

Annual Report

2012



Central Environmental Authority

Ministry of Environment

Vision

A clean & green environment

Through service excellence

Mission

**Flagship of the Nation in protecting
& managing the quality of the environment**

**By promoting public participation,
Enforcement advanced technological
Interventions & environment.**

PREFACE

The Annual Report 2012 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 2012

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 2012.

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

CEA has been empowered to control environmental pollution, environmental management, environmental education, and environmental awareness by the National Environmental Act (NEA). Having realized that the Environmental Protection Licence (EPL) programme and administrative systems are not adequate to achieve the CEA's target, CEA conducted "National Green Awards 2012" program in 2012 also at the Bandaranaike Memorial International Conference Hall on 03rd December 2012 under the patronage of His Excellency the President Mahinda Rajapaksha. The objective of the program was to evaluate and encourage their greener approaches and performance in environmental enhancement in industries, schools and Local Authorities or other institutions.

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, EPC drafted new standards for EPL, after reviewing the existing process. In addition, EPC prepared the drafting of guidelines to establish eco-friendly farming during 2012.

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, the laboratory of CEA could be able to collect and analyse samples for various aspects.

In order to make sure the optimum use of natural resources for development, to minimize environmental pollution and to control ad-hoc development, CEA has initiated actions to carry out Strategic Environmental Assessment for Northern Province, Uva province and Gampaha District Development Plan. This initiative is vital for the sustainable development of the county with minimum harm to the environment.

Another very important policy decision taken by the CEA was not to grant approvals for Mini-hydro power projects at the 383 recorded waterfalls in the country. This policy decision was taken to prevent visual pollution and to maintain the picturesque and exquisite of the water falls. Apart from that, five (5) proposed sites/places named Bentota EPA, Koggala EPA, Dadigamuwa Kanda EPA, and the Gin Oya EPA were processed for declaration as EPAs during the period of year 2012.

GIS unit operates under the EM&A division of CEA prepared a Digital District Resources Profile containing compact disk for Kurunegala and Puttalam Districts which contains environmentally related information and Socio economic data of a district at divisional secretariat level. It is a great achievement because it provides novel information for industrialists as well as for policy makers.

Hazardous wastes and electronic waste generated from various sources are the emerging issues to the nation which cause various health related problems to people. In order to manage electronic waste (e-waste) effectively and efficiently within the country, two technical workshops on management of Bio Medical waste for government hospital in Colombo district and healthcare personnel (Public and Private sector) in Matara District were conducted by CEA. In the meantime, Initiatives were taken to update the National Chemical

Profile of Sri Lanka and to prepare a Chemical Management Plan with the financial assistance of SAICM Programme of UNEP.

The Environment Education and Awareness Division (EEA) of the Central Environmental Authority (CEA) is responsible for building awareness and providing education to the public towards harnessing their participation for the conservation of environment and to make them to more concern on environment. Therefore, EEA division carried out various educational and awareness programs to make people aware about the environment and its importance. In addition, Cartoon and Photographic competitions were conducted under limited and open category to mark the World Environment Day 2012.

The national solid waste management project of CEA “Pilisarū” has funded for the establishment of composting yards within 18 Local Authorities and other institutions island wide. Under that project, large scale composting yards were constructed at Pothuwilkumbura-Kolonnawa, Pohorawatta-Kalutara, Nuwaragampalatha- Anuradhapura, Monroviawatta –Rajgama, Sundarapola- Kurunagala areas in previous year and improvements were done in 2012 for better performance. In the meantime, the project supported 19 institutions to setup biogas units in order to facilitate proper management of waste in their institutions.

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, the National Post Consumer Plastic Waste Management Project (NPCPWMP) continued in 2012 also to manage the PCPW in an environmentally friendly manner. The project initiated recycling plastics at local authority level by providing model recycling plants to them. Plastic waste crushers and polythene compactors were also provided for systematic recycling of plastic wastes in the country. Awareness programs/campaigns for stakeholders were also conducted by the project to make them aware about the proper recycling of plastic waste. NPCPWMP took initiative to collect all the polythene and plastic waste generating at most sacred Sri Padha during the six months pilgrim season during the particular year by constructing a collection centre.

