. | Month    | Date |
|-------------|----------|------|
| 237         | January  | 21   |
| 238         | February | 18   |
| 239         | April    | 03   |
| 240         | April    | 29   |

#### **Matters of concern:**

- Imposing a Cess to control "Sili" Bags in the country
- Proposed amendments to the NEA
- Treatment of waste water from automobile service stations with participation of University of Moratuwa
- Newly invented biological treatment method by ITI for automobile service stations
- North Western Provincial Environmental Statute
- Problems arisen in boundary demarcation of Bolgoda Environmental Protection Area

- Problems in implementing section 61<sup>st</sup> of Mines & Minerals Act with regard to sand mining activities
- Cooperate Plan (2014-2018); Pilisaru Project
- New five year plan for Pioneer Brigades' programme (2014-2018)
- Producer Responsibility concept for plastic waste management

The term of three years of the 11<sup>th</sup> session of the Environmental Council was terminated in June 2013. Then members for 12<sup>th</sup> session were appointed by the Hon. Minister of Environment and Renewable Energy.

### **12<sup>th</sup> Session**

Following members were appointed by the Hon. Minister of Environment and Renewable Energy for the 12<sup>th</sup> session of the Environmental Council.

#### **Members of the Council**

|                                     | <b>Name of the member</b>           |
|-------------------------------------|-------------------------------------|
| Ministry of Finance & Planning      | Mr. K. G. R. G. R. Wickramawardhana |
| Ministry of Ports & Highways        | Mr. M. C. L. Fernando               |
| Ministry of Economic Development    | Mr. N. B. Monti Ranathunga          |
| Ministry of Industries & Commercial | Mr. B. A. K. W. L. Piyaratna        |

#### **Affairs**

|                                 |                              |
|---------------------------------|------------------------------|
| Ministry of Fisheries & Aquatic | Mr. H. M. K. J. B. Gunaratna |
|---------------------------------|------------------------------|

#### **Resources**

|                              |                                     |
|------------------------------|-------------------------------------|
| Ministry of Power and Energy | Mr. J. G. L. Sulakshana Jayawardena |
| Ministry of Health           | Dr. Sarath Amunugama                |
| Ministry of Defense & Urban  | Mr. J. K. P. Kurukulasooriya        |

#### **Development**

|                                 |   |
|---------------------------------|---|
| Central Environmental Authority | Dr. Saranga Alahapperuma - <b>Secretary</b> |
|---------------------------------|---|

#### **Experts on Environment Protection and Management**

|   |                           |
|---|---------------------------|
| Head of the Department of Zoology,<br>University of Colombo | Dr. Nirmalie Pallewaththa |
| Senior Lecturer, University of Colombo                      | Dr. Sudheera Ranwala      |

**Representatives from Volunteer Organizations**

|                                  |  |
|----------------------------------|--|
| Attorney - at - law              | Mr. Jagath Gunawardena - <b>Chairman</b> |
| Prof. W. M. T. B. Wanninayaka    | Senior Marine Biologist                  |
| IUCN Sri Lanka                   | Mr. Shamen Widanage                      |
| Former Chairman of ITN           | Mr. Newton Gunaratna                     |
| Small Fisheries Federation       | Mr. Douglas Tissera                      |
| Ruk Rekaganno                    | Mrs. Iranganie Serasinghe                |
| Environmental Conservation Trust | Mr. Tilak Kariyawasam                    |

**Meetings held:**

| Meeting No. | Month    | Date |
|-------------|----------|------|
| 241         | December | 19   |

**Matters of concern:**

- Solid Waste Management
- Mangrove eco systems
- Environmental Issues in North and East

## 2.0. Duties and Responsibilities of the CEA

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To achieve its objectives; the CEA has organized its institutional structure focusing on four technically specialized Divisions listed below.

- Environmental Pollution Control (EPC)
- Environmental Management and Assessment (EM&A)
- Environmental Education and Awareness (EE&A)
- Human Resources Development, Administration and Finance (HRD, Admin & Finance)

These Divisions are headed by academically qualified and professionally competent personnel with considerable years of experience in the field of environmental management.

### **Environmental Pollution Control Division**

There are three units under the Environmental Pollution Control Division and pertaining to each unit as follows:

#### **Environmental Pollution Control Unit**

- Implement concurrence procedure for Board of Investment's approved projects (For both new site Recommendations and EPLs)
- Site Recommendations for Telecommunication Towers
- EPL scheme for Telecommunication Towers
- Participate in project approval process
- Resolving public complaints on Environmental Pollution /Nuisance
- Technical facilitation to control environmental pollution
- Appear courts and Human Right Commission (HRC) as expert witnesses and provide technical reports to the Parliamentary committees, courts and HRC
- Introduce new strategies/tools for effective pollution control

#### **Waste Management Unit**

- Introduction & implementation of Hazardous Waste Management (HWM) rules & regulations
- Technical support for implementing solid waste management projects and programmes
- Planning and implementation of pilot projects on WM systems
- Regular monitoring of compliance

- Development of technical guidelines on waste management
- Implementation of multinational environmental agreements and its obligations (Basel Convention & Rotterdam Convention)
- Industrial crisis management
- Industrial Chemical management
- Assist in granting environmental approvals for WM projects/activities
- Technical support for legal prosecution
- Pilot projects on SWM
- Handling public complaints
- Assist to conduct education and awareness programmes on WM
- Supervision of the WM related projects
- Compliance monitoring
- Providing technical inputs on waste management related activities for other institutions

#### **Air Quality & Laboratory Services Unit**

- Providing analytical service to other Divisions /POs of CEA
- Monitoring the compliance of the Environment Standards
- Monitoring the ambient water, air in selected areas
- Carrying out research & surveys in the environmental sector related to air, noise, vibration & water quality
- Formulation of regulations on air quality, water quality & noise

#### **Environmental Management & Assessment Division**

There are three units Under the Environmental Management Assessment Division

##### **Environmental Impact Assessment Unit**

- Implementing Initial Environmental Examination (IEE) process
- Implementing EIA process and ensuring compliance
- Implementing awareness programmes on the EIA/IEE procedures
- Formulating guidelines on EIA & IEE procedures
- Introduction & Implementation of SEA procedure

**Natural Resource Management Unit**

- Granting Environmental Clearance for non EIA/IEE projects
- Carrying out compliance monitoring
- Investigating public complaints on Natural Resource Degradation
- Implementing awareness programme on conservation of Natural Resources
- Declaration of environmental protection areas
- Issuing guidelines for policy implementation

**Research and Development Unit**

- Preparing GIS base information
- Implementing environmentally sensitive area management projects
- Preparing District Profiles and maps.
- Coordinating environmental research & disseminating results

**Environmental Education & Awareness Division**

- Conducting environmental education and awareness programmes among target groups through print & electronic media as well as group communication
- Conducting training workshop and exhibition at national and divisional level
- Providing environment information to the public
- Supporting necessary support to and from NGO's
- Commemorating Environmental Days
- Establishment & Implementation of Nature Field Centers.

**National Environmental Information Center**

- Collection & development of environmental information
- Coordination of library network & other libraries
- Provide library documentation & information service to all categories of information users.

**Audio Visual Unit**

- Providing facilities of audio visual equipment to the programmes.
- Visual coverage of special functions of the CEA & MENR.
- Video production for educational & awareness purposes

- Providing facilities for video graphic visuals

### **HRD, Administration & Finance Division**

Human Resource Development, Administration and Finance Units are come under the Human Resource Division, Administrator & Finance Division.

#### **Human Resource Development Unit**

- Overall Human Resources Planning
- Selection, recruitment & Promotion
- Induction Training Programmes
- Individual Performance Evaluation System
- Identifying training needs and conducting training programs for selected employees (local & international)
- Employee grievance handling.
- Disciplinary Procedures.
- Human Resources Data Base

#### **Administration Unit**

- Procurement, acquisition & maintaining capital assets
- Issue and renewal of service of agreements
- Provision of insurance facilities & logistical support
- Industrial health, safety, & welfare
- General administration

#### **Finance Unit**

- Preparing the annual budget & submitting final accounts
- Preparing final progress reports and Monthly budgetary control reports
- Preparing salary and salary related report and payments
- Maintaining project accounts
- Effective Payments

**Legal Unit**

- Preparing amendments to existing legislation (National Environmental Act) and drafting new legislation and regulations.
- Enforcing provisions of the NEA and gazetting regulations.
- Issuing directives under, sections 12 and 24 B of the NEA.
- Cancellation, suspension and rejection of EPLs.
- Issuing section 23S notices for littering.
- Approval of EPL conditions & inspection reports to be submitted to court.
- Appearing in courts on cases filed by the CEA and filed against the CEA
- Facilitating Inquiries & appeal hearings at the Ministry.
- Preparing documents in order to initiate legal action.
- Conducting awareness programmes on environmental legislation and participating in awareness programmes as resource persons.
- Advising other divisions & institutions on legal issues on environment.
- Drafting & approving agreements.
- Coordinating with the Police Department on handling complaints

**Planning & Monitoring Unit**

Collect baseline data, define types and sources of data needed and the method of data collection and link with data sources

- Formulate the Corporate Plan of the CEA
- Prepare operational plans for each thematic area, externally funded projects and for any other interventions based on the Mid Term Work Programme and the Corporate & Annual plans of the CEA
- Develop monitoring plans
- Ensure inter-divisional and Centre/Region coordination
- Arrange evaluations
- Prepare progress reports for reporting to various supervisory bodies i.e. MENR, ERD, and MPD etc.
- Prepare Annual Reports of the CEA

- Inform international donors, private sector entities and other relevant stakeholders of the progress of the operations of the CEA

#### **Complaint Unit**

- Receives complaints from the public and institutional sources concerning issues, problems and threats and damage to the environment
- Refers the issues to relevant authorities and deals with them.

#### **Internal Audit Unit**

- Review the accounting and internal control systems.
- Examination of financial and operating information.
- Review of the economy, efficiency and effectiveness of operations including non-financial control of the organization.
- Review of the operational compliance with laws, regulation and other external requirements with management policies and directives and other internal requirement.
- Carry out ad hoc investigations on any matters required by the management

#### **Provincial Offices**

- Initial Environmental Examination (IEE) for development projects with localized impacts.
- Environmental recommendation for sitting industries
- Environmental Protection Licenses procedure for prescribed activities other than those delegated to Local Authorities.
- Coordinate and monitor activities of Local Authorities on delegated functions and provide technical guidance where necessary.
- Implement programmes for Natural Resource Management.
- Assist in resolving non IEE/EIA projects which require CEA clearance, (e.g. gem mining, land filling, felling of trees etc.)
- Implement awareness and educational programmes on environment.
- Participate and represent CEA at regional level meetings and functions
- Co-ordinate with governmental organizations, non-governmental organizations, and community based organizations, voluntary associations, industrialists, business community, schools, youth groups, public officers and the general public at sub-national level.
- Implement, review and monitor district, divisional and village level projects and school projects.

- Develop, update and maintain specially referenced regional data base
- Develop Annual Work Plans for Provincial Offices and District Offices within the 5 year work programme of the CEA

**Performance of the Authority**

The highlights of the tasks performed by each of these Divisions during the year 2013 are succinctly explained in the following section.

## **3.0. Environmental Pollution Control Division**

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### **3.1. Environmental pollution control unit**

Environmental Pollution Control (EPC) unit of the Environmental Pollution Control Division is mainly responsible for prevention and control environmental pollution. To achieve this objective, EPC unit continues its regular activities and some of the new initiatives to prevent minimize and control environmental pollution mainly from industrial activities. National Green Award is one of the main activity initiated in 2012 to encourage the greening approaches of industries as well as the institutes in the country. The main legal tool implement by the CEA to control industrial discharges and emissions is the Environmental Protection License (EPL).

The activities of the unit are grouped into 4 main subject areas for easy functioning. The subject areas are as follows,

1. Regulation and Monitoring
2. Policy Development
3. Technical Facilitation
4. Special Programmes for Pollution Control

#### **3.1.1 Regulation and Monitoring**

##### **3.1.1.1 Implementation of Environmental Protection License Scheme**

The EPC unit implement EPL scheme for prescribed activities in the Gazette notification No: 1533/16 published on 25.01.2008.

All prescribed activities listed into three categories in the gazette according to their magnitude of pollution to the environment. The part “A” of the lists consists of 80 high polluting activities, part “B” consists of 33 medium polluting activities and part “C” consists of 25 low polluting activities. Implementation of the EPL process for A and B category industries are conducted by the Provincial Offices of the CEA and implementation powers of activities in the list C have been delegated to the Local Authorities (LA).

EPC unit is maintaining the database for high polluting activities (A Category). Licensing details as at present;

| Issued EPL   | 2013 |
|--------------|------|
| New EPLs     | 983  |
| EPL Renewals | 1753 |

### 3.1.1.2 Granting concurrence to the Board of Investment of Sri Lanka (BOI)

BOI has the authority to grant EPL for prescribed activities registered under section 17 of the BOI Act. The concurrence from the CEA has to be obtained before issuing the EPL. Therefore EPC unit has to play an important role in granting of concurrence to the BOI industries for implementation of EPL scheme.

#### Concurrence granted by EPC unit for EPL and New sites of the BOI registered activities

| Granted Concurrence                         | 2013 |
|---|------|
| New EPLs                                    | 70   |
| EPL Renewals                                | 236  |
| New site Recommendations Other projects     | 95   |
| New site Recommendations for Telecom Towers | 50   |
| EPL for Telecom Towers Inspections          | 33   |

### 3.1.1.3 Complaints Investigations and Monitoring

Investigation of public complaints, evaluation of pollution control systems adopted by industrial activities (by wastewater analytical reports, noise & vibration measurements etc.) are also carried out by EPC unit.

The EPC Unit investigate the complaints in relation to the activities of BOI approved industries and other complaints, which were directly forwarded by the complaint unit, Chairman and Director General of the CEA. During 2013, 70 complaints of BOI approved industries were received and 37 were investigated and remedial actions were taken and others were referred to relevant institutions. 85 non BOI complaints received and 33 complaints were inspected and others were referred to relevant institutions.

### **3.1.1.4 Environmental Protection License for Export Processing Zones (EPZ)**

There are 7 export processing zones managed by the BOI which were approved under the EIA process and prescribed as high polluting activities in the gazette notification. Therefore CEA has the responsibility to control environmental pollution from those EPZs. EPC unit is implementing EPL process for these industrial zones to minimize and control emissions and discharged to the environment. Regular monitoring is also carried out as it is important for pollution control process.

EPC unit has inspected Wathupitiwala and Katunayake, industrial zones in year 2013.

### **3.1.2 Policy Development**

#### **3.1.2.1 Establish new Regulation for Prescribed Activities.**

Prescribed Activity list No.1533/16 gazetted in 2008.01.25 was reviewed and amended during the period of 2013.

A series of meetings were held with officers from Provincial offices, considering the common and upcoming industries in the regions along with pollution load. Reweaving of the prescribed activity list was completed in year 2013.

#### **3.1.2.2 New amendment to the regulation on effluent discharge standards**

Maintain the quality of water bodies is a prime importance for the beneficial use of the humans and other life forms. But the practice of disposing industrial effluents is increasing rapidly making water resources deteriorate.

The effluent discharges of the industries are regulated through the EPL by imposing standards and criteria for pollution control.

The CEA gazetted effluent discharge standards for discharge of effluents in to the environment under several discharge modes. Many issues were identified in implementing stage of the existing regulation No. 1534/18 dated 01.02.2008. To overcome these issues and control the pollution of water resources from industries, EPC unit conducted a forum with specialists in the water and related sectors to review the anomalies in the present standards.

The main features of the proposed standards are the addition of more discharge modes when compared to the existing regulation. The practical difficulties were minimized and continual dialogues between stakeholders during the reviewing process, produced a more completed version of the existing regulation which is now ready to publish.

### **3.1.3 Technical Facilitation**

#### **3.1.3.1 Conduct Meetings of “Committee for Determining the Siting of High and Medium Polluting industries outside EPZ’s and Industrial Estates” (H&M Committee) to determine the siting of new industries (located in sensitive areas)**

This committee was formed to determine the siting of High and Medium Polluting Industries outside the Industrial Estates and Export Processing Zones. This is one of the important decision making committee established by the EPC Unit. This committee consists of members from the BOI, National Water Supply & Drainage Board, Ministry of Industry, Urban Development Authority and the CEA.

Main objective of this committee is to minimize the water pollution caused by industrial effluents mainly to the Kelani River as the Kelani River provides raw water from Ambatale for the supplying of almost 75% of the water requirement in Greater Colombo Area. Other than that the committee provide technical inputs to evaluate proposals on locating high and medium polluting industries outside the Kelani river basin which generate high amount of wastewater. In the year 2013, 14 meetings were conducted, 58 project reports were evaluated, 35 projects were recommended, 4 projects were rejected and 19 projects were differed.

#### **3.1.3.2 Technical Assistance for Environment Impact Assessment Process**

The officers of EPC unit serve as members of the Technical Evaluation Committees, which were assigned to assess pollution control aspects in EIA and IEE processes. The officers of EPC unit participated in 19 technical committees during the year 2013 to provide technical expertise in pollution control and 4 Joint inspections were carried out.

#### **3.1.3.3 Provide technical facilitations to industrial activities**

##### **(a) Annual Registration of Environmental Analytical Laboratories and Consultancy Services for Pollution Control.**

As an assistance for industrial community, EPC division has initiated an annual registration programme for environmental consultants and analytical laboratories in pollution control.

The sole purpose of this venture is to provide the industrialists an island wide low cost, genuine service and motivate them in their pollution abatement and compliance monitoring activities. At the same time consultants and laboratories will be able to rectify their shortcomings and update their knowledge to supply the demand on pollution control techniques.

33 laboratories and 45 Consultants were applied for registration. After inspections and evaluation, 29 Laboratories and 39 Consultants were registered as CEA recognized Laboratories and Consultants for 2013 lists. The lists were uploaded to the CEA website and also through printed lists.

03 Advertisements in English, Sinhala and Tamil for calling new registration and renew registration for the year 2014 were completed in last quarter of 2013.

#### **(b) Proficiency Testing Programme**

The Central Environmental Authority has organized a proficiency testing programme in collaboration with the Sri Lanka Association for Testing Laboratories. This programme is a component in annual registration of laboratories, which initiated to recognize and make uniformity among registered laboratories in the CEA. This programme would provide a means of continual improvement for participating laboratories and for them to provide genuine, competent and efficient services to the industrial community.

10 registered laboratories were selected for the programme and the proficiency testing component was completed in 2013.

The EPC unit and the laboratory of the CEA conducted the programme under the guidance of the Sri Lanka Association for Testing Laboratories, and hope to conduct similar programmes annually.

#### **3.1.3.4 Programme on Eco friendly Livestock farming for Healthy Living**

Environmental problems caused by livestock farms are increasing day by day. Most of the small scale livestock farms are located closer to dwellings and complained on odour, dust and pollution of drinking water sources.

To overcome these issues and promote environment friendly livestock farming, EPC unit of the Central Environmental Authority, with the assistance of the Ministry of Livestock & Rural Community Development, Department of Animal Production & Health, the Ministry of Health and the Ministry of Local Government & Provincial Councils established a National Level Advisory Committee. This committee is responsible for policy recommendations and ensures that the livestock farming industry, environment & health will work in a manner to maintain the highest possible standards of environmental, animal production & health aspects.

The National level advisory committee identified the need of reviewing the existing guidelines on piggery, goat, poultry and cattle farming, which were out dated and more information and corrections have to be incorporated. In 2013, the preparing of guidelines to establish eco-friendly livestock farming were completed and the guide books were ready to print.

### 3.1.3.5 Establishment of Compliance Assistance Centers for Small & Medium Enterprises.

Establishment of Compliance Assistance Centers in terms of assisting medium and small scale industries was considered by the EPC unit in the year 2013. A Series of meetings were held with ITI, IDB, NERED, NCPC, Switch Asia program and The Ministry of industry and commerce.

A task was given to ITI, NERD and IDB to develop low cost techniques to treat effluent discharges and emissions from industries. The awareness to industrialists and introduce the identified methods will be executed by the CEA. The ITI has developed a low cost effluent treatment method for service stations and Metal Crushers.

Two awareness workshops were held in 2013 with the participation of 120 and 147 participants from vehicle service stations in Southern province and Anuradhapura District to introduce the developed method to service station owners.

### 3.1.4 Special Programmes for Pollution Control

#### 3.1.4.1 Chemical Accident Prevention and Preparedness programme

“Chemical Accident Prevention and Preparedness Programme for Sri Lanka” (CAPP-SL), was implemented from July 2012 to November 2013, by the EPC unit of the Central Environment Authority. It was funded by Strategic Approach to International Chemicals Management (SAICM)’s Quick Start Programme Trust Fund, UNEP as the Executing Agency and the Asian Disaster Preparedness Center (ADPC) was served as the Technical Support Partner.

Objective of the project was to build the capacity of relevant institutions in Sri Lanka to develop systems addressing chemical accident prevention and preparedness. The project consisted of identifying the country’s situation with respect to chemical accident risks, defining the needs and priorities for improved management of chemical accident risks, and building capacity of multi-stakeholders through training. The project outcomes were a Country Situation Report with respect to chemical accidents, Needs assessment and the Road map for CAPP implementation.



*2<sup>nd</sup> Training Workshop, Colombo, Sri Lanka, 16 – 18 September 2013*

### Site Visits (Training Workshops) -



1<sup>st</sup> Training Workshop - Site visit to Map Ta Phut Industrial Estate, Rayong, Thailand, 08 May 2013

The overall vision of the CAPP Programme was determined as the following in its Roadmap: safe use of chemicals for enhanced quality of life in a zero incident environment. This project for Sri Lanka was declared as the best among other CAPP projects executed by the UNEP.

#### **3.1.4.2 Awareness workshop on Environment, Occupational Health, Chemical Risk Management and Corporate Social Responsibility for Industries in Western Province**

An awareness workshop was organized by the Environmental Pollution Control unit on 28<sup>th</sup> November 2013, at the Central Environmental Authority (CEA), Battaramulla.

The workshop was organized under themes related to Environment, Occupational Health, Chemical Risk Management and Corporate Social Responsibility for 125 industries in the Western Province. Chief Executive officers and managerial level officials of 125 industries and officers of the Central Environmental Authority were participated.

Highly experienced officials from public and private sector organizations who involved in chemical safety, health and environment pollution control were participated as resource persons.

The main facts discussed were on subjects related to Chemical management and environmental compliance, Occupational health & safety related to chemical handling in Industries, Chemical accident prevention & preparedness, Unseen side of Process machinery & safety and Corporate social responsibility for positive change in the environment.

The EPC unit is looking forward to organize this type of awareness Programmes Island wide.



Awareness workshop for Industries in Western Province

#### **3.1.4.3. National Green Award Programme**

“National Green Awards” programme is the only award scheme implemented by the Central Environmental Authority on environmental concerns. It was initiated with a view to recognize and publicize to private and public sector organizations, which are functioning in an environmentally sustainable manner. The Green Award Scheme makes a competitive forum among the different industrial sectors to apply the best practical options in the pollution abatement and greening the environment in Sri Lanka.

The target of this programme is to promote and motivate industrialists and service providers for monitoring based pollution control and environmental management system to compliance with standards, regulations and to maintain the sustainability to achieve the clean and green environment through eco-friendly actions.

Applications for “National Green Awards 2013” were entertained under 16 categories including major industrial sectors, local authorities, projects and schools. Total of 190 applications were received and evaluated by distinguished panel of Judges. Out of 190 applications, Further evaluations including field inspections have to be carried out in order to select winners to be awarded at the ceremony which is planned to be held in May 12<sup>th</sup> of 2014 at the Bandaranaike Memorial International Conference Hall under the patronage of His Excellency the President Mahinda Rajapaksa.

#### **3.1.5 Trainings / workshops, meetings and Presentations**

Training is a one of the most essential component, which required for effective implementation of functions and responsibilities of the unit.

The EPC unit conducted and facilitated following trainings, workshops, Meetings and presentations.

- 01 Workshop on EPL scheme implementation strategies for LA officers including CEA officers in Colombo was held in 2013.

- 8 Presentations/Lectures on pollution related subjects for industrial community and general public were conducted during year 2013.
- EPC unit attended 24 meetings and 7 workshops related to pollution control

#### Summary of the progress: 2013 - EPC Unit

| Activity  | Progress  |   | Remarks                                    |  |
|---|-----------|---|--|--|
|   | Physical  | Financial   |  |  |
| <b>1. Implementation of Environmental Protection License Scheme – BOI</b>                         |           |   |  |  |
| New site Recommendations for Industries   | 95        | Total budget allocation for the EPC Unit in year 2013 was Rs. 1710000.00/=. | Operational expenses were borne by the BOI |  |
| New site Recommendations for Telecom Towers   | 50        |   |  |  |
| Concurrence for new industry  | 70        |   |  |  |
| Concurrence for EPL Renewals  | 236       |   |  |  |
| <b>2. Implementation of Environmental Protection License scheme – Non BOI</b>                     |           |   |  |  |
| <b>Inspection for</b> Telecom Towers  | 33        | From this allocation total allocation was utilized by EPC Unit.             |  |  |
| Complaints<br>Non BOI   | Received  |   | 85   |  |
|   | inspected |   | 22   |  |
|   | Referred  |   | 63   |  |
| BOI   | Received  |   | 70   |  |
|   | inspected |   | 37   |  |
|   | Referred  | 33  |  |  |
| <b>3. Review and update of the existing list of consultants and list of laboratories annually</b> |           |   |  |  |

|  |      |  |          |
|--|------|--|----------|
| Received applications for laboratory Registration  | 33   |  |          |
| Received applications for Consultants Registration | 45   |  |          |
| Selected laboratories                              | 29   |  |          |
| Selected consultants                               | 39   |  |          |
| <b>7. H&amp;M Committee</b>                        |      |  |          |
| Meetings conducted                                 | 14   |  |          |
| Evaluated projects proposals                       | 58   |  |          |
| <b>8. Review water quality standards</b>           |      |  |          |
| Meetings conducted                                 | 2    |  |          |
| <b>9. Handle standard EPL numbering system</b>     |      |  |          |
| Issued "A" Category- Fresh EPLs                    | 983  |  |          |
| Issued A Category renewals                         | 1753 |  |          |
| <b>12. Trainings / workshops</b>                   |      |  |          |
| Presentations / lectures delivered by EPC unit     | 6    |  |          |
| Conducted workshops                                | 12   |  |          |
| EPC unit attended Meetings                         | 21   |  |          |
| 13.EIA TEC committee meetings                      | 22   |  |          |
| 14. National Green Award Programme                 |      |  |          |
| 15. Chemical Accident Prevention and Preparednes   |      |  | Expenses |

## 3.2. Lab Services Unit

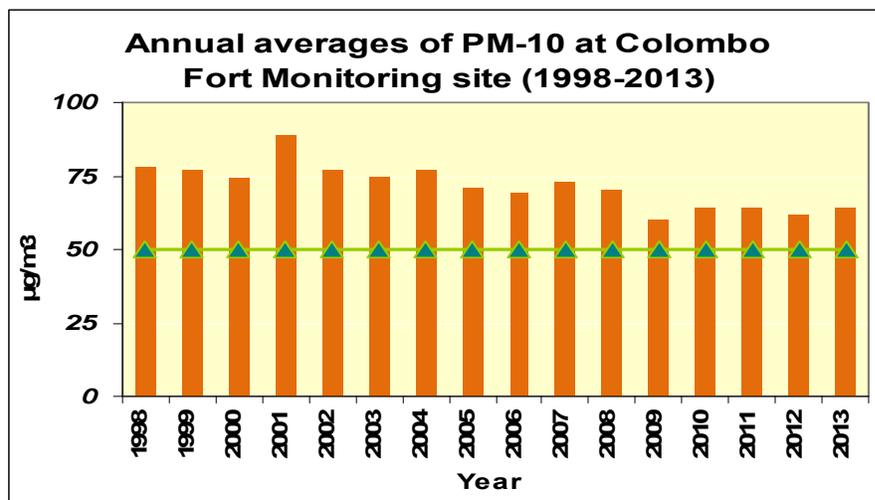
### 3.2.1 Ambient Air Quality Monitoring.

Air quality monitoring has been carried out at Colombo Fort monitoring station using wet chemical methods for sulphur dioxide and nitrogen di oxide gaseous pollutants.

PM-10 (Particulates of Aerodynamic diameter less than 10 micron) at Colombo were also measured on weekly basis to analyze the trend of variation due to increasing vehicle fleet in the Colombo City.

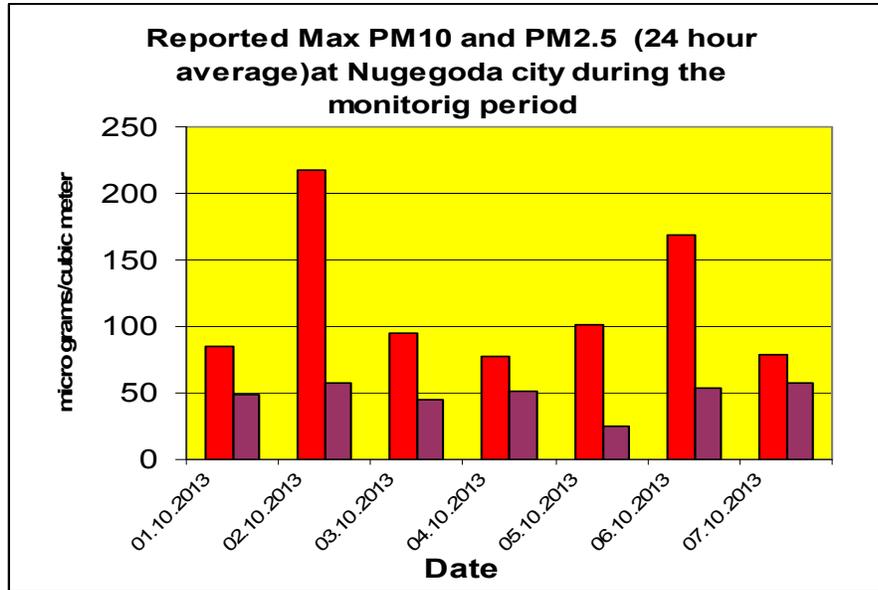
#### 3.2.1.1 Air quality monitoring status in Sri Lanka

Variation of annual averages of particulate matter PM-10 at Colombo Fort monitoring station is shown below. Even though the annual average of PM-10 concentration at Colombo Fort monitoring station exceeds the maximum permissible levels and it shows decreasing trend over last 10 years.



Parallel to the above activities, Ambient air quality of Nugegoda, Anuradapura and Jaffna cities were monitored with the use of continuous automated mobile ambient air quality monitoring station.

In addition to PM10 and other gaseous pollutants, PM2.5 and non-methane total hydrocarbon concentration in the ambient atmosphere also measured with the facilities of new mobile air quality monitoring station.

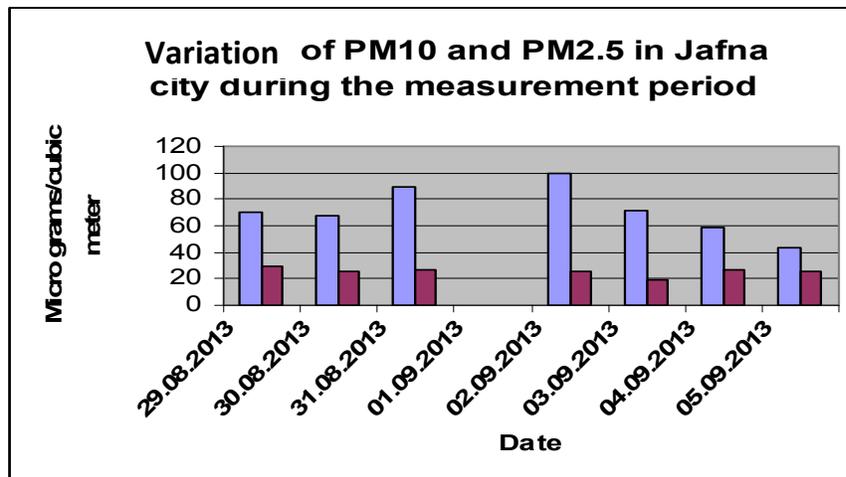


**Variation of PM concentration in Nugegoda City area during 1<sup>st</sup> October 2013 to 7<sup>th</sup> of October 2013**

In some days, the concentration PM10 exceeds the National standard of 100micrograms/cubic meter and in some days the PM2.5 concentration exceed the National Standard of 50 micro grams per cubic meter.

**Variation of PM concentration in Anuradhapura Pooja Bumi area during 20<sup>th</sup> Novenmer 2013 to 28<sup>th</sup> of November 2013**

24 hour average concentration of both PM10 and PM2.5 do not exceed the national standards during the measuring priod.



**Variation of PM concentration in Jaffna City area during 29<sup>th</sup> of August 2013 to 05<sup>th</sup> of August 2013**

## **Trans-boundary Air pollution monitoring**

### **3.2.1.2 Male Declaration Project**

The Laboratory of the Central Environmental Authority is the National Implementing Agency for the implementation of Male' Declaration activities on Control and Prevention of Air Pollution and its likely Trans boundary Effects for South Asia. Laboratory is carrying out the study of trans-boundary air pollution monitoring program under the Malé Declaration in parallel with other South Asian countries.

### **3.2.1.3 Acid Rain Monitoring**

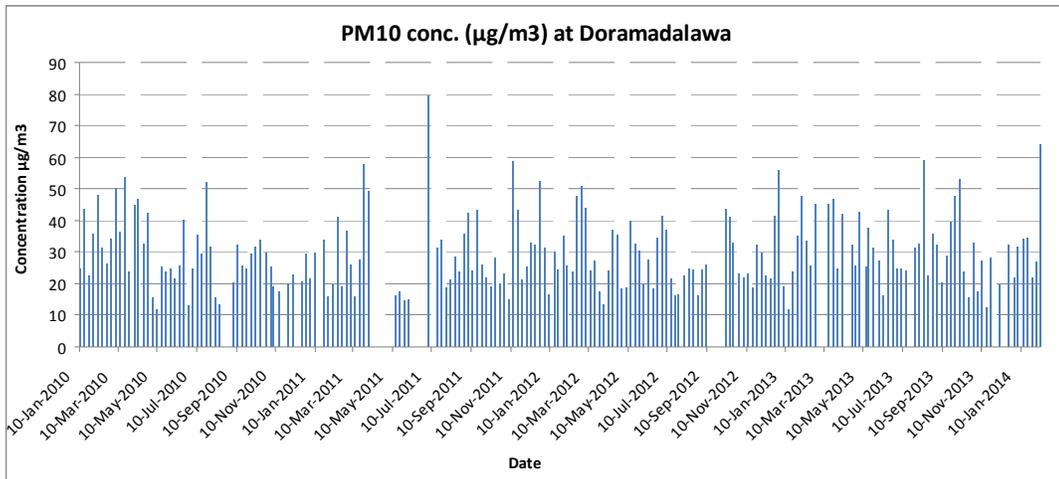
Laboratory is engaged in acid rain monitoring program to identify any possible acid rains due to trans-boundary air pollution. Under this program sampling site is identified in Doramadalawa Mihinthale and rain water collected in wet only collectors and bulk collectors are analyzed for anions, cations and amount of precipitation.

### **3.2.1.4 Trans-boundary Air pollution Monitoring**

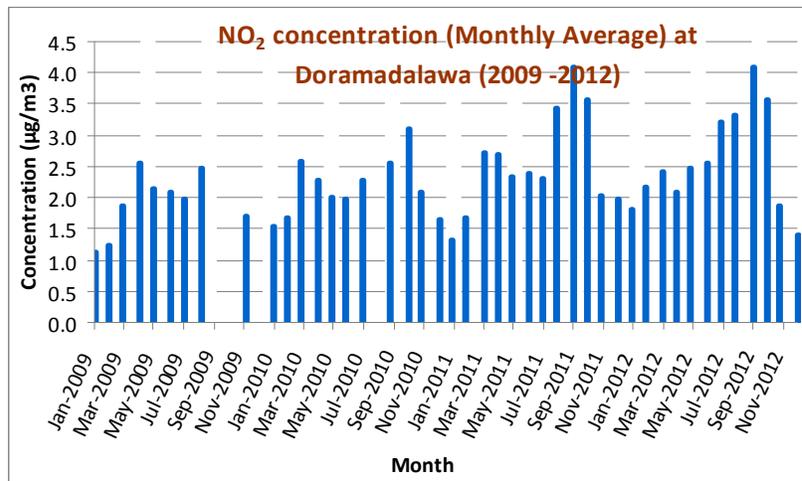
With the use of passive samples, air quality analysis is carried out at the Dutuwewa site and Doramadalawa site for initial comparisons of NO<sub>2</sub>, SO<sub>2</sub> and ground level ozone in ambient air on monthly basis. PM10 is also being carried out on weekly basis at Doramadalawa site.



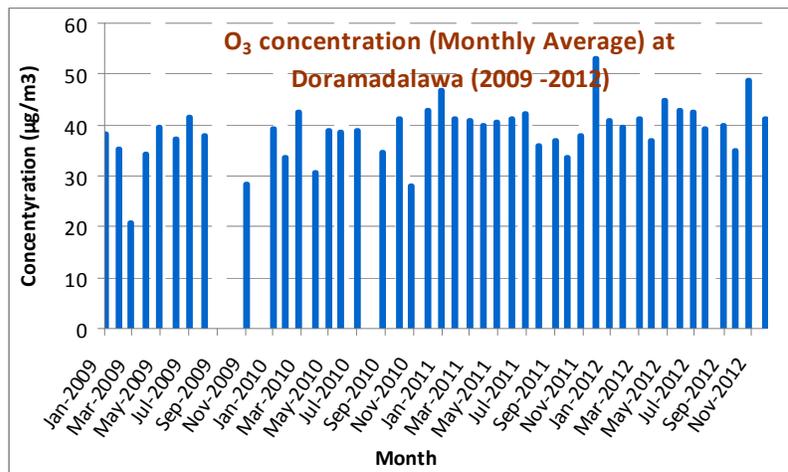
Instruments installed at Doramadalawa monitoring site



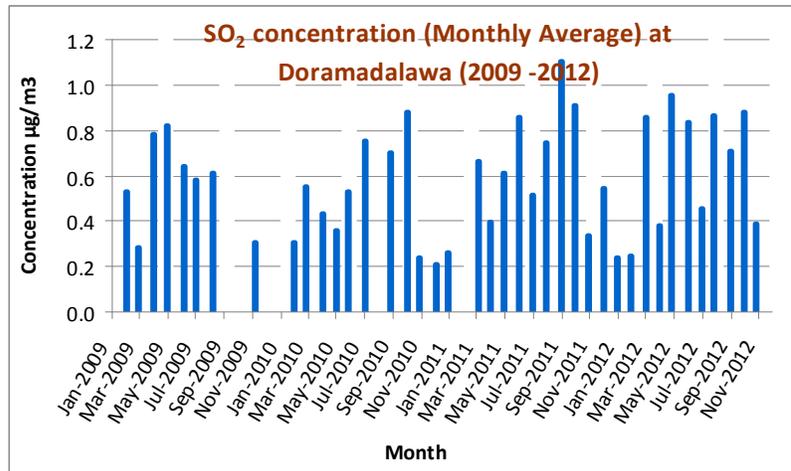
Variation of PM-10 concentration at Doramadala site



Variation of Nitrogen Dioxide concentration at Doramadala site



Variation of ground level ozone concentration at Doramadala site



Variation of sulphur dioxide concentration at Doramadallawa site

### 3.2.1.5 Environmental Noise pollution control.

Noise pollution is also a major environmental problem causing public nuisance in Sri Lankan community. Air Resource Management and Monitoring unit is engaged in environmental Noise monitoring activities of the Central Environmental Authority. CEA receives many complaints on noise pollution caused by industrial activities and community activities.

Laboratory performs noise level measurements for compliance monitoring in case of issuance or renewals of Environmental Protection License for industries and review of complaints from general public.



Noise Measurements in the field are in progress

In order to control the noise coming out of vehicular horns, CEA published a gazette regulation introducing maximum permissible limits for the vehicle horns. For purpose of implementation of the above regulation, Air Resource Management and Monitoring Unit conducted many stake holder meetings, road side awareness program with Traffic Police Division and Environmental Police Division of Depart of police. Field vehicle horn noise measurement sessions also conduce in many city area to make general public aware of the new regulation.

### 3.2.2 Water Quality Monitoring Laboratory

#### 3.2.2.1 Implementation and facilitation for Environmental Protection License Scheme

Environmental Protection Licensing is the regulatory tool under the provisions of the NEA. The prescribed activities that require EPLs are listed under part “A”, “B” and “C” of the Gazette are required to obtain the EPL from CEA. The water quality monitoring laboratory of the Environmental Pollution Control (EPC) Division of the Central Environmental Authority (CEA) has been assigned to provide analytical services to the whole institute from its inception. Its main function is to monitor the quality of industrial effluents throughout the country.

During 2013 the laboratory could be able to collect and analyzes 920 samples. These include industrial effluent collected for EPL, Commercial basis, regular monitoring and legal requirement and surface water and ground water sample from different water bodies.

| Type of Sample       | Purpose /Name of the water body | No of sample collected | Total No of test performed |
|----------------------|---------------------------------|------------------------|----------------------------|
| Industrial effluent  | For New EPL or renewal          | 123                    | 738                        |
|                      | For legal requirement           | 59                     | 354                        |
|                      | Investigate complain            | 75                     | 450                        |
|                      | Monitoring                      | 49                     | 294                        |
|                      | CTP                             | 36                     | 216                        |
|                      | Commercial (Industrial)         | 89                     | 534                        |
|                      | others                          | 13                     | 494                        |
| Surface water/Ground | Kelani River                    | 142                    | 1988                       |
|                      | Boralasgamuwa                   | 24                     | 336                        |
|                      | Maha Oya                        | 88                     | 1232                       |
|                      | Commercial (surface)            | 79                     | 474                        |
|                      | Dadugam Oya                     | 72                     | 720                        |
|                      | Banthota Ganga                  | 71                     | 994                        |

Table 1 Progress of Sampling in 2013

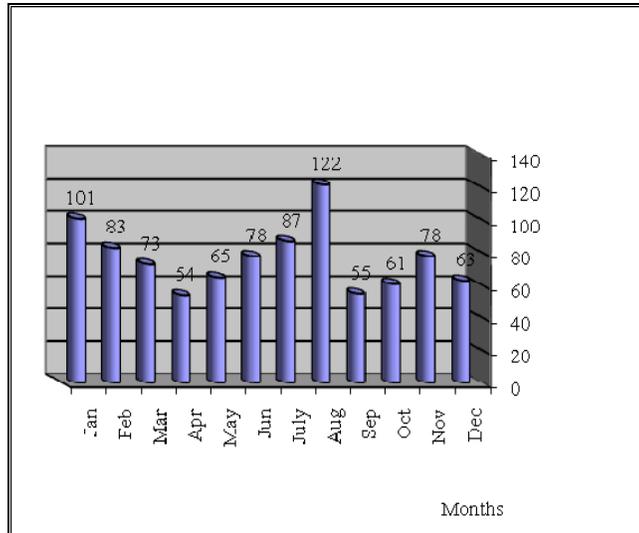


Figure 1: Graphical Presentation of Monthly monitoring progress in 2013

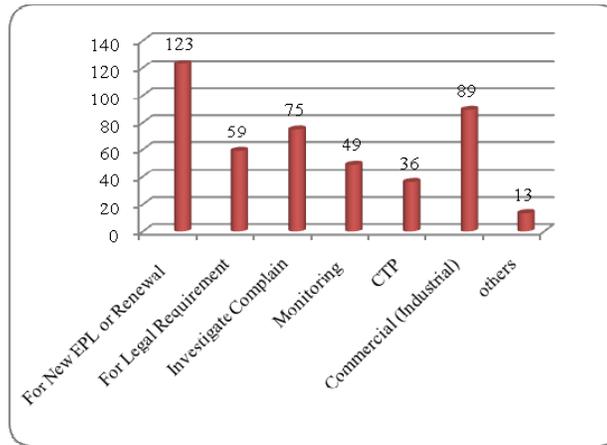


Figure 2: Graph of Monitoring progress of Industrial Effluent during 2013

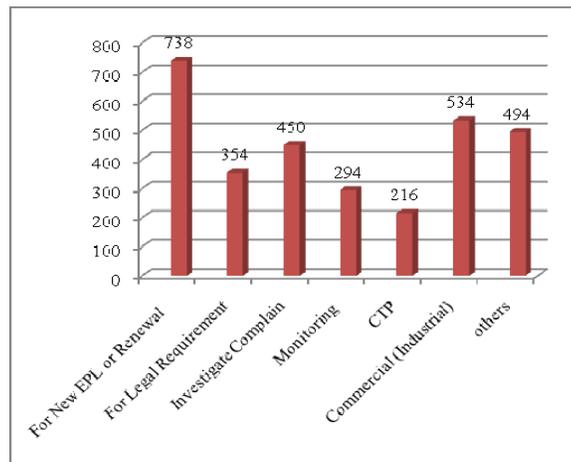


Figure 3 Graphical Presentation of No of parameter tested for Industrial Effluent during 2013

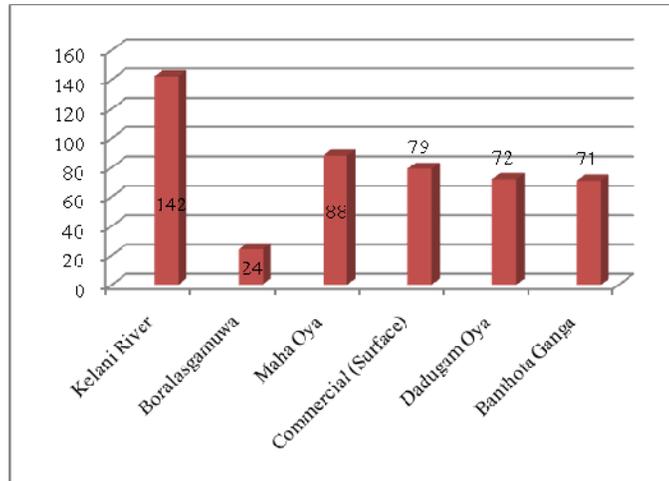


Figure 4: Graphical Presentation of Monitoring of surface water samples in 2013

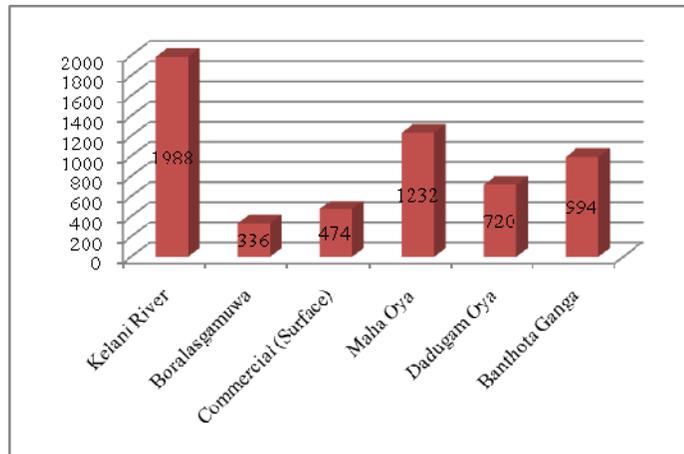


Figure 5: Graphical Presentation of No of parameter tested for surface water samples during 2013

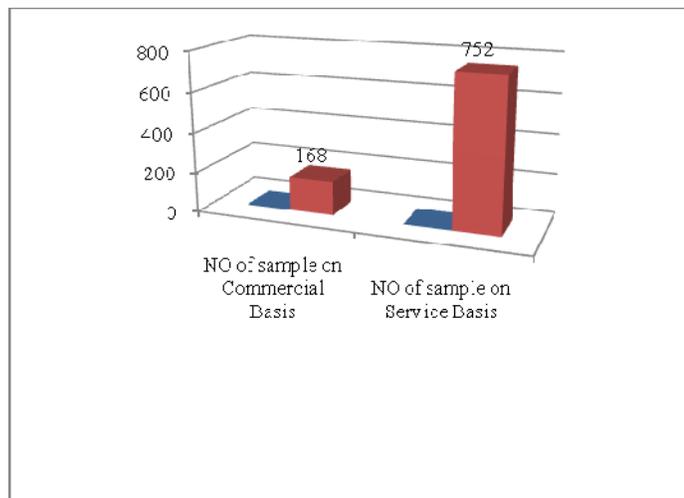


Figure 6: Graphical Presentation of Monitoring on commercial basis over service basis

New capacity building for the increasing quality of the data produced by the CEA Laboratory

The CEA laboratory could be able to participate the international performance evaluation programme conducted by the GEMS/water in 2013. The cost of such type of programme would be very high. Since we are providing a surface water quality data to the GEMS/Water, the laboratory could be able to participate for this programme without any cost other than the cost spent on clearing of the sample from Sri Lanka customs. Water quality laboratories around the world benefit from participating in GEMS/Water

Laboratory performance studies. The studies have also revealed valuable insight into the needs of developing and transitional countries. The test samples for quality control and performance evaluation have been provided by the GEMS/Water. Every staff member of the laboratory has actively engaged in the analysis of test samples provided by the GEMS. Under this 13 samples were analyzed for Microbiological test, Demand test Mineral Nutrients, pH, Solid and Trace metals such as Aluminum, Barium, Boron, Cadmium, Chromium, Cobalt's Copper Nickel Manganese Zinc and Fe. Thirteen samples were received and tested for thirty eight parameters. The analysis also demonstrates that if capacity is achieved, along with best practices and recommendations. This type of programme will help us to produce most reliable data with great accuracy. The test results was submitted on line while submitting the hard copy through post to tGEMStat PE -8 programme and we could be able to check our accuracy of the analytical data once the report is issued by April 2014.

#### Participation for Pavithra ganaga Programme

The Laboratory of CEA has been participated for water quality monitoring of Kelani River from 1998 continuously. A usual monitoring was carried out during the year 2013 on monthly basis. In addition to the monitoring of water quality in Kelani River several awareness programme was conducted by the Ministry of Environment & Renewable Energy and Renewable Energy along with the UNDP during 2013. The awareness programme was initiated with parallel the world water day. The programme has been conducted in the several local authority areas and the officers of the CEA participated for all the programme by delivering lectures presentation and laboratory practices in 2013.

#### Assistance provide to the other Division s of CEA

##### Environmental Pollution Control Division

A proficiency testing of water and waste water programme had been organized by the EPC division. Ten laboratories among the registered laboratory under CEA had been selected on priority basis to participate for this programme. The purpose of this programme is to equalize the analytical capabilities of the testing laboratory registered under CEA. The laboratory

Parameters pH, Total Phosphate, Chemical Oxygen Demand, Biochemical Oxygen demand and TSS

**Surface water quality monitoring**

Several water quality monitoring programme has been carried out by the laboratory of Central Environmental Authority. These include Kelani River, and Boralasgamu Vawa

Physical, chemical microbiological parameters of the surface water at preselected sampling location were carried out during 2013 as usual.

**Evaluation of the Water Quality in Kelani River**

Kelani River, having the total length of 145 km and 2292 sq km of river basin is the second largest watershed and it is the most polluted river in Sri Lanka due to rapid growth of industries located in close vicinity of the river and passes through the country through most populated capital city.

The main sources of water pollution in Kelani river is the land based sources such as treated and untreated industrial effluents, agricultural runoff, domestic and municipal effluents. The gravity of water pollution is apparent when examining water quality measurements of Kelani River, which meets a major part of the demand for pipe borne drinking water supplies of Colombo. Kelani River is an important source of drinking water for the Colombo District and there is a water supply intake point at Ambatale, 14 kilometers from the river mouth. However, sewage from low-income settlements and industrial effluents (especially from tanning and metal finishing and processing industries) from a large number of industries are discharged conveniently to the Kelani River.

Furthermore, the lower reach of the river has been subject to saline water intrusion from the ocean making the water non-potable due to excessive sand mining and lowering of river beds at the lower reaches in the Kelani River, where sand mining is particularly severe with the salt wedge has extended inwards to Ambatale (about 14 km from its point of discharge) on several occasions. This is a serious concern as much of the potable water supply for Colombo is extracted from the Kelani River at Ambatale.

The discharge of wastewater into the environment from industrial activities is regulated by the Environmental Protection Licenses (EPL) schemes implemented under the provisions of the section 23 (a) of the National Environmental Act of 1980. As specified in the Act it is mandatory to obtain an EPL to discharge wastewater into the environment from an industry. Industries which discharge wastewater into the environment are required to treat their wastewaters up to the relevant standards to be qualified basically to obtain an EPL. The licenses issued will specify the standard and criteria to be met by the respective industry discharging its effluent into the environment.

Even though the industries are covered with environmental protection licensing schemes, there is no regular monitoring mechanism to evaluate their meeting of discharge criteria and to control the pollutant loads discharged into the Kelani River.

The pollution status of the Kelani River and some of its tributaries were investigated from 2003 with respect to pH, Electrical conductivity, Turbidity, DO, BOD, COD, Chloride, nutrients and microbiological parameters. Also, some dissolved form of heavy metals such as Pb and Cr were analyzed. Principal component analysis revealed that the river water was negatively impacted by pollutants from anthropogenic sources as well as natural sources. Seawater intrusion faecal contamination and erosion of the soil into the river water are natural activities stressing the river water quality. Seven sampling sites of the main river and five sampling sites from its tributaries were selected considering the pollution impact on various activities. Sampling sites has been selected 58 km away from river mouth to landside up to Avissawella.

| Latitude | Longitude | Sampling Location                     |
|----------|-----------|---------------------------------------|
| 6 57 14  | 80 13 12  | Thalduwa Bridge (076005)              |
| 6 58 37  | 80 11 39  | Seethawake Ferry (076006)             |
| 6 55 02  | 80 05 53  | Wak Oya (Tributary) (076011)          |
|          |           | Pugoda Ferry (076009)                 |
| 6 56 38  | 80 08 18  | Pugoda Ela (Tributary) (076010)       |
| 6 54 36  | 80 05 00  | Hanwella Bridge(076007)               |
| 6 54 26  | 80 03 57  | Pusseli Oya (Tributary) (076012)      |
| 6 56 00  | 79 59 32  | Maha Ela (Tributary) (076013)         |
|          |           | Kaduwela Bridge(076008)               |
| 6 56 21  | 79 58 09  | Raggahawatte Ela (Tributary) (076001) |
| 6 56 18  | 79 56 50  | Welivita Bridge (076003)              |
| 6 57 37  | 79 52 40  | Victoria Bridge (076002)              |

Table 2: Sampling Location of Kelani River

## Evaluation of the water quality of Kelani River using Water Quality Index

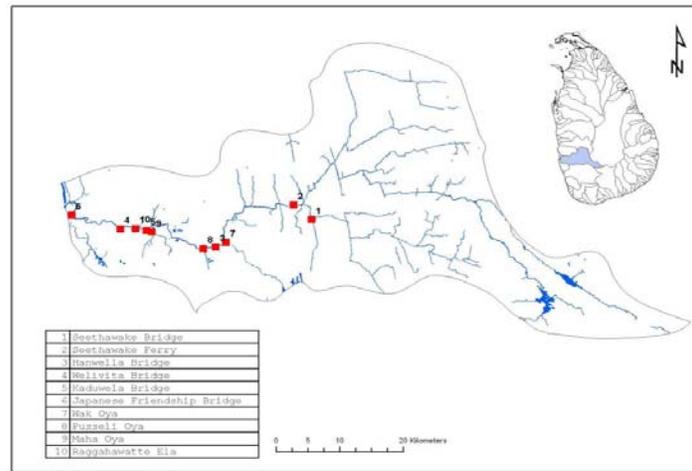


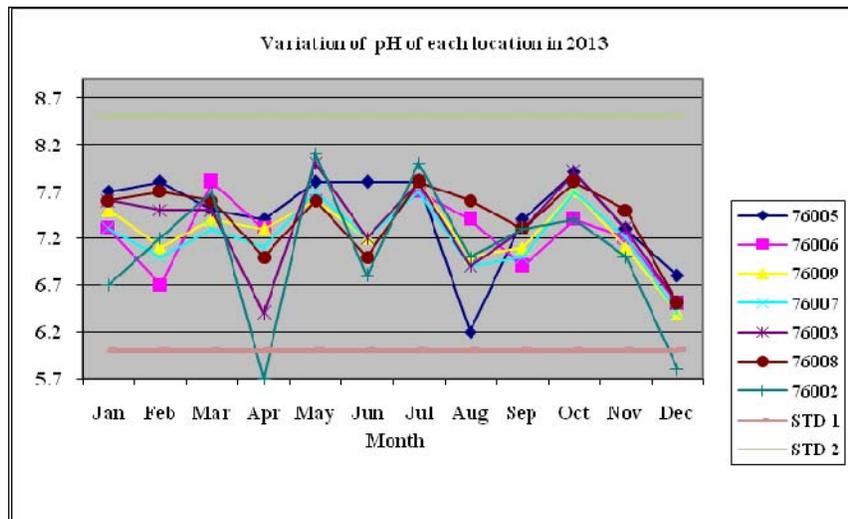
Figure 5: A map of Sampling Locations of Kelani River

pH, Turbidity, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Nitrate, Phosphate and dissolved form of heavy metal in water such as Chromium and lead were monitored during the year 2013 on monthly basis.

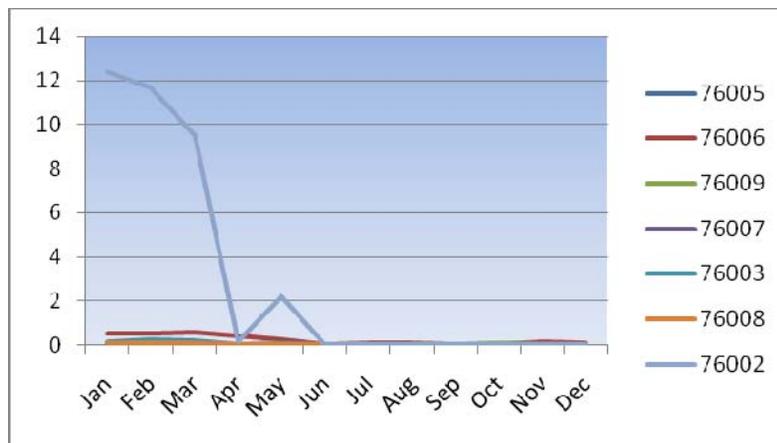
### Summary description of the water quality of Kelani River

The anthropogenic activity such as gem mining and river sand mining causes severe damage to the river bed and increases the turbidity of the river water in all sampling locations. Microbiological contamination and the turbidity is major sources of water pollution in Kelani River. Turbidity (which is a measure of the light-transmitting properties of the water) is also a measure of the suspended particulate matter in the water and depends on the fineness and concentration of particles. The variation of turbidity is always associated with the incoming suspension of sediment particle flowing along with the storm water may be due to mining activities of the upstream of the river as well the continuous rain. Turbidity which implies the activity relates to sand mining, Gem mining and impact on uncontrollable urban runoff is always exceeded the standard value throughout the monitoring period in all sampling locations

Following graphs shows the variation of the basic water quality parameters throughout year 2013

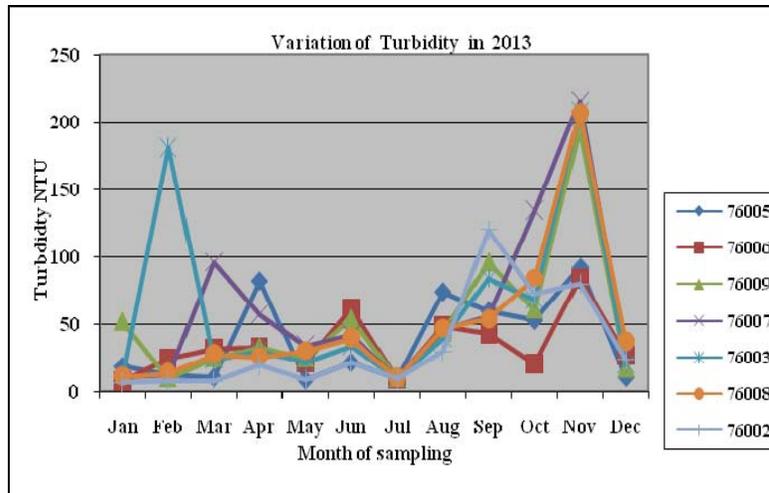


The pH of the river water always within the CEA proposed ambient water quality Minor deviation toward the acidic condition could be observed at the Victoria Bridge in April and December.

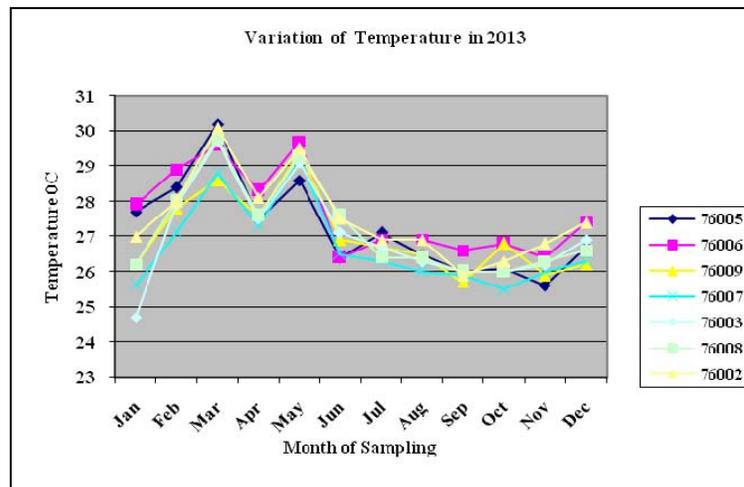


Variation of Electrical Conductivity during 2013

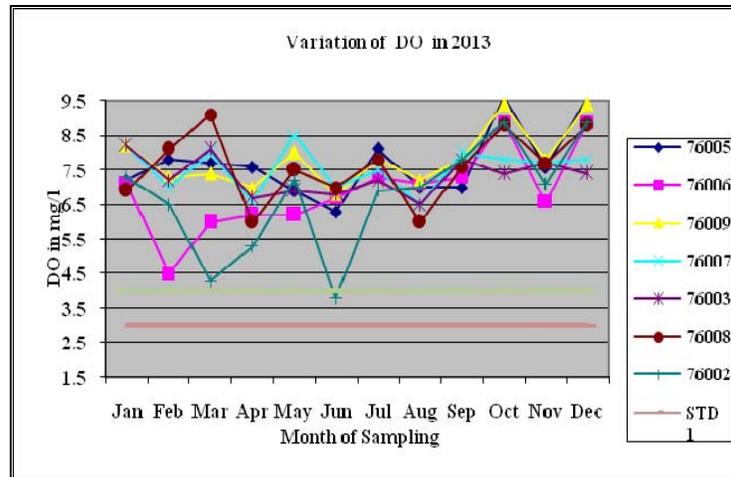
Higher value for the Electrical Conductivity was reported at two sampling locations that is Seethawake Bridge and Victoria Bridge during month of February and May. This could be due to the salinity intrusion during high tidal. Higher level of EC reported at Seethawake could be due to discharge of industrial waste water from the Seethawake industrial park.



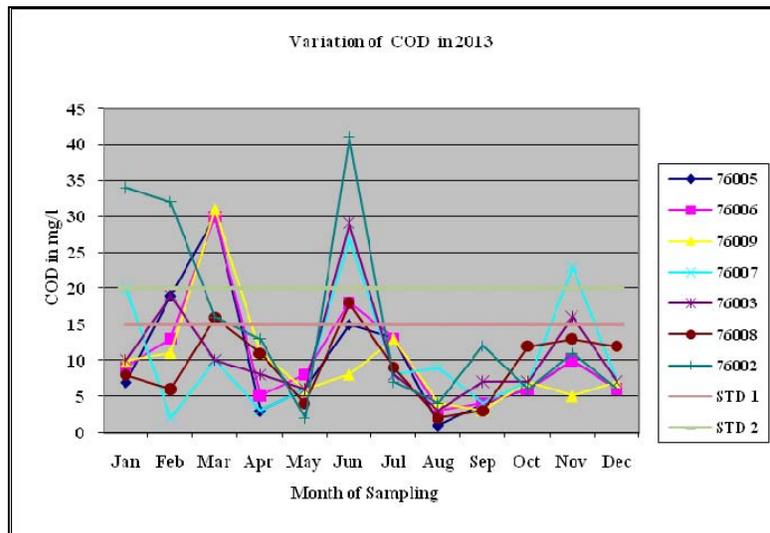
Higher value for turbidity in all sampling locations was always reported as usual during year 2013. This could be due soil erosion, removal of vegetation cover in the river catchment and various types of river bank development mining activities and heavy rain fall condition.



During the first six month of the year the higher values for the temperature could be recorded in all most all locations. During other six month the temperature was in between 25.0 C to 27.0 C in all locations



In general the higher dissolved oxygen level indicates that the water quality is good. The dissolved oxygen level is always higher than the CEA proposed ambient water quality standard. Lower value of Dissolved oxygen was reported in the month of June.



The fluctuation of chemical oxygen demand of all sampling locations could be observed throughout the year. Most of the time the reported values were below the proposed ambient water quality standards. Higher variation above the proposed ambient water quality standards could be observed during March, June, and November in some locations. (Pugoda Ferry, Thaluduwa Ela and Hanwella Bridge) Most of the time the higher COD is always reported at Victoria Bridge.