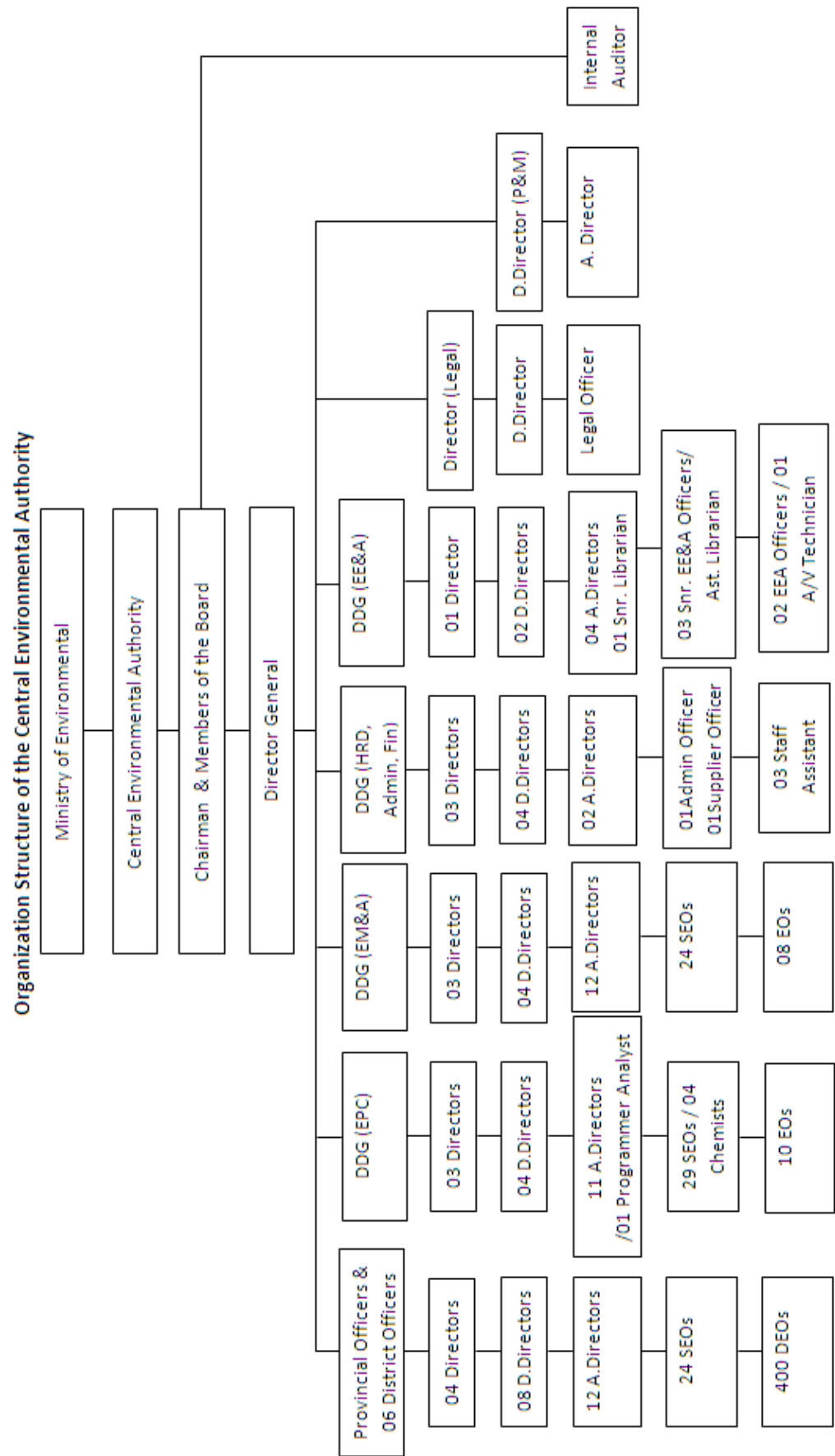
Usually, in every year we use different strategies to manage the environment sustainably while the government and the private sector launch various development projects. The strategic model that was introduced by the CEA can be adopted by the developers to protect the environment.

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 for their corporation, attention and advice. I would like to thank the Minister of Environment Hon. Anura Priyadharshana Yapa for his excellent advice and guidance.

Chairman

Central Environmental Authority

ORGANIZATION STRUCTURE



SENIOR MANAGEMENT TEAM OF THE CENTRAL ENVIRONMENTAL AUTHORITY

Name	Designation	Qualifications
Mr. Wimal Rubasinghe (SLAS)	Chairman	B.A PD Dip in MGT, Dip in Journalism, Mgt trained in UK
Ms. R. R. Ellepola	Director General	B.Sc (Special) M.Sc, M.I.chem.c, Chtd Chemist
Mr. K. H. Muthukudaarachchi	DDG (EPC)	B. Sc, M. Sc,
Eng. J. M. U. Indraratne	DDG (HRD, Admn, Fin.)	B. Sc (Eng.) Hons. MBA, C. Eng.MIE (SL) Grad. IE (Aus.)
Mr. U.K.D.G. Jayasinghe	DDG (EM & A)	B. Sc, M. Sc
Mr. M.J.J. Fernando	DDG (EE&A)	B. Sc, M. Sc, PG. Diploma (RS & GIS)
Mr. M.K.S. Nanayakkara	Director (Finance)	B.Com. (Hons.), Licentiate –SLICA, MAAT
Ms. Kanthi de Silva	Director (EIA)	B. Sc, M. Sc
Mr. M.S.A.E Thismalpola	Director (HRD)	Attorney –at - Law
Mr. M.A.A.N Hemakumara	Director (Geo - Info)	B. Sc , M. Sc
Mr. Neil Perera	Director (EE&A)	BA, Econ. (Special), MA (Economics)Dip (General Management)
Ms. Manuja Wimalasena	Director (Legal)	Attorney- at –Law, LLB (Sri Lanka), Notary Public, Commisioner for Oaths and Company Secretary
Mr. Ajith Rodrigo	Director (NRM)	B. Sc , M. Sc
Dr. R. M. S. K. Rathnayake	Director (EPC)	B.Sc. (Sp), Ph.D., Chtd. Chemist, Dip. Chemistry
Ms. Wasantha Wijesinghe	Director (Lab Services)	B. Sc (Chemistry) Hons. M.Sc. (Analytical Chemistry), M.I Chem., Chtd. Chemist
Mr. A. Weerasundara	Director (WM)	B. Sc, M. Sc
Mr. R. Walpola	Director (Admn)	B.A Hons., MSSc (Sociology)
Ms. Kumari Kulatilake	Dy. Director (P&M)	B.A (Gen)
Mr. Sunil De Silva	Programmer/Analyst	B.Sc. (Gen.), PGD Computer Technology
Ms. A.C.P. Dabare	Senior Librarian	B.A., M.Sc., ALA, Chtd.Librarian
Ms. U. Vithanachchi	Internal Auditor	MAAT, Chartered Licentiate
Mr. K.G.T.N. Kiriella	Director (CP)	B. Sc, M. Sc

Name	Designation	Qualifications
Mr. K.A.P. Welikannage	Director (SaP)	B. Sc, M. Sc, MA, PGD (Envtl. Science), Dip(HRM & Marketing)
Mr. M. Sivakumar	Director (EP)	B. Sc, M. Sc
Mr. H.S. Premachandra	Director (SuP)	B. Sc (sp) Hons, M. Sc, M.I. Biol
Ms. Devika Vithanage	Actg. Director (WP)	B. Sc M. Sc (Environmental Management) PGD(Envtl.Science)
Mr. Susantha Wedage	Dy. Director (UP)	B. Sc, M. Sc
Ms. Vijitha Sathyakumar	Asst. Director (NPO)	B. Sc, M. Sc, PGD (Envtl.Science)
Mr. R.G.M Anura	Actg. Asst. Director (NCPO)	B. Sc, M. Sc