### 3.3 Waste Management Unit

The Waste Management (WM) Unit of the Environmental Pollution Control (EPC) Division of the Central Environmental Authority (CEA) has been entrusted with the tasks of;

- a) Implementing the regulations related to Hazardous Waste Management,

- b) To deal with the international treaties and
- c) To implement the requisite projects/programmes related to both hazardous waste and solid waste management as identified in the Action Plan 2013.

### **3.3.1 Implementation of Hazardous Waste Management regulations in Sri Lanka**

As a part of the implementing the Hazardous Waste Management regulations (No. 01 of 2008 by the extra ordinary gazette notification No 1534/18 dated 01.02.2008), 90 licenses were issued during year 2013.

In order to facilitate the implementation of above mentioned regulations and providing solutions to the issues pertaining to the management of clinical wastes, initiatives were taken to establish a centralized incinerator facility as a tripartite national project with the involvement of Sisili Hanaro Encare Pvt Ltd, Central Environmental Authority and Ministry of Health at Colombo East Base Hospital, Mulleriyawa. This facility bares the capacity of combusting 6 tons per day. This facility will cater for both public and private healthcare facilities in the country to manage their clinical waste in an environmentally sound manner.

### **3.3.2 Implementation of Basel Convention**

#### **3.3.2.1 Importation of waste materials listed in the List ‘B’ of Basel Convention for industries**

Sri Lanka has ratified the Basel Convention (BC) on Transboundary movement of Hazardous Waste and their Disposal on 28.08.1992 and since then, the CEA was designated as the Competent Authority for the BC. The National Coordinating Committee (NCC) for the Implementation of BC functioning under the Ministry of Environment & Natural Resources (MENR) has appointed a Technical Expert Committee (TEC) to support the CEA in sound decision making on matters related to technical aspects of managing HW in the country. The TEC, chaired by the CEA also submits recommendations for the projects that are seeking approval to import waste listed in the Basel List ‘B’ as raw materials (Importing Waste in the List ‘A’ of the BC is banned by a decision taken by the Cabinet of Ministers).

Regulations with respect to Importation of hazardous chemicals and hazardous waste materials to the country were gazetted on 05<sup>th</sup> June of 2013 by the gazette No. 1813/14 under the Act of import and export control. As part of the implementing these regulations 154 number of clearances were issued during year 2013.

#### **3.3.2.2 Transboundary movement of hazardous waste**

Being the competent authority for the implementation of Basel Convention in Sri Lanka, during the year 2012 CEA has given the approvals for 07 transits and 06 exportations (Trans boundary movement) of waste materials listed in the List “A” of the Basel Convention.

### **3.3.3 Implementation of Rotterdam Convention**

#### **3.3.3.1 Updating the National Chemical profile of Sri Lanka and preparation of National Implementation Plan for the Chemical Management**

Final Report on the National Chemical profile of Sri Lanka and National Implementation Plan for the Chemical Management has been prepared and improvement of the quality of this report is in progress.

#### **3.3.4 Management of Electronic and Electrical Equipment (WEEE)**

In line with increasing awareness among general public on E-waste Management two drop off events were organized at General Hospital, Colombo and Municipal Council, Kurunegala.

#### **3.3.5 Experience and knowledge sharing**

Waste Management Unit has extended its contribution by participating as resource persons at the projects / awareness programmes implemented by the following agencies

- Nature Secrets (Pvt) Ltd, Horana
- SOS Village, Kesbewa.

## 4.0. Environmental Management & Assessment Division

### Environmental Impact Assessment Unit

#### 4.1 Implementation of Environmental Impact Assessment (EIA) Process

The EIA unit continued its major regulatory function of administering the EIA process for all prescribed projects, with a view to mitigating the adverse environmental impacts of these projects. This included the convening of scoping meetings and technical evaluation meetings, drafting Terms of Reference (ToR) for EIA reports, evaluation of EIA reports and facilitating the public participation process and subsequent approval and monitoring of projects.

During the year 2013, total of 87 projects for which approval under Part IV C of the National Environmental Act is required were processed under the EIA regulations by the EIA unit. Approvals for 28 projects were granted. 59 projects were pending decision.

List of projects approved during 2013 under EIA / IEE regulations by the EIA Unit;

| No. | Name of the Project  | EIA/IEE |
|-----|--|---------|
| 01  | Mawanana Mini Hydro Power Project (SEIA)   | EIA     |
| 02  | Uma oya Multipurpose Development Project SEIA at Kirindi Oya Basin Development       | EIA     |
| 03  | Proposed sea sand extraction project at Kerawalapitiya (Approval extension)          | EIA     |
| 04  | Morana reservoir Project across Ulhitiya Oya in Badulla District                     | EIA     |
| 05  | Second new Kelani Bridge Project   | EIA     |
| 06  | Proposed Athurugiriya Interchange to Outer Circular Highway Project                  | EIA     |
| 07  | Proposed Five star Hotel at Weerawila  | IEE     |
| 08  | Offshore sea sand dredging project at Maha Oya, Lansigama (Approval extension)       | IEE     |
| 09  | Land Alienation Project at Horowpatana   | IEE     |
| 10  | Proposed access road for Defence Headquarters Complex from Battaramulla to Akuregoda | IEE     |

| No. | Name of the Project   | EIA/IEE |
|-----|---|---------|
| 11  | Naya Ganga Mini Hydro Power project at Deraniyagala (Approval extension)                                | IEE     |
| 12  | Mas Fabric Park, Thulhiriya (Proposed project to co-incinerate the ETP dried sludge in Bio-mass boiler) | IEE     |
| 13  | Proposed Higher Educational Institute, Mirigama Export Processing Zone                                  | IEE     |

List of projects approved by other Project Approving Agencies (PAA) with the concurrence of CEA;

| No. | Name of the Project   | EIA/IEE |
|-----|---|---------|
| 1   | Ross Estate Mini Hydro Power Project PAA – Mahaweli Authority of Sri Lanka  | EIA     |
| 2   | Moragolla Hydro Power Project PAA - Mahaweli Authority of Sri Lanka   | EIA     |
| 3   | Proposed Mahagonawewa reservoir Project PAA – Forest Department   | EIA     |
| 4   | Proposed Centuria Eco-Friendly Meditation Retreat at Udawalawa PAA – Dept. of Wildlife Conservation                             | EIA     |
| 5   | Chandrika Wewa Mini Hydro Power Project, Embilipitiya, PAA - Mahaweli Authority of Sri Lanka                                    | IEE     |
| 6   | Maduru Oya LB Mini Hydro Power Project (drop 24-140) PAA - Mahaweli Authority of Sri Lanka (Approval extension)                 | IEE     |
| 7   | Maduru Oya LB Mini Hydro Power Project (drop 28-450) PAA - Mahaweli Authority of Sri Lanka (Approval extension)                 | IEE     |
| 8   | Proposed 220Kv Puttalam - Anuradhapura Transmission line PAA – My. of Power & Energy  | IEE     |
| 9   | Proposed mineral sand mining project along the coastal stretch of Kinniya - Muthur - Sampur PAA – Coast Conservation Department | IEE     |
| 10  | Proposed Water Front Integrated Resort - Colombo 02 PAA – Urban Development Authority   | IEE     |

| No. | Name of the Project   | EIA/IEE |
|-----|---|---------|
| 11  | Proposed Fairway city Hotel Project at Hospital Street, Colombo 01 PAA - Urban Development Authority    | IEE     |
| 12  | Feldspar Quartz mining project at Samanalathanna, Dehiattakandiya PAA - Mahaweli Authority of Sri Lanka | IEE     |
| 13  | Mechanized Metal Quarry at Ipologama PAA - Forest Department  | IEE     |
| 14  | Metal Quarry at Kalahagala, Polonnaruwa PAA - Dept. of Wildlife Conservation                            | IEE     |
| 15  | Kukulegangawatta tree felling project (extension) PAA - My. of Env't.                                   | IEE     |

List of projects which are being processed by the EIA unit;

| No. | Name of the project   | EIA/IEE |
|-----|---|---------|
| 1.  | Proposed Expressway from Hambantota sea port to Mattala Airport   | EIA     |
| 2.  | Extension of Southern Expressway from Matara to Mattala   | EIA     |
| 3.  | Northern Expressway   | EIA     |
| 4.  | Proposed Rail Road from Horana to Kottawa   | EIA     |
| 5.  | Proposed Kurunegala- Dambulla-Habarana Railway extension Project  | EIA     |
| 6.  | Bogahahena Mini Hydro Power Project at Bulathsinghala   | EIA     |
| 7.  | Proposed Yan Oya Reservoir Dev't. Project   | EIA     |
| 8.  | Proposed Lower Malwathu Oya Reservoir Project   | EIA     |
| 9.  | Proposed Kivul Oya Reservoir Project  | EIA     |
| 10. | Modification to the Configuration of Moragahakanda – Kalu Ganga Projects including Upper Elahera Canal Project                              | EIA     |
| 11. | Construction of NWP Diversion Canal from Bowetenna Reservoir to Divert Mahaweli Water to Upper Mi Oya and Hakwatuna Oya Basin in Kurunegala | EIA     |

| No. | Name of the project   | EIA/IEE |
|-----|---|---------|
|     | District  |         |
| 12. | Proposed Maduru Oya Right Bank Development Project (System B)   | EIA     |
| 13. | Proposed small Holder Farmer Based Bibile Sugar - Power - Dairy - Homestead Farm Integrated Development Project | EIA     |
| 14. | Proposed amendments made to Condominium Type apartment Complex Project, Kandy by GVR Lanka (Pvt) Ltd (SEIA)     | EIA     |
| 15. | Proposed Enderamulla Township Development Project   | EIA     |
| 16. | Proposed "Grand Palace" 200 roomed five star hotel at Gurudeniya, Kandy   | EIA     |
| 17. | Proposed 5 star City Hotel (Beira City Hotel) Colombo   | EIA     |
| 18. | Hapugahakumbura Mini Hydro power project, Balangoda   | EIA     |
| 19. | Jaffna Kilinochchi sanitation Project   | EIA     |
| 20. | Proposed waste water disposal and infrastructure project , Hambantota   | EIA     |
| 21. | Proposed waste water disposal & Infrastructure Development Project, Negambo                                     | EIA     |
| 22. | Proposed waste water disposal and infrastructure project for Galle MC area                                      | EIA     |
| 23. | Metro Colombo solid waste Management Project  | EIA     |
| 24. | Proposed Waste to energy Project at Karadiyana  | EIA     |
| 25. | Proposed 2 × 250 MW Coal Power Plant at Sampoor   | EIA     |
| 26. | Proposed project to set up a Leather & Leather goods Manufacturing Complex Michchikatti in Mannar District      | EIA     |
| 27. | Proposed Basnagoda Reservoir Project  | EIA     |
| 28. | Proposed Matara Stage IV Water Supply Project & Salinity Barrier  | EIA     |

| No. | Name of the project  | EIA/IEE |
|-----|--|---------|
| 29. | Proposed Sooriya Wewa Export Processing Zone   | EIA     |
| 30. | Mirijjawila Export Processing Zone   | EIA     |
| 31. | Hambantota International Airport Stage II  | EIA     |
| 32. | Timber Extraction and Replanting of Kelebokka State Plantation Kelebokka, Panwila                  | EIA     |
| 33. | Timber Extraction and Replanting of Alakole State Plantation Alakole, Panwila                      | EIA     |
| 34. | Timber Extraction and Replanting of Woodside State Plantation Meda Maha Nuwara                     | IEE     |
| 35. | Proposed Midland Tree Felling Project  | IEE     |
| 36. | Proposed Thalapitigala Reservoir Project   | IEE     |
| 37. | Proposed Mattala International Airport Hotel Hambantota  | IEE     |
| 38. | Homagama Western By pass Road  | IEE     |
| 39. | Construction of Approach road from Kelanisiri Bridge to Kellanimulla - Mulleriyawa - Koswatte Road | IEE     |
| 40. | Malimboda Mini Hydro power project   | IEE     |
| 41. | Manakola Mini Hydro power project  | IEE     |
| 42. | Proposed waste to energy project at Horana, Kalutara District                                      | IEE     |
| 43. | Proposed Healthcare Waste Management project for Western Province                                  | IEE     |
| 44. | Proposed Finfish project in Trincomalee  | IEE     |
| 45. | Proposed 132Kv Transmission line project from Polpitiya to Pannipitiya                             | IEE     |
| 46. | Proposed 132Kv Transmission line project from Anuradhapura to Mannar                               | IEE     |

| No. | Name of the project   | EIA/IEE |
|-----|---|---------|
| 47. | Proposed 132Kv Transmission line project from Nadukuda to Mannar                    | IEE     |
| 48. | Transmission line from Polpitiya to New Habarana                                    | IEE     |
| 49. | Proposed Sugar Refinery Project, Hambantota   | IEE     |
| 50. | Proposed Makumbura Township Development Project                                     | IEE     |
| 51. | Shifting of Manning Market to Peliyagoda  | IEE     |
| 52. | Waste and Used Oil Refinery Plant, Wagawatta, Horana                                | IEE     |
| 53. | Proposed Project to Set up a Heavy Industry Zone, Sampoor, Trincomalee              | IEE     |
| 54. | Proposed Cement Grinding, Storing and Bagging Plant at Hambantota                   | IEE     |
| 55. | Offshore sea sand dredging for reclamation of Colombo port city Development Project | IEE     |
| 56. | Industrial zone at MRMR Port, Hambantota  | IEE     |
| 57. | Proposed Bellagaswewa Industrial Park Project, Hambantota                           | IEE     |
| 58. | Construction of Micro Tunnels for storm water Drainage in Colombo                   | IEE     |
| 59. | Proposed common Bio-medical waste treatment facility at Katunayake                  | IEE     |

In addition to the above, implementation of IEE process of selected prescribed projects which do not involve complicated environmental issues have been assigned to the provincial offices of the CEA. The EIA unit closely worked with the provincial offices in processing of these projects and necessary assistance and guidance were given whenever required.

In addition, technical assistance was given to other Project Approving Agencies to implement the EIA procedure for projects referred to them.

#### **4.1.1 Monitoring of Approved EIA/IEE projects**

The EIA unit also continued the regular compliance monitoring of already approved projects in order to ensure compliance with the approval conditions. Following projects were regularly monitored through bi-monthly meetings as well as site visits.

**The projects which were monitored during year 2013 are;**

| <b>Outer Circular Highway to the City of Colombo Project (Phase I &amp; III and Phase II)</b> |  |
|---|--|
| 1)  | Southern Transport Development Project   |
| 2)  | Kalu Ganga Reservoir and Agricultural Extension Project  |
| 3)  | Colombo – Katunayake Expressway Project  |
| 4)  | Uma Oya Multi Purpose Devt. Project  |
| 5)  | Moragahakanda Agricultural Devt. Project (PAA - My. of Agri.)  |
| 6)  | Forest Rock Garden Hotel Project at Nochchiyagama  |
| 7)  | Proposed project for Rehabilitation of Gohagoda Dump Site and Establishment of an Integrated Solid Waste Management System for Kandy Municipal Council |
| 8)  | Broadland Mini Hydro Power Project   |
| 9)  | Maduru oya Mini Hydro Power Project PAA - Mahaweli Authority of Sri Lanka  |
| 10)   | Kithulgala Mini Hydro Power Project  |
| 11)   | Branford Mini Hydro Power Project PAA - Mahaweli Authority of Sri Lanka  |
| 12)   | Ross Estate Mini Hydro Power Project PAA - Mahaweli Authority of Sri Lanka   |
| 13)   | Koladeniya Mini Hydro Power Project at Nawalapitiya PAA - Mahaweli Authority of Sri Lanka  |
| 14)   | Rajjammana Mini Hydro Power Project PAA - Mahaweli Authority of Sri Lanka  |
| 15)   | Siyabalagasthenna Mini Hydro Power Project   |
| 16)   | Mulgama Mini Hydro Power Project   |
| 17)   | Ranwala oya Mini Hydro Power Project   |
| 18)   | Punagala Mini Hydro Power Project  |
| 19)   | Rakwanaganga Mini Hydro Power Project  |
| 20)   | Madugate Mini Hydro Power Project PAA - Forest Department  |
| 21)   | Ambewela Wind Power Project PAA - Dept. of Wildlife Conservation   |

| Outer Circular Highway to the City of Colombo Project (Phase I & III and Phase II) |  |
|--|--|
| 22)  | Colombo Port Expansion Project PAA - Coast Conservation Department |
| 23)  | Ayurvedic Agriculture Land Devt. Project at Lorawatta, Doluwa      |
| 24)  | Offshore sea sand dredging for construction purpose of industry    |

#### 4.1.2 Streamlining of EIA/IEE procedure

- **Review of EIA regulations**

The list of prescribed projects gazetted in the Government Gazette extraordinary No. 772/22 dated 24<sup>th</sup> June 1993 was reviewed and amended to incorporate a list of new projects and industrial projects in consultation with relevant stakeholders. The EIA regulations were also amended to incorporate recommendations made in the World Bank Report. The list of PAAs was also amended to streamline the process. Amended prescribed project list and regulations are to be gazetted.

- **EIA Training Programmes**

The EIA unit in partnership with the United Nations Development Programme, International Union for Conservation of Nature and the Center for Environmental Justice jointly organized an Intensive Environmental Impact Assessment Training Programme. This course was held at the Tree of Life Hotel, Kandy from 14<sup>th</sup> to 22<sup>nd</sup> December 2013. The first part of the course provided an overview and conceptual framework for EIA and the second half, hands on experience in the application of EIA. For the first time under this programme, two one day workshops running concurrently had been introduced.

The course was designed for Central and Provincial level officials, project proponents, consultants engaged in EIA preparation, academics, researchers, members of environmental cells within Project Approving Agencies (PAA) and members of non-governmental organizations (NGO) involved in the EIA process.

The EIA unit organized two day workshops on aspects of solid waste management Hydrological Impact Assessment, Biodiversity Impact Assessment and Economic Valuation of environmental impacts for CEA staff. The workshops were held in June and November at the CETRAC, Pelawatta.

In addition, a training programme on EIA procedure was held for junior officials of Department of Wildlife Conservation.

- **Twining Program on EIA between Japan and Sri Lanka**

Asian Environmental Compliance and Enforcement Network (AECEN) with funding from ADB has initiated action to carry out a twinning program on EIA between Japan & Sri Lanka. Under this program capacity development of officers involved in the EIAs and preparation of guidelines for selected sectors are expected. As an initial step to commence this program a stakeholder workshop was held on 10<sup>th</sup> December 2013 at the Hotel Taj Samudra. Two resource persons from Japan and two resource persons from AECEN secretariat attended the workshop to identify the issues and training requirement for the twinning program. More than 30 persons who are involved in the EIA field in Sri Lanka attended the above workshop.

- **Registration of consulting organizations for technical guidance / preparation of Environmental Impact Assessment Reports**

The existing list of Experts / consultants for the Technical Guidance / preparation of EIA reports was updated. The new list of consultants was published through the CEA web side

#### **4.1.3 Other activities**

In addition to the above activities, following meetings / site inspections were also attended by the EIA unit during 2013.

- Steering Committee meetings on National Highway Sector Project
- Steering Committee meetings on Outer Circular Highway Project
- Steering Committee meetings on Northern Road Connectivity Project
- Project Coordinating Committee meetings on Southern Transport Development Project
- Project Coordinating Committee meetings on Colombo – Katunayake Expressway Project
- Project Coordinating Committee meetings on Outer Circular Highway Project
- Steering Committee meetings on Provincial Road Rehabilitation Project
- Steering Committee meetings on Moragahakanda & Kaluganga Agriculture Development Project
- Steering Committee meetings on Jaffna – Kilinochchi water supply and sanitation project.

## **4.2 Natural Resources Management & Monitoring Unit**

The CEA holds the responsibility of management of country's natural resources, in coordination with other relevant agencies, Provincial and District offices of the Authority. Formulation of regulations,

preparation of guidelines on Natural Resources Management, implementation of project approval procedure for permitted activities within the areas declared as Environmental Protection Areas, implementation of Wetland Action Plan of the National Wetland Policy and preparation of information material on Natural Resources Management, Environmental Protection Areas, and Wetlands Activities are the other functions carried out by the CEA with respect to the Natural Resources Management. During the year 2013, the following activities were carried out with respect to the Natural Resources Management.

## **Natural Resources Management**

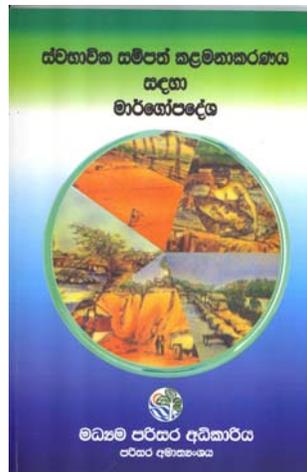
### **4.2.1 Inter-Agency Coordination Committee meeting on Natural Resources Management**

Two Meetings have been held with all relevant stakeholder agencies involved in Natural Resources Management in 2013. As an immediate requirement for regulating extraction of ground water for commercial purposes, committee has drafted regulations under the provisions of the Water Resources Act. Draft regulations area forwarded to the Ministry of Environment and Renewable Energy and Water Resources for the preparation of a joint Cabinet Paper.

### **4.2.2 Preparation of Information material**

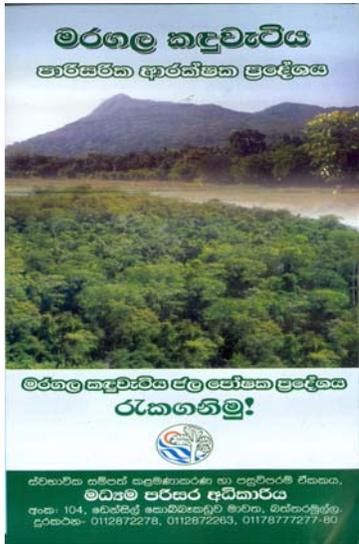
#### **Guide book**

The guide book on Natural Resources Management prepared in 1997, was reviewed and revised in consultation with stakeholder agencies and reprinted. Copies of the new print were distributed among all stakeholder agencies.



#### **Leaflets**

Leaflets on sand mining and leaflet on Maragala Kanda EPA, were prepared and distributed among Provincial and District Offices of this Authority and other relevant agencies.

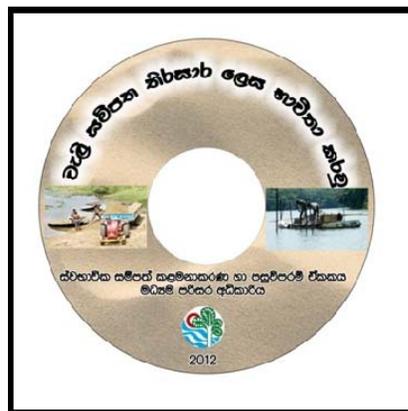


**Information Booklets on NRM**

A booklet on Natural resources management in information and a draft prepared. This include information of natural resources, such as land, water, air, mineral, forests, wild life etc.in summery form with description information tables

**4.2.3 Awareness Programs**

Seven Awareness Programs covering seven districts were carried out island wide, based on the Trainers’ training Manual on sustainable use of sand, prepared by the NRM Unit. .Awareness programs on conservation and management of natural resources were conducted for school children, government officers including Police and special Task force jointly with the Sri Lanka Water partnership Institute.



**4.2.4 Erection of Sign Boards at environmentally important places, biologically/historically significant trees Etc.;**

This, activity was initiated in 2012, with an objective of making awareness on important of such places among the public is continued in the year 2013, and selection of locations for erection of sign boards were completed . Four (4) sign boards were erected in four locations in Trincomalee DS Division, Kotapola DS Division, Nellsuwa DS Division, and Sooriyawewa DS Division.



**4.2.5 Providing Technical guidance to Government & Non-Governmental Agencies on Natural Resources Management**

Officers of this Unit represent the CEA and provide technical assistance pertaining to natural resources management at various Committees, such as Planning committees and Technical Evaluation Committees of other state Institutions such as, Urban Development Authority, Sri Lanka Land Reclamation & Development Corporation, and Geological Survey & Mines Bureau National Aquatic Development Authority, Ministry of Environment & Renewable Energy , National Science Foundation, IUCN, Parliament Consultative Committees, etc. Officers were attended over hundreds of such meetings, during the year 2013.

The comments/observations for cabinet papers, reports, management plans which were sent by the various Ministries/ Institutions for environmental concerns were submitted to the respective institutions.

#### 4.2.6 Conservation of Water Sources /Catchment Areas

A policy and an action plan for conservation and management of water sources and the catchment areas are being prepared by a committee appointed based upon a decision of the Parliamentary Consultative Committee of Ministry of Land. NRM &M Unit represents CEA at the committee and provides the necessary technical inputs.

A program for the protection of water sources in Ingiriya and Horana Divisional Secretariat divisions was initiated and preliminary works such as identification of water sources were completed.

#### 4.2.7 Protection of Waterfalls

Under the program initiated for protection of Waterfalls in Sri Lanka, Board approval was obtained to carry out a survey to collect necessary information/data on recorded waterfalls in the prepared list and new water falls identified during the survey. A questionnaire for collecting information of waterfalls to be used during the survey was prepared and awareness programs for the CEA officials on the survey was organized.

#### Declaration and management of environmental protection areas

| Name of the EPA |   | Status   |
|-----------------|---|--|
| 01              | Walauwewaththa - Wathurana<br>(Gazette No.1598/21<br>Date-2009/04/24) | Interim Management plan has been completed. Two sign boards were erected at Waluwewatte-Wathurana EPA.<br><br>Conducted two awareness programmes.  |
| 02              | Bolgoda -(Gazette No.-1634/23<br>Date-2009/12/30)                     | Surveying the boundaries of Bolgoda EPA is in progress. Six awareness programs were conducted for Government officials on conservation of Bolgoda EPA.<br><br>Twenty five (25) sign boards were erected. |
| 03              | Muthurajawela-<br>(Gazette No-1466/26<br>-Date-2006/10/13)            | Ten (10) sign boards were erected along the boundary of the EPA. One information board was designed, and finalized.  |

|    | Name of the EPA  | Status   |
|----|--|--|
| 04 | Thalangama -(Gazette No: -1487/10<br>-Date.-2007/03/05)                    | Six (6) sign boards were erected at Thalangama EPA. Preparation of Information Boards for Thalangama EPA was initiated.<br><br>Conducted two awareness programmes for government officials.<br><br>Five proposals for filling and construction of buildings, were received and rejected granting of approvals as they were not permitted activities within the EPA.                    |
| 05 | Gregory Lake( Gazette no:-1487/10<br>-Date -2007/03/05)                    | Six sign boards were erected. Printed Leaflets were distributed at the awareness programmers conducted during the festival season during the month of April, 2013.   |
| 06 | Hanthana -(Gazette no:-1641/28<br>-Date-2010/02/17)                        | Held two Hanthana EPA Management Committee meetings. 38 projects were approved & rejected 8 projects.<br><br>Revised boundary of the EPA, proposed by the Hanthana EPA Management Committee has been approved by the Hon. Minister of Environment and Renewable Energy.<br><br>Initiated to prepare a comprehensive management plan with the technical assistance of external experts. |
| 07 | Knuckles Mountain Range- (Gazette No:-1507/09 Date-2007/07/23)             | Acquiring process of private lands within the EPA is in processing by Forest Department.   |
| 08 | Maragala Mountain Range (Monaragala)- Gazette no:-1560/26 Date:-2008)8/01) | EPA and alternative boundaries were identified to exclude Monaragala town area from the EPA.<br><br>Funds collected to Survey Department to survey, the revised boundary. Four Awareness programmes were conducted. A leaflet was printed and distributed  |

|  | Name of the EPA | Status  |
|--|-----------------|---|
|  |                 | among all relevant stakeholders.<br><br>Initiated to prepare a comprehensive management plan with the technical assistance of external experts. |

**Status of the proposed EPAs (January – October 2013)**

|           |                                |   |
|-----------|--------------------------------|---|
| <b>01</b> | Benthota Ganga                 | Most areas of the proposed Benthota ganga EPA lies within the revised Coastal zone under the purview of the Department of Coast Conservation & Coastal Resources Management (CC& CRMD). Therefore, a decision was taken at the discussion held between CEA and the CC and CRMD to manage the proposed area under the CC and CRMD. |
| <b>02</b> | Dedigamuwa Kanda               | The Gazette was finalized and forwarded to the Ministry of Environment & Renewable Energy for taking necessary actions for the declaration.   |
| <b>03</b> | Koggala Lagoon                 | Since major portion of the proposed Koggala Lagoon EPA lies within the revised Coastal zone under the purview of CC& CRMD, a discussion was taken at the discussion held between CEA and the Dept. of CC and CRM, to manage and regulate activities in the proposed area under the CC and CRMD.                                   |
| <b>04</b> | Pansalthenna, Ukuwela (Matale) | Biodiversity survey is completed. A meeting was held at the District Secretariat Office, Matale to discuss the issues on demarcating the boundary of the proposed EPA. Divisional Secretary, Ukuwela was assigned to send Survey request to Survey Department.  |

|     |   |   |
|-----|---|---|
| 05  | Waratenna- Hakkinda (Kandy)                     | Bio-diversity Secretariat has recommended CEA to declare this unique area as an EPA.<br><br>Since this area lies within the purview of Mahaveli Authority of Sri Lanka (MASL), CEA has inquired from MASL, on the regulation/ legal provisions of conservation of this area under the MASL Act. |
| 06. | Gallella-Aththota-Thankolakelle<br>(Rathnapura) | Collection of information on the proposed EPA is in process.  |

#### 4.2.8 Wetland management

##### 4.2.8.1 National Wetland Management Steering Committee Meetings (NWSC)

Two (2) NWSC meetings, chaired by the Secretary, Min. of Environment, and Renewable Energy were held. Several important decisions were taken pertaining to sound management and conservation of wetlands, as indicated in the National Wetland Policy and Strategies.

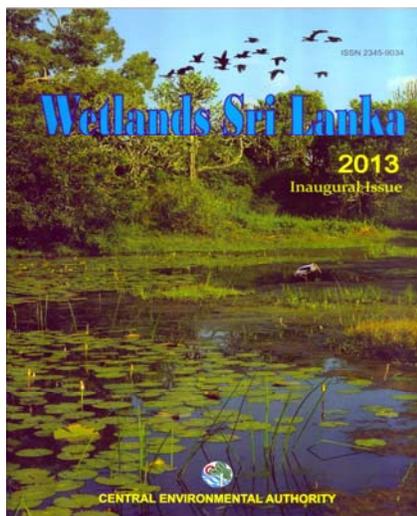
##### 4.2.8.2 Wetland database

Updating the database on wetland was initiated, and verification of data was completed in five Provinces. Digital copy of the National Wetland Directory was inserted in the CEA websites.

##### 4.2.8.3 Wetland Magazine

A Wetland Magazine, including articles and research papers on wetlands, was prepared, and the maiden volume was launched in August 2013.

Photo – wetlands Sri Lanka



#### 4.2.8.4 Hand book on “Thethbim Asiriya”

“Thethbim Asiriya” hand book was reviewed a draft book was prepared to include more important information as wetland value and “Ramsar” sites.

#### 4.2.8.5 World Wetland Day

National Day program of the World wetland Day 2013 was held on 1<sup>st</sup> February 2013 at the Water’s Edge premises. A Poster competition was organized in collaboration with the Department of Wildlife Conservation and the Prize for all island and provincial winners of the Poster competition were given by Hon. Minister of Environment and Renewable Energy and the Minister of Wildlife Conservation. In parallel to the National Day Programme, an exhibition of posters was held. Nine Provincial Programmes were also conducted by the Provincial Offices of CEA mainly targeting school children.





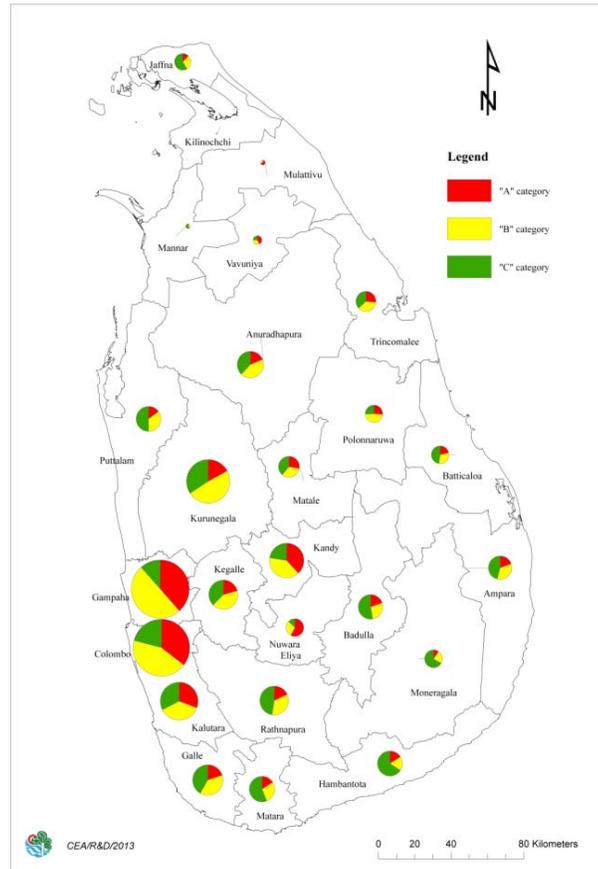
### **4.3. Research and Development Unit**

The main goal of the unit is to Contribute towards successful implementation and facilitating implementation of the provisions of the National Environmental Act in order to; prevention of environmental degradation and develop criteria for the protection and improvement of the environment by conducting , promoting, facilitating and coordinating research/studies /surveys and dissemination of information and ensure sustainable management of natural resources of Sri Lanka through application of Geographical information system (GIS) & Remote sensing technologies.

#### **4.3.1 Spatial Distribution of Industries of Sri Lanka**

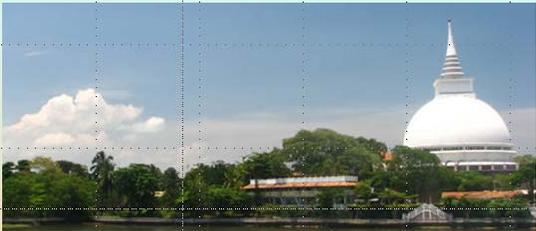
Geo-spatial database on prescribed industries was developed in reviewing the present status of distribution of the polluting industries in Sri Lanka and it is being updated continuously. Accordingly total number of High polluting industries in Sri Lanka is about 9510 and medium polluting industries are 13939 except North Western Province. This data base is immensely helpful in implementation of pollution control mechanism and locating of new industries.

### *Spatial distribution of Industries in Sri Lanka*



#### **4.3.2 Preparation of Digital District Resources Profile CDs**

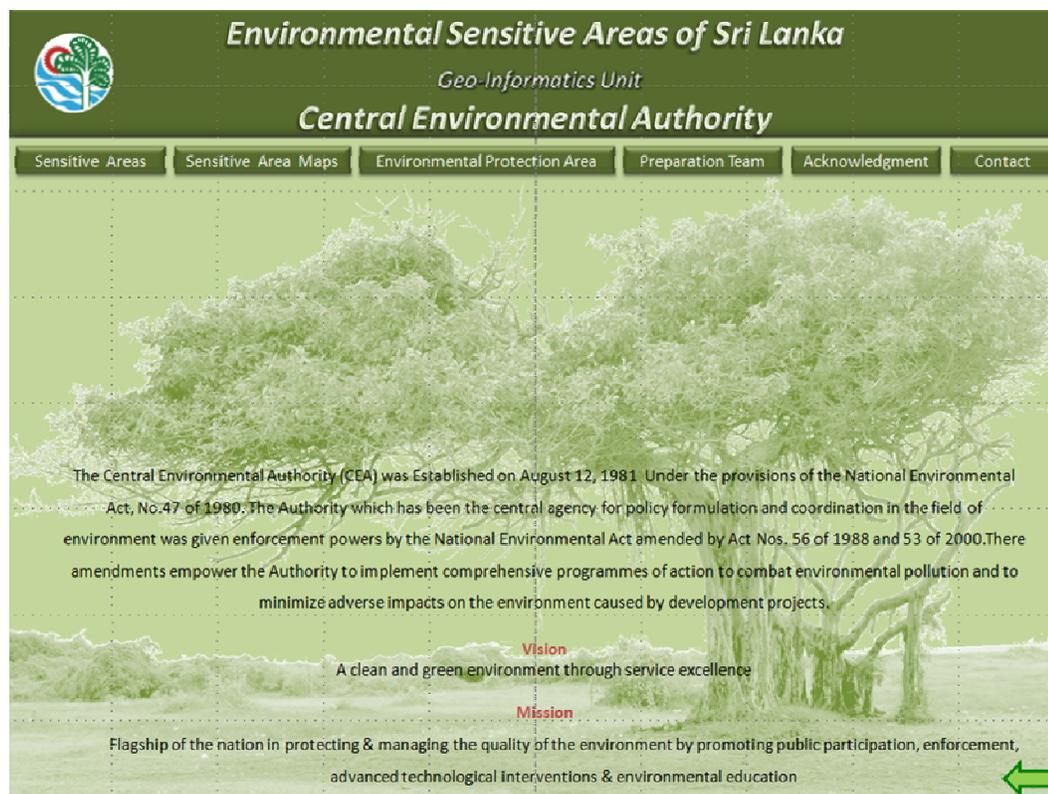
R&D unit of the CEA is maintaining and updating a centralized spatial data base on natural resources, administrative boundaries, socio economic, demographic, archaeological data and other information. Digital District Resources Profiles were produced by using existing data base for easy reference. Accordingly, maps in the CD have been developed at the level of Divisional Secretariat. The resource profiles of CDs of Kalutara and Kegalle districts have been developed and now ready to be printed. It has been planned to develop profiles for the rest of the districts of Sri Lanka.

| Environmental Resources Information System   |   |  |
|--|---|--|
| Kalutara District  |   |  |
| Research & Development Unit  |   |  |
| Central Environmental Authority  |   |  |
| <a href="#">District Outline</a><br><a href="#">Administration</a><br><a href="#">Population</a><br><a href="#">Roads</a><br><a href="#">Schools</a>                         |   | <a href="#">Natural Resources</a><br><a href="#">Water</a><br><a href="#">Forest</a><br><a href="#">Wildlife</a><br><a href="#">Environment Management</a><br><a href="#">Environmental Sensitive Areas</a><br><a href="#">Prescribed Industries</a><br><a href="#">Solid Waste Management</a><br><a href="#">Archaeological Sites</a> |
| <b>Physical Environment</b><br><a href="#">Climate</a><br><a href="#">Soil</a><br><a href="#">Geology</a><br><a href="#">Land use/ Cover</a><br><a href="#">Agro-ecology</a> | <p>The Kalutara district lying absolutely between northern latitudes 6° 25' and 6° 45' and eastern longitude 79° 50' and 80° 20' is bounded in the north by the Colombo district, in the south by the Bentara river and the Galle district, in the east by the Ratnapura district and in the west by the coastal belt about 40 kilometers long. Relative to the other two districts in the province, Kalutara is the largest area wise, comprising 1597.6 square kilometers, which is 2.43% of the total land area of Sri Lanka. Of the 25 administrative districts of the country, Kalutara ranks 19th area wise. Its administrative structure consists of the Divisional Secretariat divisions of Panadura, Kalutara, Bandaragama, Dodangoda, Beruwala, Matugama, Baduralva (Palinda Nuwara), Millaniya, Ingridiya, Walallavita, Maduravala, Horana, Bulathsinhala and Agalawatta, 762 Grama Niladhari and 2652 villages.</p> | <a href="#">Contact Us</a><br><a href="#">Sinhala</a><br><a href="#">Tamil</a><br><a href="#">English</a><br><a href="#">Acknowledgement</a><br><a href="#">Preparation Team</a>   |
| A clean and green environment through service excellence   |   |  |

*Home-page of the Environmental Resource profile of Kalutara district*

### 4.3.3 Mapping of Environmental Sensitive areas of Sri Lanka to a CD

Environmental Sensitive Area maps are based on the areas specified in **Part III** of the Schedule of the Gazette Extra Ordinary No. 772/22 of 24th June 1993(EIA regulations) and subsequent amendments and the areas declared by the CEA as Environmental Protection areas so far under the provision of the National Environmental Act. The CD consist of Environmental Sensitive Areas and it was prepared in three languages (Sinhala, Tamil & English). Information provided in the CD facilitates investors, planners and administrators to ensure implementation of sustainable development of projects.



*Home- page of the Environmental Sensitive Areas of Sri Lanka*

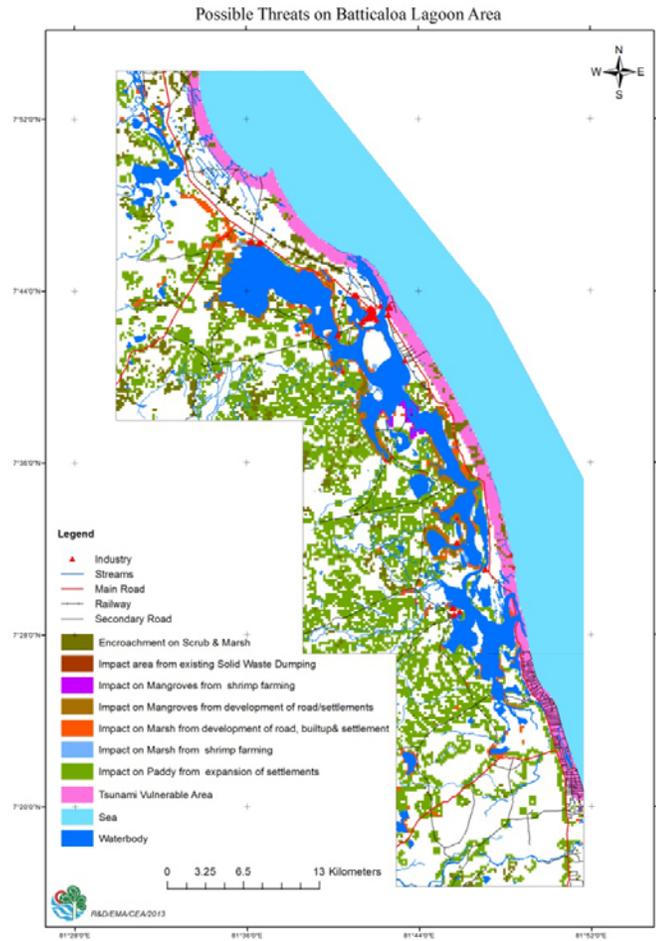
#### **4.3.4 Mapping and Change Detection of Wetlands in South Eastern River Basin Region in Sri Lanka using Optical and PALSAR remote sensing**

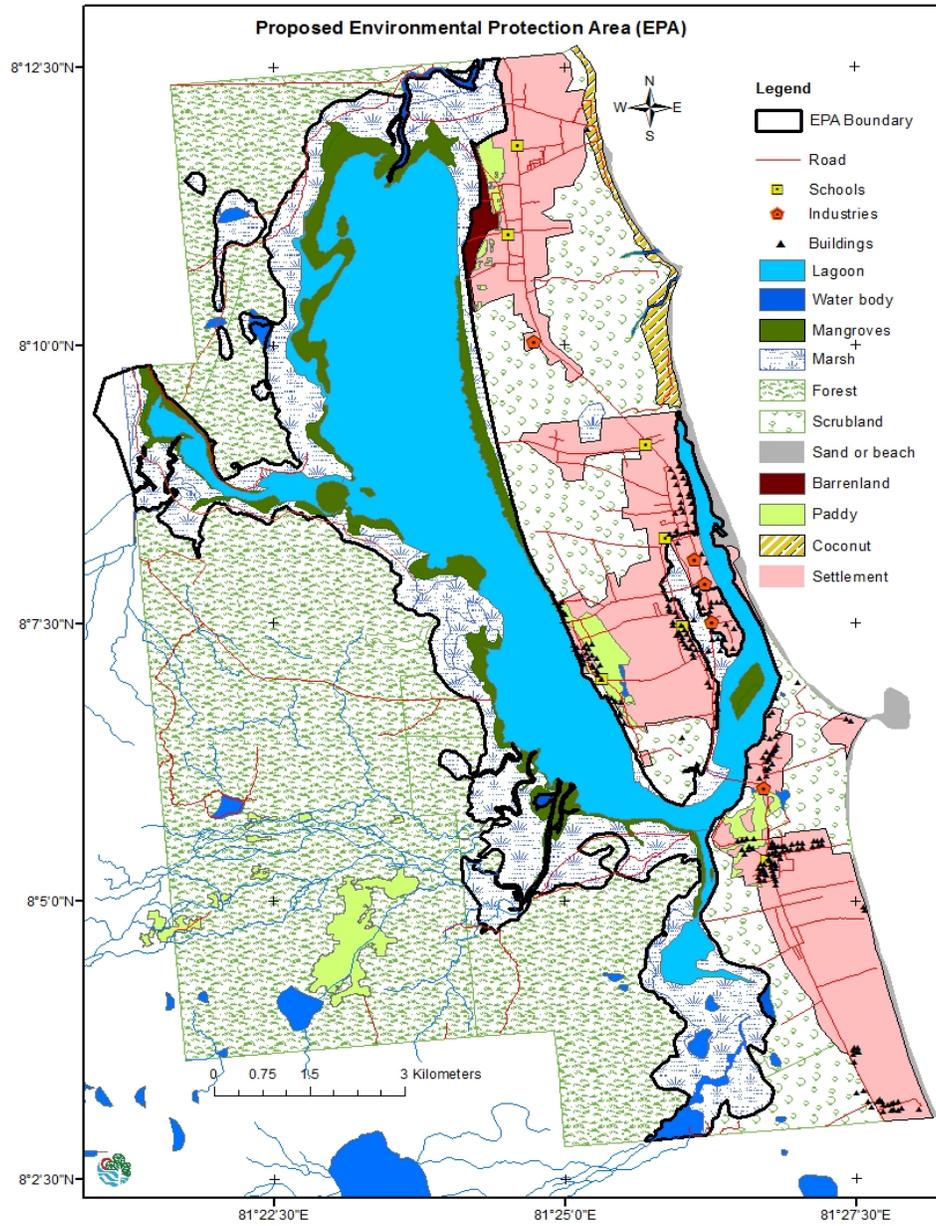
The study on Mapping and change detection of wetlands in South Eastern River Basin Region in Sri Lanka using Optical and PALSAR remote sensing were conducted by the Research & development unit with collaboration of Japanese Aerospace Agency (JAXA) and Geo-Informatics Centre, Asian Institute of Technology, Thailand (GIC, AIT). Project duration is two years.

The main objective of this project is identification, mapping and change detection of important wetlands in the South Eastern Rivers basin of Sri Lanka using ALOS satellite data of AVNIR 2 (Advanced Visible and Near Infrared Radiometer Type 2) and PALSAR (Phased Array type L-band Synthetic Aperture Radar) as base line tool for declare environmental protection areas under the National Environmental Act.

During that period 42 wetlands in the region have been studied with satellite data and field verified data separately. Series of analysis were conducted to prioritize the wetlands and Seven (07) wetlands identified as important ecosystems which need immediate attention for conservation. Panichechankerni, Manmunai, Saththurukondan, Urani lagoon mangrove wetlands, Kapurella Hot water spring, Eragama tank and some part of Batticoloa lagoon comes under the selected wetlands.

The vulnerable area maps, prediction maps environmental degradation, and zoning maps for future developments were developed for selected wetlands using remote sensing and GIS techniques. Finally, developed draft maps of proposed boundaries of Environmental Protection Areas for selected wetlands and submitted to Natural Resources Management Unit of the CEA for take necessary actions.





*Location map of the identified wetlands in the south Eastern river basin*

### 4.3.5 GIS services on commercial basis

| Income Generated for the year 2013 |  |   |           |
|------------------------------------|--|---|-----------|
| No                                 | Institute/Department   | Details of map  | LKR       |
| 1                                  | CECB   | Sensitive area map for proposed Kalugal oya Reservoir and the irrigation project                        | 5,712.00  |
| 2                                  | IEPSL  | Boundary map of Hanthana EPA  | 1,370.88  |
| 3                                  | JICA project on "Development Planning on Optimal power Generation for peak demand in Sri Lanka | Sensitive area maps in Ampara, Badulla, Monaragala, Rathnapura, Kegalle, Nuwara Eliya, Kandy and Matale | 53,572.85 |
| 4                                  | CECB   | Sensitive area maps for the EIA study for the proposed Morana Reservoir project in Badulla District     | 7,996.80  |
| 5                                  | Private organization   | Industry data of 500m both sides of Kelani River from Ambatale to Hanwella                              | 1,507.97  |
| 6                                  | Metro Colombo Urban Development Project  | Sensitive area map of Micro Tunnel design works   | 6,854.40  |
| 7                                  | EML Consultants (Pvt) Ltd.   | Sensitive area map of proposed hotel project in Sigiriya  | 2,570.00  |
| 8                                  | Ceylon Electricity Board   | Environmental sensitive area maps(4) for proposed coal fired thermal power plant                        | 34,272.00 |
| 9                                  | Diesel & motor Engineering PLC   | A map of Solid waste management sites in Western Province   | 3,884.16  |
| 10                                 | PURITAS (Pvt) Ltd.   | "A" category Industries (24,31,32,37,59,66&80) in Sri Lanka   | 20,883.07 |
| 11                                 | The University of Peradeniya   | Sensitive area map of Kalutara District   | 456.96    |

| Income Generated for the year 2013 |   |  |                   |
|------------------------------------|---|--|-------------------|
| No                                 | Institute/Department  | Details of map   | LKR               |
| 12                                 | Project of Improving community based water supply & sanitation in post conflict areas of Jaffna and Kilinochchi | Three Land use maps based on Google Earth with the overlay of proposed water supply line and relevant locations in Mathagal East, Santhai and Delft DS Divisions | 19,306.56         |
| 13                                 | Ceylon Electricity Board joint project in Feasibility study for introducing LNG to Sri Lanka Proposal           | Two environmental sensitive area maps for Northern end of the Colombo Port and Kerawalapitiya for establishing a Liquefied natural Gas terminal                  | 17,707.20         |
| 14                                 | CECB  | Sensitive area map for the proposed Basnagoda Reservoir project  | 8,853.60          |
| 15                                 | University of Moratuwa  | Sensitive area map for the Kandy city area - Boundaring Gohagoda-to Digana via Katugastota and Madawela  | 6,568.80          |
| 16                                 | University of Moratuwa  | Sensitive area map for the Kandy city area - Boundaring Dharmashoka Mawatha, Kandy Lake, Rajapihilla Mawatha and Dunumadalawa Reservoir                          | 8,853.60          |
| 17                                 | Lanka Hydraulic Institute Limited   | Locations of Solid waste Management sites along the coastal belt of Sri Lanka  | 10,510.08         |
| 18                                 | International Water Management Institute  | Locations of Solid Waste Dumping sites in Western province   | 7082.88           |
| <b>Total</b>                       |   |  | <b>217,963.81</b> |

Following services were provided on request basis

- *Identification of Environmental Sensitive areas and landuse/ land cover located within or around a selected project site*
- *Preparation of Environmental Sensitive Area maps of a selected locations*
- *Preparation of landuse/ land cover maps*

- *Satellite image analysis*
- *Obtaining GPS locations*
- *Map digitizing and classification*
- *Scanning and printing maps*

#### 4.3.6 Preparation of Master Plan on Integrated Mosquito Control in Sri Jayewardenepura Kotte MC



**Map of study Area**

Mosquitoes cause a great threat to human's health and existence than any other animal species. They act as vectors of some tropical diseases such as malaria, yellow fever, filariasis and numerous viral diseases such as dengue, yellow fever and Japanese encephalitis, which kill and debilitate millions of humans worldwide despite today.

In Sri Lanka, there are 17 genera and 140 species of mosquitoes (Data from MRI) probably large majority are not vectors but several species are important to spread diseases such as Dengue, Dengue Hemorrhagic Fever, Chikungunya, Malaria, Filaria, Yellow Fever and Japanese Encephalitis even with significant no. of severe deaths during the past decade.

In addition to those dangerous diseases mosquito bites make itch and irritation on human bodies during their biting behavior, increase the risk of impetigo, a bacterial infection of the skin, and the more severe but less frequent cellulites, a bacterial infection of the tissues that

requires treatment with antibiotics. It can also be economically detrimental to business and reduced quality of life for residence.

Development of habitats of mosquitoes directly or indirectly associate with human activities such as polluting water, discarded containers, haphazard dumping of waste, none planning /improper constructions and maintenance, ineffective management of drainage and irrigation, inadequate cleaning and clearing, human selfish, negative attitudes, with related to the poverty of people, urbanization and industrialization, improper land use patterns, increasing the population and population movements but no sustainable mechanism available to eliminate this nuisance.

Considering this situation the Central Environmental Authority has decided to create a platform for the scientists/experts in this field to look for new alternatives and strategies to control this situation. Several discussion in this regard were held at the CEA and consequently expert committee decided to prepare integrated master plan on mosquito control in Sri Jayewardenepura Kotte MC Area as a pilot project.

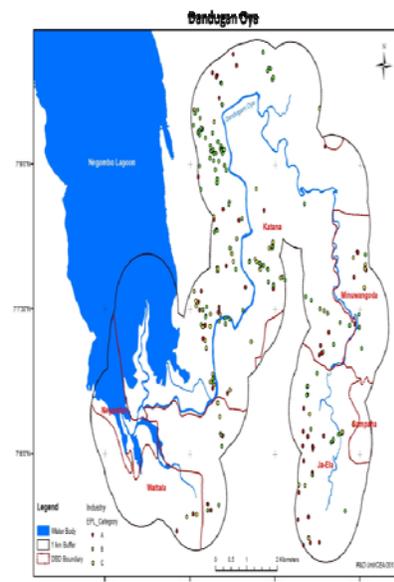
A master plan was drafted by the R&D unit and it has already been delivered to the consultant appointed by the expert committee to edit, improve and finalize the document.

#### **4.3.7 Research Project on Studying the Causes of Water Pollution in Dandugam Oya in Gampaha District and Develop Strategies to Minimize Water Pollution in the Area.**

Water quality is being monitored in several major water bodies in sequential periods to maintain the quality by the laboratory of CEA. As per the analysed water quality data recorded by the CEA laboratory it was revealed that one of the major polluted streams was Dandugam Oya in Gampaha District.

In addition, this polluted stream flows to the Negombo lagoon through a major environmentally sensitive area of the country called Muthurajawela. Industrial premises located in the catchment area of this stream discharge major pollutants to this water body. They generate large amount of wastewater containing organic pollutants & various process chemicals. Biodiversity in marsh, lagoon as well as in the stream and human being in the surrounding area may be mainly affected by those major pollutants.

**Map of Study Area**



Hence detailed study through the analysed various pollutants in Dadugam Oya was carried out by the Research and Development unit and it was decided to initiate a research project in this regard.

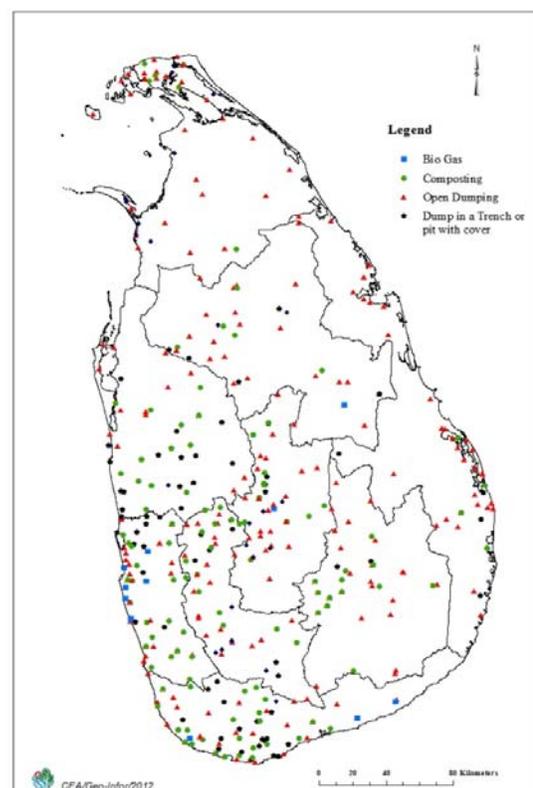
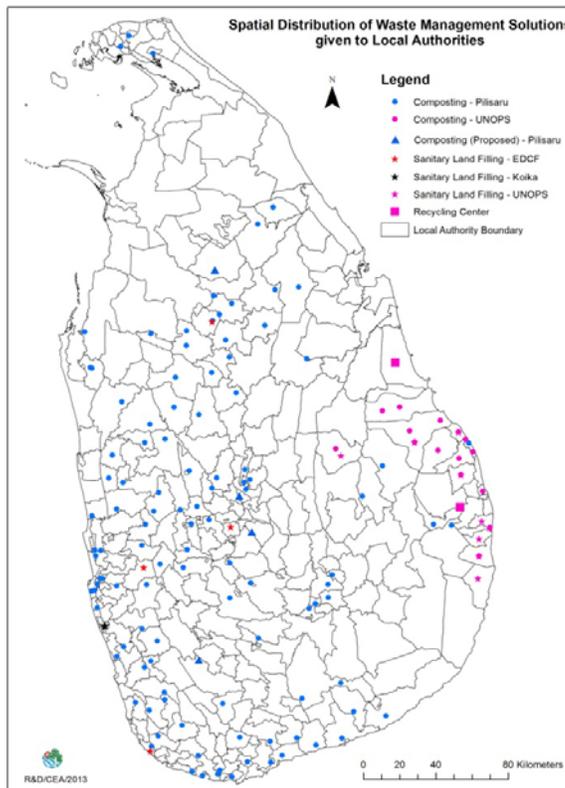
The objectives of this research are to study to analyze water quality data, determine the status of water pollution, study the effects of dredging on the water quality and identify strategies to control and minimize water pollution in Dandugam Oya.

Time period of this project is two years with two phases. Funds Rs. 3 million has been approved and the first phase of the project has been started.

#### 4.3.8 Developing a GIS database for Solid Waste Management

Data / information related to solid waste management were collected in 335 Local Authorities of the country. Spatial distribution maps were prepared and updated the data base.

Maps with spatial locations of Malamulla, Keerikkulama, Monroviyawatta, Dompe and Gonadigawatta Composting and Sanitary Landfill sites managed by the Koica and EDCF projects were developed.



## 5.0 Legal Unit

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### MISSION OF THE UNIT

*“To regulate and create environmental awareness  
to enhance the environment for the survival of each other”*

### 5.1 Legal Action under the National Environmental Act

The Legal Unit under the direct supervision of the Director General assists in enforcing the provisions and the regulations made under the National Environmental Act, No. 47 of 1980 as amended. Its substantive function is to facilitate litigation process under the Act and the activities done by the Legal Unit are as follows;

The Legal Unit has filed and finalized a number of cases during the year 2013. Accordingly, 247 cases were handled by the Legal Unit and that indicates the cases filed against the CEA and the cases filed by the CEA. More than 110 cases have been freshly filed during the year 2013.

The total amount of fine collected from those cases is Rs. 493,750.00.

#### **Performance of the Western Province in Enforcement of NEA**

There were about ninety (90) cases pending in the Western Province during the year 2013.

There were forty eight (48) pending cases at Colombo District and amongst those three (03) cases in MC Mt. Lavinia, nine (09) cases in MC Kesbewa, six (06) cases in MC Avissawella, twelve (12) cases in MC Gangodawila, three (03) cases in MC Moratuwa, five (05) cases in MC Kaduwela, one (01) case in MC Homagama and nine (09) cases in MC Colombo during the year 2013. Fourteen (14) cases have been finalized in year 2013.

Thirty six (36) cases were pending in Gampaha District and twenty five (25) cases were freshly filed. That includes six (06) cases in MC Gampaha, one (01) case in MC Negombo, nine (09) cases in MC Wattala, three (03) cases in MC Attanagalla, one (01) case in MC Mahara, four (04) cases in MC Kanuwana. Five (05) cases have been finalized in year 2013.

Further, there were six (06) cases pending in Kalutara District in year 2013 and amongst those two (02) cases were in MC Kalutara, one (01) case in MC Matugama, two (02) cases in MC Panadura and one (01) case in MC Horana.

#### **Performance of the Central Province in Enforcement of NEA**

There were about fifty (50) cases were pending in the Central Province in M.C. of Kandy, Matale Dambulla, Gampola, Nawalapitiya, Theldeniya, Nuwara Eliya, Laggala, Hatton, Helboda, Panwila

and Mahiyanganaya. Among those, seventeen (17) fresh cases were filed in Central Province in year 2013. Twenty One (21) cases have been finalized in Year 2013.

#### **Performance of the Uva Province in Enforcement of NEA**

Sixteen (16) cases were pending in Uva Province in year 2013. Among those, twelve (12) cases were freshly filed. There was one case in MC Welimada, six (06) cases in MC Mahiyanganaya, one (01) case in MC Monaragala, one (01) case in MC Passara, two (02) cases in MC Bandarawela, three (03) cases in MC Wellawaya and two (02) cases in MC Bibila. Six (06) cases were concluded in the year 2013.

#### **Performance of the Southern Province in Enforcement of NEA**

Twenty one (21) cases were pending in Southern Province in 2013 and those were in Balapitiya, Galle, Elpitiya, Tangalle, Walasmulla and Matara. Amongst those eighteen (18) fresh cases have been filed and nine (09) out of them were finalized in year 2013.

#### **Performance of the Eastern Province in Enforcement of NEA**

Two (02) cases were pending in MC Akkaraipattu and Trincomalee in year 2013. Both of those were freshly filed cases and one (01) case was finalized in year 2013 itself.

#### **Performance of the Sabaragamuwa Province in Enforcement of NEA**

Seventeen (17) cases were pending in Year 2013 in Sabaragamuwa Province. Amongst those, seven cases were freshly filed in year 2013. There were two (02) cases pending in MC Mawanella, one (01) case in MC Pelmadulla, two (02) cases in MC Warakapola, two (02) cases in MC Kegalle. Eight (08) cases have been finalized in the same year and further two (02) cases were pending in High Court, Kegalle and both the cases were terminated in the same year.

#### **Performance of the North Central Province in Enforcement of NEA**

There were five (05) cases pending in North Central Province in year 2013 and that includes MC Anuradhapura, MC Polonnaruwa and MC Hingurakgoda. Amongst, those two (02) cases were finalized in year 2013.

#### **Progress of enforcement of the provisions of the NEA**

Several industries have completed constructing treatment plants in order to ensure the standards stipulated by the CEA and several industries complied with the noise level standards stipulated under the NEA and after complied with the requirements of the Law, Environmental Protection Licenses were obtained by those industries.

## **5.2 Cases filed against the CEA**

Forty (40) cases were pending against the CEA in year 2013 in District Courts, High Courts, Supreme Court and Court of Appeal in Colombo, Mt.Lavinia, Gampaha, Jaffna, Kaduwela and Matara.

The officers attached to the Legal Unit attend for the Supreme Court and Court of Appeal, High Court, District Courts and Magistrate Courts for cases filed against the CEA.

Further, officers of the Legal Unit engage in drafting documents to be filed in Courts and attended for consultations.

## **5.3 Cancellation, Refusal and Suspension of Environmental Protection Licenses / Show Cause Letters**

Considering the environmental nuisance caused by the industries, the CEA has taken steps to cancel the Environmental Protection License (EPL) issued to eighteen (18) industries and one hundred and forty one (141) letters have been sent refusing to issue the EPL and one (01) letter has been sent suspending the operation of the industry.

Further, numbers of files have been sent to the EPC Division, Provincial Offices, District Offices and the laboratory of the CEA in order to submit analytical report and Noise measurement Reports tests and inspection reports with necessary instructions from the Legal Unit.

## **5.4 Null & Void Letters**

One (01) null & void letter was sent to a Local Authority informing that the Environmental Protection Licence issued by the Local Authority is null and void.

## **Section 24B Directives**

Legal Unit has sent one Section 24B Directive

## **5.5 Conditions of the Environmental Protection Licenses**

Conditions of EPL with regard to fresh EPL have been checked by the Assistant Legal Officers attached to the Provincial Offices and District Offices and the Officers of the Legal Unit.

The licenses to be issued for the scheduled Waste Management have been checked by the Officers of the Legal Unit of the Head Office.

## **5.6 Appeal Hearings at the Ministry of Environment & Renewable Energy**

Officers of the Legal Unit attended about twenty one (21) appeal hearings conducted by the Secretary, Ministry of Environment & Renewable Energy.

### **5.7 Notarial Work**

The Legal Unit has prepared twenty two (22) Agreements to obtain various services from the Consultants on various technical matters for implementing projects and Lease Agreements for Provincial and District Offices.

### **5.8 Meetings**

Officers of the Legal Unit have attended for twenty five (25) meetings in relation to environmental matters.

### **5.9 Complaints**

Legal Unit has handled complaints regarding pollution and nuisance sent by the Public, Local Authorities, District Secretarial Offices and other Institutions. Several complaints were forwarded to the respective Police Stations through the Police Unit of the CEA to institute legal actions under Section 98 of the Criminal Procedure Code and the Police Ordinance and relevant Local Authorities in order to take action for causing nuisance by industries.

### **5.10 Consultations**

Officers of the Legal Unit attended thirty six (36) consultations at the Attorney General's Department in order to prepare objections, Answers, Written Submissions relating to the cases filed against the CEA and for the cases filed by the CEA at the trial stage of the court cases.

### **5.11 Regulations**

The Legal Unit has taken steps to submit amendment of draft of EIA Regulations to the Legal Draftsman through Ministry introducing new prescribed projects.

Further, Legal Unit of the CEA has coordinated with the relevant technical divisions to draft the Stack Emission Standards and the said Regulation has already been forwarded to the Legal Draftsman's Department.

The Legal Unit has undertaken to draft the Regulation on Visual Pollution with the assistance of the other Government Institutions and the final draft is in the process of final discussion.