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1.0. Central Environmental Authority

1.1. Introduction

The Central Environmental Authority (CEA) having established in 1981 under the National Environmental Act No. 47 of 1980, completes thirty one years' service by 2012. The CEA operating under the purview of the Ministry of Environment is one of the main implementing arm of the national environmental policy. The Annual Report of 2012 contains the performance of the CEA including 8 Provincial Offices, 11 District Offices, one coordinating office and special Projects implemented by the CEA for 2012, 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. Mr. 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
Mr. M. Lalith De Silva	-	Member of the Authority
Mr. Saman De Silva	-	Member of the Authority

Director General of the CEA, Mrs. Ramani Ellepola acts as the Secretary of the Board under the powers provided in NEA.

The Board held 12 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 by No-56 of 1998 and 53 of 2000.

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 by No-56 of 1998 and 53 of 2000, the Environmental Council consists of a set of members appointed by the Ministry of Environment. During the year 2012, eleventh session was conducted by the Environmental Council as follows.

11th Session

The following members were appointed by the Hon. Minister of Environment to the Environmental Council.

1.5.2. Members of the Council

Members of the Council	Name	Designation
Ministry of Local Government & Provincial Council	Mr. D. Surasinghe	(Snr. Asst. Secretary (Local Government))
Ministry of Local Government & Provincial Council	Mr. W M P G Wickramasinghe	Add. Secretary
Ministry of Finance & Planning	Mr. C N Wijesekera	Add. Director General
Ministry of Lands and Land Development	Ms. A. M. K. K. Attanayaka	Snr. Asst. Secretary
Ministry of Lands and Land Development	Mrs. Shanthi Fernando	Director (Land use planning)
Ministry of Industrial Development	Mr. A. K. Seneviratne	Add. Secretary
Ministry of Highways & Road Development	Ms. S. A. D. S. Subasinghe	Add. Secretary (Development)
Ministry of Technology and Research	Mr. P. S. Gunasekera	Parliamentary Secretary to the Minister
Ministry of State Resources and Enterprise Development	Ms. Sumana Premarathne	Add. Secretary
Ministry of State Resources and Enterprise Development	Mr. D M S Abayagunawardena	Add. Secretary
Ministry of State Resources and Enterprise Development	Mrs. M A Nalini	Snr. Asst. Secretary
Ministry of Co-operatives and Internal Trade	Ms. D. C. N. A. Kumarasinghe	Deputy Director (Planning)
Ministry of Defense & Public Security Law & Peace	Ms. N. K. Abeyratne	Snr. Asst. Secretary
Ministry of Railway & Transport	Mr. U.N. Mallawarachchi	Asst. Director
Ministry of Power & Energy	Ms. Indrani Withanage	Director (Development & Planning)



Members of the Council	Name	Designation
Ministry of Health & Nutrition	Dr. Piyasena Samarakoon	Snr. Asst. Secretary
Ministry of Health & Nutrition	Dr. Ananda Jayalal	Director – (Environmental Occupational Health)
Ministry of External Affairs	Ms. Samantha Jayasooriya	Director (UN & MA)
Ministry of Fisheries & Aquatic Resources	Mr. Indra Ranasinghe	Actg. Director General
Ministry of Agriculture Development	Ms. L. U. N. Sumanasekera	Deputy Director (Investment & Promotion)
Ministry of Economic Development	Ms. N B Hema Dharmawardena	Director General
Ministry of Economic Development	Ms. M. A. S. Perera	Director (Environment Management)
Ministry of Education	Ms. B L D Balasooriya	Director of Education (Agri)
Central Environmental Authority	Ms. Ramani Ellepola-Secretary	Director General