### **5.12 Advices**

Advices were given to several Local Authorities, individuals and other Divisions of the CEA on environmental matters and other relevant matters.

### **5.13 Legal Notices**

Legal Notices were sent to thirty seven (37) industries which had been causing environmental pollution.

### **5.14 Inspection Reports**

Officers of the Legal Unit approved several inspection reports relating to inspections carried out by the Officers of the CEA in order to file in Courts and to be submitted to the appeal hearings at the Ministry of Environment and Renewable Energy.

### **5.15 Awareness**

Officers of the Legal Unit attended for twelve (12) Awareness Programmes in order to make the officers of the other Institutions public aware about the National Environmental Act. Further, officers of the Legal Unit attended for five (05) Training Sessions of training the officers of the CEA on NEA as resource persons.

On the request of law students and university students they were made aware of the National Environmental Act and Regulations by the Officers of the Legal Unit.

### **5.16 Human Rights Inquiries**

Officers of the Legal Unit attended for five (05) inquiries at the Human Rights Commission and had prepared, checked and finalize several reports including environmental matters and employers' problems.

### **5.17 Amendments to the National Environmental Act**

The Legal Unit of the CEA has taken steps to introduce the novel concepts such as the "Polluter Pays Principle" and chapters on Wetland and Hazardous Waste to the proposed NEA amendments. The final draft forwarded by the Department of Legal Draftsman is currently at the discussion.

Further, the Legal Unit of the CEA is coordinating the introduction of new NEA repealing the existing Act.

## 6.0. Environmental Education & Awareness Division (EE&A)

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### Mission

*“To create education and awareness for various target groups among public to obtain their active participation for the protection and conservation of healthy environment”*

The Environment Education and Awareness Division of the Central Environmental Authority is responsible for creating and improving awareness and providing education for the public towards obtaining their active participation for the conservation of environment. The objective of this process is to make environment friendly citizens to maintain the sustainability of the Environment. To achieve this objective, in the year 2013, the Environmental Education and Awareness Division implemented the following programs for various target groups among the public using Ministry and Treasury funds.

#### **A. Activities Implemented under the Ministry fund.**

- i. Conduct Training Programs for Teachers
- ii. Appointing EPP District Consultants in each district
- iii. Conduct discussions with EPP Commissioners
- iv. Conduct discussions with EPP Educational Coordinating Officers
- v. Production of EPP materials
- vi. Increasing badge holders and membership
- vii. Awarding of Presidential Medals
- viii. Implementation of Eco-Projects with the participation of Presidential Medal Winners
- ix. Conduct Leadership Training Program for selected school children
- x. Conduct National Environmental Camp
- xi. District Environmental Pioneer News Letter
- xii. Conduct National Tree Planting Program
- xiii. Implementation of Eco-Projects at school level (One school in each District)
- xiv. Conduct workshops to develop education activities at pre-school level
- xv. Printing Guide Book for Pre schools

#### **B. Activities Implemented under the Treasury fund.**

- i. Develop Education Materials (Posters and Leaflets) – Printed to Disseminate Message on contemporary issues related to the Environment.
- ii. Strengthen Environmental Programs Island wide
- iii. Conduct programs for Government and Non-Governmental Organizations

- iv. Conduct programs for Home Gardening
- v. Formation of Eco-Clubs – Production of Thurulatha Certificates, Vihanga Certificates, Soba Badges, Eco Teacher Guide Books, printing of leaflets
- vi. Promote Promotional Exhibitions
- vii. Conduct programs at Nature Field Centres - Adopt Practical Programs
- viii. Conduct Environmental Awareness Programs during Cultural Events
- ix. Conduct Sri Lankan Green Youth Program
- x. Production of Quarterly Environmental News Letter
- xi. Conduct Programs for House Wives
- xii. Conduct “The World Environment Day” Program –Conduct various activities relevant to the theme of the World Environment Day of the respective year.
- xiii. Conduct Education and Awareness Programs on Contemporary Issues to school children & various Stakeholders at CEA Auditorium
- xiv. Conduct Campaigns on Environmental Issues and events
- xv. Conduct Eco friendly Vesak Lantern exhibition competition
- xvi. Effective use of Electronic and Print Media
- xvii. Details of the programs conducted by the Environment Education and Awareness Division of the Central Environmental Authority in 2013 are as follows.

### **6.1 Pre-school program.**

The Pre-school program on environment is implemented to improve the consciousness of pre-school children on various environmental aspects, through various Environment related activities. Under this program, training of pre-school teachers on the use of pre-school teacher’s guidebook was the main activity.

In this regard, following programs were implemented by EE&A under the Ministry Funds.

- i. Conduct workshops to develop environmental education activities at preschool level.
- ii. Printing Guide Book for Pre- schools.

The activities done under Pre-school program are as follows.

### 6.1.1 Conduct workshops to develop education activities at Pre-school level.

Under this activity, issued 350 guide books and necessary funds were transferred to the relevant provincial and district offices of CEA. (Mathara, Sabaragamuwa, Central, North Central and Uva). To conduct pre-school program, funds were released to for Killinochchi district.



Photographs of Pre –School workshop

### 6.1.2 Printing Guide Book for Pre- schools.

For the printing of Guide Books for Pre- schools, prepared the action plan and got the approval. Coordinated with the Children Secretariat to get the list of pre-schools. Relevant letters were sent to provincial and district officers of CEA to conduct workshops in Kegalle, Matara, Badulla, Kandy, Anuradhapura, Polonnaruwa, Batticaloa and Killinochchi districts. Programs on book distribution were held at Mathara, Kandy, Badulla, Kegalle, Anuradhapura and Polonnaruwa.

For the year 2013, distribution of preschool guide book was completed.

In 2013, Printed 5000 copies of Guide Book for Pre- schools in Sinhala medium and 1000 copies in Tamil medium and these books will be distributed in 2014.

### Activities Implemented under the Treasury fund.

- i. Develop Education Materials (Posters and Leaflets) – Printed to Disseminate Message on contemporary issues.

Posters and Leaflets are printed by EE&A division, to disseminate message on contemporary issues related to environment in Sri Lanka. In this regard 7 types of leaflets were prepared on the topics as Landslides, Bio diversity, Wetlands, Global Warming, Invasive plants, Invasive animals and Dengue.

In the year 2013, it was planned to print a booklet on General Knowledge related to the Environment. Questions were drafted and the booklet was designed under the guidance of a resource committee. Accordingly, 1250 copies of the booklet in Sinhalese medium were printed, 250 copies of booklet in English medium are in printing process while Tamil translation (500 copies to be printed) is under the proof reading.

ii. Strengthen Environmental Programs Island wide.

Environmental Education and Awareness Division of CEA, Conducts various activities, providing recourse persons, education materials and funds. In 2103, EE&A division conducted various activities, providing recourse persons, education materials and funds for schools, CBO'S, NGO'S and various target groups.

iii. Conduct Program for Government and Non-Governmental Organizations.

Environment Education and Awareness Division conducts Programs for Government and Non-Governmental Organizations in order to take their active participation for the Environmental Conservation. In 2013, one program was conducted in this regard.

iv. Conduct programs for Home Gardening.

Environment Education and Awareness Division of CEA conducts programs for home gardening in order to popularize eco-friendly home gardening practices among house wives.

The objectives of this program were to develop attitudes towards domestic home gardening practices and to improve their nutritional status through the consumption of self-grown vegetables and fruits in their own home gardens. This program was linked with "*DiviNeguma*" the program highlighted in "*MahindaChinthana*" concept and this program will help them to strengthen their economy through reducing the expenditure for vegetable and fruits, while increasing the total family income by earning money through home gardening as a self-employment.

In 2013, representing 12 divisional secretariat divisions, 12 programs were conducted for house wives to introduce the environmental friendly home gardening practices. In each program, the participants were benefited though the followings.

- i. Awareness on home gardening through a PowerPoint presentation conducted by an expert resource person, Invited from the Department of Agriculture.
- ii. A booklet on home gardening.

- iii. Three leaflets on waste management and environment.
- iv. A packet of vegetable seeds distributed from the Department of Agriculture.
- v. A packet of compost manure distributed from the Department of Agriculture.

EEA Division launched 12 creative home gardening programs in 2013, parallel to *Divi Naguma* program with the participation of 746 housewives representing the following divisional secretary divisions.

| S.NO | Place   | Number of Participants |
|------|---|------------------------|
| 01   | M.D.H.Jayawardena Vidyalaya - Koswattha             | 88                     |
| 02   | Divisional Secretariat Office – Maharagama          | 68                     |
| 03   | Divisional Secretariat Office – Rathmalana          | 44                     |
| 04   | Divisional Secretariat Office – Kasbewa             | 79                     |
| 05   | Divisional Secretariat Office – Kolonnawa           | 86                     |
| 06   | Divisional Secretariat Office – Hanwella            | 41                     |
| 07   | Divisional Secretariat Office – Colombo             | 70                     |
| 08   | Divisional Secretariat Office – Sri Jayawardanapura | 67                     |
| 09   | Divisional Secretariat Office – Moratuwa            | 70                     |
| 10   | Divisional Secretariat Office – Thimbirigasyaya     | 61                     |
| 11   | Divisional Secretariat Office – Padukka             | 32                     |
| 12   | Divisional Secretariat Office – Homagama            | 40                     |

## **6.2 Formation of Eco-Clubs – Production of Thurulatha Certificates, Vihanga Certificates, Soba Badges, Eco Teacher Guide books and Printing of leaflets.**

EE&A division of CEA, introduced ECO-Clubs to school children in primary level in order to change the values, behaviours and attitudes towards a clean and green environment. These clubs are formed to get the participation of the students in primary levels, giving opportunity to the students belonging to grade 1 to 5. Through these activities small children will be trained in Eco-friendly manner and in grade six they will be taken to the Environmental Pioneer Program.

Following activities are conducted under this program.

- I. Registration of Eco clubs
- II. Production and distribution of Badges and Certificates
- III. Evaluation of program.
- IV. Conduct Training program for teachers.
- V. Distribution of Teachers guide book.



Photograph of the activities of Eco club students

In the year 2013, production of Thurulatha Certificates, Vihanga Certificates, Teacher Guide Books and printing of leaflets were scheduled to be done and requirements were handed over to the Administration Division.

## **6.3 Promote Promotional Exhibitions.**

Environmental Education and Awareness Division participates for exhibitions conducted under various themes. Through this activity EE&A division hope to build awareness, disseminate environmental messages and involves the issues through exhibiting models, posters and leaflets as it is a powerful tool to address various environmental issues delightfully.

In 2013, EE&A division participated for the following exhibitions in the following events held in various places and EE&A provided facilities for regional offices to conduct exhibitions.

|    |   |
|----|---|
|    |   |
| 01 | "EDEX" exhibition at BMICH.   |
| 02 | Exhibition at Asoka Vidyalaya - Colombo   |
| 03 | "DeyataKirula" exhibition.  |
| 04 | "Richm and Rhythm 2013" at "Samanala Ground" , Galle                              |
| 05 | "Vidubima Udani" at Pannala National School.                                      |
| 06 | Princes of WalceVidyalaya - Moratuwa.   |
| 07 | Vidulka Exhibition - BMICH  |
| 08 | National Poison Week Exhibition – General Hospital - Colombo                      |
| 09 | Exhibition at Bandaranayaka Vidyalaya - Gampaha                                   |
| 10 | "Mudalian VidubimaAdi- Udani-2013", Lalith Athlathmudali Vidyalaya- Mount Lavinia |



Photographs of Exhibition stall of CEA

EE&A division discussed with administration division to buy electronic items for Exhibition Unit. Common banners were designed to be used in different purposes.

#### 6.4 Conduct programs in Nature Field Centres - Adopt Practical Programs

Under this activity, EE&A division of CEA provides funds for Nature Field Centres (NFC) to implement various environmental activities to improve the environmental consciousness among various target groups. There are 4 Nature Field Centres under CEA. They are located in different provinces under the provincial offices of CEA. Roomassala NFC is functioning under the Sothern

Provincial Office, Kundasala NFC is functioning under the Central Provincial Office; Kegalle NFC is functioning under the Sabaragamuwa Provincial Office and Attidiya NFC is functioning under the EE&A division of CEA.



Photographs of Student's activities at Nature Field Center

The following activities were implemented under the Nature Field Centre of Attidiya, in 2013.

| S.NO | School                                   | Number of Participants |                     |
|------|--|------------------------|---------------------|
|      |  | Students               | Teachers            |
| 01   | Buddhist Ladies Maha Vidyalaya           | 60                     | 08                  |
|      | Lalith Athulathmudali Maha Vidyalaya,    |                        |                     |
|      | Kandawala Maha Vidyalaya                 |                        |                     |
|      | Dharmarama Maha Vidyalaya.               |                        |                     |
| 02   | Sri Sumangala Balika Vidyalaya - Pnadura | 55                     | 03                  |
| 03   | Isipathana Maha Vidyalaya - Colombo      | 41                     | 02                  |
| 04   | Darusalam Vidyalaya                      | 43                     | 02                  |
| 05   | Mahamathya Vidyalaya - Athurugiriya      | 44                     | 02                  |
| 06   | Subharathi Vidyalaya -Godagama           | 30                     | 02                  |
| 07   | Buwanekaba Maha Vidyalaya – Maharagama   | 58                     | 02                  |
| 08   | Army School -Panagoda                    | 42                     | 10 (and 10 Parents) |

| S.NO | School   | Number of Participants |                     |
|------|--|------------------------|---------------------|
|      |  | Students               | Teachers            |
| 09   | Students of Kithulawila Environmental Society            | 38                     | 06 others           |
| 10   | Science College -Piliyandala<br>High School -Piliyandala | 70                     | 04                  |
| 11   | Program for Scout Leaders - 2 Days                       | 80                     | 05                  |
| 12   | Leadership Program<br>Presidents College - Maharagama    | 30                     | 02                  |
| 13   | Rajatha Medal Examination<br>Anula VidyalayaNugegoda     | 18                     | 02 (and 06 parents) |
| 14   | Science College – Mount Lavinia                          | 63                     | 02                  |
| 15   | Kandawala NavodyaVidyalaya – Rathmalana                  | 56                     | 02                  |
| 16   | Moratuwa MahaVidyalaya - Moratuwa                        | 42                     | 02                  |
| 17   | Mahamaya Balika Vidyalaya - Gangodawila                  | 31                     | 02                  |
| 18   | Prince of Wales Vidyalaya - Moratuwa                     | 30                     | 02                  |
| 19   | Vidyaloka Maha Vidyalaya - Pannipitiya                   | 28                     | 02                  |
| 20   | Piliyandala Maha Vidyalaya - Piliyandala                 | 51                     | 02                  |
| 21   | Methodist High School – Moratuwa                         | 51                     | 02                  |
| 22   | Mahamaya Balika Vidyalaya - Gangodawila                  | 60                     | 02                  |
| 23   | Girls High School – Mount Lavinia                        | 25                     | 02                  |
| 24   | Kothalawala Pura MahaVidyalaya<br>Aththadassi Vidalaya   | 55                     | 04                  |

| S.NO | School  | Number of Participants |                     |
|------|---|------------------------|---------------------|
|      |   | Students               | Teachers            |
| 25   | Mahinda Rjapaksha Vidyalaya - Homagama  | 44                     | 02 (and 02 parents) |
| 26   | Buddhist Ladies Vidyalaya - Mount Lavinia   | 62                     | 02                  |
| 27   | Telawala Sri Rahula Vidyalaya - Thelawala   | 32                     | 02                  |
| 28   | Samudradevi Vidyalaya - Nugegoda  | 46                     | 02                  |
| 29   | Princes of Wales Vidyalaya - Moratuwa   | 68                     | 02                  |
| 30   | Pre-school Teacher Training- Colombo district   | 30                     | Others - 06         |
| 31   | Piliyandala Central College - Piliyandala   | 37                     | 02                  |
| 32   | Piliyandala Central College - Piliyandala   | 38                     | 02                  |
| 33   | University Students - Kelaniya  | 05                     |                     |
| 34   | University Students - Colombo   | 18                     |                     |
| 35   | Punyakami Vidyalaya – Piliyandala<br>Roman Kathalic Vidyalaya – Piliyandala<br>Meth Sevana Pre- School ,<br>Guidress Pre-school<br>Ananda Sasthralaya - Pitakotte | 160                    | 10                  |
| 36   | Budha Gosa Vidyalaya – Dehiwala<br>Yasasiri Pre-school – Athurugiriya<br>Anula Vidyalaya – Nugegoda<br>Visakha Vidyalaya - Bambalapitiya<br>Golden Key Pre-school | 284                    | 06                  |

| S.NO | School   | Number of Participants |          |
|------|--|------------------------|----------|
|      |  | Students               | Teachers |
| 37   | Presidents College – Maharagama                                      | 130                    | 14       |
|      | Museus College – Colombo   |                        |          |
|      | Royal College – Colombo  |                        |          |
|      | Visakha Vidyalaya – Bambalapitiya                                    |                        |          |
|      | Anula Vidyalaya – Colombo,<br>Vidyakara BalikaVidyalaya – Maharagama |                        |          |
| 38   | Shramadana Work – Lions Club & Students                              | 33                     |          |
| 39   | Teacher Training Programme – Piliyandala Zone                        | 46                     |          |

The following topics were discussed in school programs at Nature Field Centre of Attidiya.

Solid waste management, Tree Planting, Biodiversity, Wetlands, Industrial Waste Management, Conservation of power and Energy, Environmental Pioneer Programme, Aquatic Resources and management , Ozone layer , Butterflies , Mangroves , Environmental conservation , Water Conservation , Snakes , Climate change, Birds, Health and Environmental Protection , Global Warming etc.

Additionally, facilities were provided to do research work

### 6.5 Conduct Environmental Awareness Programs during Cultural Events

The environmental pioneers participate various cultural events to enhance the awareness of environment to keep it clean specially in the pilgrims on protecting and conserving the environment especially employing environmentally friendly solid waste disposal practices. The Education and Awareness Division organized and conducted interact programs for following events in 2013.

1. Poson festival at Anuradhapura and Mihintale
2. Esala festival at Kataragama
3. Esala festival at Kandy
4. Religious festival at Talawila



Photographs of Esala festival at Kandy

### 6.6 Sri Lankan Green Youth Program.

Prepared a project proposal to establish a Green Park in North and East submitted for the approval of DDG and after getting the approval the guidelines were sent to the Provincial and District officers of CEA. In this regard, received the project proposals from Killinochchi and Batticaloa districts. According, visited to the site in Batticaloa and identified new site for this purpose.

For this activity, received the proposals from Killinochchi and Batticaloa districts and received concern letters from the respective parties. Prepared MOU and sent to the District offices to sign the agreement.

### 6.7 Production of Quarterly Environmental News Letter.

Environment Education and Awareness Division publishes Quarterly Environmental newsletter to disperse the messages among diverse groups in Sri Lanka, especially among the school students. In 2013, first and second issues of the Environmental newsletters were published and third and fourth issues were sent to the press for printing. Printed issues were distributed among the schools all over the island except North and East.

Including three Newsletters of 2012, in 2013, 5 issues of Quarterly Environmental newsletters were published by the Media Unit of Environment Education and Awareness Division and circulated the printed Newsletters.



Photographs of activities related for distribution of Environmental News letter

## 6.8 Conduct Programs for House Wives

With Parallel to the home gardening program, Environment Education and Awareness Division of the CEA conducts Programs for house wives in order to aware them about eco-friendly agricultural practices which can be used to promote the nutritional status of their families and to increase their income through agriculture as a self-employment.

In 2013, representing 6 divisional secretariat divisions, 6 programs were conducted for house wives to introduce the environmental friendly agricultural practices. In each program, the participants were benefited though the followings.

- i). Awareness on the crop planting, composting and eco-friendly agricultural methods through a PowerPoint presentation conducted by an expert resource person of Department of Agriculture.
- ii). A booklet about the subject.
- iii). Three leaflets on waste management and environment.

There were 469 house wives participated for the programs representing following divisional secretariat divisions.

| S.NO | Place   | Number of Participants |
|------|---|------------------------|
| 01   | Divisional Secretariat Office – Kaduwela            | 80                     |
| 02   | Divisional Secretariat Office – Sri Jayawardanapura | 59                     |
| 03   | Divisional Secretariat Office –Kolonnawa            | 81                     |
| 04   | Divisional Secretariat Office – Rathmalana          | 84                     |
| 05   | Divisional Secretariat Office – Kelaniya            | 75                     |
| 06   | Divisional Secretariat Office – Padukka             | 90                     |

## 6.9 Conduct “The World Environment Day” Program

Under this event, EE&A of CEA conducts various activities according to the theme of the World Environment Day of the respective year. Under the theme “Think, eat, save, reduce your Food print” the World Environment Day - 2013 was held at the Temple Trees with the participation of more than 5000 School children including Environmental Pioneers with the participation of His Excellency Mahinda Rajapaksha, President of the Democratic Socialist Republic of Sri Lanka.

Number of invited VIP Guests representing various countries, Ministries, representatives of relevant institutions, were participated in this event. School students from 22 schools, teachers and parents, media personals and officers of Central Environmental Authority were participated for this event.

The Environmental Pioneer students of the following schools were received their Precedential Medals from His Excellency Mahinda Rajapaksha, President of the Democratic Socialist Republic of Sri Lanka.

1. Mahinda Rajapaksha Navodya Vidyalaya - Mathale
2. Ku/Suradutha Balika Maha Vidyalaya – Kuliypitiya.
3. Ku/Udabadalawa Sudharshana Maha Vidyalaya – Maspotha
4. Ga/ Richmand College – Galle
5. Ha/ Tangalle Balika Maha Vidyalaya –Tangalle
6. Mara/ Akurugoda Senani Vidyalaya – Thelijjavilla
7. Maha/ Thldeniya National School - Theldeniya
8. Co/ Visakha Vidyalaya- Colombo
9. Ma/ Uku / Alawala Vidyalaya – Ukuwela
10. Ma/ Owikanda Maha Vidyalaya – Mathale
11. Sri Sumangala Balika Vidyalaya – Panadura
12. Sumana Balika Vidyalaya – Rathnapura
13. Ja/ Ramanathan Vidyalaya – Chunnakam, Jaffna
14. WP/ Piliyandala Central College - Piliyandala
15. Ra/ Ambi / Kalla Navodya School, Kollonna
16. Ga/ Southland Balika Vidyalaya – Galle
17. Pu/ Al-aqsa National School – Kalpitiya
18. Ma/ Muwandeniya Vidyalaya – Mathale
19. WP/Ke/ Dharmaloka Central College – Kelaniya
20. Samudradevi Balika Vidyalaya – Nugegoda
21. Gam/Kamburagalla Maha Vidyalaya, Ruggahawila
22. Ra/ Ambi / Godawela Maha Vidyalaya–Omalpe



Group Photograph of the Presidential Medal Winners - 2013

The following activities were made at this special occasion.

1. To mark the World Environment Day 2013, Preparation of Eco-friendly project proposal competitions and Poster competition were conducted under limited and open category.
2. Ninety two Environmental Pioneers who got through the examination were received their presidential medals from His Excellency the President of Sri Lanka.
3. Distributed fruit plants, Eco friendly bags and leaflets among the participants.
4. Best performed teachers and environmental commissioners were awarded by His Excellency Mahinda Rajapaksha, President of the Democratic Socialist Republic of Sri Lanka.



Photographs of the Events of The World Environment Day – 2013

## 6.10 Conduct Education and Awareness Programs on Contemporary Issues

### 6.10.1 Conduct Education and Awareness Programs on Contemporary Issues to school children & various stakeholders at the CEA Auditorium.

Environment Education and Awareness Division of CEA conducts education and awareness programs on contemporary issues, for school children & various stakeholders at CEA Auditorium in order to improve the consciousness on the Environment among various target groups.

School children are the most participating group of this program. This program is consisted of 4 lectures, one video and field activity. The topics of the lectures are directly related to the environment and the subjects are very much tally with the school curriculum. A set of leaflets relevant to the environmental subjects are been distributed at this program.

Environmental topics such as Solid waste management, Tree Planting, Biodiversity, Eco system diversity, Wetlands, wetland management, Eco-friendly agriculture, Industrial Waste Management, Natural Resources management, Environmental Pioneer Program, composting, Ozone layer, Butterflies, Mangroves, Environmental conservation, Water Conservation, Animal world, Climate change, Diversity of Birds, Health and Environmental Protection , Global Warming, Feeding methods of animals, Food chains and Food webs, Global Environmental Issues, Adaptive Radiation of the beaks and feet of birds, Thalangama lake, , GIS , Ancient Irrigation systems of Sri Lanka, Sudden Disasters, and Equilibrium of the nature are the commonly addressing topics of the lectures in this program.

In 2013, the following progress was recorded from the awareness program conducted in the Auditorium of CEA.

| S.No | Name of the School  | Number of students participated | Number of Teachers/others participated |
|------|---|---------------------------------|--|
| 01   | World Wetland Day Program<br>Anula Vidyalaya – Nugegoda,<br>Vidyakara Balika Maha Vidyalaya – Maharagama,<br>Sri Subhuthi Vidyalaya – Battharamulla,<br>Vidyaraja Maha Vidyalaya – Hokandara,<br>Buwanekeba Vidyalaya - Maharagama,<br>Ananda Shasthralaya – Kotte, | 115                             | 09                                     |

| S.No | Name of the School   | Number of students participated | Number of Teachers/others participated |
|------|--|---------------------------------|--|
|      | Mahamathya Maha Vidyalaya – Athugiriya,<br>Sri Rahula Balika Maha Vidyalaya - Malambe  |                                 |  |
| 02   | Sangamiththa Vidyalaya - Heiyanthuduwa,<br>Vidyathilaka Vidyalaya -Thimbirigasyaya.  | 98                              | 04                                     |
| 03   | Kothalawala Maha Vidyalaya- Kaduwela.  | 73                              | 03                                     |
| 04   | C.W.W. Kannangara Vidyalaya -Mathugama.  | 60                              | 03                                     |
| 05   | World Environment Day, Inter National Biodiversity Day – Special Program<br>NalandaVidyalaya – Minuwangoda,<br>Sri Subhuthi Vidyalaya – Battharamulla,<br>Vidyakara Balika Maha Vidyalaya – Maharagama,<br>Mullegama Maha Vidyalaya - Homagama | 200                             | 06                                     |
| 06   | Gurukula Maha Vidyalaya-Kelaniya.  | 58                              | 02                                     |
| 07   | Ananda College – Colombo 10.   | 55                              | 03                                     |
| 08   | World Habitat Day Program<br>Methodist School -Moratuwa,<br>Moratu MahaVidyalaya – Moratuwa ,<br>St. Joseph College – Grandpass  | 150                             | 06                                     |
| 09   | World Soil Day, International Mountain Day<br>Special Program<br>M.D.H.Jayawardana Vidyalaya – Battaramulla,<br>Sri Rahula MahaVidyalaya - Madiwela  | 106                             | 5                                      |

|                                 |       |
|---------------------------------|-------|
| Number of Schools participated  | - 22  |
| Number of students participated | - 915 |
| Number of Teachers participated | - 41  |



Photographs of the Awareness Program of CEA Auditorium

### **6.10.2 Conduct Education and Awareness Programs on Contemporary Issues to school children & various stakeholders of various institutions at outside of the CEA.**

Environment Education and Awareness Division of CEA conducts education and awareness programs on contemporary issues to school children & various stakeholders of various institutions by visiting to their places to improve their awareness on environment.

In 2013, awareness outside programs were conducted at the following places.

1. Defence Service College – Colombo
2. Vidyathilaka Maha Vidyalaya – Thimbirigasyaya.
3. Bandaranayaka Vidyalaya – Gampaha
4. Ananda College – Colombo 10.
5. Presidents School – Maharagama
6. Galahitiyawa Central College – Ganemulla.
7. Sri Sumangala Balika Vidyalaya – Panadura
8. Vidura College – Thalawathugoda
9. Piliyandala Central College – Piliyandala
10. Gurukula Maha Vidyalaya – Kelaniya.
11. Plantation and Human Resources Development Trust – Battaramulla.
12. Hydramani Garment Factory – Awissawella and Hospital staff– Awissawella

13. Program conducted by BASF institution for Community and School Students at Ninamada Kadivila – Araliya Community Hall.
14. Sunro Grapics Private limited –Polgasowita



Photographs of the Awareness Program, conducted at outside of CEA

### **6.10.3 Conduct programs by National Environmental Education Institute of CEA.**

Environment Education and Awareness Division of CEA conducts special awareness program for officers, members of NGO's and officers from various institutions to improve their awareness on environment.

In this regard, EE&A division conducted the launching program of the National Environmental Education Institute with 72 participants of various institutions and the officers of CEA, in 2013. After this, the 2<sup>nd</sup> program conducted for legal enforcement officers at CEA and 69 legal officers were participated for this. The Third program was conducted on Astrology, Environment and Aurweda, with the participation of 60 participants invited from relevant institutions.

### **6.11 Conduct Campaigns on Environmental Issues and events.**

For this activity, EE&A of CEA organized programs to eradicate contemporary burning issues on environment - Eradicating Dengue Menace.

Dengue prevention programs were conducted in different Districts with the participation of the various shareholders. In this regard, discussed to form a committee to prevent spreading of Dengue disease. Sent a new format Island wide to monitor Dengue program.

- 1). The first program under this was conducted along Denzil Kobbekaduwa Road with the participation of 30 officers of CEA, Provincial council (WP). Coordination and the implementation were done by the EE&A division of CEA.
- 2). The second program under this was conducted along Denzil Kobbekaduwa Road and Robert Gunawardane Road, with the participation of 36 officers of CEA and the Foreign Employment Bureau. This was implemented by the EE&A division of CEA.

3). Coordinated Dengue irradiation program, conducted from 1st to 7th of July, with the participation of school students, community base organizations and other institutions.



Photographs of Dengue Prevention Program

The following institutions were participated for Dengue prevention Programs conducted by CEA.

1. Foreign Employment Bureau -Battaramulla
2. Coconut Cultivation Board -Battaramulla
3. Ministry of Cooperative –Western Province.
4. Road Development Authority –Western Province.
5. Carlton Sports Network.
6. MOH-Kaduwellla.
7. Police Station - Thalangama.
8. Divisional Secretariat Office - Kaduwella.
9. Municipal Council Kauwella.
10. National Water Supply and Drainage Board.
11. Department of Registrar General.
12. Road Development Authority -Battaramulla

#### **6.12 Eco friendly Vesak Lantern exhibition competition.**

Instead of Eco friendly Vesak Lantern competition, conducted a program to mark the Poson Festival in North Central Province.

Other Work.

In addition to the funded programs, the following programs were implemented by the EE&A division of CEA in 2013.

1. Submitted Project proposals to the Classic Travel.

2. School Projects under the patronage of HNB Assurance. This is in progress.
3. Coordinated with EML Consultants for the school program of the plantation sector.
4. Conducted meeting with Access International Pvt. Limited to implement school projects.
5. Provided funds for Divisional Camp conducted at Ayagama.

Additionally, various programs were organized as special Day Programs. They are as follows.

- 1). Behalf of the World Earth Day, officers of EE&A division participated for Environmental walk with the Participation of 100 students of Sri Jayawardanapura Vidyalaya, Presidents College – Maharagama, Sri Subhuthi Vidyalaya – Battaramulla. This program was conducted by the Ministry Of Environment.
- 2). Behalf of the International Biodiversity Day, Coordinated with Vidyawardene Vidyalaya and M.D.H. Jayewardene Vidyalaya for getting their participation of Environmental Pioneers for the National Ceremony and officers of EE&A participated for this occasion, representing Central Environmental Authority.

### 6.13 Effective use of Electronic and Print Media.

Electronic and Print media were used to disperse the Environmental messages among various target groups.

In 2013, the following progress was recorded by Media Unit of EE&A division.

#### Progress of Media Unit of EE&A division - 2013

| Program                   | No. of Programs | Other details  |
|---------------------------|-----------------|--|
| <b>Press release</b>      | 56              | Contains the information about the main activities of CEA.   |
| <b>Newspaper articles</b> | 23              | Contains the information about the current environmental issues and CEA related subjects.                  |
| <b>TV programs</b>        | 4               | Discussions on Environmental related subjects were telecast through TV programs.                           |
| <b>Media arrangements</b> | 27              | Whole media arrangements were done by the audio-visual unit covering various divisions and major projects. |

| Program   | No. of Programs   | Other details   |
|---|---|---|
| <b>Event covering</b>                             | 84  | Cover the major activities done by various divisions of CEA and major projects.   |
| <b>“Sobaketha” Radio Program</b>                  | 38  | This program targeted to improve the Environmental awareness among various target groups and broadcast every Monday 7.30 p.m. on commercial service of SLBC.  |
| <b>Press Conferences</b>                          | 01  | Aware personals of Electronics and Printed media about the activities of CEA, inviting Honourable Minister of Environment.  |
| <b>Environmental News letter</b>                  | 5 issues published (3 issues of 2012 and 2 issues of 2013). | Published as a quarterly news bulletin including major activities and information of the CEA. In 2013, the money allocated for the production of bi-annual magazine was transferred for the production of Environmental Newsletter. |
| <b>Production of Environmental Song CDs</b>       | Produced 100ACD and 900 VCD                                 | ACDs and VCDs containing Environmental Song is produced to distribute among the schools all over the Island. Funds were taken from the funds allocated for Environmental Cartoon Competition.                                       |
| <b>Environmental Poem, short film competition</b> | Selected Winners  | Aims to enhance the Environmental Friendly attitudes through aesthetical approach, through this activity.   |
| <b>Updating Pictorial Board of CEA</b>            | 24  | Updating Pictorial Board of CEA through replacing the photographs of Environmental activities is done by the audio-visual unit.   |
| <b>TV film production</b>                         | 3 TV Film production is ongoing                             | These films contain the information about Environmental Pioneer Program, Environmental Protection Areas and CEA.  |
| <b>“Virindu”</b>                                  | 500CDs and 500  | A singing competitions categorized under “Virindu”  |

| Program            | No. of Programs    | Other details   |
|--------------------|--------------------|---|
| <b>competition</b> | VCDs were produced | related to the environment was conducted for school students and public in order to enhance the consciousness about the Environment through Aesthetic activity. |

#### 6.14 “Virindu” Competition

A singing competitions categorized under “Virindu” related to the environment was conducted for school students and public in order to enhance the consciousness about the Environment through Aesthetic activity. EE&A division has made relevant amendments under the instructions of the Chairman of CEA. Accordingly, coordinated with 8 eminent singers. After the selection of winners, 500 CDs and 500 VCDs were produced including “Virindu” series received from school students and public. The required funds were taken from the Provincial level Media training Workshop.

#### 6.15 Press releases

Press releases were done by the Media Unit of EE&A division to disseminate the messages relevant to CEA, through print media. Some of the press releases done in 2013, by the Media Unit of EE&A are as follows.

1. Visit of Chairman to Dompe landfill site
2. Pilisaru Tractor donation ceremony for Local authorities
3. Visit of Chairman to Karadiyana Compost site
4. National Environmental Education Institute of workshop
5. Urban and Industrial waste water treatment challengers options and solution training program
6. School Library opening Ceremony at Welikanda Maha Vidyalaya.
7. New Arrival of Director General of the CEA
8. Preparation National Implementation plan for the sound management of chemicals - National workshop – pre News
9. Preparation National Implementation plan for the sound management of chemicals - National workshop – post News
10. Institute of National Environmental Education 2<sup>nd</sup> program – before news
11. Institute of National Environmental Education 2<sup>nd</sup> program- after news

12. “ Parisara Mithudama Arthawath Karamu” – message of Chairman
13. Poster Competition- 2013
14. Wesak lantern competition
15. Vehicle Emission testing program for CEA Officers
16. Poster competition of World Environment day
17. World Environment day – DEOs Program
18. World environment day- 2013 program
19. Polythene washing plant opening at Horana
20. Visit of Dompe Sanitary Landfill
21. Reduce Plastic, Polythene in Poson festival
22. Distribution of Plastic, Polythene washing plant for Kalutara district
23. Dengue prevention week
24. National Green Awards -2013
25. Workshop for Plastic waste recyclers
26. Environment poem, short story competition -2013
27. Sound waste management meeting
28. Awareness workshop of Environment duties for environment officers
29. Singing MOU CEA with IWMI of Organic fertilizer Project
30. Kandy Asala Perahara
31. Kataragama Perahera
32. Environmental Poems & short stories program
33. Requirements of EPC procedure - New arrival to start Northern provincial environment education program
34. Chemical accident Prevention and Preparedness program – pre news
35. Chemical accident Prevention and Preparedness program – Post News
36. Vehicle Emission testing program
37. National Environment Institute 01 day Training at CEA
38. National Environment Pioneer camp 2013
39. Vehicle Emission testing program
40. Vehicle Horn Testing Program at Malabe
41. A Special Program for Factories levels of Control the Chemical Accidents
42. National Environment Pioneer camp - 2013
43. EIA training Workshop
44. NRM Workshop at Kalutara (Sand mining groups)
45. Vehicle Horn Testing Program – Thalagama
46. Vehicle horn testing program - katubadda.

47. Chemical Accident Prevention and preparedness (CAPP) workshop
48. EIA training Program
49. Awareness program of Chemical Accident and preparedness for industries
50. Vehicle horn testing program at Thalangama
51. Vehicle horn testing program at Katubedda
52. EIA Training Program
53. Chemical Accident prevention and Preparedness (CAPP) workshop
54. Awareness program of Chemical Accident and preparedness for industries.
55. E-Waste collecting Program – Kurunegala
56. Plastic Project workshop with local Authority Heads.

#### **6.16 Events covered by the Audio-Visual Unit in 2013.**

Events done by various divisions of CEA and the Ministry of Environment and Renewable Energy were covered by the Audio-Visual Unit of EE&A division.

Some of the events covered by the Audio-Visual Unit in 2013 are as follows.

1. Nichola Oya landslides at Raththota
2. CEA celebrate 2013 new Year
3. Visit of Chairman to dompe landfill site
4. “Chemical Accidents prevention and preparedness program” at Waters Edge
5. Ministry program at Udabadalawa and Malambe
6. Handing over Tractors for leaders of Local Authorities at CEA
7. Welfare Annual General Meeting at CEA
8. An interview for President Medal Pioneer’s at Ambilipitiya.
9. Visit of New Minister of Environment and Renewable Energy to CEA
10. World wetland day ceremony
11. Chairman of the CEA visit to Karadiyana Compost site
12. District Environment Officer’s general Meeting at CCEA
13. Opening Ceremony of National Environmental Education Institute at CEA
14. Ministry Program at Matara

15. Urban and Industrial waste water treatment challengers' options and solution training program at HARTI – Colombo 07.
16. New Arrival of Director General of the CEA
17. Welfare Program at CEA
18. Preparation National Implementation plan for sound management of chemical national workshop at CEA
19. “DeyataKirula” National Exhibition at Ampara
20. Solid waste management workshop at CEA
21. Institute of National Environmental Education - 2<sup>nd</sup> program
22. World wetland day prize giving ceremony at CEA
23. Welfare new year party and tree planting program at CEA & Battaramulla
24. Student's awareness program at CEA auditorium.
25. World Earth day – Green Walk press conference and land site inspection at CEA
26. World Earth day – 2013 at Battaramulla
27. “*Parisara Bakmaha Ulela*”- CEA
28. World Environment day – DEOs Program at CEA
29. Student's awareness program at CEA auditorium.
30. Canal Inspection at Attidiya
31. Progress review meeting of Mapping and change detection of wetland in South Eastern river basin region in Sri Lanka.
32. Management Meeting in CEA
33. Polythene washing plant inspection at Horana
34. Vehicle Emission testing training program for CEA Officers
35. Environment Pioneer program evolution of western province.
36. World Environment day National Program conducted at Temple Trees
37. Opening Ceremony of Plastic Polythene Recycling centre at Horana
38. EIA Training Program at CETRAC
39. Student's awareness program at CEA auditorium.
40. Meeting of Sound management on waste Packaging
41. Meeting with the UNESCAP Delegation
42. Waste Separation Bins Distribution for Pre schools
43. Discussion on Sound management of yoghurt/ ice cream cup waste packaging at CEA
44. Meeting of Co-operative plan
45. Meeting of finding new alternatives to control Dengue disaster at CEA

46. Press conference at CEA
47. Workshop for plastic waste collector recyclers
48. Signing MOU - CEA with IWMI
49. Residential program for newly recruited environmental officers at CEA
50. Pre School book distribution at CEA
51. Mobile Air quality monitoring unit handover ceremony at CEA
52. E- waste meeting at CEA
53. Koica and CEA progress meeting at CEA
54. Western province DEO's meeting.
55. Meeting of vehicle horn regulation at CEA
56. Plastic, polythene waste recycling model plant at Kaduwela
57. Co-operative Plan at CEA
58. "Dalada Sirithata Parisara Bathi Puda " Kandy Program
59. Sri Lanka Carbon Fund Program at CEA
60. Welfare Society Cricket Tournament
61. Chemical accident Prevention and Preparedness program at Hotel Cinnamon Lakeside
62. National Environment Institute one day Training at CEA
63. Vehicle emission testing Program at Malabe
64. General Meeting of Technical Officer Association
65. Students Awareness Program
66. Defence Ministry Program held at sanitary Land filling at Dompe
67. Environment Pioneer National Camp – 2013
68. Handing over garbage compactor to Kelaniya P.S.
69. National Poison Prevention Week Program
70. Dengue Action Plan
71. Noise Pollution Program - Vehicle horns at Talangama
72. Donating Plastic Crusher Machine and Polythene Compactor Machine to Anuradapura M.C.
73. Noise Pollution Program Katubadda.
74. Optical and Palsar remote sensing.
75. Judgement of Environmental short stories.
76. "DeyataSevana" tree planting day
77. Chemical Accident Prevention and preparedness (CAPP) workshop at Waters edge
78. Tree Planting Program at Madiwela Sri Rahula Vidyalaya
79. Student's awareness program at CEA auditorium.
80. Plastic recycling Opening at Galgamuwa.
81. Stake holders meeting for improving waste composting in Colombo City

82. EPP Commissioners meeting
83. Shop Twining Partnership program on EIA between Sri Lanka and Japan
84. Ten days EIA workshop in Kandy
85. Environmental Awareness program at Athurgiriya
86. Chemical Accident Prevention and Preparedness program for Sri Lanka - launch of CAPP program
87. Vehicle horn testing – Talangama
88. Awareness program on Environmental Health & Chemical Risk management for industries for Western Province.

### **6.17 Environmental Education Centre of Environment Education and Awareness Division**

Environmental Education Centre of Environment Education and Awareness Division, provides facilities to the communities using various resources and methods to improve their knowledge on the Environment. The progress of the Environmental Education Centre in 2013 is attached with this as a separate document.



Photographs of the Environmental Education Centre of Environment Education and Awareness Division

Through implementing the above activities, Environment Education and Awareness Division of Central Environmental Authority hopes to create education and awareness for various target groups among public to obtain their active participation for the protection and conservation of healthy Environment.

## **7.0 Planning & Monitoring Unit**

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Formulations of various operational plans within the duties and responsibilities that are empowered under the National Environmental Act in consultation with relevant Divisions, Units, Provincial offices and get implementation of them in order to ensure objectives in establishing the Central Environmental Authority are the main responsibilities of the Planning & Monitoring Unit.

This guided to establish priorities in the environmental sector in the Government, adopted in the annual budget and to develop or guide investment plans in the private sector and also to mobilize international financial and development support properly.

In order to, various operational plans for each thematic area for environmental sector for externally funded projects and other interventions based on the annual plans of the CEA were developed and get implemented by the Head Office as a Central Government Body and Provincial Offices at regional level.

Planning & Monitoring Unit led planning process of formulating various action plans, monitoring plans and timely operational plans based on corporate plan 2008 – 2012 of the CEA. This unit is responsible for coordination and facilitation of said plans for implementation and progress reporting on every aspect of operations of the Unit with regular reports of timely delivery outputs to relevant authorities.

In term of proper system for coordinating and monitoring activities of the Authority, it was organized separate meetings with the management of the CEA and Provincial Offices once in a month to discuss problems with regard to the subject matters and also problems at regional level at one flat form. Subsequently, we could help to bring to plans up to the implementation stage and to identify possible support for its implementation.

### **7.1 Preparation of Corporate Plan 2014 - 2018**

As per the Good Governance Guidelines issued by the Treasury, all public enterprises should have Corporate Plan incorporating strategies regarding the future direction of the enterprises.

Accordingly, the Central Environmental Authority being the regulatory and enforcement body in Sri Lanka, its Corporate Plan for 2014-2018 was prepared incorporating the goals and strategies in achieving effective inputs to the environmental sector. The new Corporate Plan was approved by the Board of the CEA.

### **7.2 Coordination with Provincial Offices**

With the establishment of Provincial Offices, there should be coordination mechanism as an institutional arrangement for harmonizing the issues between the Head Office and the POs on

administration and environmental issues that involved in facilitating matters by the P&M Unit. In addition to, P&M Unit has to coordinate all matters relating to the development of Action Plans, obtaining of Project Proposals on environmental conservation and implementation of the same.

There are 14 District offices including Gampaha, Kaluthara, Mathara, Hambanthota, Nuwara Eliya, Matale, Monaragala (Buththala), Rathnapura, Polonnaruwa, Batticaloa, Ampara, Kilinochchi, Wauniya & Mannar which were being operated by 2013.

### **7.3 Parliamentary Consultative Committee**

Numerous complaints from Parliament Members on different issues had been received to the CEA in 2013. Such complaints were referred to relevant units / POs and get inspected. The reports were submitted to the Parliamentary Consultative Committee through Ministry of Environment. These reports were discussed in this Parliamentary Consultative Committee where chaired by Hon. Minister of Environment and Renewable Energy with a participation of Parliamentary Members.

Three committee Meetings were held in 2013.

### **7.4 Maintain and updated database for Environmental Protection License (B category)**

The Environmental Protection License is a regulatory tool under the provisions of the National Environmental Act to control the environmental pollution caused by the industrial activities. It is mandatory to issue Environmental Protection Licenses (EPL) for all prescribed activities listed as “A” high polluting, “B” medium polluting and “C” low polluting activities published under the gazette extra ordinary No. 1533/16 dated 25.01.2008.

Environmental Pollution Control Unit of the CEA being maintained a database for EPL (A category). It is equally important to have such a database for EPL (B category) as well. Therefore, Planning and Monitoring Unit collected copy of Environmental Protection License (B category) which is prescribed under part B issued by Provincial Office of the CEA and maintained & updated database for EPL (B category) monthly. Also generate summery statistics reports monthly, quarterly and annually as required. This database is very useful to get future decision and forecast on issuing and renewal of EPL. Up to end of December 2013, there are 6, 647 numbers of EPL (B category) data and 1,777 no of EPL (B category) data have been entered to database in 2013.

### **7.5 Over Sight Committee**

The CEA exercises its regulatory powers under the National Environmental Act through the implementation of the Environmental Impact Assessment (EIA) and issuing of Environmental Protection Licenses (EPL) for industries. In addition, new industrial sites as well as natural resources

related projects which do not require EIA or IEE are cleared by the CEA through the new site recommendation procedure. All of these procedures mentioned above, except the EIA procedure for large scale projects and EPL for “A” category industries are being processed by the relevant provincial and District offices.

It was understood that it is very important that a uniform procedure is followed by the Head Office as well as all the Provincial and District offices. As the EIA and EPL procedure are being implemented through provisions in the National Environmental Act, the time taken to process applications and the required documentation to be provided by the Project Proponent as well as charges to be paid by the Project Proponents have to be uniform through the country.

It was with this intention an Over Sight Committee was established within the CEA, chaired by the Chairman and consisting of the Director General and Deputy Director Generals of the EPC and EMA Divisions, Directors of EPC, NRM, EIA, Legal, WM Units and Provincial Directors of Western, Central, Sabaragamuwa, Southern, Eastern Provinces and / or OIC’s of Uva, North Central and Northern Provinces.

The Committee met every fortnight and all EIA, IEE approvals as well as approvals for new site recommendations for locating “A” category industries fresh “A” category EPLs, concurrence given to BOI for new EPLs and site recommendations were submitted to this Committee prior to approvals being granted by the Deputy Director General or Directors in the Head Office or OICs of relevant Provincial Offices.

During the year, 14 such meetings were held and Planning & Monitoring Unit did all the coordination and Secretarial work of this task.

## **7.6 Meetings**

Planning and monitoring unit played an important role in coordinating, facilitating and participating numerous meetings held during the year 2013.

## **7.7 Dayata Kirula**

“Deyata Kirula” Programme which is scheduled to be held at Kuliypitiya, Kurunagala district from February 2014 is being coordinated in establishing development programmes and participating to the exhibition.

## **7.8 Project Coordination, Monitoring and Evaluation**

With the Treasury funded programmes, following operational plans were coordinated and facilitated by the Unit to fulfil targets and to optimally utilize the funds of the programmes.

### **7.8.1 Treasury funded programmes**

- Pilisaru Programme (Rs. 490 Mil.)
- Post-Consumer Plastics Management Programme (Rs. 80 Mil.)
- Strengthening of Laboratory of the CEA (Rs. 25 Mil.)
- School Pioneer Programme (Rs. 7.8 Mil.)
- National Environmental Information Centre (Rs. 3 Mil.)
- Environmental Protection & Conservation Project (Rs. 10 Mil.)

### **7.8.2 Foreign Funded Project**

- KOICA – Construction of Sanitary Landfill at Dompe (GOSL/Koria)
- EDCF – Construction of Solid Waste Disposal Facility in Anuradapura, Hikkaduwa, Udunuwara and Panadura (GOSL/Koria)

KOICA stands for Korea International Corporation Agency funded projects and it has Rs. 100 million fund allocation (60 million – Foreign, 40 million – Local) whereas EDCF stands for Financial Assistance of Economic Development Corporation Fund and it has allocated Rs. 145 Million (80 million – foreign, 65 million – Local) for the project.

## 8.0. Complaint Unit

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### Introduction

The Complaint Unit was established in November 2007 for handling of complaints which are received to CEA. So far, the Unit played its role for more than six years.

The Complaint Unit receives quite a large number of complaints daily from the following sources and most complaints received are solved and the rest has been referred to relevant institutions.

- Complaints received from Presidential Secretariat.
- Complaints forwarded from the Ministry of Environment & Renewable Energy via the hot line
- Complaints received by the CEA via hot line
- Complaints received from the Chairman's Office
- Complaints received from the Director General's Office
- Complaints received from the Heads of the Divisions / Unit
- Complaints received Via E-mail
- Complaints handed over to the Hon. Minister of Environment on the public day
- Complaints lodged by the public themselves
- Complaints received by post
- Complaint received by Provincial & District Office

Most of the complaints are from activities on violation against the sections of the National Environment Act.

If complaints which are relevant to the CEA, those have been investigated by the officers attached to our relevant units or officers of Provincial Offices in the CEA.

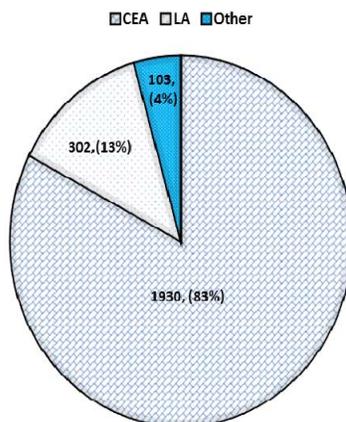
Complaints which are not relevant to the CEA have been referred to the Local Authorities of respective areas for necessary actions. And the balance complaints were referred to the relevant organization (e.g. GSMB, TRC, etc.) for taking necessary actions.

Complaints received to the unit since July 2012 are registered through a computer software. Up to now, those complaints registered in this software are being transferred to the relevant Provincial Offices and District Official of CEA for taking necessary actions and follow up actions are being taken by the Complaint Unit of CEA.

During the Year 2013 the unit received 2335 complaints.

Following pie chart shows the institutions who are responsible for solving, complaints received during the year 2013

**During the past year CEA referred 2335 complains to relevant institutions Details are show below.**



The summary of the complaints referred to the relevant institutions.

| Relevant Offices and Units |                                      | No. of Complaints | Percentage (%) |
|----------------------------|--------------------------------------|-------------------|----------------|
| 1.                         | Colombo District Office, CEA         | 387               | <b>20.60</b>   |
| 2.                         | Gampaha District Office, CEA         | 327               | <b>17.41</b>   |
| 3.                         | Kalutara District Office, CEA        | 301               | <b>16.02</b>   |
| 4.                         | Southern Provincial Office, CEA      | 154               | <b>08.20</b>   |
| 5.                         | North Central Provincial Office, CEA | 117               | <b>06.23</b>   |
| 6.                         | North Western Provincial Office, CEA | 109               | <b>05.80</b>   |
| 7.                         | Uva Provincial Office, CEA           | 106               | <b>05.64</b>   |
| 8.                         | Central Provincial Office, CEA       | 102               | <b>05.43</b>   |
| 9.                         | Sabaragamuwa Provincial Office, CEA  | 77                | <b>04.10</b>   |
| 10.                        | Matara District Office, CEA          | 62                | <b>03.30</b>   |

|     |  |    |              |
|-----|--|----|--------------|
| 11. | Hambantota District Office, CEA                              | 37 | <b>01.97</b> |
| 12. | Ampara District Office, CEA                                  | 16 | <b>00.85</b> |
| 13. | Eastern Provincial Office, CEA                               | 13 | <b>00.69</b> |
| 14. | Northern Provincial Office, CEA                              | 08 | <b>00.42</b> |
| 15. | Batticaloa District Office, CEA                              | 02 | <b>00.10</b> |
| 16. | Monaragala District Office, DEA                              | 01 | <b>00.05</b> |
| 17. | Environmental Pollution Control Division, CEA                | 44 | <b>02.34</b> |
| 18. | Solid Waste Management Unit, CEA                             | 05 | <b>00.26</b> |
| 19. | Natural Resources Management Unit, CEA                       | 04 | <b>00.21</b> |
| 20. | Environmental Impact Assessment Unit, CEA                    | 04 | <b>00.21</b> |
| 21. | Pilisaru Project, CEA  | 01 | <b>00.05</b> |
| 22. | National Post Consumer Plastic Waste Management Project, CEA | 01 | <b>00.05</b> |
| 23. | Police Unit, CEA   | 52 | <b>11.37</b> |

On the other hand, out of total complaints (1930) which were relevant to CEA, Western Provincial Office was responsible for solving more than 45.41% and majority (38.12%) of them were relevant to Colombo District Office (details are given below)

| District        | No. of Complaints | Percentage (%) |
|-----------------|-------------------|----------------|
| <b>Colombo</b>  | 387               | 20.60          |
| <b>Gampaha</b>  | 327               | 17.41          |
| <b>Kalutara</b> | 301               | 16.02          |

## **9.0. Decentralization of the CEA**

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### **9.1. Delegation of Power to Provincial Offices of the CEA**

The CEA, being the central agency at national level for providing national standards, criteria and guidelines to all agencies and organizations dealing with the environmental regionalization programme was launched in 2002 by establishing two Regional Offices in Central Province and Southern Province at regional level

Having established the above regional offices, the CEA has taken steps to replicate this programme by establishing Provincial Offices in each Province to ensure a better arrangement for the performance of activities of the CEA and functions relating to management and protection of the environment.

In order to, certain powers under the National Environmental Act, has been assigned to Heads of Provincial Offices of the CEA to implement on behalf of the CEA.

### **9.2. Delegation of Power to Local Authorities**

National environmental act of 47 of 1980 contains legal provisions, enabling the CEA to make use of the decentralization strategy, to organize its services at sub national level through other agencies by delegating its powers and functions to them.

Section 26 of the NEA provides for the CEA to delegate any of its powers and functions under the act to any government department, corporation, statutory board, local authority or any public officer.

In 1993 action was initiated to delegate some of CEA powers and functions to Local Authorities by the CEA under this section. Delegation order was issued to take effect from 01.01.1994 and under this delegation; all Municipal Councils, Urban Councils and Pradeshiya Sabhas were given authority to deal with 12 functions to management and protection of the environment under the NEA including the issue of Environmental Protection License for 45 prescribed activities.

In 2008, the gazette No. 1533/16 dated 25.01.2008 was published repealing gazette No. 1159/22 dated 22.11.2000. In the new gazette regulation, there are 3 categories which are required to obtain Environmental Protection License (EPLs) of that, 25 prescribed activities under category “C” which comparatively low polluting industries have been re-delegated in 2008 to LAS to issue EPLs on behalf of the CEA.

### **9.3. District Environmental Law Enforcement Committee (DELEC)**

In 1995, an administrative arrangement was set up at district level for coordination of environmental matters by establishing a committee called District Environmental Law Enforcement Committee (DELEC) in each administrative district. District Secretary was to function as the Chairman of this Committee and other members of the DELEC were;

- Provincial Director of Health Services
- Senior Superintendent of the Police
- District Forest Officer
- Provincial Commissioner of Local Government
- District Head of the Wild Life Department
- Divisional Secretaries in the District
- Heads of Local Authorities in the District
- Representative of a NGO in the District
- DEO as a secretary

Any other representative can be cooped to the Committee.

The main function of the DELEC is to coordinate matters relating to the enforcement of law in respect of environmental offences, by relevant Agencies such as the Police, Department of Health Services, Department of Forest and Local Authorities.

Another function of the DELEC is to consider appeals received from the general public on complaints about environmental matters.

These Committees were held at each District monthly under the chairmanship of District Secretaries.

## 10.0. Regionalization Programme of the CEA

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### 10.1 Introduction

The major regulatory programme of environmental protection is the Environmental Protection License procedure which has been assigned to POs for implementation. Standards and criteria for the discharging effluents, air emissions as well as noise and vibration are generally imposed on prescribed activities through the EPL. In reviewing the present status in Sri Lanka in relation to industrial effluents, it is obvious that major pollution problems arise mainly from those industries which were established two or three decades ago, before the present Environmental Regulations came into force.

Industrial effluents are generally disposed (with or without treatment) into a nearby water body such as rivers, tanks and to the sea. Generally, rivers' water is being used by the NWS&DB as raw water to supply the public's water demand. Therefore, disposing waste into a water body is a big issue. Apart from the surface water pollution, the ground water pollution is affecting drinking water sources of the general public.

The ground water replenishment and protection are not being covered by the existing standards on discharging effluents into the environment.

The prescribed activities coming under the issued EPLs are legally bound. Therefore, any offence or violation is punishable according to the provisions of the NEA. The majority of prescribed activities are located within the geographical area of the Western Province. According to the data available at the CEA, 39% of the prescribed activities (High and Medium Polluting) are located in the Western Province. It is 10% in the Central Province and 13% in the Southern Province. The rest that is 38% prescribe activities are located within other Provinces namely; Sabaragamuwa, Eastern, North Central, Uva and Northern. The industrial survey that is being conducted by the DEOs under the guidance of Research and Special project unit will reveal the exact number of activities located within each province.

The EPL issued to an activity is renewable. If an activity is found not complying with the conditions in the license, action is usually taken to cancel the license and proceed with legal action after the decision of the Secretary to the Ministry of Environment & Renewable Energy made at the end of the appeal hearing.

## 10.2 EPL Procedure

The progress on implementation of the EPL procedure could be illustrated as follows:

| Province     | District    | No. of EPLs issued |             |            |             |             |            | No. of EPLs renewed |            |             |            |             |            |
|--------------|-------------|--------------------|-------------|------------|-------------|-------------|------------|---------------------|------------|-------------|------------|-------------|------------|
|              |             | 2011               |             | 2012       |             | 2013        |            | 2011                |            | 2012        |            | 2013        |            |
|              |             | "A"                | "B"         | "A"        | "B"         | "A"         | "B"        | "A"                 | "B"        | "A"         | "B"        | "A"         | "B"        |
| WPO          | Colombo     | 148                | 210         | 113        | 110         | 123         | 91         | 512                 | 20         | 519         | 114        | 530         | 116        |
|              | Gampaha     | 168                | 166         | 118        | 122         | 88          | 82         | 260                 | 14         | 189         | 59         | 208         | 94         |
|              | Kalutara    | 69                 | 103         | 59         | 48          | 42          | 43         | 200                 | 21         | 200         | 49         | 230         | 57         |
| CPO          | Kandy       | 74                 | 88          | 72         | 54          | 86          | 60         | 81                  | 4          | 70          | 17         | 132         | 38         |
|              | Matale      | 32                 | 33          | 29         | 31          | 25          | 41         | 64                  | 5          | 50          | 4          | 102         | 29         |
|              | Nuwaraeliya | 13                 | 9           | 8          | 8           | 12          | 0          | 7                   |            | 13          | 2          | 12          | 2          |
| SuPO         | Galle       | 63                 | 129         | 41         | 81          | 42          | 55         | 79                  | 11         | 100         | 63         | 114         | 73         |
|              | Matara      | 23                 | 96          | 33         | 81          | 49          | 40         | 79                  | 6          | 63          | 55         | 110         | 49         |
|              | H'thota     | 39                 | 45          | 29         | 31          | 36          | 30         | 26                  | 1          | 42          | 32         | 79          | 16         |
| SaPO         | Kegalle     | 36                 | 69          | 36         | 86          | 65          | 46         | 39                  | 3          | 77          | 54         | 124         | 51         |
|              | Ratnapura   | 40                 | 79          | 30         | 72          | 88          | 46         | 39                  | 7          | 88          | 15         | 120         | 32         |
| NcPO         | A'pura      | 38                 | 55          | 109        | 73          | 90          | 59         | 64                  | 3          | 88          | 18         | 129         | 62         |
|              | Polonnaruwa | 5                  | 18          | 14         | 18          | 9           | 32         | 22                  | 1          | 29          | 2          | 36          | 11         |
| EPO          | Trincomalle | 21                 | 28          | 22         | 25          | 49          | 34         | 23                  | 4          | 28          | 14         | 71          | 41         |
|              | Ampara      | 7                  | 62          | 12         | 34          | 66          | 88         | 15                  |            | 3           | 2          | 67          | 61         |
|              | Baticaloa   | 2                  | 37          | 6          | 39          | 26          | 102        | 3                   | 8          | 16          | 9          | 42          | 41         |
|              | Vavunia     | 14                 | 3           | 29         | 8           | 16          | 10         | 7                   |            | 16          | 0          | 15          | 0          |
|              | Mannar      |                    | 5           | -          | 8           | 1           | 1          | 1                   |            | 0           | 0          | 1           | 0          |
| UPO          | Badulla     | 17                 | 37          | 46         | 39          | 31          | 23         | 26                  | 6          | 23          | 12         | 29          | 8          |
|              | Monaragala  | 2                  | 33          | 21         | 50          | 22          | 26         | 4                   | 1          | 17          | 3          | 10          | 7          |
| NPO          | Jaffna      | 12                 | 24          | 23         | 16          | 30          | 18         | 25                  | 1          | 24          | 3          | 22          | 5          |
|              | Kilinochchi | -                  | -           | -          | 2           | 1           | 7          | 0                   | -          | 0           | 2          | 0           | 0          |
|              | Mulathi     | -                  | -           | 4          | 2           | 9           | 4          | 0                   | -          | 2           | 0          | 5           | 0          |
| <b>Total</b> |             | <b>823</b>         | <b>1329</b> | <b>854</b> | <b>1038</b> | <b>1006</b> | <b>938</b> | <b>1576</b>         | <b>116</b> | <b>1657</b> | <b>529</b> | <b>2188</b> | <b>793</b> |

During the year 2013, 1006 “A” category EPLs and 938 “B” category EPLs were issued as afresh while 2188 “A” category EPLs and 793 “B” category EPLs were renewed.

### 10.3 Issuing Environmental Recommendation for new industries

The screening of new industrial sites by the CEA has several benefits and ensures that industries are not located in unsuitable locations. There have been instances in the past, when industries have been located in totally unsuitable locations, resulting in many problems both for the industry as well as to neighboring residents. Since 2000 however, the CEA grants site clearance only for a limited (80) number of activities which are high polluting in active. But, the number has increased up to total of 1,280 recommendations (1,224 approvals and 56 rejections) by 2013. With the establishment of POs, new site recommendations are issued by the POs.