Experts on Environment Protection and Management

Presidents' Counsel	Mr. Palitha Kumarasinghe -Chairman
University of Peradeniya	Prof. Shantha Hennayeka
University of Kelaniya	Mr. A. G. Amarasinghe
Attorney-at-law	Mr. Jagath Gunawardene
Social & environmental Specialist	Mr. Nandasena Maddugoda
Attorney-at-law	Mr. Bandusena Liyanage

Representatives from the NGO's

Sri Lanka Env. Journalist Forum	Dr. Dharman Wickramaratna
Project Director, TRPSP. President elect, ITPSL	Mr. Hemantha K. Jayasundara
Attorney-at-law	Mr. Indika Jayathileka



1.5.3. Meetings

Meeting No.	Month	Date
226	January	23
227	February	27
228	March	19
229	April	27
230	May	21
231	June	18
232	August	20
233	September	17
234	October	22
235	November	19
236	December	17

Matters of concern:

- Important concerns on Asbestos
- Current situation of the Post Consumer Plastic Waste Management Project (PCPWMP)
- Imposing an Environmental Conservation Levy to control “Sili” bag consumption in the country - legal and technical aspects
- Integrating Environmental Aspects into Industrial Development
- Situation of rehabilitation of Peradeniya town after the landslide
- Extension of Environmental Pioneer Brigades Programme (EPBP)
- Destruction of Wetlands and limestone exploitation in Jaffna peninsula
- Clarification on Court of Appeal judgment on issuance of EPLs
- Issues regarding land allocation for projects
- Financial support especially for S&M polluting industries (soft loan schemes) and low cost pollution control measures
- Imposing a surcharge on industries that operate without having a valid EPL without going to the Court.



- Spatial database on Environmental polluting activities in Sri Lanka prepared by the CEA
- Amendments to the National Environmental Act



2.0 Duties and Responsibilities of the CEA

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

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

Geo-Informatics 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 2012 are succinctly explained in the following section.



3.0 Environmental Pollution Control Division

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 division 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 a one of the main activity initiated in 2011 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) scheme.

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

- A. Regulation and Monitoring
- B. Policy Development
- C. Technical Facilitation
- D. 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 the 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 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).

“C” Category EPL conditions for 25 prescribed activities and guide lines for EPL Procedure were prepared in Tamil medium and printed 400 books for local government institutes in North & Eastern province of the country. English translation of “C” category EPL conditions has drafted and ready for printing.



EPC unit is maintaining the database for high polluting activities (A Category) and licensing details of them.

Issued EPL	2012
New EPLs	896
EPL Renewals	1342

3.1.1.2. Granting concurrence to the Board of Investment (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 the granting of concurrence to the BOI industries for implementation of EPL scheme by the BOI.

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

New EPLs	44
EPL Renewals	332
New site Recommendations Other projects	82
New site Recommendations for Telecom Towers	120
EPL for Telecom Towers	
Applications Received	112
Inspections	108
Issued EPL	21

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 continued to 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 2012, 30 complaints with regard to the activities of BOI approved industries were received and 10 were investigated and remedial actions were taken and



others were referred to relevant institutions. 50 non BOI complaints received and 12 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 they also prescribed as high polluting activities in the gazette notification. Therefore CEA has 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 very important for these industrial zones in the pollution control process.

EPC unit has inspected Horana, Katunayake, Koggala and Seethawaka industrial zones in year 2012 and Issued EPL for Biyagama export processing zone.

3.1.1.5 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 2012.

A series of meetings were held with officers from Provincial offices, considering the common and upcoming industries in the regional set up along with pollution load.

After the new amendment of prescribed activity list, the CEA will be the responsible authority for issuing majority of licenses to industries.

3.1.1.6. Establish new Procedure for industrial siting.

Environmental Recommendation for industrial sittings prior to establishment of industries is a vital consideration of the CEA. A step was taken to legalize the procedure in 2012 by introducing a separate list of activities which are not subjected to EIA

These activities will undergo an environmental recommendation procedure which in turn minimize the adhoc siting of industries.