The above data shows that majority of these sites were in Kalutara, Jaffna, Killinochchi and Trincomalle districts which indicates that entrepreneurs prefer for the investments. It shows that Investment have been tremendously increased from 2011-2013 in Mulathi, Baticaloa and Trincomalle Districts while there is a draw back in Rathnapura, Mannar and Badulla

#### Recommendations for siting of new industries

| Province | District    | No. of Applications received |      |      | No of inspections made |      |      | No of Approvals granted |      |      | No of Rejections |      |      |
|----------|-------------|------------------------------|------|------|------------------------|------|------|-------------------------|------|------|------------------|------|------|
|          |             | 2011                         | 2012 | 2013 | 2011                   | 2012 | 2013 | 2011                    | 2012 | 2013 | 2011             | 2012 | 2013 |
| WPO      | Colombo     | 136                          | 140  | 144  | 192                    | 146  | 123  | 82                      | 106  | 125  |                  |      | 0    |
|          | Gampaha     | 154                          | 171  | 149  | 110                    | 140  | 78   | 58                      | 124  | 12   | 15               | 15   | 1    |
|          | Kalutara    | 135                          | 116  | 97   | 125                    | 98   | 94   | 102                     | 93   | 69   | 8                | 17   | 4    |
| CPO      | Kandy       | 155                          | 125  | 126  | 91                     | 85   | 91   | 77                      | 96   | 57   | 10               | 15   | 11   |
|          | Matale      | 72                           | 85   | 69   | 61                     | 77   | 81   | 54                      | 79   | 74   | 8                | 5    | 3    |
|          | Nuwaraeliya | 19                           | 24   | 19   | 18                     | 21   | 6    | 14                      | 10   | 7    |                  | 2    | 1    |
| SuPO     | Galle       | 102                          | 87   | 68   | 118                    | 101  | 56   | 67                      | 81   | 56   | 19               | 11   | 3    |
|          | Matara      | 80                           | 78   | 70   | 79                     | 87   | 67   | 59                      | 45   | 55   | 21               | 18   | 3    |
|          | H'thota     | 58                           | 57   | 34   | 54                     | 43   | 53   | 39                      | 41   | 19   | 6                |      | 0    |
| SaPO     | Kegalle     | 96                           | 98   | 78   | 56                     | 22   | 26   | 58                      | 66   | 57   | 5                | 4    | 0    |
|          | Ratnapura   | 83                           | 111  | 67   | 34                     | 25   | 55   | 48                      | 79   | 45   | 15               | 1    | 1    |
| NCPO     | A'pura      | 164                          | 199  | 105  | 126                    | 213  | 118  | 81                      | 135  | 78   | 2                | 5    | 0    |
|          | Polonnaruwa | 16                           | 38   | 28   | 14                     | 33   | 24   | 11                      | 6    | 6    |                  |      | 0    |

|              |             |             |             |             |             |             |             |    |             |             |   |            |           |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----|-------------|-------------|---|------------|-----------|
| EPO          | Trincomalle | 98          | 51          | 74          | 66          | 51          | 64          | 91 | 45          | 62          | 7 |            | 0         |
|              | Ampara      | 28          | 116         | 67          | 34          | 110         | 69          | 60 | 111         | 51          | 3 |            | 4         |
|              | Bataloa     | 89          | 32          | 118         | 92          | 32          | 139         | 88 | 69          | 109         |   |            | 0         |
|              | Mannar      | 56          | 45          | 12          | 47          | 39          | 9           | 69 | 40          | 6           | 2 |            | 0         |
|              | Vavunia     | 37          | 18          | 28          | 37          | 19          | 22          | 26 | 16          | 8           |   |            | 0         |
| UPO          | Badulla     | 117         | 197         | 92          | 98          | 183         | 97          | 79 | 105         | 58          | 1 | 5          | 19        |
|              | Monaragala  | 44          | 60          | 52          | 30          | 65          | 50          | 28 | 55          | 37          |   | 2          | 0         |
| NPO          | Jaffna      | 155         | 122         | 81          | 120         | 110         | 66          | 97 | 107         | 72          | 3 | 3          | 2         |
|              | Kilinochchi | 117         | 195         | 97          | 107         | 131         | 87          | 99 | 123         | 87          | 3 |            | 1         |
|              | Mulathiw    | 11          | 42          | 100         | 9           | 47          | 68          | 8  | 28          | 68          |   | 1          | 0         |
| NWPO         | Kurunegala  |             | 10          | 14          |             | 10          | 4           |    | 8           | 4           |   |            | 3         |
|              | Puttlam     |             |             | 12          |             |             | 10          |    | 0           | 2           |   |            | 0         |
| <b>Total</b> |             | <b>2022</b> | <b>2217</b> | <b>1801</b> | <b>1718</b> | <b>1779</b> | <b>1557</b> |    | <b>1395</b> | <b>1224</b> |   | <b>128</b> | <b>56</b> |

During the year 2013, 1801 new industries requested recommendation for their venture whereas 1224 applicants were granted recommendations and 56 applications were rejected because they have not fulfilled the requirements to obtain the recommendation

#### **10.4 Resolving public complaints on environmental pollution / nuisances and over exploitation of Natural Resources**

In 2013, No. of 1,434 industrial pollution complaints and 372 natural resources management related complaints, total of 1,806 complaints were handled by the POs.

The POs also respond to complaints from the public in relation to pollution/nuisance caused by the operation of industries, other development activities and over exploitation of natural resources. The complaints received are duly investigated and mitigatory actions are recommended. In certain cases the complaints are referred to the responsible institutes for necessary action.

### Complaints handled during the year 2013

| District           | No. of complaints received |     | No. of complaints solved |     | Referred for legal action | Referred to other Institutions |     | Referred to EPL EPC |
|--------------------|----------------------------|-----|--------------------------|-----|---------------------------|--------------------------------|-----|---------------------|
|                    | EPC                        | NRM | EPC                      | NRM | EPC                       | EPC                            | NRM |                     |
| <b>Colombo</b>     | 197                        | 12  | 114                      | 7   | 4                         | 7                              | 1   | 9                   |
| <b>Gampaha</b>     | 166                        | 9   | 89                       | 0   | 1                         | 15                             | 0   | 10                  |
| <b>Kaluthara</b>   | 197                        | 49  | 15                       | 0   | 0                         | 23                             | 8   | 3                   |
| <b>Kandy</b>       | 41                         | 6   | 2                        | 5   | 0                         | 0                              | 0   | 0                   |
| <b>Matale</b>      | 7                          | 1   | 2                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Nuwaraeliya</b> | 0                          | 0   | 0                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Galle</b>       | 122                        | 24  | 9                        | 4   | 2                         | 9                              | 3   | 0                   |
| <b>Matara</b>      | 93                         | 34  | 10                       | 7   | 0                         | 18                             | 15  | 0                   |
| <b>H'thota</b>     | 28                         | 6   | 1                        | 0   | 0                         | 8                              | 4   | 0                   |
| <b>Kegalle</b>     | 80                         | 31  | 37                       | 20  | 0                         | 6                              | 0   | 1                   |
| <b>Ratnapura</b>   | 45                         | 33  | 18                       | 33  | 0                         | 1                              | 2   | 0                   |
| <b>A'pura</b>      | 84                         | 0   | 1                        | 0   | 6                         | 11                             | 0   | 4                   |
| <b>Polonnaruw</b>  | 49                         | 0   | 1                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Trincomalee</b> | 1                          | 0   | 1                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Ampara</b>      | 16                         | 0   | 10                       | 0   | 0                         | 3                              | 0   | 1                   |
| <b>Bataloa</b>     | 37                         | 14  | 36                       | 14  | 0                         | 0                              | 0   | 0                   |
| <b>Mannar</b>      | 0                          | 1   | 0                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Vavunia</b>     | 0                          | 0   | 0                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Badulla</b>     | 14                         | 12  | 11                       | 2   | 0                         | 0                              | 0   | 0                   |
| <b>Monaragala</b>  | 38                         | 13  | 25                       | 1   | 0                         | 1                              | 0   | 0                   |
| <b>Jaffna</b>      | 19                         | 1   | 12                       | 1   | 0                         | 0                              | 0   | 0                   |
| <b>Kilinochchi</b> | 1                          | 0   | 0                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Mulathi</b>     | 0                          | 0   | 0                        | 0   | 0                         | 0                              | 0   | 0                   |
| <b>Kurunegala</b>  | 107                        | 63  | 38                       | 13  | 0                         | 4                              | 5   | 0                   |
| <b>Puttlam</b>     | 92                         | 63  | 25                       | 4   | 0                         | 0                              | 6   | 0                   |
| <b>Total</b>       | 1434                       | 372 | 457                      | 111 | 13                        | 106                            | 44  | 28                  |

### 10.5 Contribution of the WPO for certification of industries under ISO 14001 standard

The WPO assists the SLSI in granting ISO 14001 certificate for industries by providing expert knowledge on technical and legal matters. The table below indicates industries for which ISO 14001 certifications were issued with the technical and legal inputs in the auditing procedure conducted by the SLSI.

| Date              | Industry  | Type  |
|-------------------|---|---|
| <b>11.01.2013</b> | Seashells Hotel (Pvt) Ltd<br>Palagathurai Kochchikade                     | Surveillance  |
| <b>19.02.2013</b> | CIC Holdings PLC (repacking), Pannipitiya                                 | Surveillance  |
| <b>03.05.2013</b> | Associated Motor Ways<br>Kalutara   | Recertification                                       |
| <b>07.05.2013</b> | Macbertan (Pvt) Ltd<br>24/1, Maeliyakanda road,<br>Weligampitiya, Ja- Ela | Recertification                                       |
| <b>07.06.2013</b> | M/S Ultratech Cement Lanka Ltd<br>Peliyagoda                              | Recertification                                       |
| <b>11.07.2013</b> | David Pieris Motor Co. Ltd<br>Madapatha Site<br>Bandaragama               | Surveillance  |
| <b>01.08.2013</b> | CIC Agri Business (Pvt) Ltd<br>Peliyagoda                                 | Surveillance  |
| <b>23.08.2013</b> | Harisons Chemicals (Pvt) Ltd<br>Ja- Ela                                   | Recertification                                       |
| <b>03.09.2013</b> | Lankem Ceylon Ltd (Paint)<br>Ja – Ela                                     | Surveillance  |
| <b>16.09.2013</b> | CBL Foods International (Pvt) Ltd<br>Ranala                               | Stage II Audit  |
| <b>24.09.2013</b> | The Exterminators (Pvt) Ltd<br>Battaramulla                               | Surveillance  |
| <b>04.10.2007</b> | Blue Ocenic Beach Hotel(pvt) Ltd<br>Negombo                               | Surveillance<br>Audit Withness<br>Audit With<br>SLIAB |
| <b>05.11.2013</b> | Lankem Ceylon PLC (Bituminous Product<br>division)<br>Kelaniya            | Stage I Audits  |

| Date       | Industry                                      | Type         |
|------------|---|--------------|
| 18.11.2013 | Gislaved Gummi Lanka (Pvt) Ltd<br>Piliyandala | Surveillance |
| 26.11.2013 | Dipped products Ltd<br>Pannipitiya            | Surveillance |
| 29.11.2013 | Tos Lanka Co. (Pvt) Ltd<br>Biyagama           | Surveillance |
| 05.12.2013 | Jetwing Ayuruweda (Pvt) ltd<br>Negombo        | Surveillance |

## 10.6. Environmental Management

### 10.6.1 Initial Environmental Examination (IEE)

Since 1993, all major development projects are required to undergo environmental impact assessments prior to implementation. The so called 'prescribed projects' which require EIA/IEE include infrastructure development projects as well as development of industrial estates above a certain magnitude. The EIA/IEE Procedure ensures that all the impacts that a major project may have on the development are identified and mitigatory actions planned at an early stage. This makes it easier for project proponents to plan the project such measures to be incorporated into the project at an early stage of the project planning cycle.

The POs of the Central Environmental Authority undertake IEEs while EIA Unit of the CEA undertakes EIAs, with a view to mitigating the significant environmental impacts of the project

Details of projects processed under the IEE procedure are indicated below:

#### List of Projects approved during the year 2013 under EIA/IEE regulation by the EIA unit.

| Province | District | No. of Applications |      |      | Approval granted |      |      | No of Rejections |      |      |
|----------|----------|---------------------|------|------|------------------|------|------|------------------|------|------|
|          |          | 2011                | 2012 | 2013 | 2011             | 2012 | 2013 | 2011             | 2012 | 2013 |
| WPO      | Colombo  | 2                   | 8    | 0    |                  | 6    | 0    |                  |      | 0    |
|          | Gampaha  | 4                   | 2    | 1    | 2                | 1    | 0    |                  |      | 0    |
|          | Kalutara | 1                   | 9    | 6    |                  | 5    | 2    |                  |      | 0    |
| SuPO     | Galle    | 11                  | 4    | 6    | 5                | 3    | 0    |                  | 1    | 0    |
|          | Matara   | 9                   |      | 0    |                  |      | 0    |                  |      | 0    |
|          | H'thota  | 1                   | 26   | 8    |                  |      | 0    |                  |      | 0    |
| CPO      | Kandy    | 237                 | 304  | 89   | 226              | 181  | 73   | 17               | 13   | 2    |
|          | Matale   | 42                  | 102  | 3    | 175              | 48   | 7    | 2                | 1    | 0    |
|          | Nuwarael | 97                  | 66   | 51   | 115              | 59   | 153  |                  |      | 4    |

| Province     | District    | No. of Applications |            |            | Approval granted |            |            | No of Rejections |           |          |
|--------------|-------------|---------------------|------------|------------|------------------|------------|------------|------------------|-----------|----------|
|              |             | 2011                | 2012       | 2013       | 2011             | 2012       | 2013       | 2011             | 2012      | 2013     |
| SaPO         | Kegalle     | 23                  | 4          | 6          | 4                |            | 4          |                  |           | 0        |
|              | Ratnapura   | 5                   | 14         | 3          | 4                | 4          | 3          |                  |           | 0        |
| UPO          | Badulla     | 2                   | 1          | 18         | 4                |            | 37         |                  |           | 0        |
|              | Monaragal   | 3                   |            | 5          |                  |            | 1          |                  |           | 0        |
| EPO          | Trinco      |                     |            | 51         |                  |            | 13         |                  |           | 0        |
|              | Ampara      |                     |            | 10         | 1                |            | 2          |                  |           | 0        |
|              | Batticaloa  |                     |            | 8          |                  |            | 1          |                  |           | 0        |
|              | Mannar      |                     |            | 3          |                  |            | 0          |                  |           | 0        |
|              | Vavunia     |                     | 4          | 1          |                  |            | 0          |                  |           | 0        |
| NCPO         | A'pura      | 1                   | 3          | 5          |                  | 1          | 0          |                  |           | 0        |
|              | Polonnaruw  |                     |            | 2          |                  | 1          | 0          |                  |           | 0        |
| NPO          | Jaffna      |                     |            | 1          |                  |            | 0          |                  |           | 0        |
|              | Kilinochchi | 2                   |            | 0          |                  |            | 0          |                  |           | 0        |
|              | Mullaithivu | 3                   |            | 3          |                  |            | 0          |                  |           | 0        |
| <b>Total</b> |             | <b>443</b>          | <b>338</b> | <b>280</b> | <b>536</b>       | <b>233</b> | <b>296</b> | <b>19</b>        | <b>15</b> | <b>6</b> |

During the year 2013, 280 applications have been received while 296 applications were given approvals including previous year applications. Six applications were rejected since they did not meet the standards.

### 10.6.2 Granting Environmental Recommendations for Non-Prescribed Activities

The POs are issued environmental clearance for projects which are not prescribed under the NEA and therefore do not require IEE/EIA. As request by the Developers, environmental clearances are issued with conditions to mitigate adverse environmental impacts for various non-prescribed projects. Accordingly 5,331 (including previous year applications) site clearances have been issued during the year for projects such as hotel projects, land fallings, telecommunication towers, mining activities, blocking out of lands etc. This procedure could be facilitated to ensure that the likely environmental impacts are addressed by the developers at the early planning stage of the development concerned.

#### List of Recommendations figures during the year 2013 on Non-Prescribed Activities

| Province | District    | No. of Applications | Approval granted | No. of rejections | Compliance monitoring |
|----------|-------------|---------------------|------------------|-------------------|-----------------------|
| WPO      | Colombo     | 113                 | 83               | 0                 | 0                     |
|          | Gampaha     | 186                 | 127              | 0                 | 0                     |
|          | Kalutara    | 171                 | 557              | 4                 | 0                     |
| SuPO     | Galle       | 28                  | 80               | 1                 | 8                     |
|          | Matara      | 17                  | 22               | 0                 | 0                     |
|          | H'thota     | 43                  | 41               | 1                 | 78                    |
| CPO      | Kandy       | 233                 | 568              | 5                 | 3                     |
|          | Matale      | 71                  | 373              | 5                 | 0                     |
|          | Nuwaraeliya | 24                  | 56               | 0                 | 0                     |
| SaPO     | Kegalle     | 4                   | 234              | 0                 | 8                     |

| Province     | District    | No. of Applications | Approval granted | No. of rejections | Compliance monitoring |
|--------------|-------------|---------------------|------------------|-------------------|-----------------------|
|              | Ratnapura   | 6                   | 257              | 0                 | 33                    |
| UPO          | Badulla     | 111                 | 394              | 2                 | 19                    |
|              | Monaragala  | 365                 | 408              | 50                | 54                    |
| EPO          | Trincomalle | 655                 | 672              | 1                 | 0                     |
|              | Ampara      | 183                 | 169              | 0                 | 0                     |
|              | Baticaloa   | 323                 | 285              | 0                 | 0                     |
|              | Mannar      | 48                  | 42               | 0                 | 1                     |
|              | Vavunia     | 33                  | 23               | 1                 | 0                     |
| NCPO         | A'pura      | 320                 | 212              | 0                 | 0                     |
|              | Polonnaruwa | 100                 | 56               | 0                 | 0                     |
| NPO          | Jaffna      | 19                  | 7                | 0                 | 0                     |
|              | Kilinochchi | 76                  | 67               | 6                 | 0                     |
|              | Mulathi     | 164                 | 141              | 0                 | 0                     |
| NWPO         | Kurunegala  | 456                 | 276              | 2                 | 0                     |
|              | Puttlam     | 186                 | 181              | 0                 | 0                     |
| <b>Total</b> |             | <b>3935</b>         | <b>5331</b>      | <b>78</b>         | <b>204</b>            |

The table above indicates the details of such recommendations granted in 2013

## 10.7 Natural Resource Management

### Programs conducted by central provincial office

#### I. Protected area conservation

##### A. Hanthana Conservation Programme -

Discussions are going on amendments of Demarcation of the Hanthana Protection area.

Further, the information on requests for various activities within the protected area for approval presented to the Hanthana Management Committee is given in the Table below.

Requests presented to the Hanthana Management Committee for approvals

| Category                          | Number |
|-----------------------------------|--------|
| Requests received for approval    | 174    |
| Requests recommended for approval | 119    |
| Requests with pending approval    | 55     |
| Approval rejected requests        | 3      |

B. Knuckles Conservation Programme -

Discussions are going on acquiring of private lands within the Knuckles Conservation area.

A case has been filed for the violation of NEA due to construction of Hotel without obtains approval of Environmental Authority.

C. Lake Gregory Conservation activities

C.1 Water Quality Monitoring programme.

C.1.1 Collecting Samples from specific locations of the lake (Inlets, Outlets and bodily)

C .1.2 Collecting sample from the main stream at the catchment of the lake

C.2 Identify the pollution as point source and non-point source

C.2.1. Calculation land of the waste water arising from all point source.

C.2.2. Introducing further treatment for large scale industry which has not 1:8 dilution facilities.

C.2.3. Introducing silt /waste trap to the identified points

D. Amendment parameters for the catchment of protected area instead of inland surface Water.

## 10.8 Environmental Education and Awareness

### 10.8.1 Establishment of Environmental Pioneer Brigade Programme

School Environmental Programme known as School Environmental Pioneer Programme is being implemented by the CEA since 1984, with the basis objective of producing a group of environmentally friendly citizens who make decisions in an environmentally sustainable manner, in future environmental conservation process, by promoting environmental education, knowledge, understanding and skills among school children. Under this programme, numbers of following sub activities are implemented by the Head Office with the assistance of POs.

Teacher training programmes, awareness among the Principals on EPP, badge Promotion activities, environmental camps.

### 10.8.2 Special Programmes

Special programmes in various thematic areas were conducted by the POs of the CEA. They were as follows;

- Environmental camps at zonal level.

- School environmental educational programmes
- Assessment of teachers engaged in the programme
- Environmental educational programmes to various groups
- Training opportunities provided for University students
- Dengue prevention programmes
- Environmental educational and awareness exhibitions
- Cultural day programmes
- Nature field center programmes
- Special day programmes
- Programmes for Haritha Month (October 15<sup>th</sup> – November 15<sup>th</sup>)

### **10.8.3 Dengue Prevention Programmes**

Annually about 50-100 million dengue patients are reported worldwide. In general 500,000 dengue hemorrhagic fever patients are admitted to hospitals and 90% of them are below 15 years of age.

Dengue was reported in first time in Sri Lanka in 1965 and it became an epidemic disease in 1967. Out of 29 patients 08 had been died in 1967. In 1970s, and 1980s it was under control but since 1990 it gradually increased. Since 2000 dengue was considerably increased and in 2004 15463 patients were reported according to the Ministry of Health.

Dengue is transmitted through two species of mosquitoes namely *Aedes aegypti* and *Aedes albopictus* whose eggs can survive 6-12 months even during a dry period.

#### **10.8.3.1 Special Dengue Program**

This programme is organized by Central Environmental Authority on 13<sup>th</sup> December 2013 from 9.00 am – 12.30 pm chaired by Mr. Wimal Rubasingha Chairman, and organized by EE&A Division & CEA Staff.

Venue: - Around Denzil Kobbekaduwa Mawatha & Robert Gunawardana Mawatha.

#### **Participated Government & Non-Government Organizations,**

1. Central Environment Authority
2. Office of the Medical Officer of Health, Kaduwela
3. Municipal Council, Kaduwela
4. Road Passenger Transport Authority
5. Ministry of Co – Operative (Western Province)
6. Police Station Thalagama

7. Sri Lanka Bureau of Foreign Employment
8. Road Development Authority (Navala Unit)
9. Hawaii Restaurant
10. Coconut Cultivation Board
11. National Water Supply & Drainage Board
12. Nawaloka Construction (PVT) Ltd.
13. Department of Child Care & Probation
14. Department of Industries (Western Province)

**Following activities were carried out during this programme,**

1. Inspect and search Government & Non-Governmental Institutions, public places and houses of the breeding spots of mosquitoes.
2. Elimination and Control of potential breeding places to reduce mosquito breeding.
3. Take legal action for relevant persons.
4. Cleaned Drains & water collected places and garbage dumping areas.

**10.9 Income and Expenditure of the Provincial Offices' in 2013 (Rs.)**

| Province     | Income            |                    |                    | Expenditure       |                   |                   |
|--------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|
|              | 2011              | 2012               | 2013               | 2011              | 2012              | 2013              |
| <b>WPO</b>   | 33,070,444        | 32,905,163         | 35,395,642         | 15,267,719        | 20,671,226        | <b>24,938,162</b> |
| <b>CPO</b>   | 9,872,672         | 11,944,309         | 13,480,142         | 5,430,070         | 6,431,895         | <b>6,366,056</b>  |
| <b>SuPO</b>  | 9,558,090         | 12,101,210         | 11,276,236         | 7,854,9           | 8,050,989         | <b>8,113,237</b>  |
| <b>SaPO</b>  | 9,021,319         | 11,357,345         | 12,858,130         | 6,103,9           | 5,033,323         | <b>4,928,541</b>  |
| <b>NCPO</b>  | 8,657,640         | 12,209,617         | 9,302,787          | 3,092,921         | 3,452,897         | <b>3,448,734</b>  |
| <b>EPO</b>   | 9,718,908         | 13,983,808         | 14,306,909         | 3,815,073         | 4,778,359         | <b>4,885,443</b>  |
| <b>UPO</b>   | 8,305,522         | 10,309,693         | 10,809,937         | 2,228,682         | 3,705,319         | <b>4,468,119</b>  |
| <b>NPO</b>   | 4,060,139         | 4,475,807          | 6,499,485          | 927,773           | 1,985,325         | <b>2,744,797</b>  |
| <b>NWPO</b>  |                   | 4,196,408          | 4,132,408          |                   | 2,729,878         | <b>2,429,262</b>  |
| <b>Total</b> | <b>92,264,734</b> | <b>113,483,360</b> | <b>118,061,675</b> | <b>44,721,214</b> | <b>56,839,211</b> | <b>62,322,352</b> |

## **11.0. Treasury Funded Special Projects Implemented by the CEA**

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### **11.1 National Post Consumer Plastic Waste Management Project**

In enlightening of the proper disposal of plastic / polythene waste management in order to achieve the green environmental perspective in our country, the National Post Consumer Plastic Waste Management Project (NPCPWMP) under the direction and the purview of the Central Environmental Authority and the Ministry of Environment & Renewable Energy initialized and implemented the program operations throughout the year in a strategic view of aware, guiding, standardizing and developing post-consumer plastic waste collecting & recycling mechanism in the country focusing three main aspects as; developing regional plastic collection mechanism, developing plastic recycling network and implementing propaganda to aware the people on insisting of disposal of plastic waste. Accordingly, two no of plastic / polythene recycling model plants were successfully constructed at Balangoda Urban Council and Kurunegala Municipal Council as pilot projects in order to strengthen and implement a proper plastic / polythene waste management and recycling system. According to the successfulness of these centers, another three centers at Kaduwela Municipal Council, Matara Municipal Council & Anuradhapura Municipal Council were developed successfully. In addition, a waste sorting yard was constructed at Sri Padha Nallathanni in collaboration with Ambagamuwa Pradeshiya Sabha in order to achieve the same objective as above. Also three major recyclers were selected from Kaluthara, Colombo & Gampaha Districts & implemented three washing plants for them. Also provided Plastic/polythene crusher & compactor machines for Anuradhapura MC, Kaduwela MC, and Matara MC& Ampara UC to develop as plastic/polythene recycling model plants. And plastic/polythene waste storage center was constructed in Galgamuwa pradeeshiya Saba & another storage center for Wariyapola pradeeshiya Saba is being constructed. As stipulated in the action plan 2013, three operational divisions of the project (Training Development & Awareness Raising, Waste Collection & Recycling Logistics and Promotional Campaigns) implemented the objective oriented and designing activities in stipulated and result oriented manner as follows;

1. Awareness & training programs for different communities (school children, local govt. authorities etc),
2. To demonstrate the educating and awareness banners on polythene / plastic waste management with distributing leaflets and other project reading materials.
3. To distribute the woven polypropylene bags (Orange – plastic, Blue – paper, Red – glass), waste collecting bins (Orange – plastic/polythene, Blue – Paper, Red – glass & Green – degradable)
4. To implement the shramadhana campaigns on waste collecting & referring into recycling by school children and communities

5. To publish publicity advertisements in souvenirs, and bar type advertisements with the promotion by hotline (0773-909090)

6. To make the publicity sponsorships and conducting waste management promotional campaigns by way of shramadana, awareness, training & participatory community events and exhibitions at sacred and specific places; Sri Padha, Kataragama, Anudhapura, Kandy Esala Perahera

To prepare and disseminate stalls and propaganda programs at

(a) Deyata Kirula National Exhibition - 22<sup>nd</sup> to 31<sup>st</sup> of Mar. 2013 at Ampara Hadi Technical center

(b) Sanjanani Media Exhibition at Kelaniya University

(c) Vidulka Exhibition by the Sustainable Energetic Authority at BMICH

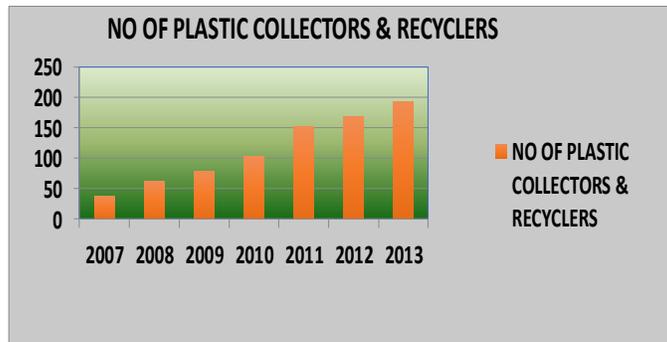
No. of events implemented to obtain the progress in the year 2013 is as follows.

| Type of events  | No.of programs / items |
|---|------------------------|
| Awareness programs for school children                          | 10                     |
| Awareness programs for school teachers                          | 01                     |
| Awareness programs for preschool teachers                       | 03                     |
| Awareness programs for local authority leaders, offices & staff | 04                     |
| Awareness programs for recyclers & collectors                   | 01                     |
| Awareness programs for government" NGO/CBO etc.                 | 20                     |
| Bags distributions  | 22000                  |
| Bins distributions  | 460                    |
| Promotional campaigns – National level                          | 07                     |
| Promotional campaigns – Domestic Level                          | 05                     |

#### INCREASE OF POLYTHENE / PLASTIC COLLECTORS & RECYCLERS

| YEAR | NO OF PLASTIC COLLECTORS & RECYCLERS |
|------|--------------------------------------|
| 2007 | 38                                   |
| 2008 | 62                                   |

| YEAR | NO OF PLASTIC COLLECTORS & RECYCLERS |
|------|--------------------------------------|
| 2009 | 78                                   |
| 2010 | 103                                  |
| 2011 | 152                                  |
| 2012 | 167                                  |
| 2013 | 194                                  |



Awareness for School Students Schools at Grate Western Estate, Thalawakele Organized by Upper Kothmale Hydro power Project.



Workshop for Plastic Waste Collectors, Recyclers and Local Authority Officers



Kurunegala Waste collection centre



Balangoda Waste collection centre



Opening ceremony of plastic waste washing plant at Horana



Handover plastic/polythene crusher & compactor machines to Anuradhapura MC



Plastic Polythene Waste Recycling Model Plant at Matara



Plastic Polythene Waste Storage center at Galgamuwa Pradeeshiya Sabhawa



The project support to enrich plastic / polythene waste recycling industry while developing the plastic/polythene waste storage facilities among local authorities which are excellent in feasibility progress in country. Also the project is carrying out a contrived procedure to increase the plastic / polythene waste recycling capacity from 40% (in present) to 80% by the year 2016. The project is having a good opportunity to walk with the “Mahinda Chinthana “ program & contribute to achieve the green environment & green economy perspective in Sri Lanka.

## 11.2. School Pioneer Programme

### Mission

*“To create education and awareness for various target groups among public to obtain their active participation for the protection and conservation of healthy environment”*

### Environmental Pioneer Program

EE&A division of CEA, introduced Environmental Pioneer Program to school children in secondary level in order to change the values, behaviours and attitudes towards a clean and green environment and to improve their knowledge on Environment through their active participation towards protection and conservation of the Environment. These Groups are formed to get the participation of the students

belonging to grade 6 to 12. Through these activities, children will be trained to engage in Eco-friendly activities and direct their behaviours towards a sustainable environment.

Following activities are conducted by EE&A of CEA, to strengthen the EPP.

### **11.2.1 Conduct Training Programmes for Teachers.**

In 2013, it was planned to conduct 6 teacher training programs. At the end of third quarter, 6 teacher training programs were conducted in following districts and the targeted number of programs was completed.

1. Badulla – Two teacher Training programs were conducted.
2. Monaragala – One teacher Training program was conducted.
3. Mullaitivu – One teacher Training program was conducted.
4. Batticaloa – One teacher Training program was conducted.
5. Kandy – One teacher Training program was conducted.

### **11.2.2 Appointing EPP District Consultants in each district.**

In 2013, letters were sent to the provincial officers and district officers of CEA for the nomination of District Consultants in each district. According to their responses, 19 EPP District Consultants were appointed from Colombo, Kaluthara, Gampaha, Kegalle, Kurunegala, Puttalam, Badulla, Monaragala, Kandy, Nuwara Eliya, Mathale, Hambantota, Anuradhapura, Polonnaruwa, Vavunia, Trincomalee, Batticaloa, Galle and Mathara.

### **11.2.3 Conduct discussions with EPP Commissioners**

Environmental Pioneer Commissioners are appointed by the EE&A to strengthen the EPP. For this activity, in 2013 the targeted discussion with EEP Commissioners was held in the month of May, at the auditorium of CEA.



Photographs of discussion with EPP Commissioners

#### 11.2.4 Conduct discussions with EPP Educational Coordinating Officers

Several discussions were held under this activity. First program was conducted at the auditorium of CEA with the participation of 72 Educational Coordinating Officers of Western Province. In this regard, the scheduled programs were completed.

#### 11.2.5 Production of EPP materials.

In 2013, it was targeted to produce all EPP materials. Except production of 6000 teacher guide books and 10000 Pioneer Medals, production of other EPP Materials was completed.

Details of the programs are as follows.

| S.No | Material                         | Production |
|------|----------------------------------|------------|
| 01   | Environmental Pioneer note books | 10000      |
| 02   | Environmental Pioneer medals     | 10950      |
| 03   | Green Certificate                | 5000       |
| 04   | Green medals                     | 5000       |
| 05   | Silver Certificate               | 2000       |
| 06   | Silver medals                    | 1500       |
| 07   | Gold Certificate                 | 500        |
| 08   | Gold medals                      | 500        |

#### 11.2.6 Increasing badge holders and membership of EPP

To strengthen EPP, distribution of EPP materials was done by the EE&A division. In 2013, it was planned to increase badge holders by 25,000. The following progress was reported in 2013.

| S.No | Material                     | Distribution |
|------|------------------------------|--------------|
| 01   | Environmental Pioneer caps   | 525          |
| 02   | Environmental Pioneer medals | 1351         |
| 03   | Green Certificate            | 1405         |

| S.No | Material           | Distribution |
|------|--------------------|--------------|
| 04   | Green medals       | 1588         |
| 05   | Silver medals      | 1078         |
| 06   | Gold certificates  | 1041         |
| 07   | EPP Note books     | 1200         |
| 08   | Silver Certificate | 114          |

### 11.2.7 Awarding of Presidential Medals.

Awarding presidential medals is a very important activity under EPP conducted by the EE&A division of CEA. .

In 2013, EE&A conducted the examination of Presidential Medals for the environmental pioneer students of following schools.

1. Ovilikanda Maha vidyalaya – Mathale
2. Mahinda Rajapaksha Navodya Vidyalaya - Mathale
3. Tangalle Balika Vidyalaya - Tangalle
4. Sri Sumangala Balika Maha Vidyalay - Panadura.

Awarding of Presidential Medals for the qualified environmental pioneer students was completed at the World Environmental Day program - 2013.



Photographs of conducting Examination for pioneers for Presidential Medals

### **11.2.8 Implementation Eco-Projects with the participation of Presidential Medal Winners.**

To Implement Eco-Projects with the participation of presidential medal winners, five project proposals were selected and received the approval. Bee Keeping, Composting, Clay pot preparation, Establishing Herbal Gardens and Making handicrafts using Reed Weeds were the selected projects. Schools were selected from Gampaha, Kurunegala, Galle, and Jaffna districts

Approval was obtained from Director General to implement the Eco Project of the following schools, too.

1. Indrajothi Vidyalaya – Battaramulla – Implemented the project.
2. Sri Subhuthi Vidyalaya – Battharamulla (first instalment was paid) – Implemented the project.
3. Vidyakara Balika Vidyalaya – Maharagama – Did not implement the project.
4. M.D.H.Jayawardhana Vidyalaya – Thalangama– Implemented the project.

Removal of water hyacinth plant to produce compost manure in Himbutuwelgoda reservoir at Gampaha district. (This project was implemented at in the outside of the school).

### **11.2.9 Conduct Leadership Training program for selected school children**

In 2013, it was planned to conduct 5 leadership training programs in Pollonnaruwa, Mathale, Badulla, Monaragala and Batticoloa districts.

Under this, in the month of May, two programs were conducted at Mathale and Polonnaruwa districts. In September, programs in Badulla and Monaragala districts were completed. Another program scheduled to conduct in Kandy district was completed. Therefore in 2013, 6 leadership training programs were conducted.

### **11.2.10 Conduct National Environmental Pioneer Camp.**

Environment Education and Awareness Division of the Central Environmental Authority conducts National Environmental Pioneer Camp annually, with the participation of Environmental Pioneers. In 2013, Environmental Pioneers who have received the Gold medal were selected for the participation for the National Environmental Pioneer Camp.

In 2013, the 11<sup>th</sup> National Environmental Pioneer Camp was conducted successfully, with the participation 238 Environmental Pioneers and 36 teachers at Pulathisipura National College of Education in Polonnaruwa, from 16<sup>th</sup> to 19<sup>th</sup> of October.



Photographs of the Inauguration ceremony - 11<sup>th</sup> National Environmental Pioneer Camp

Invited Chief Guests, Guests, teachers, environmental commissioners and officers of CEA were participated for this event. This program was consisted of following items.

1. Aerobics Program
2. Cultural events (2 Programs)
3. Awareness programs – Conducted two lectures on Ecotourism and Music and Environment.
4. Tree Planting program
5. Debate on Ecotourism
6. Field visit to Maduruoya National Park
7. Awarding Gold medals for pioneers.
8. Awarding plaques for best performing Environmental pioneer in charge teachers.



Photographs of Aesthetic activities - 11<sup>th</sup> National Environmental Pioneer Camp



Photographs of Field Visit - 11<sup>th</sup> National Environmental Pioneer Camp

### **11.2.11 Production of District Environmental Pioneer News Letter.**

Environment Education and Awareness Division of the Central Environmental Authority provides funds for printing and distribution of District Environmental Pioneer Newsletter. Activities of pioneer students of that particular district are supposed to be printed and to be distributed for the information of other interested groups.

In 2013, printing of District Environmental Pioneer Newsletter (Sinhala Medium) has been completed in 8 districts, as Gampaha, Galle, Hambanthota, Mathara, Kaluthara, Monaragala, Mathale and Kandy. The second payment was made to print District Environmental Pioneer Newsletter of Ampara, Puthalam and Nuwara Eliya. For Colombo District, the first payment was made to print the Environmental Pioneer Newsletter.

District Environmental Pioneer Newsletter was printed in Tamil medium too. In Killinochchi, Mullaithivu and Jaffna districts, printing of District Environmental Pioneer Newsletter was completed and for Trincomalee and Batticaloadistricts, the second payment was made to print the District Environmental Pioneer Newsletter.



District Environmental Pioneer News letters

### **11.2.12 Conduct National Tree Planting Day Program.**

Behalf of the National Tree Planting day, EE&A division conducted a special Tree Planting program at Sri Rahula Maha Vidyalaya, Madiwela. At this event, 30 numbers of Na trees (*Mesua ferrea*) were planted at the premises of the school. This program was conducted with the participation of the staff of EE&A of CEA, Principal, teachers, Environmental Pioneers and other children of the school.

Additionally EE&A division planned to coordinate with 25 schools from 25 districts for “Dayata Sevana Program”, behalf of the National Tree Planting day.



Photograph of Tree planting activity

### **11.2.13 Implementation of Eco-Projects at school level (One school in each District).**

Under this, schools were selected from Kurunegala, Rathnapura, Galle, Hambantota, Mannar, Kandy, Batticaloa, Colombo, Mathara, Puttalam, Kegalle and Nuwara Eliya districts to launch fruit tree planting project.

First instalment was sent to the following schools to implement the projects.

1. Pinnawala Central College – Kegalle
2. Kuliypitiya Central College – Kurunegala
3. Walasmulla National School – Hambantota
4. St. Thomas Girls High School –Mathara

In 2013, the first instalment was paid to Watthegama Maha Vidyalaya - Kandy, Rajasingha Central College – Hanwella, Al – Aqsha National School – Puttalam, Gnanadan Maha Vidyalaya – Mannar.

At the end of the 3rd quarter, 7 projects were completed and 4 projects were remaining for the 2<sup>nd</sup> payment. The 2<sup>nd</sup> payment is made for St. Thomas Girls High School, Matara, Pinnawala Central College – Kegalle, Kalpitiya Al- Aqsa National School – Puttalam.

### **11.3 Strengthening of the CEA laboratories and Improvement of Monitoring capacity in Sri Lanka**

At present the CEA possess one central laboratory and two provincial laboratories in central and eastern province. By considering the requirement for the pollution control the CEA has forwarded a project proposal to expand the laboratory facility in provincial level. The main objective of this project is to provide and widening of the laboratory facility in provincial level .Aiming of objective the existing laboratories were provided the some facility to cater the analytical requirement over the country .Rs 25 million was allocated for this project for 2013.

The central Province laboratory has been provided the analytical facility for testing of water for microbiological analysis. The atomic absorption spectrophotometer with graphite furnace was procured for the central laboratory to facilitation of heavy metal analysis.

In addition to that water quality of the several selected water bodies in the country were monitored during 2013.

### 11.3.1 Surface Water Quality Monitoring

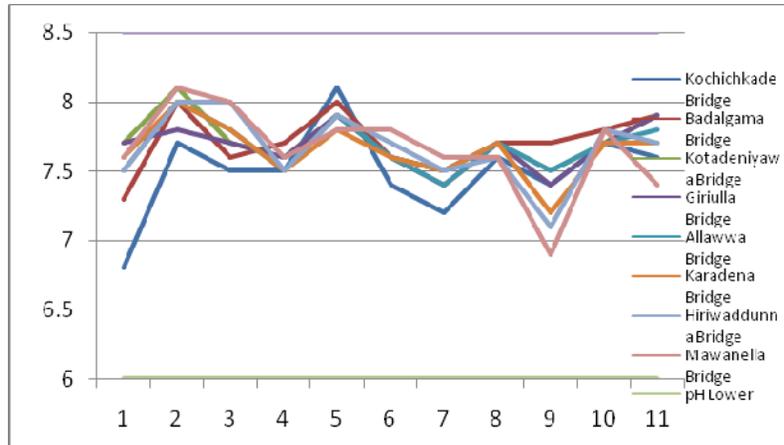
Several water quality monitoring programme has been carried out by the Central laboratory of Central Environmental Authority. These include Maha Oya Dadugam Oya and, Benthota River. Under this project the Physical, chemical & microbiological parameters of the surface water in preselected sampling locations were monitored in 2013 as usual.

| Name of the water Body | No of sampling Location | No of sample collected during 2013 |
|------------------------|-------------------------|------------------------------------|
| <b>Dadugam Oya</b>     | 06                      | 48                                 |
| <b>Maha Oya</b>        | 08                      | 108                                |
| <b>Benthota Ganaga</b> | 06                      | 72                                 |

The Water Quality of the three selected water bodies namely Kelani River, Maha Oya and Dadugam Oya were evaluated separately by using the data gathered from the water quality monitoring programme by CEA laboratory.

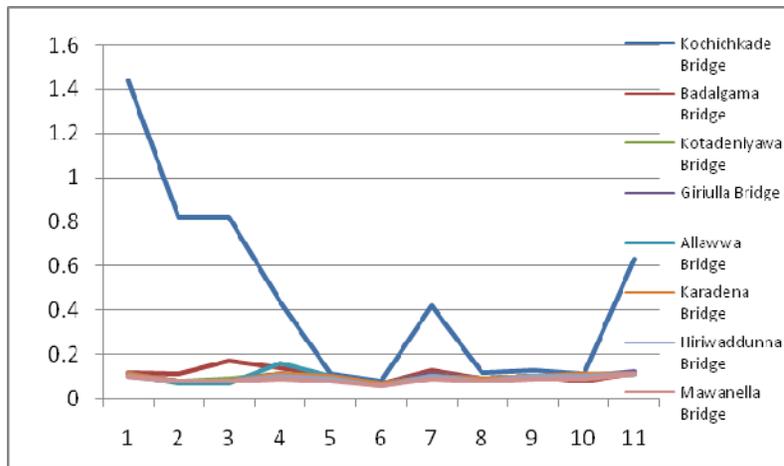
#### Status of water quality in Ma Oya during 2013

During the year 2013 the water quality of the Ma Oya water was evaluated with respect to the physical, chemical and microbiological parameters. The microbiological contaminant of the water from all selected locations along the Ma Oya indicated that the water is highly contaminated with sewage that could be observed throughout the year. High level of turbidity indicated the erosion of upper catchment. Gem and sand mining activities, bank erosion and urban runoff which will deteriorate the quality of water in Ma Oya. High level of COD electrical conductivity variation could be observed time to time in several locations.



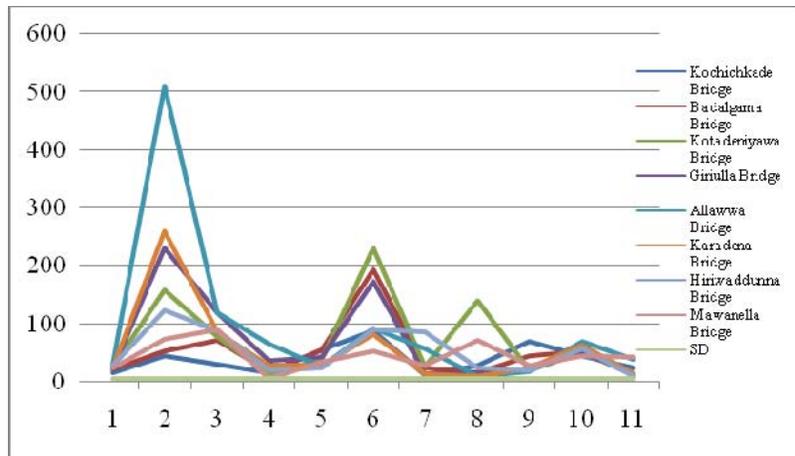
Graph 1 pH Variation of Ma Oya water during 2013

During year 2013 the pH of the water in selected locations in Ma oya do not deviate from the upper and lower levels of the proposed ambient water quality standards and always within the proposed standards.



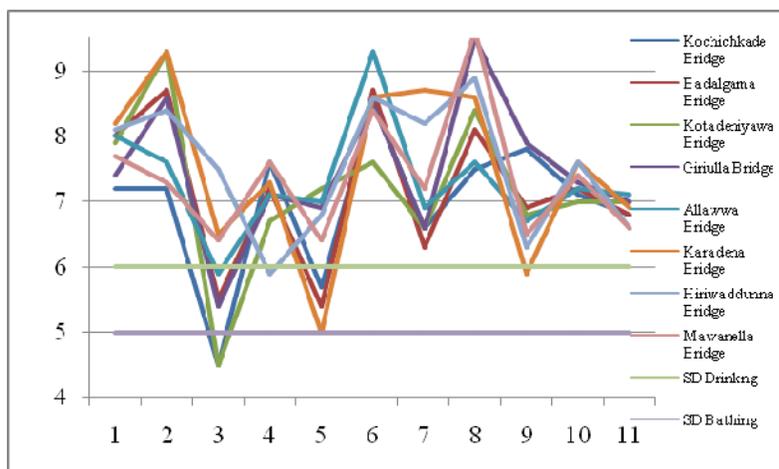
Graph 2 EC Variation of Ma Oya water during 2013

Electrical conductivity shows the ionic components which are present in the water. Visible variation or fluctuation of EC could not be observed in all most all locations during year 2013. Remarkable variation could be observed at one location and it may be due to the high tide.



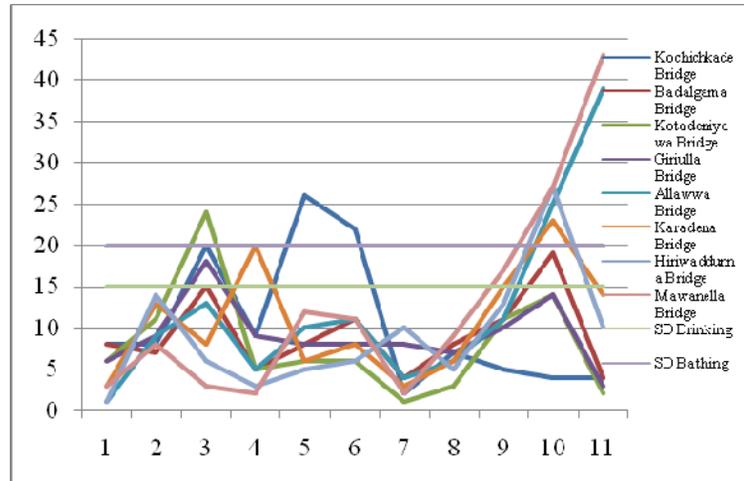
Graph 3 Turbidity Variation of Ma Oya water during 2013

The turbidity of the water was always exceed and higher than the proposed ambient water quality standards throughout the year in all sampling locations. The high level of turbidity directly indicate that the erosion of upper catchment areas, urban runoff and sand mining activities this would directly impact on drinking water intakes.



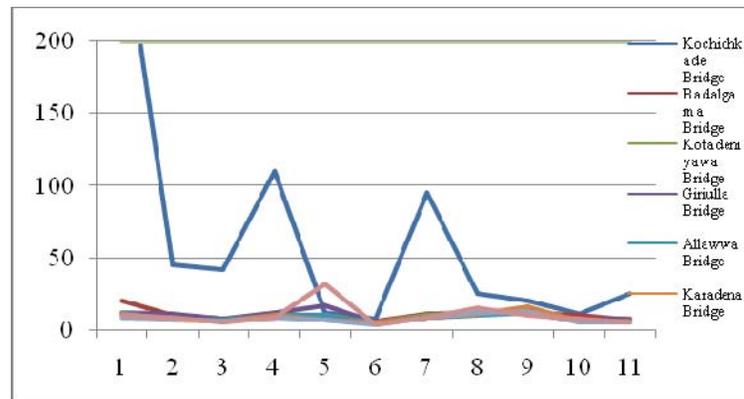
Graph 4 Variation of Dissolved Oxygen in Ma Oya water during 2013

The level of dissolved oxygen indicates the health condition of the water body. If it is higher the water quality is good. The dissolved oxygen level of the water in selected locations of Ma oya is always within in the expected level. Lower level of dissolved oxygen was reported only in the month of March and May in few locations.



Graph 5 Variation of Chemical Oxygen Demand in Ma Oya water during 2013

Sig sag variation of Chemical Oxygen Demand of the water in Ma oya could be observed in several locations. Kotadeniyawa bride , Kochchikade and Mawanella bridge the level of COD shows higher value compared to the proposed water quality standard (Category 3 (drinking) and 4(Bathing))



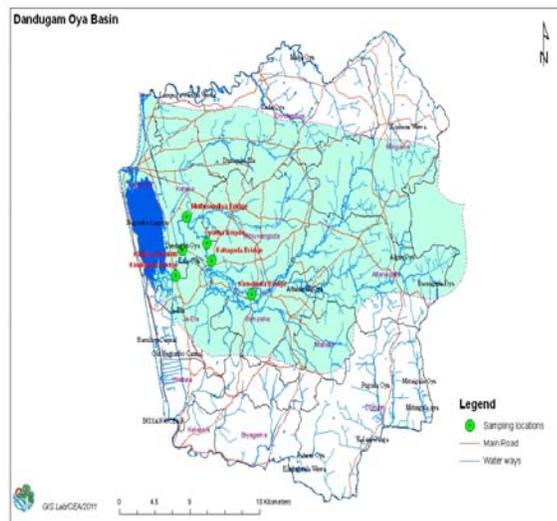
Graph 6 Variation of Chloride content in Ma Oya water during 2013

Variation of Chloride content in water could be observed during year 2013 but it was always below the proposed ambient water quality standards (Category 3 for drinking and category 4 for bathing)

Status of the Water Quality in Dadugam oya

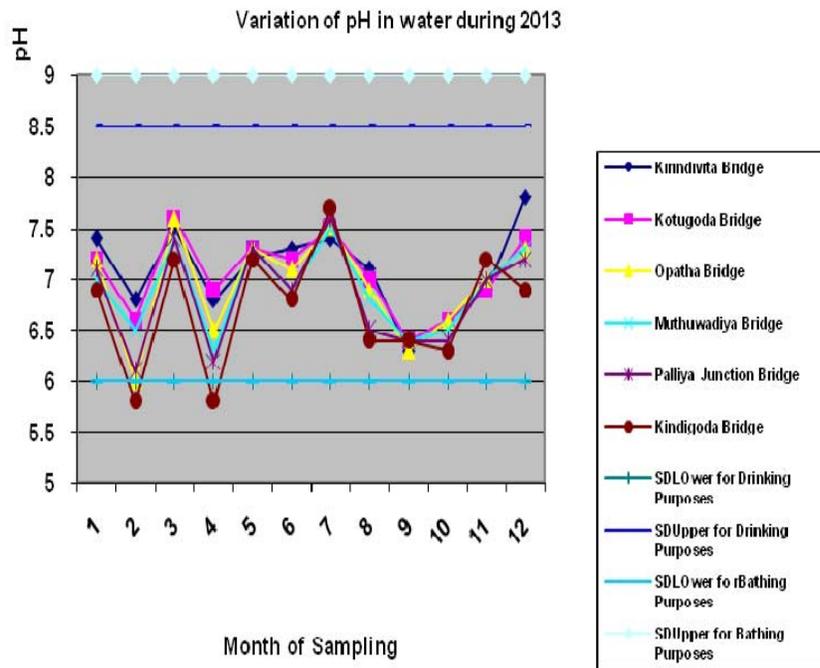
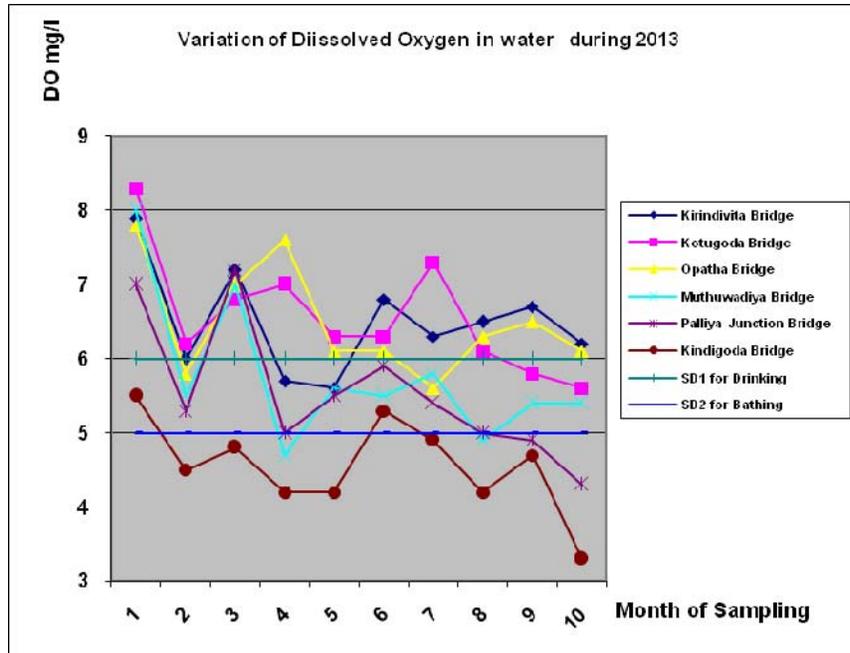
Six sampling locations have been sleeted for the assessment of the water quality in Dadugam Oya from the period of January to December 2013.

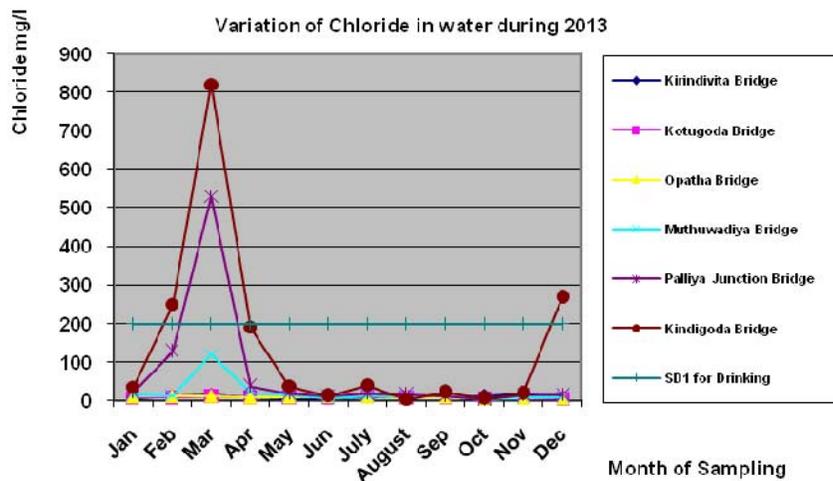
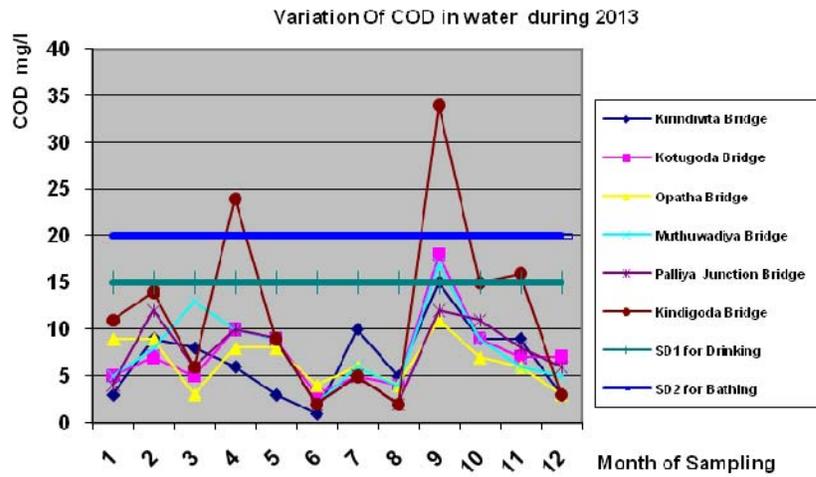
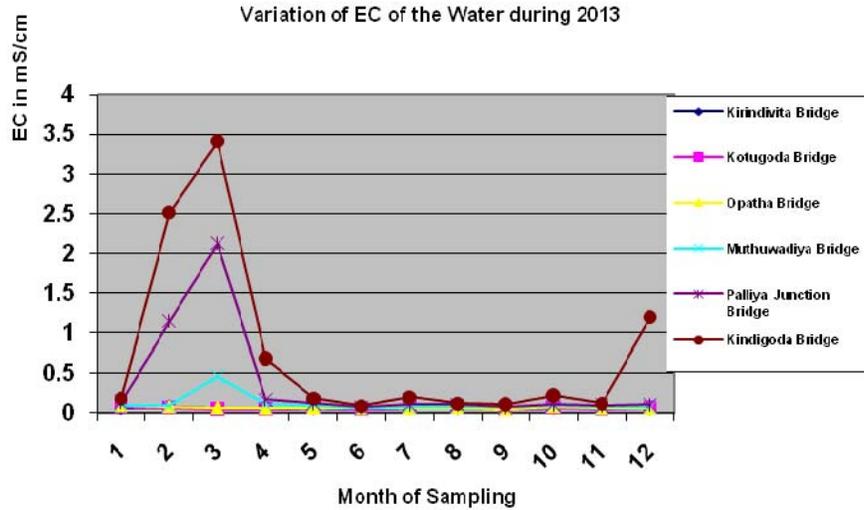
| Sampling Locations                         | GPS Coordinates:      |
|--|-----------------------|
| Sampling Point 1 (Kirindivita Bridge)      | (44386380E, 0784148N) |
| Sampling Point 2 (Kotugoda Bridge)         | (44381229E, 0787535N) |
| Sampling Point 3 (Opatha Bridge)           | (44380612E, 0789277N) |
| Sampling Point 4 (Muthuwadiya Bridge)      | (44377962E, 0791871N) |
| Sampling Point 5 (Palliya Junction Bridge) | (44377454E, 0788598N) |
| Sampling Point 6 (Kindigoda Bridge)        | (44376592E, 0786017N) |

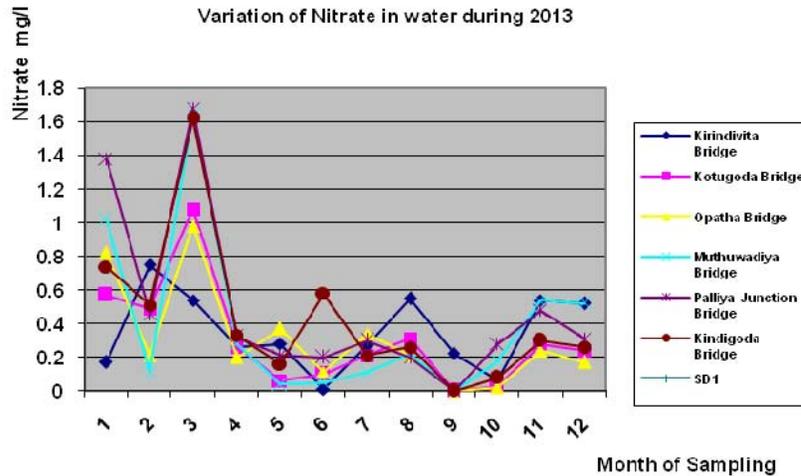


A Map of the Dadugam Oya Sampling Locations

The spatial pattern of deteriorating trend of water quality from upstream to downstream was recorded in Dadugam Oya. The main sources of pollutants is vary from domestic to industrial toward the downstream.







It is revealed that the quality of the water of Dadugam oya is not satisfactory with respect to all parameters measured during 2013. It is revealed that the turbidity which indicate the surface runoff and the microbiological contaminant are always exceeded throughout the monitoring period.

Water quality of the upstream water of Dadugam oya (Kiridiwita and Kotugoda) does not shows any evidence of the industrial pollution. The source of contamination of the upstream is very few. The only exceedances is always turbidity and microbiology contaminant.

The water quality of mid-stream site to downstream indicate the evidence of the industrial pollution with compare to the domestic and non-point sources. It is clearly indicated from Opatha to downstream. The gradual decrease of dissolved Oxygen in water from downward from this point and high level of Chemical Oxygen Demand was recorded in most of the time. Values obtained for heavy metals are lower than the detection limits of the method used for the detection of heavy metals and nutrient such as nitrate and phosphate are significantly below the proposed Ambient water quality standards ( Category 3 for drinking and category 4 for bathing ) of the Central Environmental Authority during the total monitoring. But Furthermore values obtained for COD for the latter stretch of the river are comparatively higher than the standard value for most of the times. There is a remarkable difference between the values obtained during the low and high flow rates of the year for all pollutant indicators.

The water quality is gradually decreases toward the downstream direction of the Dadugam Oya. The microbiological contaminant is become less significant in downstream from Opatha to with compare to the upstream.

The water quality of the upstream that is Kiridivita clearly shows that the domestic sources are more prominent in the upstream site of the Dadugam Oya. The quality of the water could be remarkably improved by providing the sanitary facility and controlling the domestic sources such as disposal of sewage and urban runoff. From downstream from Opatha even with the controlling of the domestic

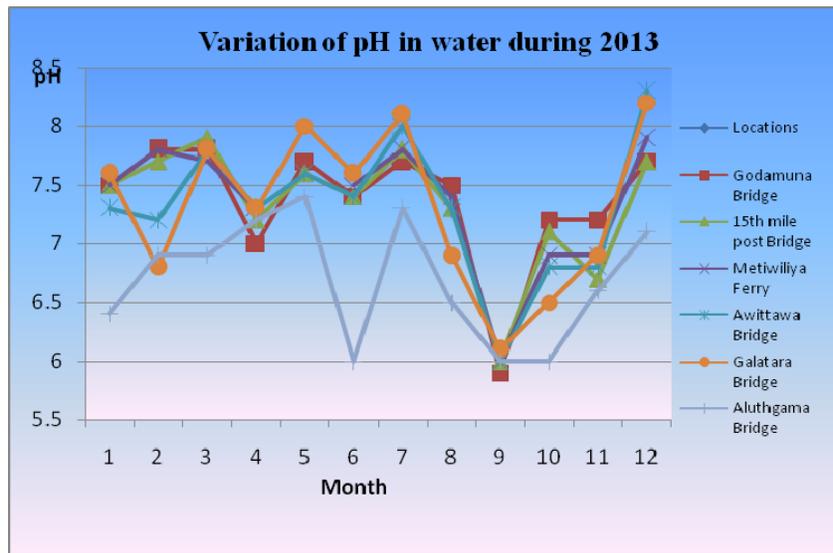
sources it is very difficult to improve the quality of the water at all. The total contribution for the deterioration of the water quality of the water is industrial pollution.

### Status of water quality in Benthota River

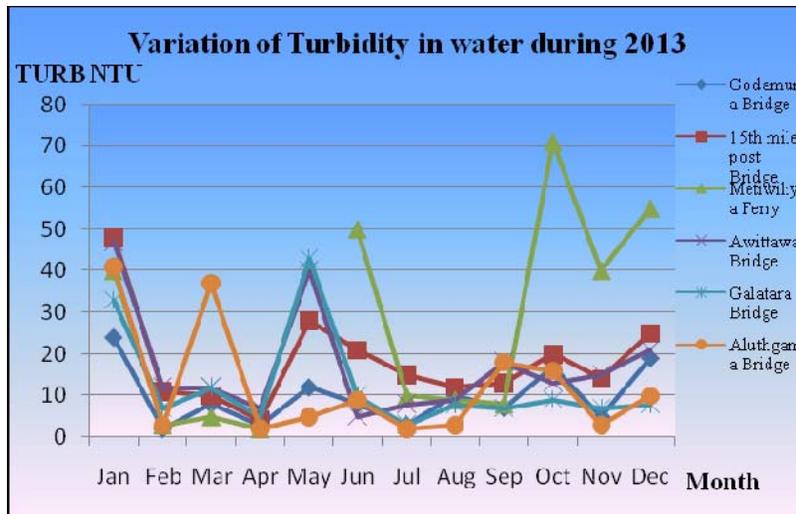
During the year 2013 the water quality of Benthota River was evaluated with respect to the physical, chemical and microbiological parameters. The monitoring was carried out monthly basis for six pre-selected sampling locations. pH, electrical conductivity, turbidity and temperature was measured at the time of collection.

The microbiological contaminant of the water from all selected locations along in Benthota River indicated that the water is highly contaminated with sewage that could be observed throughout the year.

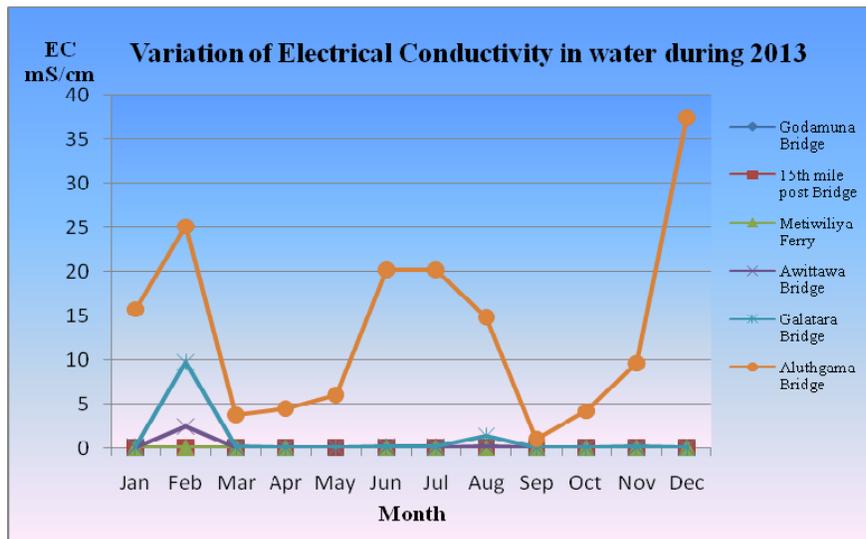
When compared with the other water bodies quality of the river water is not much deteriorated with chemical pollutant other than the domestic and urban waste and sewage.