The drafting of the activities and the discussions were completed.

3.1.2. Policy Development

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 people. But the practice of disposing of 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 has gazetted effluent discharge standards for discharge of effluents under several discharge modes. Many issues were identified in implementing 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. 8 meetings were held with the identified stakeholder participation and the reviewing process and drafting of new standards were completed in 2012.

The main features of the proposed standards are the addition of more discharge modes when compared to the existing regulation. The practical difficulties in the laboratory environment have also been reduced due to continual dialogues between stakeholders during the reviewing process.

3.1.3. Technical Facilitation

3.1.3.1. Committee on Determining the Siting of High and Medium Polluting industries outside EPZ's and Industrial Estates (H&M Committee)

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 for evaluate proposals on locating high and medium polluting industries outside the Kelani river basin which generate high amount of wastewater. In the year 2012, 10 meetings were conducted and 32 project reports were evaluated.

3.1.3.2 Evaluation of Project Proposals for Pollution Control

When issuing the EPL, industrialists are requested to submit comprehensive proposals on pollution control systems to minimize industrial emissions and discharges. To implement such proposals proper evaluation and guidance is an important factor for effective pollution control and as means of facilitation for industries.



Therefore to address this important need a committee was formed by EPC unit with expertise in the relevant fields to evaluate the proposals on pollution control. In the year 2012, 6 meetings were conducted and 29 proposals were evaluated.

The proposals that were not up to the expected level were informed to the respective consultants for clarifications or for amendments. The procedure was more practical and problem solving as the industrialist and the regulating authorities get win - win solutions out of this system.

3.1.3.3. 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 process the officers of EPC unit participated in 22 technical committees during the year 2012 to provide technical expertise in pollution control and 3 Joint inspections were carried out.

3.1.3.4. Provide technical facilitations to industrial activities

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

As 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 best available competitive service.

31 laboratories and 54 Consultants were applied for registration. After inspections and evaluation according to a criteria, 27 Laboratories and 47 Consultants were registered as CEA recognized Laboratories and Consultants for 2012 lists. The lists were uploaded to the CEA website and also through printed lists.

03 Advertisements in English, Sinhala and Tamil for calling registration for year 2013 also completed in last quarter of 2012.

(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 organizing and preparation of criteria were completed in the latter part of the year 2011. The proficiency testing component was completed in 2012 followed by a discussion on anomalies in test results.

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.

3.1.3.5 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.

To provide more recognized service by controlling pollution and through awareness, the provincial level committee for Western Province have established in 2012 with the assistance of the National Level Advisory Committee.

The National level advisory committee Identified the need of reviewing the existing guidelines for piggery, goat, poultry and cattle farming which guidelines were out dated and more information and corrections have to be incorporated.

In 2012, the drafting of guidelines to establish eco-friendly farming were completed and the drafts are ready for evaluation and discussion.

3.1.3.6. Establishment of Compliance Assistance Centers for Small & Medium Enterprises.

Establishment of Compliance Assistance Centers in terms of assist medium and small scale industries was considered by the EPC unit in the year 2012. 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.

An awareness workshop was held in 2012 with the participation of 52 participants from vehicle service stations to introduce the developed method to industrial community who operate Service stations. 54 Service station owners were participated.

3.1.4. Special Programmes for Pollution Control

3.1.4.1. Chemical Accident Prevention and Preparedness programme

EPC unit of the CEA involved with novel industrial pollution control methods which have significant impact on human and living environment of the country.

Most chemical disasters or accidents could be avoided if correct precautionary measures are taken at appropriate time with continuous monitoring.

Under the international norms a programme was initiated by the UNEP and the programme was named as Chemical Accident Prevention and Preparedness programme (CAPP).

Identifying the requirement of Chemical Accident Prevention and Preparedness of the country
The CEA applied for funding for a project to carry out Chemical Accidents Prevention and Preparedness Program for Sri Lanka.