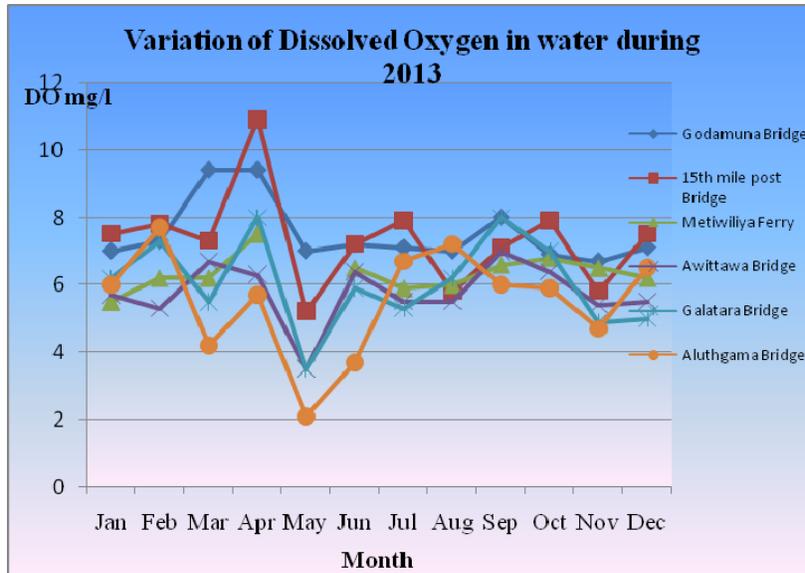
During year 2013 the pH of the water in selected locations do not deviate from the upper levels of the proposed ambient water quality standards and during the month of September. The reported value for pH in one location was below the proposed standard.



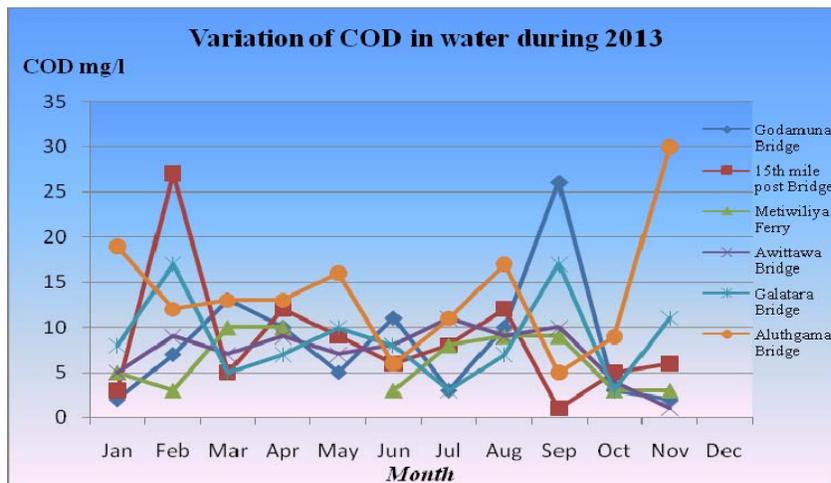
The turbidity of the water in all locations always exceed and higher than the proposed ambient water quality standards. When compared to other water bodies, the values reported for the turbidity are lower, and during the month of February the reported values were lower than the proposed ambient water quality standard except in one location. Other values were not so high when compared to the perennial water body monitored by CEA laboratory.



The electrical conductivity does not show remarkable differences. A high value of electrical conductivity was reported only at one location, but it is also less than the proposed ambient water quality standards.



The level of dissolved oxygen indicates the health condition of the water body. If it is higher the water quality is good. Benthota River was comparatively lower with respect to the other perennial water bodies monitored by CEA. During month of May the DO is lower than the standard value. Seasonal variation could be observed and it would vary time to time.



Variation of Chemical Oxygen Demand of the water in Benthota River also shows a sig sag pattern in several locations. The deviation from the upper level (Category 3 (drinking) and 4 (Bathing) of could be observed in very few occasion during the total monitoring period. Most of time the values were below the proposed ambient water quality standards (Category 3 Drinking). Only very few occasion it was higher than the upper limit of proposed ambient water quality standards.

## **11.4 Strengthening of National Environmental Information Centre / Library**

The National Environmental Information Centre is the focal point for the environmental information in Sri Lanka.

The objectives of the centre are as follows:

- To create and develop environmental information sources to satisfy the information needs of users
- To analyze and consolidate environmental information
- Coordination with local and international information centers / libraries and dissemination of information.

Progress made by the National Environmental Information Centre in 2013 are as follows:

### **11.4.1 Establish & organize a school Library in Polonnaruwa District**

1733 no. of Environmental books and information materials (Reading Table, chairs, Book Racks, Book Cupboards, Computer table with chair, Librarian table with chair, Computer and UPS) are purchased and established a well equipped library for Welikanda Maha Vidyalaya in Polonnaruwa (Expenditure over 10 lakh)

### **11.4.2 Collection Development**

733 no. of Environmental books and 16 no. of Environmental Journals are purchased.

4850 no. of books are acquisitioned and classified.

### **11.4.3 Documentation Services & Processing Works**

**11.4.3.1 National Environmental Information Centre maintained following databases and entered 1000 nos. of data.**

- CEA Database for Library book catalogue.
- IND Database for Newspapers and Journal articles.
- EIA / IEE Database for EIA / IEE reports.

**11.4.3.2 Create a Barcode System for library books**

- Labeling 14,000 nos. on library books.
- Activate Barcode reader & issued 175 no. of new membership cards.

#### **11.4.4 Library Publications**

05 issues of “Current Contents” on Environmental Periodicals and 04 issues of “Environmental News Paper Index” are compiled disseminated through the email for the year 2013.

#### **11.4.5 Exchange of Environmental Information**

- 1400 no. of environmental information exchanged with international and local Libraries as well as other organizations.
- 675 users have obtained the library facilities from Environmental Information Centre.
- The following no. of users have obtained library facilities from Nature Field Centres  
Attidiya – 678, Roomassala – 1417, Kegalle – 126
- Lending 3950 no. of books and sending reminders.

#### **11.4.6 Library Network Activities**

- Handling of information request with HELLIS / SLLA / SLSTIC/AGRINET/SLLA-AGM library networks.
- Participated for 13 no. of Library meetings and workshops.
- Issuing of 40 contents pages for AGRINET users.
- 425 no. of data supplied for network libraries.

#### **11.4.7 Other Activities**

**11.4.7.1 Renewal of the institutional membership of the British Council for 2013/2014 and issued the cards for CEA staff.**

**11.4.7.2 Renewal of the institutional membership of the British Council for 2013/2014 and issued the cards for CEA staff.**

**11.4.7.3 World Environmental Day activities 2013.**

- Hall arrangements, seating and guidance to ushering team.

**11.4.7.4 National Environment Pioneer Camp 2013.**

- Registration and providing of accommodation for 350 students, parents and officers of CEA of the camp.
- Purchasing of prizes for cultural events.
- Meal arrangement for 5 days.
- T-shirts distribution.
- Grouping of students for field trips.

**11.4.7.5 17,000 no. of pages handed over to scan through the National Digitization Project.**

**11.4.7.6 Preparation of monthly and quarterly reports.**

**11.4.7.7 Entering and shelving of 411 nos. fictions.**

**11.4.7.8 104 no. of books are distributed for 03 NFC and 04 Institutions.**

**11.4.7.9 2050 no. of Newspaper cuttings are added to the Library collection.**

#### **11.4.8 Income**

- Sales of CEA publications - 1262 Nos. Rs. 56,025.00,  
(Books, Posters, Leaflets & CDs)
- Photocopying charges - 16,761 Nos. Rs. 80,180.00

### **11.5 Korean International Cooperation Agency (KOICA)**

#### **11.5.1 Introduction**

The Central Environmental Authority (CEA) forwarded a project proposal in 16<sup>th</sup> May 2007, to Korean International Cooperation Agency (KOICA), requesting financial and technical assistants to establish sanitary landfill facilities in Sri Lanka.

Accordingly KOICA officials visited Sri Lanka on 17 September 2007, and agreed to allocate funds for constructing one model sanitary landfill and they selected a land at Waga which would facilitate four Local Authorities (Maharagama UC, Seethawaka Pura UC, Homagama PS and Seethawaka PS).

The Government of Korea (GOK) signed an agreement called Record of Discussion (RoD) between the Secretary to the Ministry of Environmental & Natural Resources and the Resident Representative of Korea International Cooperation Agency (KOICA) on 24<sup>th</sup> April 2008. According to the agreement, the Government of Korea agreed to allocate 4.5 million US dollars for this project and Government of Sri Lanka 'contribution is 1.5 million US dollars to develop sanitary landfill at Pelpola, Waga.

In view of the strong public protest demonstrated against the proposed landfill project at Waga, the government decided to suspend the project and accordingly the Urban Development Authority did not grant the approval for the proposed project at Pelpola, Waga. However, with a view to utilize the grant funding the KOICA was going to make available to Sri Lanka, discussions were initiated to seek the possibility of changing the project site from Pelpola, Waga to Dompe. After several attempts lobbied by CEA, the KOICA agreed to change the project location to Dompe.

This landfill is planned to serve as the final disposal site for Dompe PS, managing 10 tons of waste per day. In addition to the sanitary landfill it is also planned to construct a composting plant within the same site with the financial and technical support from Pilisaru Project. Originally this site belonged to

the Land Reform Commission (LRC) and leased out to Forest Department to setup a commercial forest plantation. The LRC has by now leased out an area of nearly 6 hectares of land to the CEA as the core area to construct the landfill site.

#### **11.5.1.1 Objectives**

The objectives of the Project are to:

- i. Enhance the capacity of the policy makers and government officials in charge of wastes management;
- ii. Establish an integrated waste management system with supportive policy measures and programs for the successful implementation of the system;
- iii. Conduct an inventory survey on the sources, volume of generation, collection and/or treatment of household waste;
- iv. Design and implement a safe and efficient collection system for household waste generated in the above mentioned region;
- v. Construct a sanitary waste landfill site and other related infrastructures.

#### **11.5.2 Implementing agencies**

The implementing agencies of the Project are the Korea International Cooperation Agency (KOICA) on behalf of the Government of the Republic of Korea and the Central Environmental Authority (CEA) of the Ministry of Environment & Renewable Energy on behalf of the Government of Democratic Socialist Republic of Sri Lanka.

##### **11.5.2.1 Undertakings of the respective governments.**

#### **1. Undertakings of the Government of Republic of Korea**

In accordance with the laws and regulations in effect in the Republic of Korea, and within its budgetary limitations indicated at the Article I .5.1, KOICA on behalf of the Government of the Republic of Korea, shall assist the Government of the Democratic Socialist Republic of Sri Lanka. The following details may be amended by mutual agreement, if necessary.

#### **A. Invitational training programs**

- a) Sri Lankan officials shall be invited to Korea for training on policymaking, waste administration of central and local governments, and management and operation of the waste landfill sites.
  - Waste policy: 10 persons for 1 week
  - Waste management: 15 persons for 2 weeks

- Waste facility management: 15 persons for 2 weeks
  - Composting facility: 15 persons for 2 weeks
  - Landfill site operation and management: 5 persons for 2 months
- b) Participants shall be selected by KOICA upon the recommendation of CEA. The number and period of training are subject to change according to progress of the Project. Further details shall be finalized based on the mutual consent of both parties.

#### **B. Dispatch of Korean experts**

- a) To dispatch Korean experts to the CEA to provide research and consultations related to the implementation of the Project. Their expertise and the lengths of stay are as follows:
- Project management and coordination: 20 man-months
  - Waste inventory and field survey consulting: 2 man-months
  - Waste policy and management: 3 man-months
  - Waste collection system management: 2 man-months
  - Composting facility management: 1 man-months
  - Construction management for landfill site: 12 man-months
- b) The duration of the stay, expertise and number of experts are subject to change according to progress of the Project. Other details shall be decided through further consultation between KOICA and CEA.

#### **C. Construction of a landfill site**

- a) KOICA shall perform a feasibility study on the landfill site construction for basic and detailed designs.
- b) KOICA shall provide CEA with basic and detailed designs for earth works to be done by CEA
- c) KOICA shall construct a sanitary landfill site with a minimum of 2 hectare in Seethawaka PS area, excluding earth works to be done by CEA for the household waste collected in the project area. The construction work by KOICA includes landfill liner, leachate collection and treatment facility, storm water drainage system, ground water quality monitoring wells, weighing bridge, tire washing facility, monitoring system, management & control office, landscaping, fencing, gate, designing of venting system.
- d) The location and size are subject to change through mutual consultations between the two implementing parties based on the results of feasibility study.

**D. Provision of equipment and materials**

- a) KOICA shall provide the relevant equipment and materials necessary for the implementation of the project.
- b) The quantities and specifications of the equipment and materials shall be subject to change during the actual implementation stage of the Project, based on mutual consultation between the two implementing agencies.

**2. Undertakings of the Government of the Democratic Socialist Republic of Sri Lanka**

The Government of the Democratic Socialist Republic of Sri Lanka shall, in accordance with its domestic laws and regulations, take the following measures for the successful implementation of the Project:

**A. Administrative Measures**

- a) Designate a responsible organization and personnel to prepare and implement the Project;
- b) Secure sufficient budget and manpower such as engineers, technicians, and administrative officials for self-reliant operation of the Project during and after the period of the Project;
- c) Obtain all necessary approvals and permits including environmental impact assessment from the authorities concerned which are required by the laws and regulations in effect in Sri Lanka;
- d) Provide information and documents necessary for the implementation of the Project. Such information and documents shall be translated to or written in English;
- e) Develop and implement official collection system and infrastructures in the project areas for the operation of the landfill site;
- f) Plan and implement public awareness campaign for appropriate waste separate discharge practice of the residents and education and training programs for the administrative staffs in the local authorities in the project areas;
- g) Settle all legal matters claims including civil appeals which may be brought about regarding the implementation of the Project.

**B. Measures for Construction of Landfill site**

- a) Provide legally undisputed land for the construction of a landfill site and ensure that the location of the Project site and space shall not change without mutual written agreement;
- b) Conduct earth works including excavating, banking, ground leveling and etc;

- c) Provide infrastructure required for the construction of the landfill site, including access road, electricity, water supply, sewage, drainage, telephone facility and internet connection lines prior to the commencement of the Project;
- c) Provide relevant documents, information and drawings if necessary for the construction work;
- d) Exempt the import taxes, duties, levies and other public charges applied to any of the equipment, material and supplies, which may be necessary for the construction work, purchased within or brought into the territory of Sri Lanka;
- e) Make necessary arrangements with local governments and related agencies to issue permits and authorization required for the implementation of the Project, including construction work and bear cost of obtaining the above-mentioned permits and authorizations;
- f) Provide full-time security guards for the construction site during the construction period.

### **C. Measures for Equipment and Materials**

- a) Provide reasonable spaces and facilities at the Project sites for installation of the equipment.
- b) Promptly complete customs clearance of the equipment and materials to be imported from overseas for the Project, and shall exempt the equipment and materials from harbor duties, import duties, and other taxes or public charges, if there is any.
- c) Bear the costs of unloading, inland transportation, and insurance for the equipment and materials from the port of discharge to the Project sites in Sri Lanka.
- d) Ensure proper and effective operation and maintenance of the equipment.
- e) Bear the costs of storage, operation, maintenance and repair of the equipment and materials, after the completion of the Project.
- f) Supply or replace equipment, instruments, furniture, vehicles, spare parts and other materials required for the implementation of the Project, other than those granted by the Korean Government.
- g) Use the equipment and materials granted by the Korean Government exclusively for the Project.

### **D. Measures for Korean Experts**

- a) Ensure their safety and provide them with medical assistance in the case of emergencies.
- b) Grant the Korean experts privileges, exemptions and benefits no less favourable than those granted to the experts of other countries performing similar missions.
- c) Provide exemption from taxes, duties, levies and other charges imposed under the laws and regulations of Sri Lanka in respect to the equipment, materials, and vehicles brought by the Korean experts into the territory of the Democratic Socialist Republic of Sri Lanka.

- d) Provide necessary co-worker and/or assistance personnel required for the Korean experts' effective activities.
- e) Provide necessary maps, relevant data, statistics and documents they may require in conducting their mission, in accordance with relevant laws and regulations of Sri Lanka.
- f) Provide reasonable office, furniture and other appliances which may be required for carrying out their duties at the Project sites.
- g) Issue necessary permits, authorizations and travel documents, etc. required for their stay in Sri Lanka.
- h) Protect the Korean personnel from any claim against them resulting from, occurring in the course of, or otherwise connected with, the performance of the tasks assigned to them in the Democratic Socialist Republic of Sri Lanka except for those arising from willful misconduct or gross negligence on the part of them.

#### **E. Measures for Training**

- a) Recommend qualified candidates with good command of English for the training in Korea no later than one month in advance of the commencement of the training courses.
- b) Ensure that the trainees will work for the Project and be available for employment in connection with the Project after their training in Korea.

### **11.5.3 Physical progress**

#### **11.5.3.1 Foreign component - construction of the superstructure of the landfill**

##### **11.5.3.1.1 Sanitary landfill**

The SAMHEE Construction Co. Ltd employed by the KOICA has completed the construction of Sanitary Landfill area by installing Geo textile, Bentonite mat and the HDPE sheet on the side bank of the landfill.



*Figure 3.1 : Landfill area once earth work was completed*



*Figure 3.2: Laying of liners on the side bank of Landfill*

In the bottom, underground drainage lines were installed and above that a 30 cm thick gravel layer was placed, followed by all the above liners except the Bentonite mat. Instead of Bentonite mat, bentonite mixed soil layer was laid in order to meet permeability coefficient ie  $1 \times 10^{-7}$  cm/s or less. Perforated leachate collection pipes & gas collection tubes were installed in the uppermost area of the landfill area.



*Figure 3.3: Laying of underground drainage line*



*Figure 3.4: Above the underground drainage line Geo textile and 30 cm thickness metal layer were laid*

Liners were installed in order to prevent any possible deformation or pollution of soils and ground water by leachate produced from disintegrating wastes or from rainwater permeating the landfill.



*Figure 3.5: Laying of liners on the bottom of Landfill*

In order to prevent storm water from transforming to leachate and to be flexible in landfill area utilization subject to changes in the waste volume, the project area was divided into a number of zones under the plan. The Phase-I project area was divided into 6 zones.

#### **- Gas venting System**

The vertical landfill gas collection pipes were installed on upper most part of the landfill. During the operational stage, landfill gas will be collected via perforated pipes within the waste and will be burnt in flares.



*Figure 3.6 : Gas Venting system at the landfill*

#### **-Leachate well**

The leachate collection network system was installed in such a manner that the leachate collected will drain off towards the middle where a lift well is accommodated. The leachate collected in the well shall be collected during the operational stage for the quality analysis and then will be disposed of at leachate treatment plant.



*Figure 3.7: Leachate well*

### 11.5.3.1.2. Landfill liner protector

The SAMHEE Construction Co. Ltd, the contractor of the above project has had a requirement of used (carcass) tires about 31,000 with similar width and diameters to be used as the liner protector. However in Sri Lanka a reasonable quantity of used tires were not available within the available time period expected by the KOICA. Therefore, Resident Supervisor, Mr. Hee Mun Lee has proposed to use PP bags as a landfill protector.

Mr. Hee Mun Lee recommended to fill this PP bags with metal (aggregate) and he agreed to provide gravel sufficient for the initial stage of the landfill if additional funds could be saved with their budget. However, the laying of the PP bags would become the responsibility of the Sri Lankan government at its cost.

As per the decision taken at the Monthly progress meeting held in July 2013, KOICA head office has granted approval for the deposit of money equivalent to the value of material (aggregate and PP bags) for the balance work for the above project. Accordingly CEA has requested from KOICA to draw a cheque in favor of the “Deputy Secretary to the Treasury”.

However a part of the 1<sup>st</sup> Cell of the landfill area has already been covered by the PP bags with aggregate laid by the SAMHEE Construction Co. Ltd.



*Figure 3.8: Landfill liner protector*

### 11.5.3.1.3 Storm Water drainage

The installed storm water drainage line drain both the internal and external storm water from the landfill area while the installed external drainage system deals with the outskirts storm, which employs the mountain side ditch for outer storm and the raised barrier (which functions as side gutter) for the inner storm to drain the surface water.

The storm water of the administration building site will be drained separately outside through the U-shaped side gutters.



*Figure 3.9: Storm water drainage line*

#### **11.5.3.1.4. Leachate Collection pipes**

The landfill is designed with its floor tilted so that leachate formed inside the landfill will flow towards the leachate removal pipes located at the first level of the landfill floor. The perforated pipe enveloped in 30cm –thick 25-40mm gravel to prevent blockage and the drainage pipe inclined 2%, the same as the floor inclination, to facilitate removal of leachate.

#### **11.5.3.1.5 Leachate Treatment Plant**

Leachate and waste water (leachate from the composting plant; waste water from washing vehicles etc) are transported to the Retention Reservoir or septic tank through leachate and water removal pipelines. They are treated in biological reaction Sequential Batch Reactor (SBR) before passing through wetland and finally allow flow into outer stream. The construction of Retention reservoir, septic tank, mixed tank, SBR 1, SBR2, settling tank and wetland have already been completed. Laying of water proofing material are in progress.



*Figure 3.10 : Construction of Leachate treatment plant*

#### 11.5.3.1.6 Construction of Administrative Building

The two storey building was constructed by the Samhee construction Co Ltd to facilitate landfill operation and Management Activities.



*Figure 3.11: Construction of Administrative Building*

#### 11.5.3.1.7. Installation of weigh Bridge

A 30 ton capacity Weigh bridge was installed for determining waste intake volumes by weighing waste transport vehicles that pass through the landfill. Weighing will enable analysis of target volume and actual volumes that can be used in efficient landfill operation and budget execution.

When truck is placed on the carrier horizontally, the load is relayed to the indication division by load cell and the value is electrically indicated on the digital counter weighing. The measured weight is simultaneously printed and recorded in the statement by an electric printer. The installation of all these instruments and accessories have been completed.



*Figure 3.12: Weigh Bridge*

#### 11.5.3.1.8 Installation of automatic tire washer

This tire washer is automatic and unmanned that washes tires and under body of vehicles that transport waste to the landfill so that the main road shall not be defaced. This system is made available at the entrance of the proposed site and it shall become compulsory for all vehicles to get their tires washed at this facility. The used water remained in the bay shall be changed from time to time in order to provide clean water. The dirty water shall be sent to leachate treatment plant for purification.



*Figure 3.13: Tire wash bay*

#### 11.5.3.1.9 Installation of CCTV Camera

Installation of, CCTV Camera, has been completed. This is for the observation of all the incoming and out vehicles to the landfill.



*Figure 3.14 : Installation of CCTV Camera*

#### 11.5.3.1.10 Ground Water monitoring wells

An underground water monitoring test- well has been installed to check underground water quality.



*Figure 3.15: Ground water monitoring well*

#### **11.5.3.1.11 Vehicle parking area**

The construction of Vehicle parking area was completed so as to make use in the case of traffic congestion. This facility has been constructed at a separate location within the landfill area.



*Figure 3.16: Vehicle parking Area*

#### **11.5.3.1.12 Construction of site entrance gate**

A steel gate has been constructed at the entrance of the site. However further widening of the gate later, is on the focus.



*Figure 3.17: Construction of site entrance gate*

#### **11.5. 3.1.13 Landscaping work**

The following trees have been planted in the periphery of the project site to reduce the emission of dust and other particles.

- Ruk Attana – *Alastonia scholaris*
- Araliya - *Plumeria acuminata*
- Koboleela- *Bauhinia variegata*
- Pihimbiya- *Filicium decipiens*
- Rambutan- *Nephelium lappaceum*

The grasses have been planted on side bank of the leachate treatment plant so that erosion could be minimized effectively.



*Figure 3.189: Landscaping work*

#### 11.5.3.1.14 Construction of water tank

The construction of overhead water tank has been completed by the Samhee construction Co. Ltd.



Figure 3.19: Construction of water tank

#### 11.5.3.1.15 Installation of water removal pipelines

This pipe line has been installed to remove treated water from wetland to outer stream.



Figure 3.20: Installation of water removal pipe lines

#### 11.5.3.1.16 Construction of Internal roads

The construction of internal roads has been completed by the Samhee Construction Co. Ltd in order to prevent traffic congestion during the operational stage. In case of sudden traffic congestion created an additional space should be left behind so that they could be parked without disturbing the normal traffic in the main road. , based on the road network, the total number of vehicles and the time during which vehicles are in operation a traffic plan shall be developed for implementation.



*Figure 3.21: Construction of Internal Road network*

#### **11.5.3.1.17 Training & capacity building**

As per the said RoD, Sri Lankan officials shall be invited to Korea for training on policymaking, waste administration of central and local governments, and management and operation of the waste landfill sites. Accordingly, four number of training were completed and final training is the Landfill site operation and management for 5 persons for 2 months.

However, the number and period of training are subject to change according to progress of the Project and shall be finalized based on the mutual consent of both parties. Hence, at the progress meeting held on 12<sup>th</sup> June, 2013 at Project site in Dompe it has been requested to change the final training to 10 people for one month. Accordingly the KOICA has agreed to provide one week training for the high ranking officers representing the Advisory committee of the landfill operations ( 06 Positions) and one month training for the operational staff ( 04 positions).

In the meantime CEA has taken necessary actions to establish landfill operational unit, especially for the operation and maintenance of the sanitary landfill at Maligawatta, Dompe. According to the request made by CEA through ministry, Management Services Department has given their approval to several carder positions to establish said landfill unit under the CEA. The two technical officer from the Colombo Municipal Council and the Dompe Pradeshiya Sabaha respectively, were selected to the above unit as Technical officers and one officer from CEA selected as a Site Manager.

A senior Environmental officer from CEA, was selected as a Quality and Compliance Officer for the above unit. In addition to that a machine operator and a pump operator were recruited as a new recruitment. Further to that Technical Officers selected released to the CEA on full time basis and agreed to work at least 03 years continuously at the Dompe Sanitary Landfill site.

As per the training schedule the CEA has arranged to nominate a Site Manager, and three technical officers for one month training. The technical officer-Quality and Compliance selected from CEA was not able to attend to the training due to unavoidable circumstances. Therefore, only 3 persons of the landfill operational Unit have undergone one month training that was held on 04<sup>th</sup> November 2013 to 30<sup>th</sup> November 2013.

However, the expected high ranking officials ( Chairman & Director General of the CEA, Commissioner of Local Government & Secretary, Dompe Pradeshiya Sabaha) were not able to attend due to the Government Circular issued restricting overseas travels during the CHOGM programme by the Presidential secretariat and hence only 04 officials from the KOICA Project at CEA (Project Director, Deputy Project Director, Project Manager Planning & Designing and Project Officer) were nominated to utilize the opportunity of one week training that was held on 24<sup>th</sup> November 2013 to 30<sup>th</sup> November 2013 in Korea. The Machine Operator and Pump Operator were also received one week training in Korea, during this period.



*Figure 3.22: KOICA Training held on Landfill Operation*

#### **11.5.3.1.18. Monthly Progress Review Meetings**

Progress review meetings were held in every month with the participation of relevant officials from KOICA, CEA and the Contractor to review the progress as well as to discuss any problems and issues so that requisite decisions can be taken to ensure smooth implementation of the construction work as scheduled.



Figure 3.23: Monthly Progress Meeting

#### 11.5.3.1.19 Mid-term Evaluation

In August 2013, a team of experts from Korea Environment Institute (KEI) and Sudokwon Landfill Site Management Cooperation (SLC) arrived in Sri Lanka to conduct a Mid-term Evaluation of the project of the establishment of Integrated Waste Management System in Dompe. The main objectives were to evaluate the progress of the project, to share expertise and discuss technical and management aspects of the construction process, as well as to decide future operations to ensure sustainability.

Main recommendations of the mid-term evaluation team include, primarily finalizing plans to increase waste quantity by regulating waste collection in Dompe, secondly seeking politically feasible solution in acquiring waste from neighboring Pradeshiya Sabhas at time of completion of project in late 2013.

Thirdly, the completion of a training programme at political, working group and technical assistance levels on project operations and in developing an Operational Manual of the sanitary landfill was recommended. Finally, identifying suitable equipments for landfill operation was advised by the experts.

As of August, 2013 the project construction progress stands at about 68% of its scheduled completion of 86%, the delay was due to persisted weather condition during the months May- July.



Figure 3.24: Mid Term Evaluation Meeting

### **11.5.3.2: Activities undertaken by the Government of Sri Lanka**

#### **11.5.3.2.1 Earth Work**

During the construction the Korean contractors requested to carry out an extra earthwork at the treatment Plant area.

Accordingly, specifications were developed by the Project Engineering staff and the engineers estimate for this task is Rs 580,500. Quotations were called from 07 parties form ICTAD Registered list as per the Government Procurement Guideline and 03 of them have responded.

Subsequent to a request made by the KOICA a separate quotation was called from Samhee Construction Co Ltd also, to consider the Samhee Construction Co Ltd already occupied at the same site in order to expedite the work and in order to make the coordination easy.

The PPC approved the recommendations given by the TEC, having evaluated the quotations sent by the respective bidders, to procure the works of earth excavation from Samhee Construction Co Ltd, No 1, Mahalootuwa, Kirindiwela, at a total cost of Rs 567,000.00 + 12% VAT. Finally contract was awarded to the Samhee construction Co. Ltd and they successfully completed the said task with in the given time period.

#### **11.5.3.2.2 Infrastructure development (Road, Electricity, fencing, Telephone & communication, water supply, office facilities etc)**

As per the Agreement, GOSL must ensure the supply of electricity, water, Telephone, and development of Access Road before delivery and installation of the equipment and materials. The Provincial Road Development Authority has made necessary actions to develop Access road with Hume Pipe culvert and now laying of Asphalt base carpet is in progress.

Telephone facility, Temporally Electricity supply and water supply have already been given to the site. According to the request made by Samhee construction Co. Ltd CEA has taken necessary action to obtain permanent electricity supply to the site. Hence, Construction of Transformer cubicle, high voltage line, transformer, breaker, and metering equipment to bulk supply of 160kVA to the site has been completed and recently the power supply to the site was also provided.

As per the Agreement, GoSL must ensure to provide necessary protection to the site. Upon the request made by the CEA, Dompe Pradeshiya Sabaha selected the suitable contractor to erect barbed wire fence around the site and they completed the said task successfully.



*Figure.3.25: Barbed Wire fence*

#### **11.5.3.2.3 Waste Survey:**

The waste survey was carried out by the officials from CEA and the Dompe Pradeshiya Sabaha to decide the actual requirement of the equipments necessary for the implementation of the project. Accordingly revised the list of equipment and vehicles given in in RoD to suit with the requirements of the operation stage of the landfill and submitted to the KOICA through Ministry of Environment and Renewable Energy for further actions.



*Figure 3.26: Waste Survey*

#### **11.5.3.2.4 Provide security at site, office space, engineering equipment, furniture, stationeries and other technical instruments / appliances**

As per the Agreement, GoSL must ensure to provide necessary protection to the site. Accordingly, permanent security arrangement was deployed to the site from W.E. Security Services (Pvt) Ltd, with the approval of the Board of Directors of CEA granted vide Board Paper submitted on 02.03.2012.

Furniture (3 Nos tables and 8 chairs) were delivered to the site for the use of newly established landfill unit at the site.

#### **11.5.3.2.5 Transport**

According to the provisions in the aforesaid Record of Discussion, Mr. Hee Mun Lee, Resident Supervisor from KOICA dispatched to the CEA with effect from 01<sup>st</sup> August 2012 to conduct inspections and consultations of overall project implementation process. CEA provided a 4WD Jeep which was granted by the KOICA for the use of KOICA experts during their stay in Sri Lanka. A fuel allocation equal to the level of a Director of CEA has been provided to Mr. Lee, the expatriate engineer of the project.

#### **11.5.3.2.6 Tax, duties, levies and others**

According to the Agreement (RoD), the Government of Sri Lanka (GoSL) is committed to accomplish custom clearance of the materials, machineries which are to be imported to Sri Lanka for the use of the construction of sanitary landfill and transport the same up to the landfill site at Maligawatta, Dompe. Since the clearing of cargo is a special discipline where the CEA does not have in-house expertise, quotations were called for the service of clearing goods (materials, equipment machineries and related items), loading, transportation and unloading at the site from eligible service providers. Accordingly the above service contract was awarded to Sasiri Associates, No. 126/5.1.S, 5<sup>th</sup> Floor, Y.M.B.A.

Building, and Colombo as the service provider. As per the above CEA cleared all the materials and equipment imported to Sri Lanka in time to time.

#### 11.5.3.2.7 Site visits:

Since this landfill is believed to be the first experience of its kind in Sri Lanka the management of the CEA has decided to provide an opportunity for interested parties to visit the landfill for study purposes and as a means of technology transfer. Accordingly officers and students from the following institutes were visited the site during the said period.

**Table 3.2: Site visits**

| Date       | Institute  | No of Participants |
|------------|--|--------------------|
| 10/1/2013  | Industrial Technology Institute                                      | 11                 |
| 11/1/2013  | Board of Investment  | 3                  |
| 11/1/2013  | Holcim (Geocycle)  | 7                  |
| 15/01/2013 | CEA, District Office ,Gampaha  | 15                 |
| 18/01/2013 | Department of project Management and Monitoring,<br>General Treasury | 13                 |
| 29/01/2013 | Department of National Planning                                      | 5                  |
| 30/01/2013 | EIA Division, CEA  | 7                  |
| 30/01/2013 | Faculty of Livestock Fisheries & Nutrition, Wayamba,<br>University   | 15                 |
| 8/2/2013   | Auditor General's Department   | 4                  |
| 12/2/2013  | CEA Management Committee members                                     | 12                 |
| 15/02/2013 | Waste Management Division, CEA                                       | 10                 |
|            | University of Kelaniya   | 3                  |
| 27/02/2013 | Faculty of Science, University of Kelaniya                           | 5                  |
| 4/3/2013   | Faculty of Architecture, University of Moratuwa                      | 140                |

| Date       | Institute   | No of Participants |
|------------|---|--------------------|
| 22/03/2013 | Forestry & Envi. Science Special Degree students,<br>University of Sri Jayawardenapura University | 9                  |
| 15/05/2013 | Country Representative, French Development Agency   | 2                  |
| 10/7/2013  | Faculty of Agriculture, University of Ruhuna  | 10                 |
| 15/07/2013 | China North Industries Corp   | 6                  |
| 16/07/2013 | CAPCC members of EDCF   | 5                  |
| 30/07/2013 | SLIDA   | 10                 |
| 9/8/2013   | KOICA Midterm Evaluation team   | 5                  |
| 4/9/2013   | Seoul Broadcasting System   | 6                  |
| 25/09/2013 | Korean Government officials   | 18                 |
| 14/10/2013 | Ministry of Defense & Urban Development   | 120                |
| 27/10/2013 | Department of Zoology University of Kelaniya  | 52                 |
|            |   |                    |



*Figure 3.27 Awareness program at the site for officials of Ministry of Defense & Urban Development and the people from Puttlam District.*

## 11.5.4 Financial Progress

### Summery

|                          | Allocation /Rs    | Received/Rs | Expenditure/Rs       |
|--------------------------|-------------------|-------------|----------------------|
| <b>Foreign Component</b> | 60,000,000        |             | 215,740,800**        |
| <b>Local Component</b>   | 40,000,000        |             | 40,000,000           |
| <b>Additional</b>        | 12,500,000        |             | 6,025,506.48         |
| <b>Total (Local)</b>     | <b>52,500,000</b> |             | <b>46,025,506.48</b> |

\*\*Only for Construction works

| Received:                               |  | Rs.47,100,000.00     |                   |
|---|--|----------------------|-------------------|
| Project Expenditure                     |  | Rs.                  |                   |
| Year 2013                               |  | KOICA                | Allocation /2013  |
| Expense                                 |  |                      |                   |
| A1.1 · Waste Management Promotional     |  | 542,313.00           | 550,000           |
| A1.2 · Earth Work                       |  | 196,401.50           | 210,000           |
| B · Infrastructure Development          |  | 21,355,467.02        | 21,725,000        |
| B1.1 · Surveying, O&M Equipment         |  | 859,413.82           | 875,000           |
| C1.2 · Provide Security at Site         |  | 452,046.06           | 510,000           |
| D1.1 · Transport (Fuel, Maintenance etc |  | 506,785.38*          | 450,000           |
| D1.2 · Tax, Duties, Levies and Others   |  | 22,922,775.24        | 27,930,000        |
| D1.3 · Project Coordination & Mgmt      |  | 113,227.00           | 110,000           |
| D1.4 · Contingencies                    |  | 140,154.00           | 140,000           |
| <b>Total Expenditure</b>                |  | <b>47,088,583.02</b> | <b>52,500,000</b> |

\*The vote allocation exceeds due to following reasons.

## **11.6 Project for the Construction of Solid Waste Disposal Facilities in Sri Lanka (EDCF Project)**

### **11.6.1 Introduction**

#### **11.6.1.1 Overview**

The Central Environmental Authority (CEA) has planned to construct a number of integrated waste management solutions in the form of scientifically-proven sanitary landfills as final disposal facilities for municipal solid waste that is currently being disposed of in a haphazard manner thereby causing a lot of environmental and health issues.

Having followed the formal channels stipulated by the government of Sri Lanka, the CEA requested the Treasury for financial assistance from the Export-Import Bank (Eximbank) of Government of Republic of Korea under the Export Development Cooperation Fund (EDCF) loan facility to construct four Sanitary Landfills in selected cities in Sri Lanka.

The said sanitary landfills will be constructed in Keerikkulama in Anuradhapura, Monroviawatta in Hikkaduwa, Malamulla in Panadura and Gonadikawatta in Udunuwera and would serve as the cluster based common final disposal facility to dispose residual waste generated in the respective Local Authority areas.

The total estimated cost of the project is US\$ 38.2 million of which US\$ 33.536 million is expected to be obtained from EDCF and the balance of US\$ 4.664 million would to be provided by the Government of Sri Lanka. The applicable terms and conditions of the EDCF loans are determined by the categories of the recipient countries.

#### **11.6.1.2 Scope of Project**

- Constructing a sanitary landfill in each of four locations:
  - Panadura
  - East Nuwaragampalatha, Anuradhapura
  - Udunuwera
  - Hikkaduwa
- Establishing plans for leachate management methods
- Establishing plans for landfill gas management
- Estimating wastes
- Evaluating waste disposal methods and capacity/dimensions of facilities

### 11.6.1.3 Expected Benefits and Results

The solid waste treatment facilities of this project will help Sri Lanka build an infrastructure for keeping the relevant cities clean. Once the project is completed, it will help to enhance the national image, creating job opportunities, and promoting economic development. By properly disposing and managing municipal solid waste, the project will ensure better public health and hygiene, would in turn reduce the incidence of illness and thereby help save incomes.

Ultimately, the project expects to:

- Improve the environmental conditions around the project sites
- Enhance public health and hygiene for area residents
- Improve the sanitation of wastewater treatment systems
- minimize contamination of soil, water, air and other environmental and socio-economic problems
- Transfer technical know-how of integrated solid waste treatment facility operations

The specific environmental, technological, and socio-economic benefits expected from the implementation of this project are listed below:

- Environmental Benefits:
  - Maximization of the use of recyclable resources
  - Contribution to a pleasant living environment for residents through the sanitary treatment system
  - Contribution to enhancing the public health conditions for residents through the sanitary treatment system
  - Minimization of a secondary environment-related problem and enhancement of the landscape beautification by adopting a systematic, scientific treatment process
  - Protecting the territory from pollution caused by random, unauthorized waste disposal
  - Resolving/preventing cases of various civil complaints and preservation of the living environment, and safeguarding the public health of citizens
  - Allowing the government to secure a sufficient land space for relaxations and leisure activities in its national land use plan

- Technological Benefits:
  - Establishment of reliable and economical waste management system through a comprehensive management
  - Disposal of waste hygienically on a long-term basis
  - Accumulation of the technology in landfill operations & maintenance
  - Accumulation of the leachate treatment & management technology
- Economic Benefits:
  - Rationalized land use
  - Cost saving in waste treatment for residents
  - Creation of job opportunities with construction and operation works
  - Enhancement of citizens' awareness on environment through landfill improvement works
  - Procurement of economic advantages by establishing harmonious interactive functions with surrounding environment-related facilities
  - Cost savings in management and disposal of household waste
  - Cost efficiency through recycling of material resources
- Social Benefits:
  - Procuring reliable and hygienic waste treatment facilities
  - Inducing a favorable attitude against abhorrent facilities by constructing an appropriate landfill which best fits its surrounding conditions
  - Enhancement of citizens' awareness of the environment and against waste landfill facilities by applying the eco-friendly concept
  - Resolving a landfill space shortage problem by constructing waste treatment facilities
  - Securing sanitary landfills on a long-term basis
  - Contributing to regional development

### 11.6.2. Project Locations



11.6.2.1 Malamulla Site at Panadura:

The residual wastes from 4 of the LAs (Panadura UC, Kalutara UC, Panadura PS, and Kalutara PS) will be disposed of at the Panadura proposed sanitary landfill Site.



*Proposed site view*



*<Paved access road>*



*<Access roadway of the Proposed site>*



*<Rear side of the proposed site>*



*Front side*

*Figure 2.1: Proposed site at Malamulla*

**11.6.2.1.1. Evacuation of Illegal Encroachment**

In case of Malamulla site, there was a problem of illegal encroachment by several families into the site and therefore, the Eximbank of Korea requested CEA to send confirmation on clear resolution of the illegal settling.

The person who legally owns the land has appealed to Panadura courts litigating against the illegal encroachers. However, out of nearly 73 illegal encroacher who had initially occupied the Malamulla site, except for 7 encroachers all others have already vacated the site in view of the amicable approach taken by the CEA in collaboration with other stakeholder institutions.

With the direct involvement of Divisional Secretary, Panadura (PDS), all encroachers vacated the site in an amicable manner and a re-survey was carried out to redeem the most wanted area of the Malamulla site for the EDCF Project. Accordingly, the District Survey office of the Kalutara, has sent the survey plan to CEA for a further activities. In mean time PDS gave his approval to do the development activities at the site by his letter dated 13<sup>th</sup> December 2013 until a formal release of this

land to CEA is done in long term lease basis. In the meantime, CEA requested from PDS to release this land to CEA as early as possible to proceed with the follow-up actions.

#### 11.6.2.1.2. Environmental Clearance

An application was submitted to the Kalutara District Office of the CEA seeking environmental recommendation for this sanitary landfill on 03<sup>rd</sup> April 2013. Accordingly Environmental Recommendation was granted by the CEA on 29<sup>th</sup> May 2013 for establishment of sanitary landfill at Malamulla, Panadura for a 1.6498ha which was surveyed by Mr. O.S.B. Kumarasiri Licensed surveyor.

#### 11.6.2.2 Gonadikawatta Site, at Uduuwara:

Out of the aforementioned four sites, one Sanitary Landfill will be constructed in a land called Gonadikawatta within the jurisdiction of Uduuwera Pradeshiya Sabha. This site is expected to serve 11 Local Authorities in the Central province to dispose their Municipal Solid Waste in an environmentally sound manner.



*Proposed site view*



*Left side view of the proposed site*



*Right side view of the proposed site*

*Figure 2.2: Proposed site at Gonadikawatta*

#### 11.6.2.2.1 Land Clearance

In the case of proposed site at Uduuwera, CEA has already taken action to take over a land from the Land Reform Commission (LRC) with an extent of 25 Acres situated in Gonadikawatta, Uduuwera to develop an Integrated waste management facility including the sanitary landfill for which the technical

and financial assistance is expected to be provided through the Economic Development Cooperation Fund administrated by the Eximbank., Korea.

Arrangements are currently being made to take over an additional extent of 3 acres and negotiations are under way with the LRC.

#### **11.6.2.2.2 Environmental Impact Assessment (EIA) of Gonadikawatta**

In addition to the proposed sanitary landfill, it is also being planned to setup a compost plant at the same location to convert the organic fraction of the Municipal Solid Waste that will be brought to the site from a few selected Local Authorities in the Central Province. In view of the fact that the site earmarked falls within the projects and undertakings for which approval shall be necessary under the provisions of Gazette No. 1330/9 dated 22<sup>nd</sup> May 2008 as the project site is located within the erodible zone of Sri Lanka an Environment Impact Assessment Report is required to be prepared by the Project Proponent.

The Urban Development Authority acts as the Project Approving Agency (PAA). CEA selected Center for Environmental Studies (CES) of University of Peradeniya, for the preparation of EIA Report. According to the Terms of Reference submitted by the UDA, CES prepared a draft EIA Report and forwarded to the UDA for evaluation. A series of TEC Meetings conducted with the participation of relevant stakeholders to review the draft EIA report.

In the meantime, a meeting was held with the members of EIA Preparation team and officials from CEA to review progress of the EIA on 11<sup>th</sup> January 2013 at the University of Peradeniya.

Taking into account the comments made by the TEC, CES has prepared an amended EIA report and submitted to the UDA for evaluation. A special TEC was held on 02<sup>nd</sup> August 2013 at UDA to obtain comments and observation on the adequacy of the draft EIA report.

After finalizing all the TEC recommendations, CES prepared a final report with an addendum and submitted to the UDA with 21 copies in 03 languages for obtaining public comments on 10<sup>th</sup> September 2013. In mean time UDA has made necessary actions to publish paper advertisements on all three languages of the government newspapers and it was published on 31<sup>st</sup> October 2013 and kept open for a period of one month for public comments. After one month period, a TEC meeting was held on 23<sup>rd</sup> December 2013 at the UDA to discuss final approval of the above project.

It took a long time to agree upon the total amount of waste to be supplied to the proposed landfill at Udunuwera site by the selected 11 Local Authorities. Several meetings were held last year with the participation of High level political authority to decide amount of waste to be supplied to the proposed project at Udunuwera. However, this was finalized in a high level political meeting, which was held at the District secretariat, Kandy on 17<sup>th</sup> June 2013. Therefore, the preparation of the final EIA report took a considerable time period.

### 11.6.2.2.3 Meetings:

Several meetings were conducted with the participation of the Hon. S.B. Disanayaka, Minister of Higher Education and Hon. Anura Priyadarshana Yapa, Minister of Environment, Hon. Sarath Ekanayaka, Chief Minister of Central Province and the Heads of the respective Local Authorities to finalize the issues related including the issue arising from the Kandy Municipal Council, in 2012. This year too, following meetings were also held to discuss and finalize the quantity of waste supply to the project by each Local Authority:

- 01<sup>st</sup> April 2013- Meeting with the participation of Hon. S.B. Dissanayaka, Minister of Higher Education; Hon Abdul Carder, Deputy Minister of Environment & Renewable Energy, Hon. Sarath Ekanayaka, Chief Minister, Central Province; Provincial Council Members, Heads of Local Authorities in Kandy District, Chairman/CEA, officials from CEA and officials from other relevant Institutes.
- 17<sup>th</sup> June 2013- Meeting held at District secretariat office, Kandy with the participation of District Secretary, Kandy; Heads of Local Authorities in Kandy District, Director General, CEA; officials from CEA and officials from other relevant Institutes. At this meeting, it was finally decided to construct the Sanitary landfill at the capacity of 76 tons /day.

### 11.6.2.3 Keerikkulama site at Anuradapura

The above landfill is planned to be established adjoining the compost plant complex constructed at Keerikkulama site, Nuwaragampalatha, Anuradahpura with the financial & technical assistance of the Pilisaru Project. This landfill will be developed as a fully engineered sanitary landfill to serve Anuradhapura UC, East Nuwaragampalatha PS and possibly Central Nuwaragampalatha PS. Residual waste generated after the composting process will be directed to this landfill for final disposal.



FIGURE 2.3: PROPOSED SITE AT KEERIKKULAMA

#### 11.6.2.3.1 Land Clearance

The total site area is 10 ha and this land is located in the Nuwaragampalatha East Pradeshiya Sabha (NEPS) area. Arrangements are currently being made to take over an additional extent of 12 Acres and

negotiations are under way with the Commissioner of Local Government Anuradhapura and political leadership of the North Central Province.

#### **11.6.2.3.2 Meetings:**

A meeting was held at the office of the Local Government & Provincial Council, Anuradapura with the participation of Commissioner of Local Government, heads of relevant Local Authorities, officials from CEA and the other relevant Government organizations on 13<sup>th</sup> September 2013. The main purpose of this meeting is to obtain additional 12 acre land adjoining the proposed site. In this meeting following monitoring committee was suggested to be formed;

1. Mayor, Anuradhapura Municipal Council
2. Chairman, East Nuweragampalatha Pradeshiya Sabaha
3. Commissioner of Local Government
4. Medical Officer Health
5. Divisional Secretary, Anuradhapura
6. Officer from North Central Provincial Office, CEA
7. Public Health Inspector from Anuradhapura Municipal Council
8. Public Health Inspector from East Nuweragampalatha Pradeshiya Sabaha
9. Grama Niladari

#### **11.6.2.3.3 Environmental Clearance**

An application was submitted to the Anuradhapura Provincial office of the CEA seeking environmental recommendation for this sanitary landfill and Compost plant on 06<sup>th</sup> January 2008. Accordingly Environmental Recommendation granted by the CEA on 29<sup>th</sup> December 2008 for a construction of Compost plant and the sanitary landfill at Keerikulama, Anuradhapura.

The 1<sup>st</sup> part of the project was the construction of compost plant it was completed by the Pilisaru Project with the financial assistance from the General Treasury in 2010.

The 2<sup>nd</sup> part; the activities of the construction of sanitary landfill will be carried out with the financial and technical assistance from Korean Eximbank. On the request made by the Project, the validity of the Environmental Clearance was extended for another year.

#### **11.6.2.4 Monroviawatta site at Rajgama, Hikkaduwa**

Wastes from 7 LAs (Galle MC, Ambalabgoda UC, Hikkaduwa UC, Ambalabgoda PS, Bope-Poddala PS, Balapitiya PS, and Hikkaduwa PS) out of Galle District's 18 LAs is expected to be brought to Monroviawatta site for final disposal.

#### 11.6.2.4.1 Land Clearance

This land belongs to Land Reform Commission (LRC) and LRC provided the area of 8 ha to Pilisaru Project for establishing Composting Plant and a sanitary landfill site under the EDCF Project to serve several Local Authorities in the Galle district. Arrangements are currently being made to take over an additional extent of 5 ha and negotiations are under way with the LRC.



*Figure 2.4: Proposed site at Monroviawatta, Rajgama*

#### 11.6.2.4.2 Environmental Clearance

Environmental Recommendation for the construction of sanitary landfill site at Monroviawatta, Rajgama was granted on 31<sup>st</sup> January 2013.

### 11.6.3. Consulting Service for Detailed Designing & Signing of Loan Agreement

#### 11.6.3.1 Consultancy services for detailed designing of 4 sanitary landfills.

Calling Expressions of Interest (EOIs) for the consultancy for detailed design of the Sanitary Landfill was completed during 2012. Out of the 07 Korean Consulting companies responded for EOIs 03 companies were short listed and accordingly, the short listed Companies were approved by the Exim Bank.

Request for Proposals (RFP) for procurement was finalized by Cabinet Appointed Consultants Procurement Committee (CPCC) in consultation with External Resources Department (ERD) of the General Treasury. A Technical Evaluation Committee was appointed by the Department of Public Finance of General Treasury as recommended by the Chairman of the CPCC to assist the CPCC in developing the evaluation criteria of the RFP and to carryout evaluation of the Technical/Financial Proposals submitted by Consultancy Companies.

With the concurrence of the Korean Eximbank for the final RFP document, RFP were Called from three shortlisted companies. The Closing date for the bidders to submit their proposals was 18<sup>th</sup> September 2013.

Out of the three (03) Korean Consultancy Companies, two (02) Companies have responded for the RFP and with the agreement of the Eximbank the CPCC started the evaluation process by 4<sup>th</sup> October 2013 and completed by 18<sup>th</sup> November 2013. A total number of 04 TEC meetings and 04 CPCC meetings were held in the evaluation of the RFP.

The concurrence of Eximbank was received for the selected bidder before opening the financial proposal. With the agreement of the Eximbank the CPCC has started the evaluation of financial proposal with the assistance of the TEC and in the process of finalizing the report for negotiations (technical & Financial).

By the end of year 2013, 04 meetings of the TEC and 03 meetings of the CPCC have been held during the financial negotiation process.

### 11.6. 3.2 Signing of Loan Agreement

Signing of Agreement for the provision of a Loan in a sum of Korean Won, not exceeding the equivalent of Thirty Three Million Five Hundred and Thirty Six Thousand United States Dollars (US \$ 33,536,000) for the implementation of Construction of solid waste disposal facilities project took place on 23<sup>rd</sup> July 2013 at the Ministry of Finance and Planning. Mr. Seong-Hyeog Yim, Executive Director of the EDCF and Dr. P.B. Jayasundera, Secretary, Ministry of Finance and Planning signed the Agreement on behalf of the Export-Import Bank of Korea and the Government of Sri Lanka respectively. Subsequent to the above, the EXIM Bank of Korea notified that the loan agreement would come into effect on 19<sup>th</sup> November, 2013.



*Figure 3.1: Executive Director of the Korea Eximbank, Seong-Hyeog Yim and Secretary to the Treasury, Dr. P.B. Jayasundera at the signing of the EDCF Loan Agreement.*

### 11.6.4. Financial Progress –Year 2103

#### Summary

|                           | Allocation /Rs     | Received/Rs       | Expenditure/Rs       |
|---------------------------|--------------------|-------------------|----------------------|
| Foreign Component         | 80,000,000         | 0                 | 0                    |
| Local (Foreign Component) | 25,000,000         | 0                 | 0                    |
| Local Component           | 40,000,000         | 14,100,000        | 14,089,193.54        |
| <b>Total</b>              | <b>145,000,000</b> | <b>14,100,000</b> | <b>14,089,193.54</b> |

#### Details of the expenditure

| Expense                                    | Expenditure  | Allocation/ 2013     |
|--|--------------|----------------------|
| 2.01. Tax                                  |              | <b>25,000,000.00</b> |
| 3.01 · Transport (Rentals and related      | 1,388,731.00 | 3,600,000            |
| 3.02 · Office Equipment                    | 1,865,654.04 | 6,000,000            |
| 3.03 · Office Supplies                     | 266,952.44   | 1,000,000            |
| 3.04 · Salaries for Project Staff          |              |                      |
| 3.04 A · Overtime, travelling & spl. Allow |              |                      |
| 3.04 AA · Net Salary                       |              |                      |
| 3.04 B · P.A.Y.E Tax                       |              |                      |
| 3.04 C · E.P.F                             |              |                      |
| 3.04 D · E.T.F                             |              |                      |
| Total 3.04 · Salaries for Project Staff    | 7,989,744.38 |                      |
| 3.05 · Communication/Postage               | 207,873.67   | 100,000              |
| 3.06 · Training & Capacity Building        | 75,270.00    | 2,900,000            |

| Expense                                  | Expenditure          | Allocation/ 2013  |
|--|----------------------|-------------------|
| 3.07 · Rentals/Lease Out                 | 1,471,262.24         | 6,000,000         |
| 3.08 · Project Coordination & Management | 364,909.95           | 2,000,000         |
| 3.09 · Contingencies/Miscellaneous Exp   | 458,795.82           | 8,400,000         |
| <b>Total Expenditure</b>                 | <b>14,089,193.54</b> | <b>24,600,000</b> |

## 11.7 Environmental Protection and Conservation Project

This project was initiated as a special project in order to prepare management plans for Environmental Protection Areas and to carry out related other important activities such as boundary demarcation, erection of signs and awareness for public as well as other relevant stakeholders etc.

### 11.7.1 Preparation of Management Plans.

Three Management plans were initiated to be prepared for three Environmental Protection Areas namely, Bolgoda Lake in Western province, Hantana mountain in Kandy District and Maragala mountain in Monaragala District. Management plan for Bolgoda Lake EPA would be prepared with the technical assistance of University of Moratuwa. Management plan for Maragala Mountain EPA would be prepared with the technical assistance of IUCN. Management plan for Hanatana EPA would be prepared with the technical assistance of both NBRO and IUCN. These management plans would include guidelines for implementing permitted activities, land use and zoning plans and recommendations for the conservation of sensitive ecosystems and areas within EPA.

### 11.7.2 Boundary Demarcation in Environmental Protection Areas (EPA).

Hundred (100) Boundary posts were erected along the boundary of Thalngama Environmental Protection Area. Boundary survey was initiated in Maragala EPA to survey the revise the boundary identified by the Maragala Management Committee chaired by the District Secretary, Monaragala.



### **11.7.3 Sign Boards**

Fifteen sign boards were erected along the boundary of Bolgoda EPA.

## 12.0. Corporate Governance Report

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The Central Environmental Authority having established in 1981 under the National Environmental Act No. 47 of 1980, with recurrent (salaries) and capital expenditure provided by the Treasury by way of annual government grants to meet its regulatory services.

Total approved carder of the CEA as at 31.12.2013 was 991 and the existing staffs were 715.

### 12.1 Board of Members

The CEA Board consists of three members, appointed by His Excellency the President, in consultation with Minister of Environment.

Board meetings of CEA constitute the highest decision making mechanism. Members at the Board critically monitor operations, as the Board takes final responsibility for the affairs and performance of the Authority.

The Board meets every month and subsequently held 10 meetings guiding and directing a numbers of major issues relating to environmental management during the year under review in taking responsible for the overall management of the CEA and establishing effective systems of control as checks and balances with responsibility shared widely amongst senior managers.

### 12.2 Audit Committee Meetings

The Audit Committee is constituted in accordance with the provisions of the Public Finance Circular No. PF/PE 03 of 19.11.1999, Public Finance Circular No. PF/PE 10 of 30.10.2000 and Public Enterprises Guidelines for Good Governance of June 2003.

As per the above circulars and guidelines, Audit Committee is empowered to determine the scope of the Internal Audi Unit & consider contents of internal audit reports, examine the adequacy and effectiveness of internal control systems, review the statutory accounts and published financial statements and review performance at regular intervals.

This Committee which chaired by Dy. Director, Department of Finance as Treasury representative comprises Director General, Deputy Director General (HRD, Admin, Finance), Director (Finance), Director (Admin), Director (Planning & Monitoring) and other project Directors with a participation of Audit superintendent from Auditor General's Department and chief Internal Auditor of the Ministry of Environment.

The Audit Committees met on a regular basis once in three months. The Internal Auditor functions as Secretary and Convener to the committee submitting reports on the findings. The observations and decisions of the Audit Committee are submitted to the Board of Directors to take necessary actions.

During the financial year 2012, four Audit Committee meetings were held.

The Committee;

- Review of the accounting & internal control system.
- Examination of financial & operating information
- Review of the economy, efficiency & effectiveness of operations including non-financial control of the organization
- Review of the operational compliance with laws, regulation & Other internal requirement
- Carry out ad hoc investigations on any matters required by the management.

### **12.3 Monitoring and Evaluation of Performance of the CEA**

Annual action plan with budget prepared based on the Corporate Plan was submitted to the Board to evaluate Annual Plans and budgets in ascertaining the reliability of targets and goals and to ensure that optimum capacities could be reached and to get approval for implementation. After getting approval of the Board unit wise progress of the activities against the action plan was submitted to the Board to ensure that actual performance is in line with the plan and to get advice on wherever necessary to revise the plans.

Likewise, monthly, quarterly and annual performance reports including the Auditor General's report, cash flow statement and details on procurements of materials and statement on Human Resources including cadre positions, new recruitments were being submitted to the Board at frequent intervals so as to hold Senior Managers responsibility for their assigned functions and also to ensure transparency.

In term of proper system for coordinating and monitoring activities of the CEA, it was organized separate progress review meetings every three months under the chairmanship of the Hon. Minister, Ministry of Environment, with the agencies comes under the Ministry to ensure performance made and to discuss issues and problems with regard to the subject matters and to review development activities undertaken by the Authority.

Management Committee of the CEA was held monthly to review actual performance against targets and identify reasons for deviation, progress on capital expenditure and procurement delays, to discuss issues on subject matters to discuss all matters relating to administration and establishment. This committee was held with the Senior Management where chaired by the Chairman of the CEA.

### **12.4 Performance Appraisal**

Performance appraisal system which the CEA adopts for the evaluation of performance of all staff is solely for the purpose of approving the annual increment due to each employee at the end of duty dates. Directors in charge of separate units are required to complete a report indicating particulars of knowledge, skills, attitudes, target achievements, accuracy, public relations, honesty attendance, disciplinary action taken and other details which are required for approving the annual increment.

The core objective of applying performance appraisal systems is to improve organizational efficiency and effectiveness also with the development of its human resources.

## **12.5 Corporate Plan**

The Corporate plan incorporates strategies regarding the future direction of the Authority. It is also a reflection of the commitment by the Board of Directors and senior management in the future prospects of the organization. Further, a corporate plan is featured with the Vision, Mission Statements and objectives, the current resources available in the Authority, The organization structure, Strength and Weaknesses of the organization and the external Threats and Opportunities (SWOT), A review of the preceding three years operating results, Strategic plans for the period under review etc.

The budget includes projections of realistic revenues and expenditure both recurrent and capital, having regards to the external and internal factors that have a bearing on its operations. The form and contents synchronize with the format in which the Annual Accounts are presented.

Accordingly, in 2013 the Corporate Plan for the institution was prepared for the period of 2014 – 2018 and it is subjected to update annually to lead the CEA in covering more areas of the mandate given by the NEA effectively and efficiently. This plan amongst others incorporates a situation analysis, strategies towards activities as well as the annual action plans, resources with respect to both human and financial. The Corporate plan provides projected major projects for the period.

Annual Action Plans in 2013 were prepared based on the corporate plan considering deviations & it was approved by the Board of the CEA for implementation.

## **12.6 Annual Report**

Annual report of the CEA is prepared in such a way that could be made useful conclusions about its operations and the financial viability of the Authority. The Draft Annual Report and Accounts are submitted to the Auditor General within 60 days after the close of the financial year. The report of the Auditor General on the Accounts will be made available to the Board of Directors within 30 days thereafter for considerations. The final report including audited accounts and the Auditor Report, in all three languages, action has been taken to table in Parliament within 150 days after the close of the financial year.

## 13.0. Human Resource Development, Administration & Finance Division

### 13.1 Human Resources Development Unit

Training & Development of the staff is one of the main functions of the HRD Unit. Apart from that handling disciplinary action is also a function under this unit.

The following training opportunities both local and foreign were provided to the staff during the period of year 2013.

*(i) Local Training -*

- (1) Arranged and facilitated for 53 training programmes for CEA staff including Senior Managers, Middle Managers, SEO, DEO, Management Assistants and the staff of Library, Legal and Internal Audit Units during the year 2013.
- (2) Under such programmes, following group trainings and workshops were arranged during the year 2013.

| Name of the training Pro.   | No. of officers nominated |
|---|---------------------------|
| 1. One Day workshop on Office Management Systems and newly recruited Management Assistants  | <b>06</b>                 |
| 2. Four Day Training Prog. On Waste Water Treatment Technology for the Officers of CEA collaborate with the CSE, India.             | <b>50</b>                 |
| 3. Training Course on Aspects of Bio Diversity & Environmental Economics in Relation to EIA collaborate with the EIA Division, CEA. | <b>42</b>                 |
| 4. Workshop on Safe Scientific & Economical Driving   | <b>09</b>                 |
| 5. Four Day Residential Trag. Prog. For Newly Recruited Environmental Officers  | <b>58</b>                 |

| Name of the training Pro.   | No. of officers nominated |
|---|---------------------------|
| 6. English course for Southern Provincial Officers  | 22                        |
| 7. Seminar on Environmental Law   | 08                        |
| 8. Two Day workshop for Senior Management of CEA  | 25                        |
| 9. Four Day Training Programme on “Urban Industrial Wastewater Treatment Technologies” for the Officers of CEA collaborate with the CSE, India. | 60                        |
| 10. Training course on Solid Waste Management & Hydrological Impact Assessment collaborate with the EIA Unit, CEA.                              | 43                        |
| 11. One day workshop on EIA Information System collaborate with the EIA Unit and IT Unit, CEA.  | 70                        |
| 12. Training Program on Complaint Management System collaborate with the IT Unit, CEA. (Funded by EIA Unit)                                     | 45                        |

(3) Arranged and facilitated Diploma course on Human Resource Management for two officers.

Above group training and the individual training opportunities were provided under the Treasury Fund.

**(ii) Foreign Training -**

**104 officers** were given opportunities and 77 selected to be trained mainly on short term foreign training in the e field of Environmental Pollution Control, Hazardous Waste Management, Solid Waste Management, Air Quality Monitoring, Ambient Water Quality Monitoring, Geographical Information System, Environmental Management and Assessment and Environment Education & Awareness etc.

During 2013, 15 Nos. of preliminary inquiries carried out by the HRD Unit.

## 13.2 Human Resources Management Unit

Total approved cadre of CEA as at 01.01.2013 was 803.

Amended the designation of Environment Enforcement Officer as “Assistant Legal Officer”, the Assistant Legal Officer as “Legal Officer” and Labourer as “Office Aide” with the approval of Department of Management Services w.e.f. 19.07.2013.

The following new positions were created with approval of Department of Management Services during the period of 2013.

| Positions                    | Nos. |
|------------------------------|------|
| Driver                       | 04   |
| Environmental Officer        | 131  |
| Manager                      | 01   |
| Technical Officer            | 03   |
| Administrative Officer       | 01   |
| Management Assistant         | 01   |
| Electro Mechanical Assistant | 01   |
| Machine Operator             | 01   |
| Pump Operator                | 01   |

Accordingly, approved cadre of CEA as at 31.12.2013 was 947 and the existing cadre was 715.

Mrs. Ramani Ellepola, Director General of the CEA resigned for the post with effect from 28.02.2013 and Dr. Saranga Alahapperuma assumed duties as Director General in the CEA on 13.03.2013.

### Recruitment, Promotion, Resignation, Vocation of Post and Retirement of Year 2013 - CEA

|   | Designation    | 2013     |           |               |            |
|---|----------------|----------|-----------|---------------|------------|
|   |                | Recruit. | Promotion | Resig/VOP/Tr. | Retirement |
| 1 | Senior Manager |          |           |               |            |
|   | Director       |          | 1         |               |            |

|   | Designation                              | 2013      |           |           |          |
|---|--|-----------|-----------|-----------|----------|
| 2 | <b>Middle Manager</b>                    |           |           |           |          |
|   | Deputy Director                          |           | 4         |           |          |
|   | Assistant Director                       | 1         |           | 1         |          |
| 3 | <b>Junior Manager</b>                    |           |           |           |          |
|   | Technical Officer                        | 2         |           |           |          |
|   | Chemist                                  |           |           | 2         |          |
| 4 | <b>Enforcement / Extension/Oper.</b>     |           |           |           |          |
|   | Snr. Env'tl. Officer                     |           | 8         | 5         |          |
|   | Div. Env'tl. Officer / Env't.<br>Officer | 63        |           | 19        |          |
| 5 | <b>Management Assistant (Tech)</b>       |           |           |           |          |
|   | Laboratory Assistant                     |           |           | 1         |          |
| 6 | <b>Management Assistant (Non-Tech)</b>   | 4         | 2         | 2         | 2        |
| 7 | <b>Primary Level (Skilled)</b>           |           |           |           |          |
|   | Driver                                   | 5         |           |           |          |
| 8 | <b>Primary Level (Semi-Skilled)</b>      |           |           |           |          |
|   | Machine Operator                         | 1         |           |           |          |
|   | Pump Operator                            | 1         |           |           |          |
| 9 | <b>Primary Level (Unskilled)</b>         |           |           |           |          |
|   | Office Aide                              | 5         | 0         | 1         |          |
|   |  | <b>82</b> | <b>15</b> | <b>31</b> | <b>2</b> |

### Recruitment, Promotion, Resignation, and Termination of Year 2013

#### – “Pilisaru” National Solid Waste Management Program

|    | Designation  | 2013      |            |            |
|----|--|-----------|------------|------------|
|    |  | Recruit.  | Resig /Tr. | Retirement |
| 1. | Project Director   |           | 1          |            |
| 2. | Clerk  | 03        |            |            |
| 3. | Office Aide  | 01        |            |            |
|    | <ul style="list-style-type: none"> <li>Due to not extension of contact period of staff, all the project staff were terminated</li> </ul> |           | 26 *       |            |
|    |  | <b>04</b> | <b>27</b>  |            |

#### National Post Consumer Plastic Waste Mgmt. Project

|    | Designation       | 2013      |            |            |
|----|-------------------|-----------|------------|------------|
|    |                   | Recruit.  | Resig /Tr. | Retirement |
| 1. | Project Secretary | 01        |            |            |
| 2. | Project Assistant | 01        | 01         |            |
| 3. | Office Aide       | 01        |            |            |
|    |                   | <b>03</b> | <b>01</b>  |            |

## Construction of Solid Waste Disposal Facility Project

|    | Designation         | 2013      |            |            |
|----|---------------------|-----------|------------|------------|
|    |                     | Recruit.  | Resig /Tr. | Retirement |
| 1. | Procurement Officer |           | 01         |            |
| 2. | General Clerk       | 01        | 01         |            |
| 3. | Office Aide         | 01        |            |            |
|    |                     | <b>02</b> | <b>02</b>  |            |

### 13.3 Finance Unit

#### ACCOUNTING POLICIES

##### 13.3.1 CORPORATE INFORMATION

###### 13.3.1.1 Domicile and Legal Form

The Central Environmental Authority is a statutory body. The head office is located at No. 104, "PARISARA PIYASA" Denzil Kobbekaduwa Mawatha, Battaramulla, Sri Lanka.

###### 13.3.1.2 Principal Activities and Nature of Operations

The principal activities of the Central Environmental Authority are, to protect and enhance the quality of the environment through pollution control, natural resource management and environmental education based on our technical expertise and commitment.

###### 13.3.1.3 The Number of Employees

The number of employees at the end of the year was 715.

##### 13.3.2 BASIS OF PREPARATION

###### 13.3.2.1 Statement of Compliance.

The financial statements of Central Environmental Authority comprise the Statement of Financial Position, Statement of Financial Performance, Cash Flow Statement, Statement of Changes in Equity and notes to the financial statements. These statements are prepared in accordance with the Sri Lanka Public Sector Accounting Standards (SLPSAs) laid down by the Institute of Chartered Accountants of Sri Lanka (ICASL).

### **13.3.2.2 Basis of Measurement**

The financial Statements have been prepared on the historical cost Basis.

No adjustments have been made for inflationary factors in the financial statements

### **13.3.2.3 Functional and presentation Currency.**

These financial Statements are presented in Sri Lankan Rupees, which is the CEA's functional currency.

### **13.3.3 Significant Accounting Policies**

These accounting policies set out below have been applied consistently to all periods presented in these financial statements.

#### **13.3.3.1 Property, Plant and Equipment**

The cost of Property, plant and equipments is the cost of acquisition or construction together with any expenses incurred in bringing the asset to its working condition for its intended use. Subsequent to the initial recognition as an asset at cost, revalued assets are carried at revalued amount less any subsequent depreciation thereon. All other Property, Plant and Equipments are stated at cost less accumulated depreciation. Where an item of Property, plant and equipments comprises major components having different useful lives, they are accounted for as separate item of Property, plant and equipments.

The asset's residual values, useful lives and methods of depreciation are reviewed, and adjusted if appropriate, at each financial year end.

#### **13.3.3.2 Property, Plant and Equipment- Received as Grant**

Property, Plant and Equipment acquired under any grant are capitalized at cost.

Property, Plant and Equipment other freehold land are stated at cost less accumulated depreciation. Free hold land is stated at cost.

Depreciation is charged on all Property, Plant and Equipment other than freehold land to write off the cost over the estimated useful lives.

Depreciation has been provided for the year of purchase and in the case of disposal, no depreciation will be provided for the year of disposal.

Property, Plant and Equipment are depreciated on straight line method as mentioned below, further, that the all Property, Plant and Equipment have been accounted at cost method.

**SLPSAS 7 – Property, Plant & Equipment.**

1. Motor vehicles 25% - p.a.
2. Furniture & Office Equipment 10% - p.a.
3. Lab Equipment 10% p.a.
4. Library Books 10% p.a.
5. Building 2.5% p.a.

An item of Property, Plant and Equipment is derecognized upon disposal or when no future economic benefit is expected from its use or disposal. Any gain or loss arising on derecognition of the asset. (Calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement in the year the asset is derecognized.

Expenditure incurred on repairs or maintenance of Property, Plant and Equipment in order to restore or maintain the future economic benefit expected from originally assessed standard of performance is recognized as an expense when incurred.

**13.3.3.3 Inventories**

The inventories used during the financial year had been charged to the income & expenditure statement at cost.

Balance stock has been valued at cost, selling price or net realizable value whichever is lower.

In case of chemicals and glassware the entire purchases during the year had been treated as consumption. This method had been adopted due to the difficulty in measuring these items and also due to the comparatively low cost of usage.

**13.3.4. Short Term Investment**

Investments in money market instruments with a maturity period over three months are treated as short term investment and are stated at cost.

**13.3.5 Cash and Cash equivalents**

Cash and cash equivalents comprise cash in hand, deposit held at call with bank.

**13.3.6 Cash flow Statement**

Cash flow Statement has been prepared using the indirect method

**13.3.7 Liabilities and Provisions**

Liabilities are recognized in the balance sheet when there is a present obligation as a result of past events, the settlement of which is expected to result in an outflow of resources embodying economic

benefits. Obligations payable at the demand of the creditors or within one year of the balance sheet date are treated as current liabilities in the Balance sheet.

Provision is recognized if, as a result of a past event, the CEA has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefit will be required to settle the obligation.

### **13.3.8 Taxation**

Tax expenses reported in the financial statement and computed in accordance with the provision of the Inland Revenue Act No.10 of 2006 and its amendments thereto.

### **13.3.9 Employee Benefits**

#### **I. Define Contribution Plan.**

Obligation to define contribution plan are recognized as an expenses in the income statement as incurred. The CEA contribute 15% and 3% of gross emoluments of employees to Provident Fund and Trust Fund respectively.

#### **II. Define Benefit Plan**

Gratuity is a define benefit plan. The CEA is liable to pay gratuity in terms of the relevant statute. In order to meet this liability , a provision is carried forward in the balance sheet, equivalent to an amount calculated based on a half month's salary of the last of the financial year of all employees for each completed year of service, commencing from the first year of service.

Provision is made for retirement gratuity for all employees in respect of gratuity payable under the payment of gratuity Act No. 12 of 1983. This item is grouped under noncurrent liabilities in the balance sheet.

According to The Treasury, a fund is not necessary, as they will grant the funds when required.

### **13.3.10 Revenue Recognition**

The expenditure as well as revenue has been accounted on accrual basis. Income generated from issuing of licenses which is issued for 3 years has accounted only for 1/3 of the earned income for 2011 and adjusted for previous two years accordingly further that the income generated from the license issued for the one year has been accounted as the income for the same year irrespective of the date of receipt.

Other income is recorded on a cash basis except interest and rent income.

**13.3.11 Comparative information**

Where necessary, comparative figures have been rearranged to conform to the current year's presentation.

**13.3.12 Events occurring after balance sheet date**

All material post balance sheet events have been considered and where appropriate adjustment or disclosures have been made in respective note to the financial statement.

**13.3.13 Commitments and contingencies**

Contingencies are possible assets or obligations that arise from a past event and would be confirmed only on the occurrence or non-occurrence of uncertain future events, which are beyond the CEA's control.

**13.3.14 Accounting of Grants****i. Government Grants**

The accounting policy adopted for Government Grants including the methods of presentation are as follows.

- a. Government Grants for purchase of assets are recognized as income over the periods of useful life of the assets.
- b. Other recurrent grants received from foreign Agencies as well as expenses thereon have been incorporated in the Profit & Loss A/C 2012.
- c. Government Grants for School programmer is treated as expenditure for the year as there is no tangible assets arising out of same.

**ii. Capital Grants received from other agencies**

Same method adopted for accounting of Government Grant is also adopted for other Capital Grants received from other agencies.

**Central Environmental Authority has received following grants during the year 2013.**

**Rs.**

|                                      |             |
|--------------------------------------|-------------|
| Treasury - Recurrent                 | 327,507,000 |
| Treasury - Capital – in cash         | 36,063,120  |
| Pilisaru Project                     | 3,497,700   |
| UNDP (Motor Vehicle)                 | 3,700,000   |
| Strengthening of CEA Laboratory 2012 | 365,834     |
| Strengthening of CEA Laboratory 2013 | 13,779,821  |
| Library Information Centre           | 578,909     |

**Capital grant has been used as follows;**

**Rs.**

|  |               |
|--|---------------|
| Conducting Secondary School Level Environment Education Programs | 5,986,880     |
| Environmental Conservation Project                               | 238,808       |
| SAICM Hazardous Waste Management                                 | 542,890       |
| SAICM Environmental Pollution Control                            | 332,400       |
| EDCF Building Fund   | 1,678,738     |
| Library Books - Donation   | <b>29,495</b> |

**13.3.15 Sundry Debtors**

Mr. Sri Lal Kaldera died in 2006; action will be taken to write off the advance given to him when the Court decision is granted.

### 13.3.16 Investment

Investment in fixed deposit and short term deposit has been stated at cost. Income from such investments has been accounted on accrual basis.

### 13.3.17 Contingencies & Commitments

It may be noted that the 47 number of cases have been filed at court against the Central Environmental Authority, for which there will be no financial commitments.

Polipto Lanka (Pvt) Ltd which has been formed jointly by CEA (60%), University of Moratuwa (10%) and Mr. N.V. Ananda Vithanage (inventor – 30%) had been brought under the purview of the Ministry of Power & Energy on 04<sup>th</sup> October 2010 by an extraordinary gazette notification. The Ministry of Power & Energy informed us that they will take steps to reimburse Rs. 22,790,683.26 once the Ministry of Power & Energy received the funds from the Treasury.

| <b>CENTRAL ENVIRONMENTAL AUTHORITY</b>             |           |             |                        |                        |
|--|-----------|-------------|------------------------|------------------------|
| <b>STATEMENT OF FINANCIAL PERFORMANCE</b>          |           |             |                        |                        |
| <b>FOR THE YEAR ENDED DECEMBER 2013</b>            |           |             |                        |                        |
|  |           | <b>Note</b> | <b>2013</b>            | <b>2012</b>            |
|  |           |             | <b>Rs.</b>             | <b>Rs.</b>             |
| Operating Revenue                                  | -         |             |                        |                        |
| Recurrent Grant                                    | -Treasury |             | 327,507,000.00         | 277,671,000.00         |
|  | - Others  | 4           | 91,692,233.73          | 69,785,098.70          |
| Differed Revenue                                   |           |             | 34,928,236.33          | 39,439,503.56          |
| Other Revenue                                      |           | 4           | 167,787,119.84         | 165,094,317.59         |
| School Programme                                   | -Treasury |             | 5,986,880.07           | 3,067,070.33           |
| <b>Total Revenue</b>                               |           |             | <b>627,901,469.97</b>  | <b>555,056,990.18</b>  |
| Operating Expenses                                 | -         |             |                        |                        |
| Personnel Emoluments                               |           | 5           | 363,502,514.36         | 332,554,266.21         |
| Traveling  |           | 6           | 16,844,802.19          | 16,417,781.18          |
| Supplies & Consumable Used                         |           | 7           | 44,977,334.62          | 35,202,449.11          |
| Maintenance  |           | 8           | 20,256,931.28          | 15,321,897.38          |
| Contractual Services                               |           | 9           | 44,567,734.39          | 38,903,563.39          |
| Research & Development                             |           | 10          | 32,860,915.97          | 14,314,197.56          |
| Depreciation and Amortizations                     |           | 11          | 34,928,236.33          | 39,439,503.56          |
| Other Operating Expenses                           |           | 12          | 4,517,274.98           | 3,767,653.39           |
| Project Activities                                 |           | 13          | 93,840,198.60          | 89,569,455.04          |
| <b>Total Operating Expenses</b>                    |           |             | <b>656,295,942.72</b>  | <b>585,490,766.82</b>  |
| <b>Surplus/(Deficit) from Operating Activities</b> |           |             | <b>(28,394,472.75)</b> | <b>(30,433,776.64)</b> |

|                                      |   |  |                   |                   |
|--------------------------------------|---|--|-------------------|-------------------|
| Finance Cost                         | - |  |                   |                   |
| Bank Charges                         |   |  | 215,965.00        | 201,540.00        |
| Total Non-Operating Expenses         |   |  | <b>215,965.00</b> | <b>201,540.00</b> |
|                                      |   |  |                   |                   |
| Net Surplus/(Deficit) for the Period |   |  | (28,610,437.75)   | (30,635,316.64)   |

| <b>CENTRAL ENVIRONMENTAL AUTHORITY</b> |   |             |                       |                       |
|--|---|-------------|-----------------------|-----------------------|
| <b>STATEMENT OF FINANCIAL POSITION</b> |   |             |                       |                       |
| <b>AS AT 31 DECEMBER 2013</b>          |   |             |                       |                       |
|  |   | <b>Note</b> | <b>2013</b>           | <b>2012</b>           |
|  |   |             | <b>Rs.</b>            | <b>Rs.</b>            |
| Assets                                 | - |             |                       |                       |
| Non-Current Assets                     |   |             |                       |                       |
| Property, Plant & Equipment            |   | 14          | 317,737,473.65        | 314,917,328.53        |
| Investment                             |   | 15          | 9,960,000.00          | 9,960,000.00          |
| Goods in Transit and Work in Progress  |   | 16          | 45,047,068.54         | -                     |
|  |   |             |                       |                       |
| Current Assets                         | - |             |                       |                       |
| Inventories                            |   | 17          | 3,536,825.77          | 9,921,312.84          |
| Receivables                            |   | 18          | 78,691,443.87         | 70,498,944.06         |
| Prepayments                            |   | 19          | 7,068,217.64          | 7,594,196.74          |
| Cash & Cash Equivalent                 |   | 20          | 92,721,224.81         | 86,453,781.05         |
| Total Assets                           |   |             | <b>554,762,254.28</b> | <b>499,345,563.22</b> |
|  |   |             |                       |                       |
| Liabilities                            |   |             |                       |                       |
| Current Liabilities                    |   |             |                       |                       |
| Payable                                |   | 21          | 62,084,158.98         | 49,761,447.72         |
| Accrued Expenses                       |   | 22          | 75,953,080.59         | 39,218,143.63         |
| Differed Revenue Reserve               |   |             | 11,385,240.00         | 10,418,480.00         |
| Compost Bins Reserve                   |   |             | 7,887,530.63          | 7,879,480.63          |
|  |   |             |                       |                       |
| Non-Current Liabilities                |   |             |                       |                       |
| Recurrent Grant                        |   | 23          | 30,646,497.35         | 36,849,585.23         |
| Provision for Gratuity                 | - | 24          | 140,670,204.11        | 126,351,923.38        |
| Total Liabilities                      |   |             | <b>328,626,711.66</b> | <b>270,479,060.59</b> |
| Total Net Assets                       |   |             | <b>226,135,542.62</b> | <b>228,866,502.63</b> |

|                               |  |    |                       |                       |
|-------------------------------|--|----|-----------------------|-----------------------|
| NET ASSETS/EQUITY             |  |    |                       |                       |
| Accumulated Fund              |  |    | 73,573,242.64         | 73,573,242.64         |
| Excess B/F                    |  |    | (77,508,600.72)       | (46,873,284.08)       |
| Excess/(Deficit) for the year |  |    | (28,610,437.75)       | (30,635,316.64)       |
| Capital Grants                |  | 25 | 258,681,338.45        | 232,801,860.71        |
|                               |  |    | <b>226,135,542.62</b> | <b>228,866,502.63</b> |

| <b>CENTRAL ENVIRONMENTAL AUTHORITY</b>                    |   |      |                      |                       |
|---|---|------|----------------------|-----------------------|
| <b>CASH FLOW STATEMENT</b>                                |   |      |                      |                       |
| <b>FOR THE YEAR ENDED 31 DECEMBER 2013</b>                |   |      |                      |                       |
|   |   | Note | 2013                 | 2012                  |
| <b>Cash Flows from/(used in) Operating Activities</b>     |   |      | <b>Rs.</b>           | <b>Rs.</b>            |
| <b>Surplus/(Deficit) from Operating Activities</b>        |   |      | (28,610,437.75)      | (30,635,316.64)       |
| <b>Adjustments for:</b>                                   |   |      |                      |                       |
|   | Depreciation                                    | 11   | 34,928,236.33        | 39,439,503.56         |
|   | Amortization of Capital Grants                  |      | (34,928,236.33)      | (39,439,503.56)       |
|   | Finance Cost                                    |      | 215,965.00           | 201,540.00            |
|   | Provision for Gratuity                          | 5    | 17,415,198.35        | 18,210,201.78         |
| Operating Profit before Working Capital Changes           |   |      | (10,979,274.40)      | (12,223,574.86)       |
|   | (Increase)/ Decrease in Inventories             | 17   | 6,384,487.07         | (3,922,682.65)        |
|   | (Increase)/ Decrease in Receivable              | 18   | (8,192,499.81)       | (2,869,976.67)        |
|   | (Increase)/Decrease in Prepayments              | 19   | 525,979.10           | (3,183,892.00)        |
|   | Increase/(Decrease) in Payables                 | 21   | 12,322,711.26        | 12,653,167.05         |
|   | Increase/(Decrease) in Accrued Expenses         | 22   | 36,734,936.96        | (4,743,138.01)        |
|   | Increase/(Decrease) in Differed Revenue Reserve |      | 966,760.00           | 281,460.00            |
|   | Increase/(Decrease) in Compost Bins Reserve     |      | 8,050.00             | 77,000.00             |
|   | Recurrent Grants                                | 23   | (6,203,087.88)       | 10,327,749.20         |
| Cash Generated from Operations                            |   |      | 31,568,062.30        | (3,603,887.94)        |
|   | Finance Costs Paid                              |      | (215,965.00)         | (201,540.00)          |
|   | Gratuity Paid                                   |      | (3,096,917.62)       | (1,983,538.96)        |
| <b>Net Cash Flows from/(used in) Operating Activities</b> |   |      | <b>28,255,179.68</b> | <b>(5,788,966.90)</b> |

| CENTRAL ENVIRONMENTAL AUTHORITY                         |  |      |                        |                        |  |
|---|--|------|------------------------|------------------------|--|
| CASH FLOW STATEMENT                                     |  |      |                        |                        |  |
| FOR THE YEAR ENDED 31 DECEMBER 2013                     |  |      |                        |                        |  |
|   |  | Note | 2013                   | 2012                   |  |
| Cash Flows from/(used in) Investing Activities          |  |      |                        |                        |  |
| Acquisition of Property, Plant & Equipment              |  | 14.1 | (37,748,381.45)        | (30,029,048.04)        |  |
| Goods in Transit and Work in Progress                   |  | 16   | (45,047,068.54)        | 4,573,203.00           |  |
| Net change in adjustment to Property, Plant & Equipment |  | 14.1 | -                      | 710,240.88             |  |
| Net Cash Flows from/(used in) Investing Activities      |  |      | <b>(82,795,449.99)</b> | <b>(24,745,604.16)</b> |  |
| Cash Flows from/(used in) Financing Activities          |  |      |                        |                        |  |
| Proceeds from/(used in) Capital Grants                  |  | 25   | 60,807,714.07          | 29,693,361.17          |  |
| Net Cash Flows from/(used in) Financing Activities      |  |      | <b>60,807,714.07</b>   | <b>29,693,361.17</b>   |  |
| Net Increase/(Decrease) in Cash & Cash Equivalents      |  |      | 6,267,443.76           | (841,209.89)           |  |
| Cash & Cash Equivalents at the beginning of the Year    |  | 20   | 86,453,781.05          | 87,294,990.94          |  |
| Cash & Cash Equivalents at the end of the Year          |  | 20   | 92,721,224.81          | 86,453,781.05          |  |

| CENTRAL ENVIRONMENTAL AUTHORITY |               |                   |                |                 |
|---------------------------------|---------------|-------------------|----------------|-----------------|
| STATEMENT OF CHANGES IN EQUITY  |               |                   |                |                 |
| AS AT 31 DECEMBER 2013          |               |                   |                |                 |
|                                 | Accumulated   | Operating         | Capital        | Total Net       |
|                                 | Fund          | Surplus/(Deficit) | Grants         | Assets/Equity   |
|                                 | Rs.           | Rs.               | Rs.            | Rs.             |
| Balance as at December 31,2012  |               |                   |                |                 |
| Accumulated Fund                | 73,573,242.64 |                   |                | 73,573,242.64   |
| Excess B/F                      |               | (46,873,284.08)   |                | (46,873,284.08) |
| Excess/(Deficit) for the year   |               | (30,635,316.64)   |                | (30,635,316.64) |
| Capital Grants                  |               |                   | 232,801,860.71 | 232,801,860.71  |

| <b>CENTRAL ENVIRONMENTAL AUTHORITY</b>         |                      |                         |                       |                       |
|--|----------------------|-------------------------|-----------------------|-----------------------|
| <b>STATEMENT OF CHANGES IN EQUITY</b>          |                      |                         |                       |                       |
| <b>AS AT 31 DECEMBER 2013</b>                  |                      |                         |                       |                       |
|  | <b>Accumulated</b>   | <b>Operating</b>        | <b>Capital Grants</b> | <b>Total Net</b>      |
|  | <b>73,573,242.64</b> | <b>(77,508,600.72)</b>  | <b>232,801,860.71</b> | <b>228,866,502.63</b> |
| Changing in net assets/equity for 2013         |                      |                         |                       |                       |
| Excess/(Deficit) for the year                  |                      | (28,610,437.75)         |                       | (28,610,437.75)       |
| Proceeds from Capital Grants                   |                      |                         | 25,879,477.74         | 25,879,477.74         |
| Balance as at December 31,2013 carried forward | <b>73,573,242.64</b> | <b>(106,119,038.47)</b> | <b>258,681,338.45</b> | <b>226,135,542.62</b> |

| <b>Note 4 A</b>  | <b>2013</b>          | <b>2012</b>          |
|--|----------------------|----------------------|
| <b>Operating Revenue</b>                               | <b>Rs.</b>           | <b>Rs.</b>           |
| Other Recurrent Grants                                 |                      |                      |
| Environmental Resources Information System             | 1,966,785.18         | 845,304.41           |
| Male Declaration Project                               | 886,922.34           | 892,161.25           |
| Plastic Waste Management Project                       | 68,913,005.42        | 52,429,659.83        |
| Environmental Pioneer Programme-Ministry               | 7,526,117.19         | 8,000,000.00         |
| Water Quality Monitoring Programme                     | 10,703.84            | 149,385.38           |
| Wetland Day CBL  | 39,964.00            | 535,463.13           |
| E Waste Programme                                      | 775,279.65           | 2,331,518.00         |
| SAICM Hazardous Waste Management                       | 142,593.00           | 377,216.00           |
| SAICM Environment Pollution Control                    | 5,056,681.09         | 116,050.00           |
| Strengthening of Laboratory -2012                      | 1,093,572.95         | 1,677,976.80         |
| Strengthening of Laboratory -2013                      | 865,052.33           | -                    |
| Environment Conservation Income                        | 3,301,862.00         | -                    |
| Greening School Programme                              | 254,642.00           | -                    |
| Vehicle Emission Test Income                           | 599,052.74           | -                    |
| Perahera Income  | 10,000.00            | -                    |
| Removal of Invasive Plants                             | 250,000.00           | -                    |
| Development of Data Base for Evt. Polluting Activities | -                    | 150,659.00           |
| Pilisar Project (Caps)                                 | -                    | 2,148,854.40         |
| GIS Information Systems                                | -                    | 130,850.50           |
| <b>Total</b>   | <b>91,692,233.73</b> | <b>69,785,098.70</b> |

| <b>Note 4B</b>           | <b>2013</b> | <b>2012</b> |
|--------------------------|-------------|-------------|
| <b>Operating Revenue</b> | <b>Rs.</b>  | <b>Rs.</b>  |
|                          |             |             |

| Note 4B                                   | 2013                  | 2012                  |
|---|-----------------------|-----------------------|
|   | Rs.                   | Rs.                   |
| Operating Revenue                         |                       |                       |
| Other Revenue                             |                       |                       |
| Inspections Fees                          | 79,430,940.61         | 82,248,788.64         |
| License Fees                              | 40,971,039.00         | 36,445,893.64         |
| BOI Inspections Fees                      | 1,240,000.00          | 3,834,786.00          |
| BOI License Fees                          | 2,773,300.00          | 3,170,000.00          |
| Consultancy Fees                          | 899,542.00            | 614,660.06            |
| Air Quality & Noise Testing               | 3,077,256.21          | 2,821,623.04          |
| EIA & IEE Projects Income                 | 7,999,156.50          | 1,612,418.39          |
| Hazardous Waste Programme                 | 2,250,417.55          | 995,945.42            |
| Water Quality                             | 1,166,881.66          | 1,502,438.14          |
| Court Case Income                         | 493,750.00            | 361,835.00            |
| Digital Map                               | 194,885.90            | 493,139.02            |
| World Environmental Day                   | 14,360,447.01         | 9,490,000.00          |
| Building Rent                             | 6,439,862.24          | 4,196,400.00          |
| Auditorium Fees                           | 22,818.62             |                       |
| Interest Income                           | 2,943,862.15          | 2,522,456.10          |
| Weeravila Bungalow Fees                   | 54,010.00             | 86,630.00             |
| Non Refundable Tender Deposit             | 593,765.25            | 547,089.00            |
| Insurance Claims -CEA                     | 159,309.80            | 51,245.00             |
| Miscellaneous Income                      | 1,210,514.84          | 516,470.14            |
| Settlement of Bond- Mrs.                  | 300,000.00            | 275,000.00            |
| Vehicle Hiring Charges MALE and<br>Others | 460,000.00            | 510,000.00            |
| Awareness Programme                       | 30,000.00             | 88,000.00             |
| Implementation Basel Convention           | 340,000.00            | 120,000.00            |
| Discarded Items Auction                   | 175,360.50            | -                     |
| Settlement of Bond - Mr R.P.Mendis        | 200,000.00            | -                     |
| Go Green Tree Planting Project            | -                     | 25,000.00             |
| National Green Awards                     | -                     | 12,500,000.00         |
|   | <b>167,787,119.84</b> | <b>165,094,317.59</b> |

| Note 5                               | 2013                  | 2012                  |
|--------------------------------------|-----------------------|-----------------------|
|                                      | Rs.                   | Rs.                   |
| Personal Emoluments                  |                       |                       |
| Salaries and Wages                   | 289,632,618.70        | 264,136,652.35        |
| EPF Contribution                     | 41,931,382.50         | 36,981,844.95         |
| ETF Contribution                     | 8,150,894.75          | 7,425,791.39          |
| Overtime & Holiday Pay               | 5,980,170.47          | 5,440,657.24          |
| Provision for Gratuity               | 17,415,198.35         | 18,210,201.78         |
| Allowance to Board & Council Members | 151,536.00            | 254,418.00            |
| Entertainment Expenses               | 240,713.59            | 104,700.50            |
| <b>Total</b>                         | <b>363,502,514.36</b> | <b>332,554,266.21</b> |

| Note 6             | 2013                 | 2012                 |
|--------------------|----------------------|----------------------|
|                    | Rs.                  | Rs.                  |
| Traveling Expenses |                      |                      |
| Domestic           | 12,278,469.67        | 11,355,677.56        |
| Foreign            | 4,566,332.52         | 5,062,103.62         |
| <b>Total</b>       | <b>16,844,802.19</b> | <b>16,417,781.18</b> |

| Note 7                             | 2013                 | 2012                 |
|------------------------------------|----------------------|----------------------|
|                                    | Rs.                  | Rs.                  |
| Supplies & Consumable Items        |                      |                      |
| Stationery & Office Requisites     | 7,193,579.94         | 7,431,051.73         |
| Fuel & Lubricants                  | 30,946,940.20        | 27,110,046.28        |
| Uniforms                           | 219,683.72           | 200,665.00           |
| Printing                           | 473,455.00           | 63,414.50            |
| Newspapers                         | 394,864.00           | 313,606.00           |
| Periodicals, Fax sheet and Posters | 5,748,811.76         | 83,665.60            |
| <b>Total</b>                       | <b>44,977,334.62</b> | <b>35,202,449.11</b> |

| Note 8                         | 2013                 | 2012                 |
|--------------------------------|----------------------|----------------------|
|                                | Rs.                  | Rs.                  |
| Maintenance                    |                      |                      |
| Vehicles Repairs & Maintenance | 11,224,087.50        | 8,234,996.46         |
| Building & Structure           | 3,854,864.16         | 2,963,656.81         |
| Office & Lab Equipments        | 5,177,979.62         | 4,123,244.11         |
| <b>Total</b>                   | <b>20,256,931.28</b> | <b>15,321,897.38</b> |

| Note 9               | 2013                 | 2012                 |
|----------------------|----------------------|----------------------|
|                      | Rs.                  | Rs.                  |
| Contractual Services |                      |                      |
| Electricity          | 12,994,148.55        | 11,224,194.21        |
| Security Services    | 7,441,984.88         | 6,935,251.30         |
| Insurance            | 4,729,424.01         | 4,233,868.98         |
| Postage              | 2,116,513.06         | 2,003,169.00         |
| Telephone            | 7,109,150.37         | 6,321,151.21         |
| Building Rent        | 4,672,665.08         | 3,916,806.48         |
| Water Supply         | 1,403,485.66         | 775,272.05           |
| Nation Building Tax  | 2,898,768.78         | 2,452,947.80         |
| Audit Fees           | 700,000.00           | 700,000.00           |
| Membership Fees      | 39,424.00            | 340,902.36           |
| Book & Periodicals   | 462,170.00           | -                    |
| <b>Total</b>         | <b>44,567,734.39</b> | <b>38,903,563.39</b> |

| Note 10                              |      | 2013                 | 2012                 |
|--------------------------------------|------|----------------------|----------------------|
|                                      |      | Rs.                  | Rs.                  |
| Research & Development               |      |                      |                      |
| Envt. Education & Awareness Expenses | 10.1 | 20,632,318.33        | 3,373,191.31         |
| Envt. Pollution Control              | 10.2 | 4,371,045.29         | 4,019,512.09         |
| Envt. Management & Assessment        | 10.3 | 3,400,967.59         | 2,822,875.48         |
| Legal Expenses                       |      | 1,746,300.00         | 1,409,378.00         |
| Human Resources Development          |      | 2,652,920.55         | 2,684,708.68         |
| Cost of Compost Bin                  |      | 57,364.21            | 4,532.00             |
| <b>Total</b>                         |      | <b>32,860,915.97</b> | <b>14,314,197.56</b> |

| Note 11                       | 2013                 | 2012                 |
|-------------------------------|----------------------|----------------------|
|                               | Rs.                  | Rs.                  |
| Depreciation                  |                      |                      |
| Building                      | 8,730,217.32         | 1,035,134.38         |
| Building - Color Washing      | -                    | 2,542,104.71         |
| Motor Vehicles                | 4,417,623.96         | 8,182,874.38         |
| Nature Field Centre           | 513,202.83           | 484,713.94           |
| Furniture & Fittings          | 4,121,664.56         | 9,249,753.18         |
| Office Equipment              | 8,776,311.66         | 10,099,485.60        |
| Laboratory Equipment          | 6,491,994.90         | 6,203,190.53         |
| Library Books                 | 631,234.51           | 579,864.47           |
| Name Board & Garden<br>Chairs | 102,955.16           | 89,861.84            |
| Regional Office               | 1,143,031.43         | 972,520.53           |
| <b>Total</b>                  | <b>34,928,236.33</b> | <b>39,439,503.56</b> |

| Note 12                       | 2013                | 2012                |
|-------------------------------|---------------------|---------------------|
|                               | Rs.                 | Rs.                 |
| Other Operating Expenses      |                     |                     |
| Advertising                   | 566,000.00          | 230,244.00          |
| Miscellaneous                 | 344,785.50          | 475,942.77          |
| Welfare Expenses              | 3,262,834.68        | 2,737,728.00        |
| Deyata Kirula -2013           | 343,654.80          | -                   |
| Written off of WHT Receivable | -                   | 180,000.00          |
| Written off of GST Receivable | -                   | 143,738.62          |
| <b>Total</b>                  | <b>4,517,274.98</b> | <b>3,767,653.39</b> |

| Note 13                                    |      | 2013                 | 2012                 |
|--|------|----------------------|----------------------|
|  |      | Rs.                  | Rs.                  |
| Project Expenses                           |      |                      |                      |
| Male Declaration                           | 13.1 | 886,922.34           | 892,161.25           |
| Plastics Waste Minimization Project        | 13.2 | 68,913,005.42        | 52,429,659.83        |
| Environmental Pioneer Program-Ministry     | 13.3 | 7,526,117.19         | 7,754,669.71         |
| Environmental Information Centre           | 13.4 | 1,966,785.18         | 845,305.13           |
| E Waste Programme                          |      | 775,279.65           | 2,331,518.00         |
| National Green Awards                      |      | 694,337.61           | 12,641,795.43        |
| SAICM Hazardous Waste Management           |      | 142,593.00           | 393,266.00           |
| SAICM Environment Pollution Control        |      | 5,056,681.09         | 100,000.00           |
| Water Quality Monitoring Programme         |      | 10,703.84            | 149,385.38           |
| Wetland Day CBL                            |      | 39,964.00            | 535,463.13           |
| Strengthening of Laboratory of CEA - 2012  |      | 1,093,572.95         | 1,677,976.80         |
| Strengthening of Laboratory of CEA - 2013  |      | 865,052.33           | -                    |
| Unrecoverable Project expenses- Pilisaru   |      | 1,884,342.00         | -                    |
| Environment Conservation Project           |      | 3,301,862.00         | -                    |
| Removal of Invasive Plants                 |      | 250,000.00           | -                    |
| Perahera Expenses                          |      | 10,000.00            | -                    |
| Greening School Programme                  |      | 254,642.00           | -                    |
| Vehicle Emission Test Expenses             |      | 104,688.00           | -                    |
| Awareness Programme                        |      | 10,000.00            | -                    |
| National Events                            |      | 53,650.00            | -                    |
| Development of Data Base for EP Activities | 13.5 | -                    | 150,659.00           |
| World Environmental Day                    |      | -                    | 9,536,744.88         |
| GIS Information Systems                    |      | -                    | 130,850.50           |
| <b>Total</b>                               |      | <b>93,840,198.60</b> | <b>89,569,455.04</b> |

| Note 14                     |      | 2013                  | 2012                  |
|-----------------------------|------|-----------------------|-----------------------|
|                             |      | Rs.                   | Rs.                   |
| Property, Plant & Equipment |      |                       |                       |
| Land                        |      | 27,453,088.65         | 27,453,088.65         |
| Building                    | 14.1 | 139,368,284.31        | 146,409,017.87        |
| Motor Vehicles              | 14.1 | 11,591,920.58         | 12,309,544.54         |
| Mobile Laboratory           | 14.1 | 3.04                  | 3.04                  |
| Furniture & Fittings        | 14.1 | 14,911,427.64         | 14,135,002.80         |
| Office Equipment            | 14.1 | 51,851,505.88         | 51,793,229.50         |
| Laboratory Equipment        | 14.1 | 25,293,699.02         | 14,939,589.54         |
| Library Books               | 14.1 | 3,618,445.93          | 3,736,476.44          |
| Plant & Machinery           | 14.1 | 1.00                  | 1.00                  |
| Regional Office             | 14.1 | 39,802,394.74         | 40,197,797.20         |
| Name Board                  | 14.1 | 454,640.51            | 459,395.67            |
| Nature Field Centre         | 14.1 | 3,392,062.35          | 3,484,182.28          |
| <b>Total</b>                |      | <b>317,737,473.65</b> | <b>314,917,328.53</b> |

| Note 15                         |  | 2013                | 2012                |
|---------------------------------|--|---------------------|---------------------|
|                                 |  | Rs.                 | Rs.                 |
| Investment                      |  |                     |                     |
| Treasury Bills - Bank of Ceylon |  | 9,960,000.00        | 9,960,000.00        |
| <b>Total</b>                    |  | <b>9,960,000.00</b> | <b>9,960,000.00</b> |

| Note 16  |  | 2013                 | 2012     |
|--|--|----------------------|----------|
|  |  | Rs.                  | Rs.      |
| Goods in Transit and Work in Progress                    |  |                      |          |
| Regional Office Construction - Galle                     |  | 37,344,852.54        | -        |
| Strengthening of Laboratory of CEA 2013 - Lab Equipments |  | 1,665,216.00         | -        |
| Renovation of Randniya Sobaketha                         |  | 21,000.00            | -        |
| Development of New Web Site                              |  | 230,000.00           | -        |
| Development of Complaint Software                        |  | 300,000.00           | -        |
| Education and Awareness Program                          |  | 776,000.00           | -        |
| Research Studies - E Flow                                |  | 3,163,000.00         | -        |
| Furniture and Office Equipments                          |  | 1,547,000.00         | -        |
| <b>Total</b>   |  | <b>45,047,068.54</b> | <b>-</b> |

| Note 17                        | 2013                | 2012                |
|--------------------------------|---------------------|---------------------|
|                                | Rs.                 | Rs.                 |
| Inventories                    |                     |                     |
| Stationery & Office Requisites | 1,796,151.77        | 2,126,973.98        |
| Books & Publication            | 1,421,910.00        | 7,170,721.76        |
| Motor Spare Parts              | 299,350.00          | 570,748.00          |
| Electrical Items               | 19,414.00           | 52,869.10           |
| <b>Total</b>                   | <b>3,536,825.77</b> | <b>9,921,312.84</b> |

| Note 18  |       | 2013          | 2012          |
|--|-------|---------------|---------------|
|  |       | Rs.           | Rs.           |
| Receivable   |       |               |               |
| Miscellaneous Advances                                 | 18.1  | 268,535.50    | 357,750.00    |
| Purchase Advances                                      | 18.2  | 1,018,556.50  | 1,010,872.81  |
| Tsunami Loan   | 18.3  | -             | 20,277.95     |
| Deposits Receivables                                   | 18.4  | 1,053,036.00  | 811,695.00    |
| EIA Projects   | 18.5  | -             | 13,769.00     |
| Motorcycle Loan -Drivers                               | 18.6  | 1,832,068.20  | 2,368,069.20  |
| Plastic Waste Management Project Purchase Advance      | 18.7  | -             | 390,000.00    |
| EIA Advance  | 18.8  | 318,372.00    | 130,883.50    |
| Flood Loan Receivable                                  | 18.9  | 17,529.76     | 740,463.60    |
| Plastic Waste Cash Advance                             | 18.10 | 9,121.50      | -             |
| Distress Loan  |       | 66,656,917.65 | 47,982,524.97 |
| Festival Advances                                      |       | 810,600.00    | 793,100.00    |
| Family Medical Insurance                               |       | 1,689,660.08  | 946,993.47    |
| Special Advances                                       |       | 749,458.50    | 310,458.50    |
| VAT Receivable   |       | 2,505,248.96  | 2,471,655.82  |
| Rent receivable -Plastic & Pilisaru Project            |       | 550,800.00    | 1,127,894.25  |
| Cash Imprest   |       | 60,000.00     | 90,000.00     |
| Male Project (Fuel Cost) Receivable                    |       | 460,000.00    | 510,000.00    |
| Vehicle Emission Test Programe Receivable              |       | 557,202.74    | -             |
| Plastic Project Expenses Receivable                    |       | 104,923.48    | -             |
| Salary Advance   |       | 27,400.00     | -             |
| Motorcycle Insurance (DO)                              |       | -             | 242,122.02    |
| Pilisaru Project - National Camp, Randenigala Expenses |       | -             | 509,342.00    |
| Pilisaru Project - Green Awards Expenses               |       | -             | 4,375,000.00  |

| Note 18                                  | 2013                 | 2012                 |
|--|----------------------|----------------------|
|  | Rs.                  | Rs.                  |
| Receivable                               |                      |                      |
| Plastic Project - Green Awards Expenses  | -                    | 4,000,000.00         |
| Holcim Lanka Ltd - Green Awards Expenses | -                    | 750,000.00           |
| Pilisaruru & EDCF Projects - Salaries    | -                    | 544,059.97           |
| <b>Total</b>                             | <b>78,691,443.87</b> | <b>70,498,944.06</b> |

| Note 19                                  |      | 2013                | 2012                |
|--|------|---------------------|---------------------|
|  |      | Rs.                 | Rs.                 |
| Prepayments                              |      |                     |                     |
| Payments in Advance                      | 19.1 | 6,068,217.64        | 6,594,196.74        |
| Plastic Waste Management Advance Imprest |      | 1,000,000.00        | 1,000,000.00        |
| <b>Total</b>                             |      | <b>7,068,217.64</b> | <b>7,594,196.74</b> |

| Note 20  |  | 2013                 | 2012                 |
|--|--|----------------------|----------------------|
|  |  | Rs.                  | Rs.                  |
| Cash & Cash Equivalents                          |  |                      |                      |
| Bank of Ceylon, Pelawatte - Main A/C 0-002937303 |  | 76,349,113.37        | 71,290,982.46        |
| Bank of Ceylon, Pelawatte - MALE - 0002972309    |  | 2,733,460.25         | 3,229,185.59         |
| Bank of Ceylon, Pelawatte - DEO - 2937330        |  | 990,920.14           | (310,288.54)         |
| Bank of Ceylon, Corporate Branch, 1608           |  | 10,186,170.55        | 11,196,914.61        |
| Bank of Ceylon, Pelawatte, Polycass 2937361      |  | 2,461,560.50         | 1,046,986.93         |
| <b>Total</b>                                     |  | <b>92,721,224.81</b> | <b>86,453,781.05</b> |

| Note 21                                      |      | 2013          | 2012          |
|--|------|---------------|---------------|
|  |      | Rs.           | Rs.           |
| Payable                                      |      |               |               |
| Deposit Payable                              | 21.1 | 53,000.00     | 53,000.00     |
| EIA Projects                                 | 21.2 | 54,553,751.74 | 44,225,514.71 |
| MHP Projects                                 | 21.3 | -             | 86,518.00     |
| Refundable Tender Deposit                    |      | 1,655,760.53  | 1,379,979.80  |
| Medical Insurance Claims                     |      | 285,835.88    | 291,409.49    |
| Upper Kothmale Water Quality                 |      | 728,146.75    | 728,146.75    |
| Stamp Duty Payable                           |      | 1,590,869.00  | 1,298,922.16  |
| Interest Received in Advance (Fixed Deposit) |      | 504,784.51    | 597,000.08    |
| Retention Fee                                |      | 690,299.12    | 565,643.62    |
| Recovery - Camera                            |      | 60,000.00     | 56,000.00     |

| Note 21                               | 2013                 | 2012                 |
|---------------------------------------|----------------------|----------------------|
|                                       | Rs.                  | Rs.                  |
| Motor Cycle Insurance                 | 69,851.00            | 69,851.00            |
| Implementation Basel Convention       | 224,365.45           | 174,365.45           |
| Solid Waste Management Allowance (DO) | 3,000.00             | 3,000.00             |
| UN Environmental Trust Fund           | 1,664,495.00         | -                    |
| National Camp                         | -                    | 8,000.00             |
| Chairman's Fund                       | -                    | 8,218.66             |
| Land Fill Construction at Mawanella   | -                    | 156,584.00           |
| <b>Total</b>                          | <b>62,084,158.98</b> | <b>49,529,351.06</b> |

| Note 22                                   | 2013          | 2012          |
|---|---------------|---------------|
|   | Rs.           | Rs.           |
| Accrued Expenses                          |               |               |
| Salaries and Wages                        | 20,696,619.00 | 13,741,619.23 |
| Employee Provident Fund                   | 3,517,327.26  | 3,106,801.26  |
| Employee Trust Fund                       | 703,465.47    | 618,420.43    |
| Over time                                 | 534,133.46    | 431,601.50    |
| Gratuity Allowance                        | 16,358.94     | 221,137.50    |
| Local Traveling                           | 928,656.30    | 1,238,718.45  |
| Foreign Travelling                        | 20,260.00     | 1,000.00      |
| Repairs & Maintenance of Building         | 324,478.76    | 260,741.72    |
| Repairs & Maintenance of Office Equipment | 140,930.50    | 166,004.18    |
| Repairs of Motor Vehicles                 | 537,718.00    | 555,670.10    |
| Security Charges                          | 1,603,292.60  | 1,441,273.87  |
| Electricity Charges                       | 944,914.64    | 742,060.50    |
| Fuel and Lubricant                        | 2,081,724.50  | 1,105,156.71  |
| Stationery                                | 64,060.27     | 235,412.50    |
| Telephone Charges                         | 568,658.74    | 610,461.47    |
| Newspapers                                | 64,100.00     | 24,220.00     |
| Water supply                              | 50,758.94     | 22,855.91     |
| Legal Expenses                            | 175,960.00    | 698,763.00    |
| VAT (VAT to Accrued Expenses)             | 68,254.96     | 134,538.00    |
| Ambient Air Quality Monitoring            | 705,239.05    | 428,458.00    |
| Audit Fees                                | 1,543,480.00  | 1,488,480.00  |
| Office Building Rent                      | 261,471.00    | 312,500.00    |
| Plastic Expenses                          | 2,561,335.88  | 1,443,211.91  |
| Nation Building Tax                       | 268,479.92    | 888,543.52    |
| Distress Loans- Stamp Duty                | 725.00        | 500.00        |
| NRM Division                              | 80,050.00     | 209,157.60    |
| Planning and Operational Unit             | 236,908.50    | 300,000.00    |
| EPC Division (Laboratory)                 | 1,679,403.54  | 1,400,000.00  |

| Note 22                                      | 2013<br>Rs.          | 2012<br>Rs.          |
|--|----------------------|----------------------|
| Miscellaneous Expenses                       | 3,505.00             | 5,155.00             |
| Pollution Control Division                   | 391,446.00           | 372,320.00           |
| Local Training                               | 376,000.27           | 341,492.50           |
| Advertising                                  | 11,220.00            | 108,375.00           |
| Printing                                     | 237,775.00           | 63,414.50            |
| Periodicals                                  | 454,670.00           | -                    |
| Office Equipments                            | 5,070,278.89         | -                    |
| Office Furniture                             | 1,049,700.00         | -                    |
| Lab Equipment                                | 3,890,734.40         | -                    |
| Removal of Invasive Plants                   | 25,000.00            | -                    |
| School Programme -Treasury                   | 526,561.92           | -                    |
| SAICM Environment Pollution Control          | 431,900.00           | -                    |
| WIP Capital Assets                           | 22,500,000.00        | -                    |
| Strengthening of Laboratory -2013            | 603,510.88           | -                    |
| Welfare Expenses                             | -                    | 75,792.00            |
| Postage                                      | -                    | 28,388.00            |
| Motor Cycle Loan                             | -                    | 100.00               |
| Allowance to Council Members                 | -                    | 600.00               |
| Allowance to Board Members                   | -                    | 1,200.00             |
| Library Books                                | -                    | 325.00               |
| Strengthening of CEA Laboratory              | -                    | 759,665.64           |
| Strengthening of National Information Centre | -                    | 159,945.80           |
| Hazardous Waste Management Division          | -                    | 800.00               |
| Green Awards                                 | -                    | 5,471,250.83         |
| <b>Total</b>                                 | <b>75,953,080.59</b> | <b>39,218,143.63</b> |

| Note 23  | 2013<br>Rs.   | 2012<br>Rs.   |
|--|---------------|---------------|
| Recurrent Grants                                       |               |               |
| Male Declaration                                       | 3,881,838.79  | 4,377,564.13  |
| Plastic Waste Grant                                    | 14,890,713.17 | 14,879,218.59 |
| GIS Project  | 67,009.13     | 67,009.13     |
| Development of Data Base for Evt. Polluting Activities | 110,732.07    | 110,732.07    |
| Large Scale Water Quality Grants                       | 659,936.65    | 659,936.65    |
| KITA Grant   | 105,822.02    | 105,822.02    |
| Water Quality Monitoring Programme                     | 265,210.82    | 275,914.66    |
| Community Based Water Quality Mgt. Programme           | 526,109.00    | 526,109.00    |
| Water Quality Three Main Water Boundaries              | 290,619.84    | 290,619.84    |
| E Waste Grant  | 1,652,883.33  | 2,428,162.98  |
| Wetland Day CBL  | 213,360.87    | 253,324.87    |

| Note 23                                      | 2013                 | 2012                 |
|--|----------------------|----------------------|
|  | Rs.                  | Rs.                  |
| Strengthening of CEA Laboratory - 2013       | 2,211,202.28         | 2,322,023.20         |
| Strengthening of National Information Centre | 94,189.41            | 108,571.59           |
| SAICM Hazardous Waste Management             | 1,916,517.00         | 7,842,576.50         |
| SAICM Environment Pollution Control          | 2,453,495.41         | 2,602,000.00         |
| Greening School                              | 170,358.00           | -                    |
| Strengthening of Lab of CEA - 2012           | 862,616.75           | -                    |
| School Pioneer Program                       | 273,882.81           | -                    |
| <b>Total</b>                                 | <b>30,646,497.35</b> | <b>36,849,585.23</b> |

| Note 24                | 2013                  | 2012                  |
|------------------------|-----------------------|-----------------------|
|                        | Rs.                   | Rs.                   |
| Provision for Gratuity | 140,670,204.11        | 126,351,923.38        |
| -                      |                       |                       |
| <b>Total</b>           | <b>140,670,204.11</b> | <b>126,351,923.38</b> |

| Note 25                                      | 2013           | 2012           |
|--|----------------|----------------|
|  | Rs.            | Rs.            |
| Capital Grant                                |                |                |
| UNITAR Capital Grant                         | 63,061.80      | 126,124.80     |
| FRMP Capital Grant                           | 107,872.00     | 213,707.00     |
| Dutch Capital Grant                          | 8,712,355.86   | 11,064,734.86  |
| EAIP Grant                                   | 5,408,036.65   | 5,613,104.65   |
| Capital Grant - Treasury Fund                | 60,677,399.74  | 44,510,533.98  |
| Asian Development Bank                       | -              | 340,977.00     |
| UNDP   | 3,828,130.00   | 441,360.00     |
| WHO  | -              | 115,335.00     |
| APPELL Project                               | 23,271.00      | 31,028.00      |
| World Bank                                   | -              | 127.00         |
| Grant of Library Books                       | 206,752.46     | 305,078.21     |
| International Development Association        | 122,566,740.77 | 128,381,434.67 |
| IRMP   | 1,288,713.21   | 1,288,713.21   |
| UNEP   | 2,800.00       | 151,597.20     |
| Ceylon Tobacco Company                       | -              | 5,097.20       |
| Grant of Motor Vehicle                       | 5,586,458.33   | 8,650,000.00   |
| UNEP Capital Grant                           | 2,800.00       | 4,200.00       |
| E-Waste Capital Grant                        | 37,618.60      | 47,222.90      |
| Plastic Waste Management Capital Grant       | 3,466,286.11   | 4,484,048.41   |
| GIS Capital Grant                            | 679,782.22     | 799,658.54     |
| Household Waste Minimizing Project - Gampaha | 188,991.60     | 236,239.40     |

| Note 25  | 2013                  | 2012                  |
|--|-----------------------|-----------------------|
|  | Rs.                   | Rs.                   |
| Post Tsunami Capital Grant                             | 85,160.00             | 106,450.00            |
| Nature Field Centre Grant                              | 412,500.00            | 425,000.00            |
| Mezzanine Floor  | 21,875,000.00         | 22,500,000.00         |
| Development of Data Base for Evt. Polluting Activities | 988,529.76            | 1,153,284.68          |
| South Asia Program                                     | 63,000.00             | 73,500.00             |
| Safe Disposal Mobile                                   | 272,720.00            | 342,400.00            |
| John Keels Foundation                                  | 94,560.00             | 106,380.00            |
| Library Information Centre                             | 1,415,808.20          | 1,046,124.00          |
| Pioneer Program - Ministry Found                       | 190,800.00            | 238,400.00            |
| Strengthening of CEA Laboratory - 2012                 | 365,833.50            | -                     |
| Strengthening of CEA Laboratory - 2013                 | 13,779,820.88         | -                     |
| Environmental Conservation Project                     | 238,808.00            | -                     |
| SAICM Hazardous Waste Management                       | 542,890.00            | -                     |
| SAICM Environment Pollution Control                    | 332,400.00            | -                     |
| Pilisaru Project - Lab Equipments                      | 3,497,700.00          | -                     |
| EDCF Building Fund                                     | 1,678,737.76          | -                     |
| <b>Total</b>   | <b>258,681,338.45</b> | <b>232,801,860.71</b> |

| Note 10.1                                       |  | 2013          | 2012       |
|---|--|---------------|------------|
|   |  | Rs.           | Rs.        |
| <b>Envt. Education &amp; Awareness Expenses</b> |  |               |            |
| <b>307</b>                                      | Printing & Distribution of Quarterly News Letters    | 257,656.25    | 306,120.98 |
| <b>317.3.6.3</b>                                | Conduct Awareness Progremme                          | 50,718.00     | -          |
| <b>317.3.10.3</b>                               | Environmental Poem ,Short Stories Scrip Writing Comp | 170,591.82    | -          |
| <b>317.3.10.6</b>                               | Establish Green Park in North & East                 | 18,916.98     | -          |
| <b>317.3.2.2</b>                                | Training   | 58,572.00     | -          |
| <b>317.3.10.5</b>                               | Home Gardening Competition                           | 269,183.00    | -          |
| <b>317.3.4.4</b>                                | CDs Production of Environment Song                   | 1,106,813.46  | -          |
| <b>317.3.10.2</b>                               | Provincial Level Media Training                      | 319,208.18    | -          |
| <b>317.3.10.2</b>                               | Vesak Lantern Exhibiting                             | 294,800.00    | -          |
| <b>317.3.6.2</b>                                | Conduct Education & Awareness Programmes             | 182,371.00    | -          |
| <b>317.3.10.1</b>                               | World Environmental Day                              | 12,439,406.46 | -          |
| <b>317.3.5.1</b>                                | Organize Promotional Exhibitions                     | 848,610.01    | -          |
| <b>317.3.4.5</b>                                | Environment Cartoon Competition                      | 600,000.00    | -          |
| <b>317.3.4.6</b>                                | Virindu Competition                                  | 500,000.00    | -          |
| <b>317.3.4.3</b>                                | Regular Radio Program                                | 920,533.56    | -          |
| <b>317.3.4.2</b>                                | TV Film Program                                      | 95,103.50     | -          |

| Note 10.1 |   | 2013                 | 2012                |
|-----------|---|----------------------|---------------------|
|           |   | Rs.                  | Rs.                 |
| 317.3.4.1 | Arrange Press Conference                              | 63,255.00            | -                   |
| 317.3.3   | Formation of Eco Clubs                                | 268,488.00           | -                   |
| 317.2.2.2 | Programme For Housewives                              | 157,622.00           | -                   |
| 317.3.2.1 | Pro. Govt - Non Govt Organization                     | 194,468.24           | -                   |
| 317.3.1.1 | Education Material                                    | 949,098.65           | -                   |
| 317.3.6.1 | Implement Nature Field Centers                        | 866,902.22           | -                   |
| 317/31121 | World Environmental Day                               | -                    | 181,425.00          |
| 317/3111  | Preparation of Educational Materials                  | -                    | 135,568.86          |
| 317/3121  | Program for Government & Non-Government Organizations | -                    | 159,023.00          |
| 317/3122  | Program for House Wives                               | -                    | 310,617.00          |
| 317/313   | Formation of Eco Clubs                                | -                    | 405,638.70          |
| 317/3141  | Organize Promotional Exhibitions                      | -                    | 35,564.00           |
| 317/3151  | Implement Nature Field Centers                        | -                    | 400,218.01          |
| 317/3152  | Conduct Education & Awareness Programmes              | -                    | 203,940.00          |
| 317/3153  | Conduct Awareness Programmes on Current Issues        | -                    | 103,522.00          |
| 317/3212  | TV Film Program                                       | -                    | 631,663.76          |
| 317/3213  | Regular Radio Program                                 | -                    | 422,360.00          |
| 317/3216  | Virindu Competition                                   | -                    | 77,530.00           |
|           | <b>Total</b>  | <b>20,632,318.33</b> | <b>3,373,191.31</b> |

| Note 10.2                                | 2013                | 2012                |
|--|---------------------|---------------------|
|  | Rs.                 | Rs.                 |
| Environmental Pollution Control Expenses |                     |                     |
| Hazardous Waste Unit                     | 94,235.00           | 167,162.50          |
| Pollution Control Unit                   | 1,558,612.96        | 1,562,499.46        |
| Purchase of Lab Chemicals & Glass ware   | 1,718,197.33        | 1,711,285.71        |
| Ambient Air Quality Monitoring           | 1,000,000.00        | 578,564.42          |
| <b>Total</b>                             | <b>4,371,045.29</b> | <b>4,019,512.09</b> |

| Note 10.3                                | 2013                | 2012                |
|--|---------------------|---------------------|
|  | Rs.                 | Rs.                 |
| Environment Management & Assessment Unit |                     |                     |
| Natural Resources Management Unit        | 1,304,967.59        | 2,106,362.91        |
| Environmental Impact and Assessment Unit | 671,974.00          | 149,233.10          |
| Research and Special Project Unit        | 725,861.00          | 457,893.47          |
| Planning Unit                            | 698,165.00          | 109,386.00          |
| <b>Total</b>                             | <b>3,400,967.59</b> | <b>2,822,875.48</b> |

| Note 13.1                           | 2013              | 2012              |
|-------------------------------------|-------------------|-------------------|
|                                     | Rs.               | Rs.               |
| Male Declaration Programme          |                   |                   |
| Foreign Traveling                   | 116,376.97        | 41,287.50         |
| Overtime Days Payment & Subsistence | 236,545.37        | 271,926.05        |
| Miscellaneous Expenses              | 24,000.00         | 1,500.00          |
| Fuel Charges                        | 510,000.00        | 9,306.00          |
| Ararat University                   | -                 | 264,000.00        |
| Work Shop                           | -                 | 304,141.70        |
| <b>Total</b>                        | <b>886,922.34</b> | <b>892,161.25</b> |

| Note 13.2   | 2013                 | 2012                 |
|---|----------------------|----------------------|
|   | Rs.                  | Rs.                  |
| <b>National Post Consumer Plastic Waste Management Project</b>            |                      |                      |
| Develop. of Plastics Waste Collection System through the interest parties | 19,793,669.86        | 10,972,006.18        |
| Operations Activities   | 11,325,936.54        | 10,599,209.77        |
| Training Awareness & Promotion  | 8,128,005.26         | -                    |
| Agreed Payment Commitment   | 28,957,800.00        | -                    |
| Staff Development   | 707,593.76           | -                    |
| Research and Development Programmes                                       | -                    | 7,500.00             |
| Promotional Campaign  | -                    | 30,850,943.88        |
| <b>Total</b>  | <b>68,913,005.42</b> | <b>52,429,659.83</b> |

| Note 13.3  | 2013         | 2012       |
|--|--------------|------------|
|  | Rs.          | Rs.        |
| <b>Environmental Pioneer Programme -Ministry</b> |              |            |
| <b>319.1</b> Promote Environmental Education     | 621,618.00   | -          |
| <b>319.2</b> Strengthen Environment Pioneer Pro  | 289,305.50   | -          |
| <b>319.3</b> Develop SOBA                        | 2,520.00     | -          |
| <b>319.5</b> Meeting with EPP Commissioners      | 114,059.00   | -          |
| <b>319.13</b> Events Covering AVU                | 49,695.00    | -          |
| <b>319.14</b> Environmental Project              | 20,000.00    | -          |
| <b>319.15</b> Decision with EPP Education        | 91,132.64    | -          |
| <b>319.6</b> EPP 25 Anniversary                  | 1,582,666.64 | -          |
| <b>319.7</b> Swasara Thaksalawa                  | 335,448.00   | -          |
| <b>319.8</b> Programme of EPP Materials          | 3,336,326.41 | -          |
| <b>319.9</b> Environmental Pioneer News Letter   | 358,512.00   | -          |
| <b>319.10</b> Printing of Information Materials  | 150,600.00   | 73,853.00  |
| <b>319.11</b> Events Covering                    | 574,234.00   | 104,323.00 |

| Note 13.3    |   | 2013                | 2012                |
|--------------|---|---------------------|---------------------|
|              |   | Rs.                 | Rs.                 |
| <b>319.1</b> | Training Program for Teachers                                 | -                   | 951,648.30          |
| <b>319.2</b> | Leadership Training Program for Selected School Children      | -                   | 417,613.40          |
| <b>319.3</b> | Implementation of Eco Project at School Level                 | -                   | 245,646.00          |
| <b>319.4</b> | Production of EPP Materials                                   | -                   | 1,978,071.30        |
| <b>319.5</b> | District Environmental Pioneer News Letters                   | -                   | 220,000.00          |
| <b>319.6</b> | Conduct National Environmental Camp                           | -                   | 3,182,717.71        |
| <b>319.8</b> | National Tree Planting Program                                | -                   | 437,252.00          |
| <b>319.9</b> | Workshops to Develop Education Activities at Pre School Level | -                   | 143,545.00          |
|              | <b>Total</b>  | <b>7,526,117.19</b> | <b>7,754,669.71</b> |

|   |   | Rs.                 | Rs.               |
|---|---|---------------------|-------------------|
| <b>Environmental Information Centre</b> |   |                     |                   |
| <b>320.1</b>                            | Establish & Organizing School Library               | 1,052,709.00        | 845,305.13        |
| <b>320.2</b>                            | Periodicals   | 67,850.18           | -                 |
| <b>320.4</b>                            | Staff Training on Library New Technology            | 723,746.00          | -                 |
| <b>320.5</b>                            | Administration, Management & Miscellaneous Expenses | 122,480.00          | -                 |
|   | <b>Total</b>  | <b>1,966,785.18</b> | <b>845,305.13</b> |

| Note 13.5  |  | 2013     | 2012              |
|--|--|----------|-------------------|
|  |  | Rs.      | Rs.               |
| Development of Data Base for Evt. Polluting Activities |  |          |                   |
| Data Collection and Entering Data Clearing             |  | -        | 45,715.00         |
| Presentation of output                                 |  | -        | 104,944.00        |
| <b>Total</b>   |  | <b>-</b> | <b>150,659.00</b> |

## 14.0. Report of the Auditor General on the Financial Statements



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கணக்காய்வாளர் தலைமை அறிப்பி திணைக்களம்  
**AUDITOR GENERAL'S DEPARTMENT**



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எனது இல.  
My No.

TM2/L/CEA/1/  
13/27

ඔබේ අංකය  
உமது இல.  
Your No.

දිනය  
திகதி  
Date

31 October 2014

The Chairman  
Central Environmental Authority

**Report of the Auditor General on the financial Statements of the Central Environmental Authority for the year ended 31 December 2013 in terms of Section 14(2)(c) of the Finance Act, No. 38 of 1971**

The audit of financial Statements of the Central Environmental Authority for the year ended 31 December 2013 comprising the Statement of Financial Position as at 31 December and the Statement of Financial Performance, Statement of Changes in Equity and Cash Flow Statement for the year then ended and a summary of significant accounting policies and other explanatory information, was carried out under my direction in pursuance of provision in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No.38 of 1971 and Section 6(3) of the National Environment Act, No.47 of 1980. My comments and observations which I consider should be published with the Annual Report of the Authority in terms of Section 14(2)(c) of the Finance Act appear in this report. A detailed report in terms of Section 13(7)(a) of the Finance Act was issued to the Chairman of the Authority on 26 May 2014.

### 1.2 Managements responsibility for the financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Sri Lanka Public Sector Accounting Standards and for such internal control as the management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

### 1.3 Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Sri Lanka Auditing Standards, consistent with International Standards of Supreme Audit Institutions (ISSAI – 1000 – 1810). Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements.



An audit involves performance procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of risks of material misstatements of the financial statements whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management as well as evaluating the overall presentation of financial statements. Sub sections (3) and (4) of the Section 13 of the Finance Act, No. 38 of 1971 give discretionary any powers to the Auditor General to determine the scope and extent of the Audit.

I believe that audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

#### **Basis for Qualified Opinion**

My opinion is qualified based on the matter in paragraph 2.2 of this report.

#### **Financial Statements**

##### **Qualified Opinion**

In my opinion, except for the effects of the matters described in paragraph 2.2 of this report, the financial statements give a true and fair view of the financial position of the Central Environment Authority as at 31 December 2013 and its financial performance and cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

#### **Comments of Financial Statements**

##### **I Sri Lanka Public Sector Accounting Standards**

An outside entity and an individual had filed cases against the Authority and claimed compensation of Rs.460 million together with Rs.10,000 per day from the date of filing the case respectively on the ground of suspension of a Project on breach of conditions stipulated in the Environmental Evaluation Report and construction of an Information Center (Sobaketha) in a land which was not legally vested. However, the nature of the contingent liability which may arise from those cases had not been disclosed in the financial statements according to the Sri Lanka Public Sector Accounting Standard No.08.



### 2.2.2 Accounting Deficiencies

The following observations are made.

- (a) Out of the grants received from United Nations Environment Fund to implement a project for updating National Chemical Material Profile, a sum of Rs.1,664,495 had been saved and shown as payables instead of treated as grants received.
- (b) Although the expenditure incurred to develop of a new website amounted Rs.115,000, it had been brought to accounts as Rs.230,000 and as a result expenditure for the year and payables at the year end had been overstated by Rs.115,000.
- (c) Assets such as laboratory equipment, computer software, furniture and office equipment etc valued at Rs.3,512,216 had been erroneously disclosed as goods-in transit and work-in progress under non-current assets and related liabilities as payables under current liabilities without being identified the transactions specifically.
- (d) A sum of Rs.3,939,000 to be incurred on the educational programs and research and education expenses had been shown under the work in progress and accrued expenses. Nevertheless, the Authority was not bound to pay for those programs and as such assets and liabilities of the Authority as at 31 December of the year under review had been overstated in the financial Statements.

### 2.3 Non-Compliance with Laws, Rules, Regulations and Management Decisions

The following non-compliances with laws, rules and regulations were observed.

| <u>Reference to Laws, Rules, Regulations</u>   | <u>Non Compliance</u>   |
|--|---|
| (a) Section 12.2.6 of Chapter VII of the Establishments Code of the Democratic Socialist Republic of Sri Lanka | Seven officers had been appointed for acting posts without the approval of the Secretary to the Ministry,   |
| (b) Financial Regulation 757(c) of the Democratic Socialist Republic of Sri Lanka                              | Board of Survey reports in respect of laboratory equipment valued at Rs.125,571,509 had not made available. |



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|--|---|
| (c) Public Enterprises Circular No. 95 of 14 June 1994 | Contrary to circular instructions transport allowances amounting to Rs.1,455,000 had been paid to 22 Deputy Directors of the Authority while Rs.107,000 had been paid to two officers as official residence allowances.   |
| (d) Gazette Notification No.1466/5 of 10 October 2006. | Even though the manufacturing of polythene product with 20 micron or less than that for local use, sale or use of such polythene product had been prohibited, action had not been taken to examine the progress of the implementation of such an order by the Authority.  |
| (e) Management Services Circular No.39 of 26 May 2009. | Although the concurrence of the Department of Management Services should be obtained for the payment of additional allowances, contrary to that 3 increments had been granted to the officers who possessed post-graduate qualifications. The amount so paid to 22 officers during the year under review was Rs.20,445. |

### 3. Financial Review

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#### 3.1 Financial Results

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According to the financial statements presented, the operation of the Authority for the year under review had resulted in a deficit of Rs.28.6 million as compared with the deficit of Rs.30.6 million for the preceding year. Accordingly, a decrease of deficit by Rs.2 million was shown as compared with the preceding year. Although the grants from General Treasury and other operating income had increased by Rs.77.4 million, with the increase of operating expenses by Rs.77.9 million and decrease of deferred revenue income by Rs.4.5 million was the reason therefor.



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### 3.2 Legal Cases initiated by the Authority

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The Authority had filed 110 legal cases in the Courts at the end of the year under review against the outside entities and individuals in respect of environment pollution and environment licenses not obtained.

## 4. Operating Review

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### 4.1 Performance

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The following observations are made.

#### (a) Complaints on Environmental Matters

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- (i) According to the procedure adopted by the Authority regarding complaints, necessary action should be taken in respect of environmental complaints within 14 days. However, required action in respect of 03 environmental complaints made to the District office, Matara in March 2013 had not been taken by the Complaints Division at the Head Office even by the end of May 2013.
- (ii) A data base in respect of environmental complaints had not been maintained and the progress of the action taken with regard to complaints had not been reviewed.

#### (b) Issue of Environment Protection Licenses

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- (i) According to the Condition No.22 on issue of the Environment Protection Licenses, it was informed that waste water analysis reports should be submitted once in a 3 months during the validity period of the Licenses but the Authority had not taken action to do this.
- (ii) In terms of Section 23(a) of the National Environment Act, No. 47 of 1980 and the Gazette Notification No. 1533/16 dated 25 January 2008, the Environment Protection Licenses should be obtained for industries as well. Nevertheless, Licenses for 201 factories belonging to Board of Investment and 5298 factories not belonging to Board of Investment respectively had not been obtained.



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 Auditor General's Department

- (iii) According to the Extra Ordinary Gazette Notification No. 1534/08 dated 01 February 2008, a Waste Water Emission or Disposal License should be obtained before obtaining an Environment Protection License. Nevertheless, on issuing of Environment Protection Licenses for industries under Board of Investment, it was not investigated whether the above License had been obtained. According to a sample check, it was observed that Environment Protection Licenses had been issued to 15 industries by which Licenses for Waste Water Emission or Disposal had not been obtained. It was further observed that, this deficiency had directly contributed to worsen the environmental problems.
- (iv) A methodology in order to identify and solve environmental complaints received by the Authority against the industries by which Licenses obtained had not been introduced. It was further observed in the audit examination that concurrence of environmental matters had been granted without being examined the complaints made against such industries.

#### 4.2 Operation of a Management Information System

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The Authority had not introduced a Disaster Rebate Plan for the computerized management system maintained by the Authority.

#### 4.3 Operating Inefficiencies

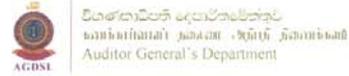
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Even though the Environmental Officers under three levels namely Senior Environmental Officers, Regional Environmental Offices and Environmental Officers attached to Regional Officers and District Secretariats are engaged in duties, delegation of duties by identifying each of these levels had not been done and a supervisory mechanism had not been introduced. Travelling and subsistence totalling Rs.7,200,431 had been paid to Environmental Officers during the year under review without advance programs and progress reports to ensure the work done by the officers.

#### 4.4 Idle and Under Utilised Assets

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Ten testing equipment purchased in the year 2007 at a cost of Rs.452,660 for the testing of polythene products less than 20 micron had not been utilized even up to August 2014.



#### 4.5 Identified Losses

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Sundry advances of Rs.104,083 had been written off from the ledger Accounts with the approval of the Board of Management and action had not been taken to obtain the approval of the Treasury.

#### 4.6 Apparent Discrepancies

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Action had not been taken to recover the loss of Rs.49,623,542 incurred an construction works of Sanitation Waste Land Filling Project at Dompe even up to the end of August 2014.

#### 4.7 Weaknesses in the Construction Administration

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The following observation are made.

- (a) A provision of Rs.48 million had been made for the construction of a building for Southern Provincial Office and the following weaknesses were observed thereon.
- (i) Even though building construction plan had been prepared and made payment Rs.380,721 in the year 2008, it was given up subsequently and construction had been commenced in accordance with a new plan prepared by the Consultating Committee. As the Consultating Committee had not prepared the plan for the building as per the specific standards, an additional cost of Rs.4,619,082 had to be incurred for works which were not necessarily required.
  - (ii) As the construction works had not been completed within the specified date, the delay charge of Rs.4,735,738 had not been recovered.
  - (iii) Even though it was estimated to construct a place in the part of the building for accommodation purposes at a cost of Rs.6,036,897 which represented 25 per cent of the total construction cost of Rs.23,926,797 under Stage II, a sum of Rs.5,480,517 had been spent for the construction of 02 rooms with 120 square feet each with a stair case. The approval of the Treasury had not been obtained for this additional cost.



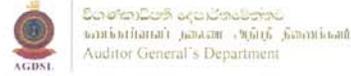
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 Auditor General's Department

- (iv) A sum of Rs.816,032 had been spent on an additional estimate for construction activities and an over payment of Rs.861,000 had been made to the contractor for this purpose.
  - (v) The construction company had paid a sum of Rs.975,000 to an Engineer for 13 months at Rs.75,000 per month and the Authority had also paid Rs.550,000 to another Engineer for 11 months at Rs.50,000 per month for the performance of same purpose.
- (b) A contract for Rs.69.5 million had been awarded for the construction of access road to Sanitation Waste Retaining Land Filling Project at Dompe. At a field inspection carried out in audit it was observed that there was an over estimate of Rs.22.26 million and an over payment of Rs.8.15 million had been made to the contractor.  
 Even though 5 Laboratory reports had shown that construction works of the road had not been done in accordance with the standard specifications, the Authority had not paid attention thereon.
- (c) Even though it was planned to complete and utilize the Waste Detaining Project at the end of the year 2013, it was completed only in May 2014. However, action had not been taken to utilize same even up to September 2014.

#### 4.8 Delays in Projects

The following observations are made.

- (a) The National Chemical Material Profile Updating Project was scheduled to be completed in the month of January of the year under review, the Project Implementation Design had not been completed even by 10 March 2014. However, an advance of Rs.336,000 had been paid at the time of signing the agreement for the preparation of project report. The office equipment had been purchased at a cost of Rs.558,840 for the project office before identifying needs of the project and such equipment had remained idle for more than one year.
- (b) Solid Waste Disposal Facility Construction Project carried out under this credit facilities provided by Economic Corporation Fund (EDCF).



Even though the project staff had been recruited in the year 2012 and the Project Agreement had been signed on 23 July 2013, the land fillings for 04 construction works had not been commenced. However, out of the cumulative expenditure of the Project up to the end of the year under review amounted Rs.11,028,095 or 64 per cent had been incurred for project staff, construction work of 04 land reclamation proposed under the Project had not been commenced during the period of 2 years.

- (c) The Treasury had made an allocation of Rs.5.633 billion for the “Pilisar Project” commenced with the intention of completion it within the 3 years period from 2008 to 2010. The following matters were observed in this regard.
- (i) Even though the Project was scheduled to be completed in the year 2010 it was not completed even by the end of August 2014. Out of the provision of Rs.5.633 billion made for the Project only Rs.1.965 billion or 35 per cent had been spent up to the end of the year under review.
  - (ii) The construction of 103 small scale compost yards had been planned under the Project, only 69 yards had been constructed. Even though Rs.66.73 million had been granted to 31 Local Authorities to construer 31 yards, construction works of 13 yards had not been commenced and 03 yards had been abandoned. Manufacture of compost had not been commenced by 14 yards constructed. The other yard had failed to manufacture compost with optimum capacity.
  - (iii) Out of the 14 large scale compost yards designed to be constructed 06 yards had been constructed. Three large scale compost yards constructed at a cost of Rs.248.7 million had been failed due to lack of follow up actions and operational inefficiencies.
  - (iv) Even though it was planned to construct 10 land escalation premises for non – rotten waste management, even one site had not been set up. Out of the provision made for the purpose, a sum of Rs.163 million had been spent up to the end of the year under review for temporary land filling.
  - (v) Officers who had not possessed required qualifications had been recruited for the posts of Senior Engineer and the Deputy Manager (Public Relations) of the



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Project and a sum of Rs.6,403,600 had been paid as salaries and allowances from 2008 to 2012. Although the services of these officer had been terminated during the year under review, gratuity amounting to Rs.524,825 had been paid them. It was observed that the qualified and efficient officers had not been employed and it was a reason for the failure of the activities of the Project.

- (vi) According to the Project Agreement, an Environment Protection Licence should be obtained one month before the commencement of the compost yard, such a License had not been obtained for any of those compost yard. Further, in order to improve the quality of fertilizer manufactured for the sustainability of the Project, plantations with plentiful Nitrogen should be continuously operated and maintained at the premises of the Project from the commencement of the Project of plant leaves should be used as a raw – material for the manufacture of compost. However it had not been done accordingly. Further, quality assurance testing reports for 91 composed yard which are operating at present had not been obtained, once in a 03 months period according to the Agreements.
- (vii) A motor vehicle purchased from the funds of the Project had met with an accident causing a loss of Rs.6,050,000. Action had not been taken to recover the loss even after a lapse of 2 years.

#### 4.9 Resources of the Authority allowed to use by other government institutions

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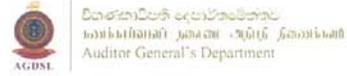
A sum of Rs.783,000 had been spent by the Authority for the purchase of air tickets for the officers at the Minister's office. Further, the and salaries, overtime and combined allowances totalling Rs.692,255 had been paid by the Authority for 02 casual employees and a driver attached to the office of the Deputy Minister.

#### 4.10 Personnel Administration

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The following observations are made.

- (a) The approved cadre of the Authority as at 31 December 2013 was 947 officers However the actual cadre was 715, thus 232 vacancies were remained.



- (b) The Scheme of the Recruitment for the Authority had not been approved by the Department of Management Services of the Treasury.
- (c) Photocopies of educational certificates of the employees contained in the personal files had not been certified as true copies.

## 5. Accountability and Good Governance

### 5.1 Internal Audit

Eventhough the audit examinations had been carried out by the Internal Audit Division to strengthen the internal control systems, action had not been taken to rectify the weaknesses identified.

### 5.2 Procurement Plan

A procurement plan in accordance with the Procurement Guidelines - 2006 had not prepared.

### 5.3 Unresolved Audit Paragraphs

The following observations are made

- (a) Necessary steps had not been taken to rectify the deficiencies pointed out since 2012 in respect of issues such as air quality control, sound and vibration control, motor vehicle emission testing control, implementation of Projects in Male and the establishment of an Atmospheric Condition Follow up Unit at Colombo Fort under the Circulation Atmospheric Condition Follow up Project in Sri Lanka.
- (b) Action in terms of Section 23 of the National Environmental Act had not been taken in respect of the pollution of drainage system by disposing sewerage system and other chemical waste from the industrial and housing project to the developed channel and drainage system identified by Lunawa Project.
- (c) Amendments had not been made to the National Environment Act, No. 47 of 1980 required to be improved in 18 identified Sections of the Act.



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Auditor General's Department

#### 5.4 Fulfilment of Environmental and Social Responsibility

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In terms of National Environment Act, No. 47 of 1980 and paragraph 22 of the National Environment Amendment Act, No. 56 of 1988, programs should be recommended to identify and protect water flowing risk areas and effective conservation of soil. Contrary to that action had been taken to make recommendations by the Authority for soil cutting purposes without considering the environmental protection. Environmental Complaints were also lodged and stated that environmental evaluation were not carried out to make such recommendations.

#### 6. Systems and Controls

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Weaknesses in systems and control observed in audit were brought to the notice of the Chairman of the Authority from time to time. special attention is needed in respect of the following areas of control.

- (a) Budget
- (b) Computer software system utilization
- (c) Accounting
- (d) Procurement procedure
- (e) Provision for gratuity
- (f) Environmental protection licences
- (g) Personnel administration
- (h) Contract administration
- (i) Internal Audit

**H.A.S. Samaraweera**  
Auditor General

## **15.0. ‘Pilisaru’ National Solid Waste Management Project**

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### **15.1 Introduction**

Improper management of solid waste is one of the biggest and key environmental problems in Sri Lanka. The lack of systematic systems for waste collection, waste transport, intermediate treatment systems, and suitable waste disposal have been contributing to aggravate the solid waste problem in Sri Lanka. The present haphazard waste disposal practices in Sri Lanka have created many environmental problems and innumerable nuisances on general public. As a consequence of this practice entire communities are suffering and number of health, social, economic and cultural problems have been created.

In view of the fact that the infrastructure and resources for waste collection and disposal are lacking in most parts of the country, scattering and dumping of garbage in environmentally sensitive places takes place in an uncontrolled manner. There are no proper facilities for final disposal of most of the solid waste produced by households and industries. Waste that is improperly dumped can impede water-flow in drainage channels, and provides breeding places for disease vectors such as flies, mosquitoes and rats. Open dumping sites in natural areas cause pollution of ground and surface water, and will facilitate encroachment. Open burning of waste at low temperatures is also widespread. It contributes to atmospheric pollution and may cause serious health problems.

In Sri Lanka, the entire responsibility for Solid Waste Management (SWM) lies on Local Authorities (LAs) under respective legal enactments. The powers in relation to SWM have been vested on Municipal Council Ordinance, Urban Council Ordinance, and Pradeshiya Sabha Act. Although most of the Local Authorities pay more attention to the improvement of physical resources falling within their purview, the concern towards SWM issue is comparatively low. The amount of resources utilized for SWM is too relatively low.

### **15.2 Establishment of the Pilisaru Project**

Because of the comparatively poor attention paid on the waste management issue by most of the LAs in Sri Lanka, the general public has to undergo risks with regard to several SWM problems and the faith they have on the Local authorities to solve these problems has substantially reduced over the past years. Hence various complaints are being frequently lodged by the public at the Central Environmental Authority (CEA) and the Ministry of Environment (MoE) against local authorities regarding waste management concerns.

Taking the aforesaid circumstances into consideration, the Minister of Environment (MoE) launched a national level solid waste management programme titled ‘**Pilisaru**’ under the direction of MoE and

CEA along with the participation of other government organisations, private Institutions, NGOs and experts in this field.

The word *Pilisar* means re-resource in Sinhala language. This has become the main goal of the program. The concept of this programme is to maximize the reutilization of resources discarded as wastes and to dispose the non-utilizable residue in an environmentally acceptable manner.

Having considered the importance of addressing this issue in a nationally coordinated approach, the Ministry of Environment (then Ministry of Environment and Natural Resources [MENR]) submitted a Cabinet Paper to implement ‘*Pilisar*’ Waste Management Program for which the Cabinet of Ministers approved in principle on 25<sup>th</sup> July 2007.

This program includes *inter alia* the following activities:

- Preparation of a National Waste Management Policy.
- Capacity building and awareness creation for those involved with waste management.
- Provision of technical assistance and resources to Local Authorities to improve ongoing waste management programs and to embark on new initiatives.
- Facilitation of waste management programs through mobilization and optimal utilization of resources.
- Monitoring of waste management program.
- Legal actions as a long term approach to address non-compliance by responsible parties.

The *Pilisar* National Solid Waste Management Project (PP) was established in CEA with effect from 1<sup>st</sup> January 2008 subsequent to an approval given by the Cabinet of Ministers on 19<sup>th</sup> December 2008 for a separate Cabinet Memorandum titled ‘*Pilisar Programme - A National Approach for Solid Waste Management in Sri Lanka- Establishment of the Pilisar Project*’ which was submitted by the MENR.

The overall guidance for the implementation of the *Pilisar* program is provided by a high level National Committee on SWM (called as ‘National *Pilisar* Platform’) co-chaired by the Secretaries of the Ministries of Environment & Natural Resources and the Local Government & Provincial Councils (MLGPC).

Earlier *Pilisar* Program is implemented for a period of 3 years commencing from January 2008 in the form of a Project titled ‘*Pilisar Project*’ established in the Central Environmental Authority. The financial provisions of Rs. 5.675 billion is expected to be accrued mainly from the General Treasury.

This MENR, having noted the magnitude of the scope and the tremendous amount of tasks lined up to be executed during the period 2008-2010, had made arrangements to setting up the ‘*Pilisar Project*’ in

Central Environmental Authority with a dedicated project staff with specific responsibilities assigned to ensure the timely implementation of the project activities identified under the Project Report of the Pilisaru Programme.

Considering the importance and the timely necessity of this project, the Cabinet of Ministers has given approval to extend the project for further three years period from 1<sup>st</sup> January 2011.

Accordingly, a programme of action has been formulated for three years (2011-2013) and activities, which have not so far been completed, have been incorporated in it.

### **15.3 National Solid Waste Management Policy**

As part of the Pilisaru initiative, the MENR has taken steps to formulate a National Policy on Solid Waste Management (NPSWM) in October 2007 and drafted new National Solid Waste Management Strategies for implementing the National Policy on Solid Waste Management. Currently, there is a dire need to translate the strategy into action in order to implement suitable waste management programs for respective areas and obtain the fullest involvement and cooperation of the LAs to implement them. The Pilisaru Program envisages this challenge of translation of the strategy into action.

### **15.4 Objectives**

There are five main objectives in the Pilisaru Program

- Development of a National Policy on Solid Waste Management
- Development of a National Strategy on SWM
- Effective education & awareness for all stakeholders on SWM including training & capacity building
- Facilitation for LAS for implementation of SWM projects / programs
- Legal reforms to strengthen effective law enforcement

These objectives are formulated considering the existing solid waste related problems and issues faced by the stakeholders and to improve the overall solid waste management system in the country, emphasizing particularly the crucial issues such as intermediate treatments and environmentally friendly final disposal of residues.

### **15.5 Scope**

Solid waste in this context covers household wastes, commercial wastes, market wastes, institutional and certain industrial wastes as well as waste produced in public places owned by the LAs. The Scope of the Pilisaru Project generally encompasses the following key activities.

**i. Collection of information on disposal of solid waste by LAs**

Information on current waste disposal methods, projects and programmes abandoned by LAs and the resources available is collected for planning purposes. In the process of collecting data the assistance of the Divisional Environmental Officers (DEOs) of the CEA is obtained through the network of the CEA's Provincial and District Offices.

**ii. Evaluation of Project proposals**

Proposals forwarded by local authorities are evaluated and necessary financial and technical assistance is provided to implement them. An evaluation procedure is formulated and assistance is sought from various technical experts for the successful implementation of the proposals.

**iii. Establishment of Waste Recycling Banking System**

The Pilisaru Project negotiates with the SANASA Development Bank with regard to the possibility of implementing a waste banking system. The Bank collects the recyclable waste, particularly the plastics and polythene from the account holders and an amount equal to the value of the waste handed over is credited in the account of the account holder. The collected waste is sold by the Bank to recyclers regularly to recover the money paid to the account holders with a nominal profit to cover the bank expenses. In fact, this is an innovative approach introduced by the Pilisaru Project with the 'SANASA Bank'.

iv. Establishment of waste collecting centres.

v. Technical Support , Institutional strengthening and capacity building

vi. Strengthening recycling by establishing collection network for metal, plastic, glass, and paper wastes

Waste plastic, metal, glass, and papers are the preferable items used for recycling. An increasing number of private-sector organizations are now providing plastics and paper collection services. One of the main activities of the Pilisaru Project is the establishment of proper collection network system for paper and plastic wastes. Education and awareness programs are especially launched through schools, community organizations, and women's societies. Local Authorities are encouraged to increase recycling of waste materials.

**vii. Establishment of Compost plants at Local Authority level**

As an effort to find a scientifically acceptable and reasonable solution for the problem of haphazard dumping of solid waste in open lands and water bodies, Pilisaru project takes an initiative to assist the establishment of a composting plants and an environmentally safe waste disposal facility with

appropriate technologies utilizing the expert knowledge of members of the technical committee established under the National Committee on SWM.

#### **viii. Construction of low cost sanitary landfills for disposing residual waste**

Sanitary landfill site is a location designed for the final disposal of waste in an environmentally sound manner. The design includes controlling of leachate and gas, daily cover for the working surface of waste, runoff and run on diversions, which would result in decreasing the potential of surface and ground water pollution. The Pilisaru Project plans to establish a number of sanitary landfills in such a way that the LAs can make use of them to dispose residual wastes on a cluster system.

#### **ix. Promoting Home Composting**

Household composting usually involves relatively small volumes of organic materials generated from the kitchen and garden. Using a bin or a pit helps to retain the heat and moisture that would be lost in a small, open pile. A container also has the advantage of being tidy, which is desirable in a residential area. Therefore, the Pilisaru Project makes arrangements to promote the use of home composting by providing bins to LAs at a subsidized rate.

#### **x. Monitoring and taking Legal action for LAs to continue carrying out improper SWM practices**

Pilisaru project, as its final action would resort to taking legal actions against LAs which do not carry out proper SWM practices. Regular evaluation and monitoring of SWM programs funded by the Pilisaru Project and implemented by LAs are conducted by a Monitoring & Evaluation Committee may include members of the local authority, CEA District Environment Officer, Public Health Inspector, and other relevant personnel.

### **15.6 Pilisaru Action Plans**

In addition to three year action plans (2008 – 2010 and 2011-2013) of the Pilisaru Project, annual action plans are prepared for respective years. Accordingly Pilisaru Action plan 2010 was formulated giving all the activities to be implemented along with the budget envisaged for corresponding activities. However, the Pilisaru Action Plan - 2013 was subjected to several amendments during its implementation to adjust the changes envisaged from time to time.

Similarly, some of the activities and corresponding budgetary allocations planned in the beginning of the year had to be changed during the course of implementation to incorporate necessities surfaced at later stages, particularly to overcome a number of issues and problems, most of which are beyond the control of the Pilisaru Project. The approval of the National Pilisaru Platform and/or the Board of Management of CEA have been obtained for such changes as and where necessary.

## **15.7 Progress of the Pilisaru Project**

The progress of the Pilisaru Project is given under each and every action included in the Action Plan - 2013 for easy understanding and clarity. However, it should be emphasized that the one would note certain actions showing very little progress (in certain instances 'no progresses) and this is mainly due to the fact that the limitation of liquidity received from the General Treasury.

Similarly, the PP had to provide its support, both in terms of manpower and financially to implement several national programs though they were not included in the action plan.

### **15.7.1 Construction of Compost Plant Complexes (Major Projects)**

#### **Important features of a major composting plant**

- **Unloading and sorting area**

The waste transported has to be unloaded and sorted to compostable waste and the rest is sent to the nearby landfill. So this is constructed at a place easily accessible and close to the undercover piling areas as the bio degradable waste is then sent there.

- **Open piling area**

Once the waste is unloaded and sorted, it is arranged into piles on a concrete pad (open to the sky). The open piling area (without a roof) is where the waste is initially piled to begin the composting process. The lack of roof allows direct sunlight to reach the waste piles, thereby increasing the pile temperature, which in turn promotes the aerobic microbial digestion of the waste into compost; allows for rain water to add to the required moisture content of the pile; and reduces the development of fly larvae and the biological control of maggots through birds. The ratio between the open piling and under cover piling areas should be 60:40, respectively.

- **Under cover piling area**

Once the composting process is under way, the piles can be turned from the open piling area to the undercover piling area (with roof). At this point, most of the waste has been largely decomposed and the process can continue under cover, preventing excess moisture from rain to waterlog the piles and allowing for laborers to work in the shade

To process the compost piles and sieve the compost. The floor is constructed with 1:80 slope to the middle making the leachate to come to the leachate collecting drain in the middle.

- **Packing and store area**

The produced compost has to be packed and store until sent away in this area. The space is provided for sieving and shredding of compost if needed.

- **Facility building**

This is to facilitate the workers and consists of separate rest rooms and bathrooms for male and female workers. As they must work with the waste and smell all day, sufficient facilities must be provided for them to clean before going home. It is assumed that this will upgrade their enthusiasm about the work and will encourage people to come to this sector.

- **Main office**

The office is built to provide the administration and cooperation with outside. This is constructed in a place which allows it to have a full view of the site from the office.

- **Watcher's hut**

This is constructed at the entrance to keep a security guard to provide safety to the equipments and to the produced compost. This is situated at a place to where the whole site is visible.

- **Leachate treatment system**

Drains and pipes must be properly constructed to collect leachate produced from the composting piles and collect to the leachate tank for re use for processing of composting.

- **Good internal road network**

In the Major Composting Plant areas, lots of heavy vehicles carrying waste mobilize around the site and at the collection times, vehicular traffic is unavoidable. Thus, the road network must prevent blocking of vehicles and must be strong and wide enough to endure the perfect functioning of vehicle movement.

- **Peripheral fence**

A fence surrounding the site is needed to stop the stray animals entering the site and disturbing the waste. Also it provides security to the vehicles, machinery at the plants and prevents scavenging action from taking place.

- **Buffer Zone**

When people see waste dumped at a place, they sense a rotten smell, even when the waste does not smell. That is a psychological fact and public opposition to the Waste Management Projects mostly arises due to this reason. Thus, measures should be taken to block the view of the Composting Plant and a line of trees are planted around the periphery of the site to form a buffer. It also prevents dust, waste particles from leaving the site.

In the case of other Composting projects, a technical evaluation process was adopted to ensure the technical soundness and integrity prior to mobilize financial assistance. The process of evaluation

commenced with a Preliminary investigation of the project site by Pilisaru Project officers followed by the critical technical evaluation of project proposals by a Panel of Experts (known as Technical Sub-Group) nominated by the Pilisaru National Platform. Following are the major steps adopted in the planning and implementation of any project proposal funded by the Pilisaru Project.

- Development of concept
- Preparation of project proposal
- Obtain environmental clearance
- Obtaining approval of the Local Authority
- Obtaining soil testing and other investigation reports relevant to the land
- Complete the boundary survey
- Designing (planning & designing of all buildings)
- Preparation of agreement
- Sign of agreement
- Complete the tender procedure
- Commencement of constructions
- Monitoring & progress review
- Handing over the site

Since the construction work of some of the compost plants has been commissioned in 2009, PP continued to extend its technical and financial assistance during 2013 either to maintain or to improve existing facilities.

**a. Compost plant at Pothuwilkumbura, Kolonnawa**



The construction was completed in year 2011 and contractor's defects liability period is in year 2012. Some improvements to the waste unloading area were made for smooth operation of the plant.

Arrangements were made to process 10 tons of perishable waste from Kaduwela Municipal Council at this plant.

**b. Compost plant at Pohorawatta, Kalutara**



The construction was completed in year 2011 and contractor's defects liability period is also over in early 2012. Plant operations were monitored and separated waste is transported from four local authorities. A satisfactory mechanism has been adopted for sale of compost produced and the plant premises is maintained well. New research has been commenced for testing application of compost for cultivation of maize. Leachate is reused for maintained the optimum moisture content in waste piles. The quality of compost has been tested by Coconut Research Institute and confirmed that the compost is applicable for cultivation of coconut and based on findings Coconut Cultivation Board has instructed all regional managers to use compost for coconut cultivation.

**c. Compost plant at Keerikkulama at Nuwaragampalatha, Anuradhapura**

The access road to the compost plant was developed in the year 2011 and the improvements to rest of the road up to main road were commenced.

**d. Compost plant at Monroviawatta, Rajgama**



The construction of access road to the compost plant has been commencing in 2012 and estimated amount is Rs 34.0Mn. The construction work is implementing through the Rajgama Pradeshiya Sabha and physical work progress is 80% up to end of the year 2013.

The compost plant complex was being operated by the Department of Local Government (Southern Province) (DLGSP) and at end August the Hon. Chief Minister of Southern Provincial Council decided to hand over the operation and maintenance under the monitoring of DLGSP to Galle MC and Rajgama PS through an agreement. Also a management committee was appointed under the co-chairmanship of Chairmen of both Local Authorities. The Pilisaru Project also a member of this management committee.

**e. Compost plant at Sundarapola for Kurunegala Municipal Council**



Kurunegala Municipal Council and Kurunegala Pradeshiya Sabha are located in the Kurunegala District of the North Western Province of Sri Lanka. The total extent of the Municipal council and Pradeshiya Sabha domain is 11.3 and 327 km<sup>2</sup> respectively. The total population of the MC and PS is 190,438. The engineering planning and design works were done by the Kurunegala Municipal Council. The compost plant is designed to manage the 42 MT of solid waste collected daily and also treat and manage the 20m<sup>3</sup> per day of in-house septic tanks sewage.

The Municipal Engineer and his Engineering staff supervise the constructions and also an Engineering Assistant is appointed for in house supervision of construction by Pilisaru Project with the recommendation of Kurunegala Municipal council. The contractor has completed the construction. The site was handed over to KMC to commence operations of the Compost plant and the sewerage treatment system.

This plant consists of waste unloading and sorting area, open piling area, under cover piling area, sieving and value addition area, stores for compost and recyclable materials, workers rest rooms, toilets, water tank, watcher hut, office, and a sewage treatment plant.

**f. compost plant in Jaffna**

Soil testing was conducted for planning to expand the compost plant for Jaffna Municipal Council (JMC). A discussion with Hon. Mayor and Municipal Engineer of the JMC was conducted to initiate the planning of the compost plant and to overcome the issues and continue the operations of the existing compost plant.



Malimboda Pradeshiya Sabha (PS) is located in the Matara District of the Southern Province of Sri Lanka. The total extent of the Pradeshiya Sabha domain is 36.32 km<sup>2</sup>. The total population of the Pradeshiya Sabha area is 33474. Municipal waste is collected from the 907 households.

The construction of the compost plant for the PS was completed and it has the capacity to handle a waste quantity of 2 metric tons per day. The facility is located on a state land of area three roods named Polpelaketiya, Palewila, in Sulthanagoda-east GN division that was vested to the PS by the Divisional Secretary for the purpose of waste management.

The Pilisaru Project has allocated a budget of Rs. 5,67,289.49 for the construction of the waste processing / compost facility in the Malimboda PS.

#### **15.7.2.2 Compost Plant at Kahatagasdigiya Ps**



The Kahatagasdigiya PS is located in the Anuradhapura District of the Central Province of the country. The total extent of the PS area is 343 km<sup>2</sup> and comprises a population of 33,130.

A waste quantity of 2 metric tons is collected each day. The small-scale compost project is being constructed on a land area of 4.04 hectares at a total budgeted cost of Rs. 6,497,638.42. The plant construction was completed and waste composting process is in operation.

#### **15.7.2.3 Compost Plant at Bulathkohupitiya Ps**

The Bulathkohupitiya Pradeshiya Sabha is located in the Kegalle District of the Sabaragamuwa Province of Sri Lanka. The domain of the PS is 125 km<sup>2</sup> and caters to a population of 52,000 people. The waste generated within the PS is collected primarily from the 1,332 households, 6 institutions, 26 shops, 20 hotels, 30 schools, 2 hospitals, and 1 weekly fair.

The waste management facility funded by the Pilisaru Project is being constructed at a land known as Yaggalakanda and is designed to process a waste quantity of 1 metric ton per day. A total financial allocation of Rs. 3,244,642.95 was approved for the compost project. The construction has been completed.

#### 15.7.2.4 Compost Plant at Tissamaharama Ps

The Tissamaharama PS is located in the Hambantota District of Sri Lanka's Southern Province. The PS comprises a land area of 842 km<sup>2</sup> with a population of 79,618. The Tissamaharama PS includes 18,750 households, 17 institutions, 137 industries, 855 shops, 124 hotels, 25 schools, and 1 hospital. The Tissamaharama PS collects 7 metric tons of waste per day from within its jurisdiction.

The Tissamaharama PS submitted a project proposal seeking financial assistance from the Pilisaru Project for a solid waste management facility as an interim solution to reduce the waste quantity entering the municipal waste stream and minimize its impact on the environment. The Pilisaru Project allocated an amount of Rs. 4,303,379.42 for the Tissamaharama PS to construct and implement a waste management facility to sort, recycle, and treat/compost waste at a site known as Uddhakandara with an area of 4 hectares. The construction of the plant has been completed and waste composting is going on.



#### 15.7.2.5 Compost Plant at Ukuwela Ps

The Ukuwela PS is located in the Matale District of the Central Province. The population within the 82 km<sup>2</sup> of the Ukuwela PS is 71,729. The PS area comprises 18,530 households, 425 shops, 40 industries, 28 schools, 25 hotels, 3 hospitals, and 1 institution and includes 3 main towns.

The Ukuwela PS collects approximately 2 metric tons of waste per day from within its jurisdiction. The Pilisaru Project funded the construction and implementation of a solid waste management facility for the Ukuwela PS at a site located on Dematagolla Road. A financial allocation of Rs. 3,439,155.55 was awarded to the Ukuwela PS. Construction work is completed and waste composting is going on.

#### 15.7.2.6 Compost Plant at Mahaoya Ps

The Mahaoya PS is located in Ampara District of the Eastern Province and comprises an area of 720 km<sup>2</sup> and a population of 22,000. Approximately 1 metric tons of waste is generated per day within the Mahaoya area. Waste is collected from 6,000 households; 180 shops; 20 industries; 18 schools; 10 institutions; 1 hospital and 1 weekly market.

The Pilisaru Project approved the establishment of a waste management facility to be constructed at a land referred to as Mudagala at a total cost of Rs. 4,727,725.18. A mobilization advance of 20% of the total financial allocation was released to the Mahaoya PS in June 2012. Construction is ongoing and the first bill has been submitted to the Pilisaru Project for reimbursement. The project was awarded with the view of construction being completed and the site commissioned in line with next year's Deyata Kirula National Development Program, which is to be held in the Eastern Province in February 2013. The construction of the plant is completed and waste composting is going on.

#### **15.7.2.7 Compost Plant at Padiyatalawa Ps**

Located in the Ampara District of the Eastern Province, the Padiyatalawa PS comprises a population of 19,457 within its area of 464 km<sup>2</sup>. The PS includes 5,301 households; 60 shops; 18 schools; 15 industries; 5 institutions; 2 hotels; 1 hospital; and 1 weekly fair.

The Padiyatalawa PS sought financial and technical assistance from the Pilisaru Project to manage the 1 ton of waste collected daily from within its jurisdiction. The Pilisaru Project approved the construction of a waste management/compost facility at a total cost of Rs. 4,572,661.38 at a site known as Kirawana of area 3 acres, 3 roods, and 33 perches. A mobilization advance payment of 20% of the allocated total cost was issued to the Padiyatalawa PS in June 2012 with a view of completing construction and commissioning the site in line with the Deyata Kirula National Development Program to be opened in February 2013. Construction is completed and the waste composting is going on.

#### **15.7.2.8 Compost Plant at Sri Lanka Air Force – Katunayake**

The Sri Lanka Air Force (SLAF) – Katunayake submitted a proposal to the Pilisaru Project requesting assistance for the management of waste within its premises. Located in the Gampaha District of the Western Province, the Katunayake Air Force base comprises an area of 1,100 acres. The base comprises a population of 6,600 persons, including servicemen and civil personnel. There are 1,500 households located within the base; 2 stores; 1 school; 1 hospital; messes and cafeterias; a poultry farm; and a piggery. A waste quantity of 3 MT is generated within the Air Force premises on a daily basis.

The Pilisaru Project awarded financial assistance to the Sri Lanka Air Force – Katunayake in the amount of Rs. 6,513,787.75 to construct and implement a compost facility as a means of treating the waste generated within the base. A mobilization advance payment of Rs. 1,302,757.55 was issued to SLAF – Katunayake in August 2012 to facilitate the commencement of construction. The construction is completed.



#### 15.7.2.9 Compost Plant at Damana Ps

Located in the Ampara District of the Eastern Province, the Damana PS comprises an area of 334 km<sup>2</sup> and a population of 40,000. A waste quantity of 1 metric ton is collected per day from the 10,700 households; 510 shops; 60 industries; 40 hotels; 31 schools; 15 institutions; 7 hospitals and 3 weekly fairs.

Upon the request of the Damana PS, the Pilisaru Project allocated an amount of Rs. 3,901,116.45 for the establishment of a compost facility processing collected waste. The waste management facility is being constructed at a site of 1 acre, known as Pahalagampura. The construction is completed and waste composting is going on.



#### 15.7.2.10 Compost Plant at Horowpothana Ps

The Horowpothana PS is located in the Anuradhapura District of the North Central Province of Sri Lanka. The total land extent of the Pradeshiya Sabha domain is 790 km<sup>2</sup> and comprises a population of 38,889. The PS comprises 11,100 households; 320 shops; 65 industries; 17 institutions; 8 weekly fairs; and 3 hospitals from which 1 metric ton of waste is collected each day. The Horowpothana PS includes 6 main towns, namely: Horowpothana; Walimuwapoathana; Motagonawa; Ratmale; Veherabadugala; and Kalawedupola.

Upon the request for assistance from the Horowpothana PS, the Pilisaru Project allocated an amount of Rs. 5,323,275.50 for the establishment of a compost facility processing the waste collected from within the jurisdiction of the PS. The compost facility is being constructed at a site known as Moragoda Mukalana. A 20% mobilization advance of Rs. 1,013,957.24 was released to facilitate the initiation of construction in November 2012. Site preparation has been completed and construction work has commenced.

#### **15.7.2.11 Compost Plant at Kebithigollewa Ps**

The Kebithigollewa PS comprises an area of 406 km<sup>2</sup> and a population of 28,140 and is located in the Anuradhapura District of the North Central Province of Sri Lanka. The PS area includes the five main towns of: Kebithigollewa; Kuratiyawa; Yakuwewa; Wahalkuda; and Kulekade Junction.

The Pilisaru Project awarded financial and technical assistance to the Kebithigollewa PS in the amount of Rs. 6,764,089.32 and issued a 20% mobilization advance payment in November 2012 to facilitate the commencement of construction. The waste management facility at Kebithigollewa PS is being constructed at a site known as Ulpathhenakale and is designed to process a waste quantity of 2 metric tons per day.

#### **15.7.2.12 Compost Plant at Namaloya Ps**

The Namaloya PS is located in the Ampara District of the Eastern Province of the island. It comprises a land area of 108 km<sup>2</sup> and a population of 23,209. A waste quantity of 1 metric ton is collected per day from 5,200 households; 278 stores; 71 industries; 8 institutions; 2 hotels; 2 hospitals; and 2 weekly fairs.

In line with the Deyata Kirula National Development Program 2013, to be held in the Eastern Province, and upon the request of the Namaloya PS, the Pilisaru Project awarded Rs. 4,284,956.92 as financial assistance to the PS for the establishment of a compost facility to treat the collected municipal waste. The project is being established at a site of 0.8 ha known as Polwatte west in Polgahajanapadaya. The construction is completed and waste composting is going on.

#### **15.7.2.13 Compost Plant at Valikamam South PS**

The Valikamam South PS is located in the Jaffna District of the Northern Province. The Valikamam South PS requested financial and technical assistance from the Pilisaru Project to establish a solid waste management compost facility within its jurisdiction. After evaluating the required documentation and obtaining the necessary approvals, the Pilisaru Project allocated an amount of Rs. 4,972,920.99 to the Valikamam South PS for the construction of the compost facility. A mobilization advance payment of Rs. 947,223.05 was released to the PS in November 2012.



#### **15.7.2.14 Compost Plant at Sri Lanka Air Force Station, Diyatalawa**

The Sri Lanka Air Force Station, Diyatalawa is located in the Badulla District of the Uva Province. The air force base comprises a total land extent of 80 acres. 2,000 airmen live within the premises of the base. To ensure environmentally friendly treatment and disposal of waste generated within the base, the Sri Lanka Air Force Station, Diyatalawa requested financial and technical assistance from the Pilisaru Project for their waste management activities.

The Pilisaru Project approved the establishment of a compost facility designed to process 2 metric tons of waste per day. The project was approved at a total cost of Rs. 2,523,755.02 with a mobilization advance of Rs. 504,751.00 issued in November 2012 to facilitate the commencement of construction.

#### **15.7.2.15 Compost Plant at Kathankudy PS**

The Kattankudy PS is located in the Batticaloa District of the Eastern Province of the island. It comprises a land area of 6.5 km<sup>2</sup> and a population of 48,569. A waste quantity of 1 metric ton is collected per day from 12,691 families and commercial establishments.

Upon the request of the Kattankudy UC, the Pilisaru Project awarded Rs. 4,284,956.92 as financial assistance to the PS for the establishment of a compost facility to treat the collected municipal waste. The compost plant has been erected at Deans Road in the village of Puthukattankudy. The construction is completed and waste composting is going on.



#### **15.7.2.16 Compost plant at Galnewa PS**

The Galnewa PS is located in the Anuradhapura District of the North Central Province of the island. It comprises a land area of 250 km<sup>2</sup> and a population of 45,692. A waste quantity of metric ton is collected per day. Upon the request of the Galnewa PS, the Pilisaru Project allocated Rs. 5,295,245.90 and provided financial and technical assistance to the PS for the establishment of a compost facility to treat the collected municipal waste. The construction of the compost plant has been completed and waste composting is going on.

#### **15.7.2.17 Compost plant at Rajanganaya PS**

The Rajanganaya PS is located in the Anuradhapura District of the North Central Province of the island. It comprises a land area of 102 km<sup>2</sup> and a population of 30,298. A waste quantity of 1 metric ton is collected per day. Upon the request of the Rajanganaya PS, the Pilisaru Project allocated Rs. 5,295,245.90 and provided financial and technical assistance to the PS for the establishment of a compost facility to treat the collected municipal waste. The construction of the compost plant has been completed.

#### **15.7.2.18 Compost plant at Weeraketiya PS**

The Weeraketiya PS is located in the Hambantota District of the Southern Province of the island. It comprises a land area of 531 km<sup>2</sup> and a population of 73,228. A waste quantity of 2 metric ton is collected per day. Upon the request of the Weeraketiya PS, the Pilisaru Project allocated Rs. 2,221,348.05 and provided financial and technical assistance to the PS for the establishment of a compost facility to treat the collected municipal waste. The construction of the compost plant has been completed and waste composting is going on.



#### **15.7.2.19 Compost Plant at Akurana PS**

The Akurana PS is located in the Kandy District of the Central Province of the island. It comprises a land area of 32.39 km<sup>2</sup> and a population of 61,288. A waste quantity of 4 metric ton is collected per day. Waste is collected from 12,850 households, 20 schools upon the request of the Akurana PS, the Pilisaru Project allocated Rs. 5,394,964.10 and provided financial and technical assistance to the PS for

the establishment of a compost facility to treat the collected municipal waste. The construction of the compost plant has been completed and waste composting is going on.

### 15.7.3. Construction of biogas plants

Organic waste (food scraps) arising from kitchens and canteens can be used to produce biogas through treatment processes such as anaerobic digestion. Anaerobic digestion has been demonstrated to be a viable option for the management and stabilization of the biodegradable fraction of those wastes. Anaerobic digestion typically results in a 50% reduction of organic matter (volatile solids). The extent of conversion is dependent upon the feedstock and is similar to that obtained by aerobic composting operated at comparable residence times. Approximately 90% of the energy from the degraded organic matter is retained in the form of methane. The widespread natural occurrence of methane bacteria demonstrates that anaerobic digestion can take place over a variety of moisture contents from 60 to more than 99 percent. For MSW, the quantity of methane is not trivial and typically amounts to around 100 to 200 cubic meters of biogas per ton of organic MSW digested. Upon the request of Ministry of Health action was initiated to set up biogas plants in government hospitals as a solution for food waste arisen from the kitchens and wards. At the same time, several requests were received from the military bases as well. The Pilisaru Project initiated actions to set up biogas plants in 19 institutions and completed the constructions in 2012. The biogas produced is used for cooking purposes of the same institutions which on the other hand save the cost of LP gas they earlier used for cooking. A meeting was conducted with the contractor to complete the construction and hand over the plants to relevant institutions. The contractor is attending the work under the monitoring by the Pilisaru project.



### 15.7.4. Supply of waste transport vehicles

Waste collection from houses, commercial establishments and common places is one of the main responsibilities of a local authority with respect to waste management. Inadequate waste transport vehicles are a bottle neck which shall be rectified immediately. The Pilisaru Project procured 75 tractors and 77 trailers and distributed among local authorities and provincial councils. The details are listed below.

| No. | Province      | District     | No. of tractors | No of trailers |
|-----|---------------|--------------|-----------------|----------------|
| 1   | Central       | Kandy        | 8               | 08             |
| 2   |               | Matale       | 3               | 03             |
| 3   |               | Nuwara Eliya | 1               | 01             |
| 4   | North Central | Anuradhapura | 1               | 01             |
| 5   | Northwestern  | Kurunegala   | 19              | 19             |
| 6   |               | Puttalam     | 12              | 12             |
| 7   | Sabaragamuwa  | Kegalle      | 1               | 01             |
| 8   |               | Ratnapura    | 5               | 05             |
| 9   | Southern      | Galle        | 5               | 05             |
| 10  |               | Hambantota   | 4               | 04             |
| 11  |               | Matara       | 6               | 06             |
| 12  | Uva           | Monaragala   | 1               | 01             |
| 13  | Western       | Colombo      | 3               | 05             |
| 14  |               | Gampaha      | 4               | 04             |
| 15  |               | Kalutara     | 2               | 02             |
|     | <b>Total</b>  |              | <b>75</b>       | <b>77</b>      |

### 15.7.5 Monitoring and evaluation of compost plant operations

The main objectives of compost plants established by Pilisaru National Solid Waste Management Project are to strengthen the operational, financial, and environmental performance of MSWM in the country and to improve capacities of LAs for better planning and management of municipal solid waste services including enhanced cost effectiveness. Within this framework, project evaluated the present compost plant operations with the aim to improve municipal solid waste treatment, and disposal, with possible resource recovery and recycling elements. To that end project realizes that a project evaluation shall be conducted as a management and planning tool and is a must to complement its operational

issues and plans in the sector of solid waste management. A memorandum of understanding was signed with International Water Management Institute (IWMI) with the objective of evaluating the compost plants assisted by the project. Fifteen plants were randomly selected and the necessary data was collected for the purpose of project evaluation. The IWMI is in the process of preparing the final report.



### **15.7.6 Planning and designing sanitary landfills for residual waste disposal**

#### **15.7.6.1 Rajgama Temporary Landfill**

The MSW brought into the Rajgama compost plant complex is sorted through a semi mechanized method and organic waste is processed and converted into compost. The non-organic materials are again sorted and recyclable materials are stored in the stores separately until sold. The non-recyclable materials need a suitable environmentally safe disposal method. It has been proposed to construct a sanitary landfill at the same site under the financial and technical assistance of EDCF project. However, since it takes few years to complete the proposed sanitary landfill, the Rajgama Pradeshiya Sabha requested the CEA to implement a suitable solution for disposal of such residual waste for the time being. As such the 'Pilisaru' project designed a temporary landfill facility for disposal of residual waste arising from the plant. This landfill site will be able to accommodate 30 tons of waste per day for period of two years. This facility will have an impermeable bottom along with leachate collection pipe system and a treatment system. Also the landfill will be operated with daily soil covers after compaction of residual waste up to 1/3 of the volume. The Southern Provincial Council agreed to provide RS. 4 Million to meet the construction cost of the short term semi engineered landfill site designed by the Pilisaru project. The design and BOQ of the short term semi engineered landfill site was handed over to the District Engineer for implementation with the funds from the Southern Provincial Council.

### **15.7.6.2 Matara Long-term Landfill**

A decision has been taken by the MC to handover the site identified for construction of sanitary landfill for a water supply project. An alternative site has been identified by the Matara MC for the landfill construction and necessary communications are going on with the UDA in this regard. Once Matara MC get the site finalized the 'Pilisaru' project will commence designing the landfill.

### **15.7.6.3 Medirigiriya Landfill**

The compost plant complex at Medirigiriya is in operation since 2009 in a very successful manner. The residual waste arising from the plant is at present awaiting a suitable disposal option. As such, the project initiated action to design a suitable landfill facility within the same site. The PS has taken action to clear the land to obtain levels along L/S & C/s.s on the existing ground.

### **15.7.6.4 Badulla landfill**

The Badulla Municipal Council utilized the playground is located within the city to dump MSW for last 30 years. The renovation and improvements to the playground is now going on and therefore there is a requirement to remove garbage already dumped and clear the ground in order to implement improvements already being implemented. In these circumstances, Badulla MC requested the project through the CEA to design a landfill facility dispose of the existing garbage in a land at Sarnia estate, Soranatotota the project design a landfill facility for 40,000 m<sup>3</sup> of MSW already available in the playground. The design consists of leachate management system, operational methodologies and post closure options. The landfill is under construction with the funds of Municipality.

### **15.7.7 Waste transfer stations**

The proposed sites for waste transfer stations at Galle and Ambalangoda were examined for soil conditions and it has been revealed that these sites have been used for dumping garbage for a long time and as such, permanent structures are not advisable on these sites with weak soils. Therefore, the Galle Municipal Council has been advised to consider improve the existing ground and proceed with the designs.

### **15.7.8 Sundara Gampaha Programme**

The Kelaniya Pradeshiya Sabha (KPS) is located in the Gampaha district in the Western Province. The total land extent of the KPS area is 21.9 sqKm. The population of the KPS area is 134,364 and includes 34,951 housing units, commercial establishments and other institutes. The 'Pilisaru' Project assisted the KPS in sound management of 50 metric tons of municipal solid waste collected within the Pradeshiyasabha area per day. The 'Pilisaru' project granted financial and technical assistance for construction of a waste composting plant in a land just adjacent to the previous haphazard dumping site

and now all perishable municipal solid waste is being composted through windrow method under the technical guidance of the 'Pilisaru' project.

Along the Kandy road a stretch from Kelaniya to Kadawatha was selected to implement a model waste management programme. The shops along the road will be provided waste separation bins while the houses located within 500m distance is provided waste compost bins. For implementation of this programme a series of discussions were held with PS. It was agreed to provide waste 1500 compost bins to PS with a concession on part payment basis. The PS was provided a compactor for transport of waste to the compost plant.



### 15.7.9 Promoting home composting

Upon the requests of Local Authorities 4000 compost bins were procured and 2230 bins were distributed under 50% concessionary rate for following local authorities.

| No. | Local Authority                       | No of bins distributed |
|-----|---------------------------------------|------------------------|
| 1   | Biyagama PS                           | 1000                   |
| 2   | Warakapola PS                         | 25                     |
| 3   | Udubaddawa PS                         | 25                     |
| 4   | Ja-ela Urban Council                  | 500                    |
| 5   | Sri Jayewardenepura Municipal Council | 300                    |
| 6   | Yatinyanthota Pradeshiya Sabha        | 100                    |
| 7   | Attanagalla Pradeshiya Sabha          | 100                    |

| No. | Local Authority                        | No of bins distributed |
|-----|--|------------------------|
| 8   | National Gem and Jewellery Corporation | 20                     |
|     | <b>Total</b>                           | <b>2070</b>            |

#### 15.7.10 Waste collection bins

Waste collection bins were prepared with discarded chemical bins obtained from chemical formulating companies with no cost. The prepared bins (1000) were used for waste management programme outside the 'Deyata Kirula' National Development Exhibition held at Hardy Centre at Ampara. Waste collection bins (650) were issued for three religious events (Esala Perehera-Kandy, Thalawila Ceremony, and Katharagama Perehera) for management of municipal solid waste generated due to mass public gatherings. The other institutes for which waste collection bins were issued are listed below.

| No. | Institute  | No. of bins |
|-----|--|-------------|
| 1   | Kuchchiweli PS   | 100         |
| 2   | Police station –Mirihana   | 60          |
| 3   | Sri Sunandarama Pirivena, Ruwanwella   | 05          |
| 4   | Western Provincial council   | 120         |
| 5   | District Secretariat -Youth conference held in parallel to CHOGM in Hambantota | 200         |
| 6   | St. Markus Church, Dandugama   | 10          |
| 7   | SLARMY Corps (Pay & Records), Panagoda   | 10          |
| 8   | Buttala PS-National Wesak Festival   | 100         |
| 9   | Galahitiyawa Central college, Ganemulla  | 20          |
| 10  | CEA-Diyawanna Wesak Kalapaya   | 50          |
| 11  | The Wayamba University, Kuliypitiya  | 30          |
| 12  | Weeraketiya PS   | 100         |

| No. | Institute   | No. of bins |
|-----|---|-------------|
| 13  | Polgahawela PS                                    | 50          |
| 14  | Hakmana PS  | 100         |
| 15  | Wayamba National College of Education             | 30          |
| 16  | Wayamba University                                | 30          |
| 17  | Ruwanwella Sri Darmathilakaramaya                 | 04          |
| 18  | General Hospital, Nagoda                          | 20          |
| 19  | Ganga Ihala Korale PS                             | 100         |
| 20  | Ministry of Environment and Renewable Energy      | 200         |
| 21  | Kantale PS  | 85          |
| 22  | Sri Rahula College, Madiwela                      | 10          |
| 23  | 2 <sup>nd</sup> Regiment Special Forces, Vavuniya | 50          |
| 24  | 4 <sup>th</sup> Battalion, Panagoda, SLARMY Camp  | 10          |
|     | TOTAL   | 1,474       |

### 15.7.11 Feasibility Study on Colombo Waste composting

A stakeholder meeting was conducted and a team of Experts were identified in order to conduct a feasibility study on composting perishable waste generated in Colombo MC area under the patronage of Hon. Minister of Environment and Renewable energy. This study is planned to be conducted in collaboration with International Water management institute.



### 15.7.12 Waste Management in Air Force Camps

Sri Lanka Air force consists of eight major camps all over the island and the camps at Diyathalawa and Katunayaka has been assisted by the ‘Pilisaru’ project for establishment of compost plants in order to convert perishable waste into compost. The Air Force intends to introduce the same practice to other camps as well and a meeting was conducted at the CEA to proceed with the proposal.

### 15.8 Training on operational & maintenance for stakeholders of large and Medium-scale composting and land filling/Awareness and education in ISWM for all stakeholders

The Pilisaru Project coordinated three training programs in the year 2013 for relevant personnel of local authorities and institutions at which the Project has provided financial assistance for the establishment of compost facilities.

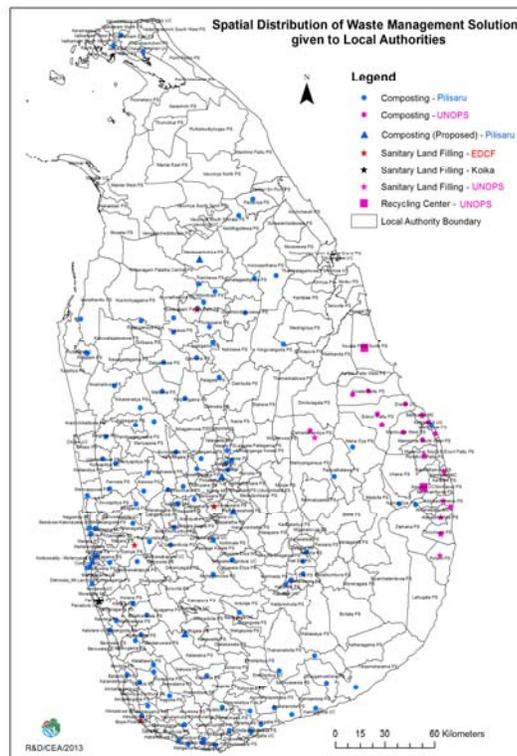
The training programs were arranged to provide a hands-on experience to the above officers. The curriculum of the training program was developed in such a way that the trainees are exposed to theoretical knowledge as well as practical hands-on experience on windrow composting. Detailed theoretical knowledge on the scientific aspects of landfilling was also included in the program to harness the latest techniques of landfilling. The following training programs were conducted by the Pilisaru Project:

| No. | Category of participants   | Dates                    | No. of participants |
|-----|--|--------------------------|---------------------|
| 1   | Laborers and Site Supervisor of Thissamaharama at Weligama Compost plant.                | 2013.10.10 to 2013.10.14 | 08                  |
| 2   | In plant training for Laborers and Site Supervisor of Ukuwela PS compost plant           | 2013.09.25               | 08                  |
| 3   | In plant training for Laborers and Site Supervisor of Galnewa PS compost plant           | 2013.06.27               | 11                  |
| 4   | In plant training for Laborers and Site Supervisor of Kahatahasdigiliya PS compost plant | 2013.10.22               | 10                  |
| 5   | In plant training for Laborers and Site Supervisor of Weeraketiya PS compost plant       | 2013.12.18               | 17                  |
| 6   | In plant training for Laborers and Site Supervisor of Damana PS compost plant            | 2013.02.02               | 05                  |
| 8   | In plant training for Laborers and Site Supervisor of Maha Oya PS compost plant          | 2013.05.03               | 04                  |

## 15.9 Development of a GIS database on solid waste management

Lack of proper data on waste management is one of the main constraints in developing programmes on the same and therefore a comprehensive data base was prepared by the Geo -Informatics Unit of the CEA. The CEA was provided necessary equipments such as GPS and computers for implementation of the programme.

Under this project, Solid waste management data/information in 340 Local Authorities of Sri Lanka were collected and data was incorporated into a comprehensive **geospatial environmental resources information system** (*Central Environmental Resources Database of the country*) which is maintained and updated by the Geo-informatics unit of the CEA. This GIS data base includes Environmental and socio-economic data / information of Sri Lanka up to the Grama Niladhari division level. The main objective of the database is to provide geo-spatial data and do analysis required for environmental planning, management, assessment, monitoring & awareness activities and dissemination of such information.



## 15.10 Waste Management Promotional Activities

### 15.10.1 Exhibitions

The main objective of participating in the exhibitions is to educate the stakeholders especially, the public and school children on proper waste management. This opportunity is also capitalized to make

them aware about the ‘Pilisar’ project and its activities. Since some of the waste treatment and disposal systems are new to this country, models are used as education material to elaborate the process and the functions.

Basically, people are educated regarding in following areas at the exhibitions.

- Segregation of waste according to color code
- waste minimization
- Composting.(Domestic methods and windrow system used in composting yards)
- Sanitary land filling
- Application of above techniques in Sri Lanka and Internationally.

Following is list of exhibitions the Pilisar Project participated, where materials like Display Boards, banners, Video Visuals, Models, Cutouts, Leaflets, Posters, and Calendars were used to disseminate the message.

| No. | Exhibition                     | Location  | Date  |
|-----|--------------------------------|-----------|---|
| 1   | Edex 2013 Exhibition           | B.M.I.C.H | 20 <sup>th</sup> to 22 <sup>nd</sup> January 2012 |
| 2   | Deyata Kirula 2013 Exhibition, | Ampara    | April 2013  |

*Table: Exhibitions attended by the ‘Pilisar’ Project*

### 15.10.2 Awareness at the Opening of the Waste Management Projects completed by the ‘Pilisar’ Project

In view of the tremendous importance of raising awareness of the general public towards extending their support facilitating the solid waste management programs initiated by the respective Local Authorities established with the technical & financial assistance from the Pilisar Project, several education & awareness programs were conducted in parallel to the opening ceremonies organized by the relevant Local Authorities, taking the advantage of mass gathering of citizens as well as school children . Below is list of events of openings of the projects completed by the ‘Pilisar’ Project.

*Table: Awareness Programs Conducted at ceremonies of Declared*

| No. | Local Authority / Gov Institution                          | Date of Opening             |
|-----|--|-----------------------------|
| 1   | Opening Ceremony of the Namal Oya Pilisar Composting Plant | 20 <sup>th</sup> April 2013 |
|     | Opening Ceremony of the Damana Pilisar                     | 20 <sup>th</sup> April 2013 |

| No. | Local Authority / Gov Institution  | Date of Opening                      |
|-----|--|--------------------------------------|
|     | Composting Plant   |                                      |
|     | Opening Ceremony of the Maha Oya Pilisaru Composting Plant                         | <b>21<sup>th</sup> April 2013</b>    |
| 2   | Opening Ceremony of the Malimboda Pilisaru Composting Plant                        | <b>30<sup>th</sup> August 2013</b>   |
| 3   | Opening ceremony of the Kelaniya University Medical Faculty Pilisaru compost plant | <b>11<sup>th</sup> December 2013</b> |
| 4   | Awareness on Waste Management at Department of Immigration & Emigration            | <b>01<sup>st</sup> January 2013</b>  |



### 15.11 Awareness on waste management in schools through Environmental Pioneer Brigade Programme

School children, teachers, principals and other staff were made aware on waste management through Environmental Pioneer Brigade Programme.

### 15.12 Project coordination and management

Under the direction of Hon. Minister of Environment and Renewable Energy a corporate plan on municipal waste management was prepared in consultation of all stakeholders and a cabinet paper was submitted Requesting additional funds and extension to the project for next five years. Accordingly approval was granted Rs. 290 Mn for the year 2013 and the National Budget has allocated Rs. 200 Mn for project operation in 2014.

During the year 2013, six officers resigned from the project and the CEA terminated 22 staff members in July 2013 and the details are given below.

| Position               | Terminated | Resigned  |
|------------------------|------------|-----------|
| Deputy Director        | 01         | -         |
| Deputy manager         | 01         | 02        |
| Senior Engineer        | 02         | -         |
| Accountant             | -          | 01        |
| Junior Accountant      | 01         | -         |
| Project Officer        | 03         | -         |
| Administrative Officer | 01         | -         |
| Quantity Surveyor      | 01         | -         |
| Project Engineer       | 01         | -         |
| Project Assistant      | 01         | 01        |
| Project Secretary      | -          | 01        |
| Draft Person           | 01         | -         |
| Procurement Assistant  | -          | 01        |
| Accounts Assistant     | 01         | -         |
| Clerk                  | 05         | -         |
| Driver                 | 03         | -         |
| Office assistant       | 01         | -         |
| <b>Total</b>           | <b>22</b>  | <b>06</b> |

As at 31<sup>st</sup> December 2013 the project is manned only by a total cadre of 03 staff. The Procurement works are handled by the procurement Management of the SDF-KOICA Project. The existing staff is as at the end 2013, listed below;

| Position                | No.       |
|-------------------------|-----------|
| Project Director        | 01        |
| Atg. Accountant         | 01        |
| Divisional Env. Officer | 01        |
| <b>Total</b>            | <b>03</b> |

### 15.13 Financial progress

The project was allocated a sum of Rs. 200Million for the year 2013 initially. The project requested additional funds through a Cabinet Memorandum for project operations and accordingly approval of cabinet of ministers were received an additional funds of Rs. 265 Million. However, the General

Treasury released only Rs. 65 Million out of approved additional funds. The total financial progress of the project was Rs. 265 Million i.e. being 100% progress. However, the project had to make several payments of the work done in the previous year out of the allocations of the current year.

| <b>Pilisaruru Project</b>                               |                 |                       |                 |                       |
|---|-----------------|-----------------------|-----------------|-----------------------|
| <b>Statement of Financial Performance</b>               |                 |                       |                 |                       |
| <b>For the year Ended 31<sup>st</sup> December 2013</b> |                 |                       |                 |                       |
|   |                 |                       |                 |                       |
|   | <b>2013 Rs.</b> |                       | <b>2012 Rs.</b> |                       |
| <b>Income</b>   |                 |                       |                 |                       |
| Government Grants                                       |                 | 265,000,000.00        |                 | 220,960,000.00        |
| Sales Proceeds from Compost Bins                        |                 | 2,565,007.13          |                 | 4,488,817.97          |
| MISL Income   |                 | 510.40                |                 | 261,618.21            |
| Nonrefundable deposits                                  |                 | -                     |                 | 170,000.00            |
| Deferred Revenue  |                 | 27,412.50             |                 | 10,308,234.63         |
|   |                 | <b>267,592,930.03</b> |                 | <b>236,188,670.81</b> |
| <b>Expenses</b>   |                 |                       |                 |                       |
| Establishment of Major Compost Plants                   |                 |                       |                 |                       |
|   |                 |                       |                 |                       |
| Kolonnawa   | 569,449.80      |                       | 301,572.54      |                       |
| Kalutara Pohorawatta                                    | 138,967.77      |                       | 1,047,561.87    |                       |
| Hikkaduwa , Monoraviawatta                              | 225,017.10      |                       | 19,980,525.70   |                       |
| Kurunegala, Sundarapola                                 | 38,305,755.36   |                       | 22,861,335.32   |                       |
| Anuradhapura, Nuwaragampalatha                          | 664,610.80      |                       | 2,154,847.96    |                       |
| Jaffna  | 91,368.00       |                       | -               |                       |
| Operating Cost for Major Compost Plants                 | 1,956,229.53    |                       | 6,161,683.84    |                       |
| Improvements for Major Composting Plants                | -               |                       | 1,086,312.51    |                       |
| Planning and Design Of Major Composting Plant           | -               | 41,951,398.36         | 1,703,346.10    | 55,297,185.84         |
|   |                 |                       |                 |                       |
| Establishment of Landfill Sites & Transfer Stations     |                 |                       |                 |                       |

| Pilisar Project<br>Statement of Financial Performance<br>For the year Ended 31 <sup>st</sup> December 2013       |                |   |                |              |
|--|----------------|---|----------------|--------------|
| Planning, design and implementation of landfills at selected locations   | -              | - | 4,255,164.23   | 4,255,164.23 |
| Small Scale Composting Plants & Facilitation of SWM Programmes   |                |   |                |              |
| Small Scale Compost Plants for Local Authorities   | 111,086,200.21 |   | 77,341,133.04  |              |
| O& M and Improvements for Small Scale Compost Plants   | 210,406.35     |   | 1,645,089.35   |              |
| Monitoring of Operations of Compost Plants established by Pilisar Project  | 92,330.84      |   | 137,083.11     |              |
| Bio Gas Plants for Local Authorities, Hospitals, Military Camps Government Institutions                          | -              |   | 1,191,629.80   |              |
| Management of E-waste, Biomedical-Healthcare Waste, Chemical Waste   | -              |   | 162,798.50     |              |
| Implementation of Sundara Gampaha Programme  | -              |   | 5,342,400.00   |              |
| Providing Household Compost Bins & Collection bins to Local Authorities schools, religious Places, Institutions. | -              |   | 15,730,644.21  |              |
| Supply of Waste Collection & Transport Vehicles and Land filling equipment/ Machineries                          | 7,105,193.85   |   | 158,041,852.04 |              |
| Waste Management Promotional Activities  | 484,275.28     |   | 17,744,815.82  |              |
| Deyata Kirula National Development exhibition  | -              |   | 2,491,024.06   |              |

| <b>Pilisar Project</b>   |              |                |               |                |
|--|--------------|----------------|---------------|----------------|
| <b>Statement of Financial Performance</b>  |              |                |               |                |
| <b>For the year Ended 31<sup>st</sup> December 2013</b>  |              |                |               |                |
| Development of GIS data base on Solid Waste Management   | -            |                | 1,769,636.80  |                |
| Improved Waste Management in schools through Strengthening of environmental pioneer programme  | 2,974,702.70 |                | 14,416,876.65 |                |
| National approach for recognition of waste minimization/management programme for government/private sector establishments and entrepreneurs                                      | 3,000,000.00 |                | 5,025,000.00  |                |
| Provide Marketing Opportunities for compost/establish quality control standards/facilitate standards of compost  | -            |                | 43,470.00     |                |
| Training on operational & maintenance for stakeholders of large and medium scale composting land filling, awareness and education in ISWM for all stakeholders/Training Capacity | -            |                | 901,893.13    |                |
| Establishment of SWM Training Center in Kandy  | -            | 124,953,109.23 | 570,772.28    | 302,556,118.79 |
|  |              |                |               |                |
| <b>KOICA Expenses</b>  |              |                |               |                |
| Earth Work   | 854,582.59   |                |               |                |
| Project Operation & Maintenance  | 179,148.84   | 1,033,731.43   |               |                |
|  |              |                |               |                |
| Operating Expenses   |              |                |               |                |
| Transport ( Fuel & maintenance)  | 2,460,379.64 |                | 4,314,404.83  |                |
| Office Supplies  | 1,038,485.21 |                | 2,002,498.96  |                |
| Salaries for Project Staff   | 9,935,121.15 |                | 20,111,113.59 |                |

| Pilisar Project<br>Statement of Financial Performance<br>For the year Ended 31 <sup>st</sup> December 2013 |              |                       |               |                         |
|--|--------------|-----------------------|---------------|-------------------------|
| Gratuity Provision   | 124,700.05   |                       |               |                         |
| EPF  | 1,808,164.29 |                       | 1,969,976.15  |                         |
| ETF  | 283,602.90   |                       | 492,493.91    |                         |
| Over Time, Subsistence & Special Allowance   | 850,937.91   |                       | 2,483,390.58  |                         |
| Communication / postage  | 285,070.59   |                       | 349,013.11    |                         |
| Rentals  | 3,979,007.67 |                       | 3,408,800.05  |                         |
| Project Coordination, Management   | 852,385.94   |                       | 204,066.00    |                         |
| Bank Charges and Debit Tax   | 12,000.00    |                       | 20,100.00     |                         |
| Contingencies / Miscellaneous - Other  | 63,887.21    |                       | 34,700.00     |                         |
| Depreciation of Property Plant & Equipment   | 2,221,182.74 |                       | 10,308,234.63 |                         |
| Vehicle Services & Repair  | 1,021,045.67 | 24,935,970.97         | 2,383,072.50  | <b>48,081,864.31</b>    |
| Total Expenses   |              | <b>192,874,209.99</b> |               | <b>410,190,333.17</b>   |
| <b>Income over Expenses/(Expenses over Income)</b>   |              | <b>74,718,720.04</b>  |               | <b>(174,001,662.36)</b> |

| <b>Pilisaru Project</b>                |             |                        |                         |
|--|-------------|------------------------|-------------------------|
| <b>Statement of Financial Position</b> |             |                        |                         |
| <b>As at 31st December</b>             |             |                        |                         |
|  | <b>Note</b> | <b>2013</b>            | <b>2012</b>             |
| <b>Assets</b>                          | <b>No</b>   | <b>Rs.</b>             | <b>Rs.</b>              |
| <b>Non Current Assets</b>              |             |                        |                         |
| Property, Plant & Equipment            | 3           | 3,323,343.20           | 5,544,525.94            |
| <b>Total Non-Current Assets</b>        |             | <b>3,323,343.20</b>    | <b>5,544,525.94</b>     |
| <b>Current Assets</b>                  |             |                        |                         |
| Cash at Bank                           |             | 2,325,730.62           | 12,376,929.24           |
| Cash Imprest                           |             | 30,000.00              | 30,000.00               |
| Consumable Stocks                      | 4           | 148,326.50             | 460,170.50              |
| Prepayment                             |             | -                      | 191,202.84              |
| Advance receivable                     |             | -                      | 680,000.00              |
| Mobilization Advance                   | 5           | 21,166,886.39          | 45,627,495.09           |
| Receivable -CEA                        |             | -                      | 33,404.93               |
| Fuel Deposit - Nadeesha Travels        |             | 200,000.00             | 200,000.00              |
| <b>Total Current Assets</b>            |             | <b>23,870,943.51</b>   | <b>59,599,202.60</b>    |
| <b>Total Assets</b>                    |             | <b>27,194,286.71</b>   | <b>65,143,728.54</b>    |
| <b>Less: Current Liabilities</b>       |             |                        |                         |
| Accrued Expenses                       | 6           | 83,305,395.30          | 191,887,664.83          |
| Retention Payable                      | 7           | 14,228,293.45          | 19,982,460.20           |
| Gratuity Payable                       | 8           | -                      | 814,769.95              |
| Payables to CEA                        | 9           | -                      | 4,535,655.30            |
| Payables to KOICA Project              | 10          | 2,318,105.00           | 2,438,454.80            |
| Refundable Deposits                    | 11          | 350,000.00             | 350,000.00              |
| <b>Total Current Liabilities</b>       |             | <b>100,201,793.75</b>  | <b>220,009,005.08</b>   |
| <b>Net Assets</b>                      |             | <b>(73,007,507.04)</b> | <b>(154,865,276.54)</b> |
| Balance B/F                            |             | (156,766,995.69)       | 10,376,260.10           |
| Surplus/(Deficit) for the Year         |             | 74,999,362.98          | (174,001,662.36)        |
| Capital Grant and Surplus              |             | 8,760,125.67           | 8,760,125.72            |
|  |             | <b>(73,007,507.04)</b> | <b>(154,865,276.54)</b> |

| <b>Pilisaru Project<br/>Cash Flow Statement<br/>For the year Ended 31st December</b> |                         |                         |
|--|-------------------------|-------------------------|
| <b>Description</b>   | <b>2013 Rs.</b>         | <b>2012 Rs.</b>         |
| Operating Activities   |                         |                         |
| Decrease in Stocks   | 311,844.00              | 1,544,519.00            |
| Decrease in Prepayments  | 191,202.84              | 636,627.96              |
| Decrease in Advance Receivables  | 680,000.00              | 242,224.99              |
| Decrease/(Increase) in Mobilization Advance  | 24,460,608.70           | (7,962,418.41)          |
| Decrease in Receivable from CEA  | 33,404.93               | (33,404.93)             |
| (Increase) in Other Receivables  | -                       | (100,000.00)            |
| (Decrease)/Increase of Accrued Expenses  | (108,582,269.53)        | 170,409,525.25          |
| (Decrease)/Increase of Retention Payable   | (5,754,166.75)          | 4,131,670.84            |
| (Decrease)/Increase of Payable to CEA  | (4,535,655.30)          | 4,535,655.30            |
| (Decrease)/Increase of Payable to KOICA Project                                      | (120,349.80)            | 2,438,454.80            |
| Increase of Refundable Deposits  | -                       | 50,000.00               |
| Cash Generated from Operations   | <b>(93,315,380.91)</b>  | <b>175,892,854.80</b>   |
| Less: Gratuity Paid  | (939,470.00)            | -                       |
| Net Cash flows Used in Operating Activities  | <b>(94,254,850.91)</b>  | <b>175,892,854.80</b>   |
| Investment Activities  |                         |                         |
| Establishment of Major Compost Plants  | (41,951,398.36)         | (55,298,185.84)         |
| Purchase of Fixed Assets   | -                       | (1,187,242.00)          |
| Establishment of Landfill Sites & Transfer Stations                                  | -                       | (4,255,164.23)          |
| Small Scale Composting Plants & Facilitation of SWM Programmes                       | (124,953,109.23)        | (302,556,118.79)        |
| KOICA Expenses   | (1,033,731.43)          | -                       |
| Project Operating Activities   | (22,309,444.89)         | (37,742,054.73)         |
| Cash Flow Used for Investing Activities  | <b>(190,247,683.91)</b> | <b>(401,038,765.59)</b> |
| Financing Activities   |                         |                         |

| <b>Pilisar Project<br/>Cash Flow Statement<br/>For the year Ended 31st December</b> |                        |                       |
|---|------------------------|-----------------------|
| Funds Received from the Treasury  | 265,000,000.00         | 220,960,000.00        |
| Proceed from Selling of Compost Bins  | 2,592,929.63           | 4,684,986.18          |
| Change in Accumulated Fund  | 6,858,406.57           | 553,609.04            |
| Cash Flow from Financing Activities   | <b>274,451,336.20</b>  | <b>226,198,595.22</b> |
|   |                        |                       |
| Cash & Cash Equivalents for the Year  | <b>(10,051,198.62)</b> | <b>1,052,684.43</b>   |
| Cash & Cash Equivalents at the Beginning of the Year                                | <b>12,406,929.24</b>   | <b>11,354,244.81</b>  |
| Cash & Cash Equivalents at the End of the Year - (Note A)                           | <b>2,355,730.62</b>    | <b>12,406,929.24</b>  |
|   |                        |                       |
| Note A - Cash & Cash Equivalents at the End of the Year                             |                        |                       |
| Cash at Bank  | 2,325,730.62           | 12,376,929.24         |
| Cash Imprest  | 30,000.00              | 30,000.00             |
|   | <b>2,355,730.62</b>    | <b>12,406,929.24</b>  |

## **Accounting Policies of PILISARU Project**

### **1. Corporate Information**

#### **1.1 Domicile Legal Form**

Pilisaru Project was established in the CEA with effect from 01<sup>st</sup> January 2008 based on a Cabinet Memorandum titled “Pilisaru Program -A National Approach for Waste Management in Sri Lanka which was submitted by the Ministry of Environment and Renewable Energy with a view to address the issue of improper Solid Waste Management (SWM) in the country and it was approved by the Cabinet Ministers on 19<sup>th</sup> December 2007.

Considering the importance and the timely necessity of this project, the Cabinet of Ministers has given its approval to extend the project for further three years period from 01<sup>st</sup> January 2011.

#### **Objectives**

Main objectives set in the Pilisaru Project.

##### **i. To ensure proper conservation of resources & proper SWM**

To use the correct policy and strategy in SWM and thereby to conserve resources wasted through garbage disposal & to conserve natural resources affected by informal/improper SWM.

##### **ii. To create awareness regarding SWM issues to relevant personnel & improve their skills.**

To create awareness & to train especially to LA Heads & officers related with SWM and DEO about the approach to manage SWM. In order to improve skills related with SWM necessary workshops are organized with the participation of private, government, non- government, educational and specialized personnel. Some of the awareness Programs to carry out are as set out below:

- Exhibitions at events such as the National Exhibition “ Deyata Kirula”
- Distribution of leaflets and posters at schools, universities, other institutions and events.
- Publication of documents, including books and reports on the waste management.
- Educational Programs at schools and universities.
- Television and Radio Programs on solid waste management and sanitary landfills.
- News Paper articles and features.
- Training and awareness program for heads of local authorities and other institutions.
- Distribution of Cloth bags to minimize the use of plastic.

### **iii. Implementation of SWM projects**

To provide necessary technical knowledge, finance and resources to Local Authorities (LAs) Island wide where SWM Project are carrying out and also which are waiting to start SWM Projects. The project has assisted over 115 local authorities with the construction of small-scale compost plants (receiving less than 10 tons of waste per day) and few Mega composting projects.

### **iv monitoring of SWM programmes**

In Sri Lanka the responsibility of SWM lies on LAs. But most of the public complaints are received by the MOE & CEA. Hence feedback of the SWM projects is carried out to identify the necessary resources for the LAs and to assist LAs to implement proper SWM.

### **v Providing facility to facilitate SWM**

Improve the facilities (equipments, finance etc) available for recycling in SWM & also to conserve resources by creating a market and promote sorting of waste at household level in order to facilitate provision of resources to recycling. Opening of SWM collection centers wherever necessary island wide and to create awareness among public in order to increase participation in SWM. Further, Provide households' compost bins at deeply subsidized rates and provide waste segregation bins.

### **vi Provision of necessary financial facilities for SWM**

An action is taken to provide financial facilities to LAs for the purpose of SWM through various organizations by collecting funds from governments and other funding agencies.

### **vii. Establishment of Waste Recycling Banking System**

According to this waste banking system a reputed bank must agree to collect waste from the account holders and an amount equal to the value of the waste should be credited to their bank account. The collected waste would be sold by the bank to recyclers and converted to money.

## **2. Summary Accounting Policies**

### **2.1 General**

#### **2.1.1 Statement of Compliance**

The Balance Sheet and the related Cash Flow Statement and the Accounting Policies and notes to the Financial Statements of Pilisaru Project have been prepared in accordance with the Generally Accepted Accounting Principles.

## **2.1.2 Basis of Preparation of Financial Statements**

The Final Statements of the Project are prepared in accordance with historical cost conversion with Generally Accepted Accounting Policies. No adjustments have been made for inflationary factors affecting the account. It is prepared in Sri Lankan Rupees (Rs.)

## **2.1.3 Comparative Information**

The accounting policies have been consistently applied by the Project and are consistent with those of the previous year and the previous year's figures have been re-arranged where ever necessary to confirm to the presentation.

## **2.1.4 Property Plant and Equipment**

### **2.1.4.1 Recognition and Measurement**

The property plant and equipment are recorded at cost less accumulated depreciation.

When an asset is appreciated, any increasing in the carrying amount is credited directly to the Capital Grant & Surplus account.

The cost of the property plant and the equipment is the cost of purchase or construction together with any expenses incurred in bringing the assets its working condition for its intended use.

The cost of the property plant and the equipment is the cash price equivalent at the recognition date i.e date of purchase.

### **2.1.4.2 Depreciation**

Provision for depreciation is calculated by using the straight line method on cost/revaluation of all property plant and equipment in order to write off such amount over the estimated useful economic life of such asset.

|                      |      |
|----------------------|------|
| Motor Vehicle        | 25%  |
| Office Equipment     | 25%  |
| Furniture            | 10%  |
| Laboratory Equipment | 10%  |
| Building             | 2.5% |

## **2.1.5 Inventories**

### **Cost of Inventories**

The cost of Inventories are comprises all cost of purchase incurred during the inventories to their present location.

The Project provides households' compost bins at deeply subsidized rates and provides waste segregation bins free of charge for National level functions, School exhibitions etc on their request.

Available balance at the end of year of Promotional items such as Pilisarua Caps, T-shirts and Cloth Bags also considered as closing Stocks.

#### **2.1.6 Cash and Cash equivalents**

For the purpose of Cash Flow Statement, cash and cash equivalents are defined as cash in hand (Cash Imprest) and cash at bank.

#### **2.1.7 Liabilities and Provisions**

Liabilities classified as current liabilities on the Balance Sheet at those which fall due for payment on demand or within one year from the Balance Sheet date.

Provisions and liabilities are recognized when the Project has a legal or constructive obligation as a result of past events and it is probable that an outflow of the economic benefits will be required to settle the obligation.

#### **2.1.8 Retirement Benefits to Employees**

##### **(a) Defined Benefit Plans**

The Retirement Benefit Plan adopted is as required under the payment of Gratuity Act No: 12 1983. Provision for Retiring Gratuity in the accounts of the project staff have been made from the first year of service of the employee.

##### **(b) Defined Contribution Plans –EPF and ETF**

All employees who are eligible for Employees Provident Fund Contributions and Employee Trust Fund Contribution are converted by relevant contributory funds in line with respective status.

#### **2.1.9 Deferred Revenue**

##### **2.1.9.1 Government Grants**

Government Grants are adjusted in the Cash Flow Statement and it matches over the periods necessary to match them with the related expenses which they are intended to be compensated on a systematic basis.

Grants related to assets, including non –monitory grants at fair value is deferred in the Balance Sheet and credited to the Income Statement over the useful life of the related assets.

##### **2.1.9.2 Income from Compost Bins**

Receipt from compost bins have been recognized in the Cash Flow Statement.

### 2.1.9.3 Non Refundable Deposits

Receipts from nonrefundable deposits have also been considered in the Cash Flow Statement.

### 2.1.10 Expenditure

All expenses incurred in the running of the Project and the maintaining the assets have been identified in the Cash Flow Statement.

| <b>Pilisaru Project</b>                |           |                        |                         |
|--|-----------|------------------------|-------------------------|
| <b>Statement of Financial Position</b> |           |                        |                         |
| <b>As at 31st December</b>             |           |                        |                         |
|  | Note      | 2013                   | 2012                    |
| <b>Assets</b>                          | <b>No</b> | <b>Rs.</b>             | <b>Rs.</b>              |
| -                                      |           |                        |                         |
| Non Current Assets                     |           |                        |                         |
| Property, Plant & Equipment            | 3         | 3,323,343.20           | 5,544,525.94            |
| Total Non Current Assets               |           | 3,323,343.20           | 5,544,525.94            |
| Current Assets                         |           |                        |                         |
| Cash at Bank                           |           | 2,325,730.62           | 12,376,929.24           |
| Cash Imprest                           |           | 30,000.00              | 30,000.00               |
| Consumable Stocks                      | 4         | 148,326.50             | 460,170.50              |
| Prepayment                             |           | -                      | 191,202.84              |
| Advance receivable                     |           | -                      | 680,000.00              |
| Mobilisation Advance                   | 5         | 21,166,886.39          | 45,627,495.09           |
| Receivable -CEA                        |           | -                      | 33,404.93               |
| Fuel Deposit - Nadeesha Travels        |           | 200,000.00             | 200,000.00              |
| Total Current Assets                   |           | <b>23,870,943.51</b>   | <b>59,599,202.60</b>    |
| <b>Total Assets</b>                    |           | <b>27,194,286.71</b>   | <b>65,143,728.54</b>    |
| Less: Current Liabilities              |           |                        |                         |
| Accrued Expenses                       | 6         | 83,305,395.30          | 191,887,664.83          |
| Retention Payable                      | 7         | 14,228,293.45          | 19,982,460.20           |
| Gratuity Payable                       | 8         | -                      | 814,769.95              |
| Payables to CEA                        | 9         | -                      | 4,535,655.30            |
| Payables to KOICA Project              | 10        | 2,318,105.00           | 2,438,454.80            |
| Refundable Deposits                    | 11        | 350,000.00             | 350,000.00              |
| Total Current Liabilities              |           | <b>100,201,793.75</b>  | <b>220,009,005.08</b>   |
| Net Assets                             |           | <b>(73,007,507.04)</b> | <b>(154,865,276.54)</b> |
| Balance B/F                            |           | (156,766,995.69)       | 10,376,260.10           |

| <b>Pilisar Project</b>  |             |                        |                         |
|---|-------------|------------------------|-------------------------|
| <b>Statement of Financial Position</b>  |             |                        |                         |
| <b>As at 31st December</b>  |             |                        |                         |
|   | <b>Note</b> | <b>2013</b>            | <b>2012</b>             |
| Surplus/(Deficit) for the Year  |             | 74,999,362.98          | (174,001,662.36)        |
| Capital Grant and Surplus   |             | 8,760,125.67           | 8,760,125.72            |
|   |             | <b>(73,007,507.04)</b> | <b>(154,865,276.54)</b> |
| <p><b>The Board of the Central Environmental Authority is responsible for preparation &amp; presentation of these Financial Statements in accordance with the Generally Accepted Accounting Principles.</b></p> |             |                        |                         |

| <b>Pilisar Project</b>                          |                        |                       |
|---|------------------------|-----------------------|
| <b>Cash Flow Statement</b>                      |                        |                       |
| <b><u>For the year Ended 31st December</u></b>  |                        |                       |
| <b>Description</b>                              | <b>2013 Rs.</b>        | <b>2012 Rs.</b>       |
| Operating Activities                            |                        |                       |
| Decrease in Stocks                              | 311,844.00             | 1,544,519.00          |
| Decrease in Prepayments                         | 191,202.84             | 636,627.96            |
| Decrease in Advance Receivables                 | 680,000.00             | 242,224.99            |
| Decrease/(Increase) in Mobilization Advance     | 24,460,608.70          | (7,962,418.41)        |
| Decrease in Receivable from CEA                 | 33,404.93              | (33,404.93)           |
| (Increase) in Other Receivables                 | -                      | (100,000.00)          |
| (Decrease)/Increase of Accrued Expenses         | (108,582,269.53)       | 170,409,525.25        |
| (Decrease)/Increase of Retention Payable        | (5,754,166.75)         | 4,131,670.84          |
| (Decrease)/Increase of Payable to CEA           | (4,535,655.30)         | 4,535,655.30          |
| (Decrease)/Increase of Payable to KOICA Project | (120,349.80)           | 2,438,454.80          |
| Increase of Refundable Deposits                 | -                      | 50,000.00             |
| Cash Generated from Operations                  | <b>(93,315,380.91)</b> | <b>175,892,854.80</b> |
| Less: Gratuity Paid                             | (939,470.00)           | -                     |
| Net Cash flows Used in Operating Activities     | <b>(94,254,850.91)</b> | <b>175,892,854.80</b> |

| <b>Pilisar Project</b>   |                         |                         |
|--|-------------------------|-------------------------|
| <b>Cash Flow Statement</b>                                     |                         |                         |
| <b><u>For the year Ended 31st December</u></b>                 |                         |                         |
| Description  | 2013 Rs.                | 2012 Rs.                |
| Investment Activities  |                         |                         |
| Establishment of Mager Compost Plants                          | (41,951,398.36)         | (55,298,185.84)         |
| Purchase of Fixed Assets                                       | -                       | (1,187,242.00)          |
| Establishment of Landfill Sites & Transfer Stations            | -                       | (4,255,164.23)          |
| Small Scale Composting Plants & Facilitation of SWM Programmes | (124,953,109.23)        | (302,556,118.79)        |
| KOICA Expenses   | (1,033,731.43)          | -                       |
| Project Operating Activities                                   | (22,309,444.89)         | (37,742,054.73)         |
| Cash Flow Used for Investing Activities                        | <b>(190,247,683.91)</b> | <b>(401,038,765.59)</b> |
| Financing Activities   |                         |                         |
| Funds Received from the Treasury                               | 265,000,000.00          | 220,960,000.00          |
| Proceed from Selling of Compost Bins                           | 2,592,929.63            | 4,684,986.18            |
| Change in Accumulated Fund                                     | 6,858,406.57            | 553,609.04              |
| Cash Flow from Financing Activities                            | <b>274,451,336.20</b>   | <b>226,198,595.22</b>   |
| Cash & Cash Equivalents for the Year                           | <b>(10,051,198.62)</b>  | <b>1,052,684.43</b>     |
| Cash & Cash Equivalents at the Beginning of the Year           | <b>12,406,929.24</b>    | <b>11,354,244.81</b>    |
| Cash & Cash Equivalents at the End of the Year - (Note A)      | <b>2,355,730.62</b>     | <b>12,406,929.24</b>    |
| Note A - Cash & Cash Equivalents at the End of the Year        |                         |                         |
| <b>Cash at Bank</b>  | 2,325,730.62            | 12,376,929.24           |
| <b>Cash Imprest</b>  | 30,000.00               | 30,000.00               |
|  | <b>2,355,730.62</b>     | <b>12,406,929.24</b>    |

| <b>Note 03 - Property Plant &amp; Equipment</b> |                                 |                                  |                                 |                                 |                                 |                                 |                        |
|---|---------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|------------------------|
| <b>Asset Category</b>                           | <b>Cost/Revaluation Amount</b>  |                                  |                                 | <b>Accumulated Depreciation</b> |                                 |                                 | <b>Carrying Amount</b> |
|   | <b>Balance as at 01.01.2013</b> | <b>Additions During the Year</b> | <b>Balance as at 31.12.2013</b> | <b>Balance as at 01.01.2013</b> | <b>Charge for the year 2013</b> | <b>Balance as at 31.12.2013</b> |                        |
|   | <b>Rs.</b>                      | <b>Rs.</b>                       | <b>Rs.</b>                      | <b>Rs.</b>                      | <b>Rs.</b>                      | <b>Rs.</b>                      |                        |
| Motor Vehicle                                   | 20,800,000.00                   | -                                | 20,800,000.00                   | 20,319,315.07                   | 480,683.93                      | 20,799,999.00                   | 1.00                   |
| Furniture & Fittings                            | 2,737,843.50                    | -                                | 2,737,843.50                    | 1,041,213.90                    | 273,784.35                      | 1,314,998.25                    | 1,422,845.25           |
| Buildings (Garage)                              | 1,500,000.00                    | -                                | 1,500,000.00                    | 111,765.82                      | 37,500.00                       | 149,265.82                      | 1,350,734.18           |
| Office Equipment                                | 10,308,047.78                   | -                                | 10,308,047.78                   | 8,965,071.82                    | 1,342,976.96                    | 10,308,048.78                   | (1.00)                 |
| Laboratory Equipment                            | 862,374.60                      | -                                | 862,374.60                      | 226,373.33                      | 86,237.50                       | 312,610.83                      | 549,763.77             |
| <b>Total</b>                                    | <b>36,208,265.88</b>            | <b>-</b>                         | <b>36,208,265.88</b>            | <b>30,663,739.94</b>            | <b>2,221,182.74</b>             | <b>32,884,922.68</b>            | <b>3,323,343.20</b>    |

| <b>Note 04 - Consumable Stocks</b> |          |          |                   |
|------------------------------------|----------|----------|-------------------|
| Description                        | Quantity | Rate     | Value Rs.         |
| Compost Bins                       | 3        | 2,550.00 | <b>7,650.00</b>   |
| Waste Collection Bins RPC          | 30       | 3,250.00 | <b>97,500.00</b>  |
| Cloth Bags                         | 260      | 140.00   | <b>36,400.00</b>  |
| T-shirts                           | 14       | 475.00   | <b>6,650.00</b>   |
| Pilisaru Caps                      | 1        | 126.50   | <b>126.50</b>     |
| <b>Total</b>                       |          |          | <b>148,326.50</b> |

| <b>Note No 05 - Mobilization Advances-Recoverable Amount</b> |              |              |
|--|--------------|--------------|
| Major Projects   | Rs.          | Rs.          |
| Hikkaduwa-Road Construction                                  | 3,719,043.52 |              |
| Bio Gas Plants -Isuru Engineers                              | 1,000,000.00 | 4,719,043.52 |
| Mini Projects Local Authorities                              |              |              |
| Boralesgamuawa UC(Sampathpiysa)                              | 326,906.64   |              |
| Kegalle UC   | 311,364.77   |              |
| Elpitiya PS  | 300,000.00   |              |
| Kelaniya PS  | 1,250,627.43 |              |
| Mawathagama PS   | 728,418.92   |              |
| Thanamalwila PS/Sevanagala                                   | 519,164.44   |              |
| Galenbindunuwewa Pradeshiya Sabha                            | 1,280,662.97 |              |
| Ipalogama Pradeshiya Sabha                                   | 241,693.48   |              |
| Medawachchiya Pradeshiya Sabha                               | 200,000.00   |              |
| Rambewa Pradeshiya Sabha                                     | 1,299,527.68 |              |
| Thirappane Pradeshiya Sabha                                  | 1,114,405.12 |              |
| Chavakachcheri Urban Council                                 | 447,255.65   |              |
| Hambantota Pradeshiya Sabha                                  | 512,638.94   |              |
| Ruwanwella Pradeshiya Sabha                                  | 745,289.31   |              |
| Wanathavilluwa Pradeshiya Sabha                              | 668,678.35   |              |
| Thalawa PS   | 864,110.22   |              |
| Thalawa PS - Thambuttegama                                   | 1,003,849.34 |              |
| Puttalam PS  | 1,477,875.47 |              |
| Sri Lanka Air Force - Katunayake                             | 503,985.31   |              |

| Note No 05 - Mobilization Advances-Recoverable Amount |              |                      |
|---|--------------|----------------------|
| Major Projects  | Rs.          | Rs.                  |
| SLAF Diyathalawa                                      | 504,751.00   |                      |
| Kaththankudi  | 551,292.49   |                      |
| Chawakachcheri  | 1,121,383.44 |                      |
| Kabithigollawa PS                                     | 473,961.90   | 16,447,842.87        |
| <b>Total</b>  |              | <b>21,166,886.39</b> |

| Note No 06 - Accrued Expenses         |   |              |               |
|---------------------------------------|---|--------------|---------------|
| Payee/Client                          | Description                                 | Date of Bill | Amount Rs.    |
| Alawwa PS                             | Payment of 5th Bill                         | 04.03.2013   | 642,798.05    |
| Associated Motor ways/DIMO            | Purchase of Lorry and Tipper                |              | 5,932,000.00  |
| Damana PS                             | Payment of Final Bill                       | 05.02.2014   | 1,281,836.08  |
| Hambantota PS                         | Payment of 2nd Bill                         | 10.04.2013   | 209,213.94    |
| Hikkaduwa Monrowiyawatta              | Payment of 4th Bill                         | 13.08.2013   | 30,014,634.00 |
| Kattankudi PS                         | Payment of 1st Bill                         | 05.02.2014   | 3,495,462.41  |
| Kelaniya PS                           | Payment of Final Bill                       | 30.07.2013   | 380,995.46    |
| Mahaoya PS                            | Payment of 3rd Bill                         | 05.02.2014   | 820,350.58    |
| Malimbada PS                          | Payment of Final Bill                       | 10.02.2014   | 1,307,797.82  |
| Mawathagama PS                        | Payment of 3rd Bill                         | 19.06.2013   | 2,767,816.76  |
| Madawachchiya PS                      | Payment of Final Bill                       | 13.06.2013   | 611,943.87    |
| Matara UC                             | Payment of Extra Work                       | 07.02.2014   | 200,000.00    |
| Mahawa PS                             | Payment of Final Bill                       | 28.01.2014   | 739,819.78    |
| Medirigiriya - Yudaganawa             | Payment for Extra Work                      | 11.01.2013   | 35,422.20     |
| Nikaweratiya PS                       | Payment of 3rd Bill                         | 20.12.2013   | 252,483.39    |
| Nikini Automation Systems Pvt Ltd     | Balance payment of purchasing convere Belts |              | 1,178,240.00  |
| Nivithigala PS                        | Payment of Final Bill                       | 04.10.2013   | 132,125.59    |
| Pannala PS                            | Release of Retention Money                  | 18.09.2013   | 75,257.27     |
| Puttlam PS                            | Payment of 4th Bill                         | 08.01.2013   | 823,759.74    |
| Rajgama - Monrowiyawatta Compost Yard | Reimbursement of Operating Cost             |              | 87,864.00     |
| RPC Polylmer                          | 600 Nos. Seperation Bins                    | 09.10.2012   | 12,650,433.00 |
| Sri Lanka Air Force - Katunayake      | Payment of 2nd Bill                         | 04.02.2014   | 1,308,649.07  |
| Sri Lanka Air Force - Diyatalawa      | Payment of 2nd Bill                         | 11.05.2013   | 5,224,193.49  |
| Thanamalwila                          | Mini Composting Plant                       | 15.11.2012   | 441,921.00    |

|                                 |                       |            |                      |
|---------------------------------|-----------------------|------------|----------------------|
| Thirappane PS                   | Payment of Final Bill | 30.01.2014 | 2,741,138.32         |
| Tissamaharamaya PS              | Payment of 2nd Bill   | 05.02.2014 | 1,830,999.48         |
| Purchasing of Skid Steel Loader | 2 Numbers             |            | 6,940,000.00         |
| Purchasing of Compost Hullers   | 4 Numbers             |            | 1,178,240.00         |
| <b>Total</b>                    |                       |            | <b>83,305,395.30</b> |

#### Note No 07 - Retention Payable

| Description  | Amount Rs    |              |
|--|--------------|--------------|
| Major Construction projects                              |              |              |
| Kolonnawa-Square Mesh Engineering (Pvt)Ltd.              | 2,814,677.06 |              |
| Kolonnawa-Fence  | 79,172.50    |              |
| Retention Payable-Anuradhapura Access Road               | 664,610.80   |              |
| Payment for training Camp -Medirigiriya                  | 68,118.43    |              |
| Nikini Automation (Pvt)Ltd.-Convey Belts for major sites | 806,804.12   |              |
| Madirigiriya   | 21,902.25    |              |
| Hikkaduwa Road Construction                              | 776,630.54   |              |
| Kalutara-Waste Management Authority -Renovation          | 5,776.50     |              |
| Kurunegala Mega Composting Site-Theshan Engineers        | 541,419.71   |              |
|  |              | 5,779,111.91 |
| Mini Construction projects                               |              |              |
| Local Authority  |              |              |
| Gampaha 1  | 15,698.50    |              |
| Thalawa PS - Thambuttegama                               | 36,728.06    |              |
| CDF Camp-Galkiriyagama                                   | 44,867.15    |              |
| Wanathavilluwa Pradeshiya Sabha                          | 48,825.44    |              |
| Chavakachcheri Urban Council                             | 49,354.00    |              |
| Karandeniya PS   | 54,488.04    |              |
| kakathivu  | 63,604.73    |              |
| Armoured Corps Training Institute, Galkulama             | 86,318.69    |              |
| Ja-Ela Urban Council                                     | 87,559.85    |              |
| Elpitiya PS  | 105,812.34   |              |
| Weeraketiya Pradeshiya Sabha                             | 111,067.40   |              |
| Thalawa PS   | 126,681.54   |              |
| Kegalle UC   | 130,280.32   |              |
| Nivithigala PS (SWM Collect Centre)                      | 132,125.59   |              |
| Matale MC  | 132,478.59   |              |
| Polpithigama Pradeshiya Sabha                            | 136,813.10   |              |
| Kuruwita PS (SWM Collect Centre)                         | 146,627.35   |              |
| Nikaweratiya PS  | 150,636.90   |              |
| Rattota PS   | 154,987.17   |              |
| Maho PS  | 193,556.65   |              |
| Mahawa PS  | 193,556.63   |              |

|                                |            |                      |
|--------------------------------|------------|----------------------|
| Mawathagama PS                 | 197,445.20 |                      |
| Gampaha 2                      | 199,696.50 |                      |
| Malimbada Pradeshiya Sabha     | 200,347.96 |                      |
| Rideegama PS                   | 201,726.55 |                      |
| Pathahewaheta PS               | 207,237.88 |                      |
| Akurana PS                     | 253,441.14 |                      |
| Galnewa Pradeshiya Sabha       | 264,762.30 |                      |
| Rajanganaya Pradeshiya Sabha   | 264,762.30 |                      |
| Beliatta PS                    | 270,649.68 |                      |
| Kirinda-Pohulwella PS          | 281,519.59 |                      |
| Ipalogama Pradeshiya Sabha     | 302,116.85 |                      |
| Medawachchiya Pradeshiya Sabha | 309,339.59 |                      |
| Kebithigollawa PS              | 322,099.49 |                      |
| Polgahawela PS                 | 332,523.99 |                      |
| Mirigama PS                    | 345,283.22 |                      |
| Padaviya PS                    | 345,903.25 |                      |
| Kelaniya PS                    | 694,793.01 |                      |
| Kaththankudi PS                | 417,307.00 |                      |
| Damana PS                      | 195,056.00 |                      |
| Thissamaharamaya PS            | 215,169.00 |                      |
| Walikaman South PS             | 236,806.00 |                      |
| Namal Oya PS                   | 189,127.00 | 8,449,181.54         |
| <b>Total</b>                   |            | <b>14,228,293.45</b> |

#### Note No 08 - Gratuity Payable (31.12.2012)

| Date Join  | Name                   | EPF No | Basic Salary per month | No of Years | Amount            |
|------------|------------------------|--------|------------------------|-------------|-------------------|
| 02.05.2008 | R B Premarathna        | 1068   | 40,000.00              | 4.67        | 93,400.00         |
| 02.05.2008 | G D Gunathilaka        | 1069   | 85,000.00              | 4.67        | 198,475.00        |
| 02.05.2008 | U D W A Gunawardana    | 1066   | 85,000.00              | 4.67        | 198,475.00        |
| 09.05.2008 | P L D K Rohan Liyanage | 1074   | 40,000.00              | 4.67        | 93,400.00         |
| 02.06.2008 | K A G S Perera         | 1079   | 13,560.00              | 4.50        | 30,509.95         |
| 09.06.2008 | G A D Perera           | 1081   | 13,560.00              | 4.50        | 30,510.00         |
| 11.08.2008 | H Sunethra Ranatunga   | 1089   | 40,000.00              | 4.33        | 86,600.00         |
| 06.10.2008 | Anupa Pasqual          | 1124   | 40,000.00              | 4.17        | 83,400.00         |
|            |                        |        |                        |             | <b>814,769.95</b> |

Note:

1. Gratuity provision has been made on the basis of the project duration. (2008-2013).
2. Provision has been made for the employees who can be completed 05 years period as at 31.12.2013, at the prevailing date of termination of the Project as well currently employing.

**Note No 09 - Payable to Central Environmental Authority as at 31 December 2012**

| Description                           | Date of Bill | Amount              |
|---------------------------------------|--------------|---------------------|
| <b>National Green Award</b>           | 03.12.2012   | 3,000,000.00        |
| Building Rent Oct -Nov Dec -2012      | 31.12.2012   | 772,200.00          |
| National Camp<br>Randenigala(Jambori) |              | 509,342.00          |
| Staff Salaries December 2013          | 25.12.2012   | 254,113.30          |
|                                       |              | <b>4,535,655.30</b> |

**Note No 10 - Payable to KOICA Project as at 31 December 2013**

| Date of Bill   | Payee/Client                          | Amount              |
|--|---------------------------------------|---------------------|
| 26.11.2012   | Suwasara thaksalawa- School Programme | 487,500.00          |
| 26.11.2012   | EPP Commissioner Programme            | 1,170,954.80        |
| 26.11.2012   | Green Youth Programme                 | 780,000.00          |
| Less : Advance Settlements                                 |                                       | (120,349.80)        |
| <b>Net Payable to KOICA Project as at 31 December 2013</b> |                                       | <b>2,318,105.00</b> |

**Note No 11 - Refundable Deposits- as at 31.12.2013**

| Date              | Name                                  | Receipt No | Amount    |
|-------------------|---------------------------------------|------------|-----------|
| <b>18.08.2010</b> | Wemara Construction(Pvt)Ltd.          | 61022      | 10,000.00 |
| <b>20.08.2010</b> | ST.Mary's construction                | 61003      | 10,000.00 |
| <b>23.08.2010</b> | Chaminda Construction                 | 61009      | 10,000.00 |
| <b>23.08.2010</b> | Panthila Civil Engineering            | 61010      | 10,000.00 |
| <b>23.08.2010</b> | Furni Dianamic Engineering (Pvt)Ltd.  | 61012      | 10,000.00 |
| <b>23.08.2010</b> | Gamini Construction                   | 61015      | 10,000.00 |
| <b>25.08.2010</b> | Sooriya Builders                      | 61019      | 10,000.00 |
| <b>25.08.2010</b> | Sumanasekera Construction             | 61021      | 10,000.00 |
| <b>26.08.2010</b> | Star Construction and Engineers (Pvt) | 61025      | 10,000.00 |
| <b>27.08.2010</b> | Isuru Engineering Services (Pvt)Ltd.  | 61033      | 10,000.00 |

| <b>Note No 11 - Refundable Deposits- as at 31.12.2013</b> |                                       |                   |                   |
|---|---------------------------------------|-------------------|-------------------|
| <b>Date</b>   | <b>Name</b>                           | <b>Receipt No</b> | <b>Amount</b>     |
| 30.08.2010  | G.G.C.International (Pvt) Ltd.        | 61036             | 10,000.00         |
| 30.08.2010  | Asiri Construction                    | 61039             | 10,000.00         |
| 17.08.2010  | RH Steel Buildings Systems (Pvt)      | 61193             | 10,000.00         |
| 18.08.2010  | N & A Engineering Services (Pvt) Ltd. | 61199             | 10,000.00         |
| 28.04.2011  | Teshan Engineering (Pvt) Ltd.         | 61990             | 10,000.00         |
| 29.04.2011  | Wemara Construction(Pvt)Ltd.          | 61992             | 10,000.00         |
| 02.05.2011  | RH Steel Buildings Systems (Pvt)      | 61195             | 10,000.00         |
| 04.05.2011  | ASB Constructions (Pvt)Ltd            | 61198             | 10,000.00         |
| 05.05.2011  | State Engineering Corporation         | 62401             | 10,000.00         |
| 09.05.2011  | G.G.C.International (Pvt) Ltd.        | 52403             | 10,000.00         |
| 11.05.2011  | Panthila Civil Engineers              | 62404             | 10,000.00         |
| 11.05.2011  | Industrial Engineering Enterprises    | 62407             | 10,000.00         |
| 12.05.2011  | KES Engineering (Pvt) Ltd.            | 62408             | 10,000.00         |
| 23.05.2011  | Aanthony Builders                     | 62418             | 10,000.00         |
| 13.05.2011  | Aselarachchi Construction (Pvt)Ltd.   | 62411             | 10,000.00         |
| 19.05.2011  | Gamine Construction                   | 62415             | 10,000.00         |
| 04.05.2011  | Subasingha Constructions              | 62420             | 10,000.00         |
| 24.05.2011  | Wahid Constructions                   | 62422             | 10,000.00         |
| 25.05.2011  | New Land Industries (Pvt)Ltd.         | 62423             | 10,000.00         |
| 25.05.2011  | Access International (Pvt)Ltd.        | 62426             | 10,000.00         |
| 19.04.2012  | Aselarachchi Construction (Pvt)Ltd.   | 63172             | 10,000.00         |
| 20.04.2012  | Teshan Engineering (Pvt) Ltd.         | 63176             | 10,000.00         |
| 24.04.2012  | RH Steel Buildings Systems (Pvt)      | 63182             | 10,000.00         |
| 25.04.2012  | RE Weerakoon Company                  | 63184             | 10,000.00         |
| 09.05.2012  | ATSL International(pvt)Ltd.           | 63192             | 10,000.00         |
| <b>Total</b>  |                                       |                   | <b>350,000.00</b> |



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கணக்காய்வாளர் தலைமை அபிபதி திணைக்களம்  
**AUDITOR GENERAL'S DEPARTMENT**



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எனது இல. } M2/L/PSD/4/13/31  
My No. }

ඔබේ අංකය  
உமது இல. }  
Your No. }

දිනය  
திகதி }  
Date }

18 December 2014

The Chairman,  
Central Environmental Authority

**Report of the Auditor General on the Financial Statements of the Pilisaru project for the year ended 31 December 2013.**

The audit of financial statements of the pilisaru project for the year ended 31 December 2013 was carried out under my direction in pursuance of provisions in Article 154 (1) of the constitution of the Democratic Socialist Republic of Sri Lanka.

**1.2 Implementation, objectives, funding and duration of the Project.**

The Pilisaru Project is implemented by the pilisaru Project Division established in the Central Environmental Authority and executed by the Ministry of Environment and Renewable Energy. Proper conservation of resources and to ensure the solid waste management, knowledge and skills building of persons engage in solid waste management, implementation of Solid waste management projects, Observation of projects, provision of facilities supply of required provision, establishment of a solid waste recycling banking system, taking legal action against the Local Authorities which do not manage solid waste are the main objectives of the Project. According to the funding plan for 6 years, the total cost of the project was Rs.5.6 billion, out of which Rs.2.675 billion from the Treasury and Rs.3 billion from "Green Tax introduced by the Budget for 2008 are expected to be financed. According to the Project proposal, the Project had commenced its activities on 01 January 2008 and was expected to be completed on 31 Decenter 2011. However It was recommended by the cabinet paper No. 10/1905/432/008 dated 16 September 2010 and Cabinet memorandum No.10/2010 that as the project could not be completed on due date the project period had been extended for 3 years from 01 January 2011 and provision should be made for the in implementation of the project for the next 3 years from 2008 to 2010 within the approved Limit of Rs.5.6 billion. According to the action plan for the year 2013 the estimated cost for the project amounted to Rs.0.2 billion.



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Auditor General's Department

### 1.3 Responsibility of the Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Generally Accepted Accounting principles. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

### 2. Scope of Audit and Basis of Opinion

My responsibility is to express an opinion on these financial statements based on my audit. Audit opinion, comments and findings in this report are based on revised of the financial statements presented to audit and substantive tests of samples of transactions. The scope and extent of such review and tests were such as to enable as wide an audit coverage as possible within the limitations of staff, other resources and time available to me. The audit was carried out in accordance with Sri Lanka Auditing Standards to obtain reasonable assurance as to whether the financial statements are free from material misstatements. The audit includes the examination on a test basis of evidence supporting the amounts and disclosures in financial statements and assessment of accounting policies used and significant estimates made by the management in the preparation of financial statements as well as evaluating their overall prevention. I have obtained sufficient information and explanations which to the best of my knowledge and belief were necessary for the purpose of my audit. I therefore believe that my audit provides a reasonable basis for my opinion. The examination also included such test of systems and controls, transactions, assets, liabilities and accounting records as deemed necessary to assess the following.

- (a) Whether the systems and controls were adequate from the point of view of internal control so as to ensure a satisfactory control over project Management and the reliability of books, records, etc. relating to the operations of the project.
- (b) Whether adequate accounting records were maintained of a continuing basis to show the expenditure of the project from the funds of the Government of Sri Lanka and the Lending Agency, the progress of the project in financial and physical terms, the assets and liabilities arising from the operations of the project, the identification of the purchases made out of the Loan, etc.



- (c) Whether the expenditure had been correctly identified according to the classification adopted for the implementation of the project.
- (d) Whether the financial statements had been prepared on the basis of Generally Accepted Accounting Principles.
- (e) Whether satisfactory measures had been taken by the management to rectify the issues highlighted in my previous year audit report.

### 3. Opinion

So far as appears from my examination and to the best of information and according to the explanations given to me, except for the effects of the adjustments arising from the matters referred to in paragraph 5 of this report, I am of opinion that,

- (a) The Project had maintained proper accounting records for the period of 06 months ended 30 June 2013 and the financial statements give a true and fair view of the state of affairs of the Project as at 30 June 2013 in accordance with Generally Accepted Accounting Principles,
- (b) The funds provided had been utilized for the purposes for which they were provided,
- (c) Satisfactory measures have been taken by the management to rectify the issues highlighted in my previous audit report.

### 4. Financial Statements

#### 4.1 Financial Performance

According to the financial statements presented, the expenditure for the year under review amounted to Rs. 317,396,336 and the accumulated expenditure for the year ended 31 December 2013 amounted to Rs. 1,952,031,164. A summary of the expenditure for the year under review, expenditure for the preceding year and the accumulated expenditure as at 31 December 2013 is given below.



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 Auditor General's Department

| Item of Expenditure   | Expenditure<br>for the year<br>2013 | Expenditure<br>for the year<br>2012 | Accumulated<br>expenditure as at<br>31 December 2013 |
|---|-------------------------------------|-------------------------------------|--|
|   | Rs.                                 | Rs.                                 | Rs.  |
| Construction of compost yards                                       | 45,816,245                          | 55,297,185                          | 511,191,805  |
| Land filling construction   | 732,443                             | 4,255,164                           | 17,211,401   |
| Small scale compost Yards and household compost containers          | 246,921,008                         | 302,556,119                         | 1,208,284,882  |
| Transport (fuel and maintenance)                                    | 2,460,379                           | 4,059,468                           | 17,624,018   |
| Office stationary supplies  | 726,177                             | 2,002,499                           | 5,948,026  |
| Salaries  | 12,915,044                          | 22,573,584                          | 108,626,343  |
| Postal and Tele communication                                       | 285,081                             | 349,013                             | 3,772,920  |
| Project Co-ordination and Management                                | 852,286                             | 204,066                             | 3,034,053  |
| Office Rent   | 4,739,702                           | 3,408,800                           | 19,347,056   |
| Overtime  | 850,938                             | 2,483,391                           | 7,312,962  |
| Bank charges and Debit tax  | 12,000                              | 20,100                              | 837,327  |
| Insurance   | -                                   | 254,937                             | 2,583,181  |
| Vehicles services and repairs                                       | 1,021,046                           | 2,383,072                           | 7,159,330  |
| Expenditure relating to the Korean International Corporation Agency | -                                   | -                                   | 19,387,597   |
| Training and capacity building of the project staff                 | -                                   | -                                   | 5,171,390  |
| Program Launching   | -                                   | -                                   | 4,959,320  |
| Other   | 63,887                              | 34,700                              | 9,579,553  |
|   | <u>317,396,336</u>                  | <u>399,882,098</u>                  | <u>1,952,031,164</u>                                 |



சென்ட்ரல் சூழலியல் அதிகாரிகளின்  
 பொதுமன்றம்  
 Auditor General's Department

## 5. Audit Observations

The following observations are made

- (a) Even though the loss of Rs. 6,050,000 incurred in respect of a vehicle belonging to the project in the year 2011, action had not been taken to recover the loss from the responsible Officers.
- (b) The Bard of Survey reports for the year 2013 had not been presented to the Auditor General in terms of Financial Regulation 757.

## 6. Financial and Physical Performance

### 6.1 Utilization of Funds

Certain data in respect of the utilization of funds by the project during the year 2013 and the overall fund utilization of the project as at 31 December 2013 is given below.

| Source of funds | Funds expected<br>to be invested for<br>project activities | Fund utilized<br>during the<br>year 2013 | Total Funds utilized<br>as at<br>31 December 2013 |
|-----------------|--|--|---|
|                 | Rs.million   | Rs.million                               | Rs.million  |
| Green Tax       | 3,000  | -  | -   |
| GOSL            | 2,675  | 317                                      | 1,998   |
|                 | <u>5,675</u>   | <u>317</u>                               | <u>1,998</u>                                      |

### 6.2 Contract Administration

Following observations are made

- (a) Financial assistance had been granted by the project to construct compost yards in the various Pradeshiya Sabhas under the implementation of solid waste management project which was the main objective of the project. Audit examination carried out in this regard observed the following matters.
  - (i) Even though an advance of Rs. 1,241,652 had been paid out of the estimated value of Rs. 1,806,413 for the construction of the security fence of the compost



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 Auditor General's Department

- yard, office and the stores building by the Pilisaru project to the Thanamalwila Pradeshiya sabha, the construction work of this yard had been commenced without being carried out any feasibility study. As such, it was observed in audit that disposal of waste and rubbish and manufacture of fertilizer could not be done at a maximum capacity.
- (ii) An expenditure of Rs.100.861 million had been incurred for the construction of the grand scale compost yard at Kolonnawa, Pothu wil kumbura, but a feasibility study had not been carried out. It was observed and informed at the physical verification carried out on 02 March 2013 that there would be a danger in burying the compost yard by the rubbish heap nearby but attention had not been paid in this regard. Subsequently on 11 December 2013, that rubbish heap was collapsed on to the compost yard. A sum of Rs.114.06 million had been spent for the constructions of this compost yard and to purchase plant and machinery.
- (iii) A compost yard had been constructed in an extent of 06 acres at yudaganawa area in Polonnarawa District under the Large scale compost yards by incurring an expenditure of Rs. 22,442,860. Eventhough it was targeted to manufacture 20 tons of carbonic fertilizer per month by using garbage of Higurakgoda and Medirigirya areas under this large scale compost. Yard, only 2 tractor loads been received daily and as such the expected targets could not be achieved. Further, the Medirigiry pradeshiya sabha had to spend Rs.2 million annually to maintain this yard and as a result this waste management projects was failed.
- (iv) It was observed that the manufacture of compost had not been carried out in the large scale compost yard at Monroviyawatta in Hikkaduwa, constructed to waste management in 07 Local autherities incurring an expenditure of Rs.112,200,183.
- (v) Further, even though a sum of Rs. 15,705,465 had been given to 12 Local authorities for the construction of small scale compost yards, they had not been constructed even by August 2014.



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 Auditor General's Department

Even though an advance of Rs. 1,280,663 had been given to the Galenbindunuwewa pradeshiya sabha in November 2011 for the implementation of small scale compost projects it had not been constructed and it was unable to recover the advance paid.

- (vi) Even though the manufacture of compost should be started within 2 weeks after the construction of small scale compost yards, manufacture of compost had not been commenced in the compost yards constructed in 14 Local authorities by incurring an expenditure of Rs. 44,490,219.
- (vii) Even though a sum of Rs. 3,444,748 had been released to 3 other local authorities for the construction of compost yards, those projects had already been abandoned.
- (viii) Before 01 month of the commented of compost yard activities, it was stated in agreement that Environment protection License should be obtained by the Local authorities. Nevertheless, such licenses had not been obtained for 103 compost yards.  
 Further, action should be taken to grow and continuously operate and maintain 'galsidia' 'wal sooriya kantha, keppetiya, gansooriya etc, with high nitrogen in order to uplift the quality of fertilizer manufactured and to utilise those leaves as a raw material to manufacture compost. Nevertheless it had not be so done.
- (ix) The quality of samples of carbonic fertilizer manufactured in the compost yards should be tested once in 3 months by the manufacture and popularization program of carbonic fertilizer under the control of the Ministry of Agriculture. Nevertheless 91 Local authorities had not done so and the project had also not taken follow up action.
- (x) It was observed that tanks to be constructed for the disposal of waste water through solid waste recycling process in the compost yard implemented by the pradeshiya sabha at Beliatta had not been quantitatively and properly constructed and implemented.

- (b) Even though a sum of Rs. 187.93 million had been spent by the Pilisaru project during the period from 2008 to 2013 for awareness pograms, the collection of allocated waste by the local authorities observed that the knowledge of persons who are engaged in



solid waste management was not improved. Further, even though 6,160 containers of solid waste had been purchased at a cost of Rs. 19,434,130 and distributed among the Public and private institutions and Local authorities the objective of this was not achieved.

- (c) Even though a sum of Rs.163 million had been spent by the project for Land filling, any land filling whatsoever had not been set up out of 9 land fillings stated in the action plan for the period from 2008 - 2010.

### 6.3 Human Resources Management

-----

Five coordinating officers had been recruited to the pilisaru project since 02 June 2014. Although a monthly salary of Rs. 40,000 and an monthly fuel allowance of Rs.20,000 had been paid to an individual with the approval of the Board of Directors, it was revealed that they had been recruited without checking their basic qualifications. Similarly, these posts had not been approved by the Department of Management services. Further, it was observed that in recruiting for the posts of senior Engineer and the Deputy Manager (Public Relations) of the project officer who had no required qualifications for the posts had been recruited and a sum of Rs. 6,403,600 had been paid as salaries and allowance to them during the period from 2008 to 2012.

After being pointed out his matter in audit their services were terminated. However a gratuity of Rs. 524,825 had been paid to them in the year 2013.

W.P.C. Wikramaratne  
Acting Auditor General

## LIST OF ABBREVIATIONS

|        |   |   |
|--------|---|---|
| BOD    | - | Biological Oxygen Demand  |
| BOI    | - | Board of Investment   |
| CEA    | - | Central Environmental Authority                                     |
| COD    | - | Chemical Oxygen Demand  |
| CETRAC | - | Construction Equipment Training Centre                              |
| DDG    | - | Deputy Director General   |
| DEO    | - | Divisional Environmental Officer                                    |
| DO     | - | District Office   |
| E & NR | - | Environment & Natural Resources                                     |
| EE & A | - | Environmental Education Awareness                                   |
| EIA    | - | Environmental Impact Assessment                                     |
| EM & A | - | Environmental Management & Assessment                               |
| EMS    | - | Environmental Management System                                     |
| EPC    | - | Environmental Pollution Control                                     |
| EPL    | - | Environmental Protection Licence                                    |
| GSMB   | - | Geological Survey and Mining Bureau                                 |
| HRD    | - | Human Resource Management   |
| HWM    | - | Hazardous Waste Management  |
| IEE    | - | Initial Environmental Examination                                   |
| IEMP   | - | Integrated Environmental Management Project                         |
| ITI    | - | Industrial Technological Institute                                  |
| JBIC   | - | Japan Bank of International Cooperation                             |
| KPS    | - | Kuruvita Pradeshiya Sabha   |
| NBRO   | - | National Building research Organization                             |
| LLF    | - | Load Based Licence Fee  |
| NEA    | - | National Environmental Act  |
| NEIC   | - | National Environmental Information Centre                           |
| NERD   | - | National Engineering Research & Development Centre                  |
| OP & M | - | Operational Planning & Monitoring                                   |
| PO     | - | Provincial Office   |
| PVC    | - | Polyvinyl chloride  |
| SEO    | - | Senior Environmental Officer  |
| SLTB   | - | Sri Lanka Transport Board   |
| SRO    | - | Sub Regional Office Kandy RO  |
| TPS    | - | Thamankaduwa Pradeshiya Sabha                                       |
| WDF    | - | Waste Water Discharge Fee   |
| WEA    | - | Wayamba Environmental Authority                                     |
| WWMA   | - | Western Province Waste Management                                   |
| WPO    | - | Western Provincial Office   |
| CPO    | - | Central Provincial Office   |
| SaPO   | - | Sabaragamuwa Provincial Office                                      |
| SuPO   | - | Southern Provincial Office  |
| NCPO   | - | North Central Provincial Office                                     |
| EPO    | - | Eastern Provincial Office   |
| UPO    | - | Uva Provincial Office   |
| NPO    | - | Northern Provincial Office  |
| JAICA  | - | Japan International cooperation Industry                            |
| IQMU   | - | Air Quality Monitoring Unit   |
| PM     | - | Particulate Matter  |
| KECO   | - | Korean Environmental Cooperation                                    |
| NCC    | - | National Coordination Committee                                     |
| TACMIC | - | Technical Advisory Committee for Management of Industrial Chemicals |

|        |   |  |
|--------|---|--|
| MEEE   | - | Management of Electronic and Electrical Equipments   |
| BMICH  | - | Bandaranayaka Memorial International Conference Hall |
| CFL    | - | Compact Fluorescent Lamp                             |
| PAA    | - | Project Approving Agency                             |
| NRM&M  | - | Natural Resource Management & Monitoring Unit        |
| EM&A   | - | Environmental Management & Awareness                 |
| NWP    | - | National Wetland Policy                              |
| NWSC   | - | National Wetland Steering Committee                  |
| DWLC   | - | Department of Wildlife Conservation                  |
| UDA    | - | Urban Development Authority                          |
| ICASL  | - | Institute of Chartered Accounts of Sri Lanka         |
| SLLRDC | - | Sri Lanka Land Reclamation & Development Corporation |
| GN     | - | Grama Niladari                                       |
| DS     | - | Divisional Secretary                                 |
| CCD    | - | Coastal Conservation Department                      |
| MC     | - | Municipal Council                                    |
| EE&A   | - | Environmental Education & Awareness Division         |
| EPP    | - | Environmental Pioneer Programme                      |
| WED    | - | World Environmental Day                              |
| TRC    | - | Telecommunication Regulatory Commission              |
| DELEC  | - | District Environmental Law Enforcement Committee     |
| NWS&DB | - | National Water Supply & Drainage Board               |
| LGA    | - | Local Government Authority                           |
| MENR   | - | Ministry of Environment & Natural Resource           |
| MERE   | - | Ministry of Environment & Renewable Energy           |
| PP     | - | Pilisaru Project                                     |
| NSWMS  | - | National Solid Waste Management Supporting Centre    |
| KMC    | - | Kurunagala Municipal Council                         |
| ICTAD  | - | Institute of Construction Training & Development     |
| EDCF   | - | Economic Development Cooperation Fund                |
| PPA    | - | Project Preparation Assistant                        |
| NPD    | - | National Planning Department                         |
| ERD    | - | External Resource Department                         |
| NSWMC  | - | National Solid Waste Management Centre               |
| WPWMA  | - | Western Province Waste Management Authority          |
| CLG    | - | Commissioner of Local Government                     |
| BOQ    | - | Bill of Quantities                                   |
| ISWM   | - | Integrated Solid Waste Management                    |