The Project was approved by the SAICM in 2011 and an agreement was signed in August 2012 with the UNEP, the organization working as the executing Agency of the project and the first installment for the project was received from UNEP.

3.1.4.2. Water Environment Partnership in Asia (WEPA) dialogue on Wastewater Management in Sri Lanka

Recognizing the need to improve good governance in water environment, a dialogue cum workshop on wastewater management in Sri Lanka and Japan was held on 27th August 2012, at Cinnamon Grand Hotel, Colombo.

The dialogue was organized by the Water Environment Partnership in Asia Programme (WEPA) which is an initiative of the Ministry of the Environment Japan, with the assistance of the Environmental Pollution Control Unit of the Central Environmental Authority.



The WEPA is a forum which allows to discuss the experiences, and dissemination of information, while identifying potential solutions to improve the water environment of partner countries in the region, namely Cambodia, China, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, Vietnam, and Nepal & Sri Lanka.



The main facts discussed at the work shop were; domestic wastewater management in Sri Lanka and Japan, the role of the CEA in industrial wastewater management and Japanese experience in industrial wastewater management, Effluent discharge standards and its recent revision process.

3.1.4.3. National Green Award Scheme

“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.



H.E. the President Mahinda Rajapakse and some of the distinguished guest participated at the National Green Award 2012

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 2012” were entertained under 16 categories including major industrial sectors, local authorities, projects and schools. Total of 278 applications were received and evaluated by distinguished panel of Judges. Inspections were carried out to ascertain the real situations if necessary. Out of 278 applications, 49 applicants were selected to be awarded in the awarding ceremony.

The “National Green Awards 2012” ceremony was successfully held at the Bandaranaike memorial International Conference Hall on 03rd December 2012 under the patronage of his Excellency the

President Mahinda Rajapaksha. Honorable minister of Environment and other distinguished guests were also participated .Totally more than 600 guests participated in this event.

Seven Gold Awards, 12 Silver Awards, 18 Bronze Awards and 12 Merit Awards were awarded in the ceremony.

List of Gold Award winners

Heritance Ahungalla, Ahungalla	Hotel Sector
MAS Intimates, Thurulie, MAS Fabric Park, Thulhiriya.	Apparel Sector
Noyon Lanka (Pvt) Ltd, 46 A, Biyagama Export	Textile and Textile Processing
Geocycle Holcim Lanka Ltd, 413, R A De Mel Mw,	Waste Recycling Sector
Richmond College, Galle.	School Sector (1AB,1C)
Dammulgoda Primary School, Puhulwella.	School Sector (Type 2&3)
Sadaharitha Plantations Ltd, No: 6A, Alfred Place,	Private Institute Sector



Awarding the Gold Awards to School sector and Waste Recycling sector by H.E. the President Mahinda Rajapakse at the National Green Award 2012

Trainings / workshops, meetings and Presentations

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

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

- 7 Workshops on EPL scheme implementation strategies for LA officers including CEA officers in Galle, Gampaha (Gampaha District Secretariat Conference hall), Matara (Matara District Secretariat Conference hall), Hambantota (Hambantota Mirijjawila Viharamahadeva Human Resource Center), Jaffna, Kilinochchi and Mulative (Karachchi Pradeshiya Sabha Conference hall) Districts were held in 2012.



- 6 Presentations/Lectures on pollution related subjects for industrial community and general public were conducted during year 2012.
- EPC unit attended 21 meetings and 8 workshops related to pollution control

Summary of the progress

Activity	Progress		Remarks
	Physical	Financial	
1. Implementation of Environmental			
New site Recommendations for Industries	82	Total budget	Operational expenses were borne by the BOI
New site Recommendations for Telecom	120		
Concurrence for new industry	44		
Concurrence for EPL Renewals	332		
2. Implementation of Environmental		allocation for the EPC Unit in year 2012 was	
EPL for Telecom Towers	21		
Complaints			
3. Review and update of the existing list of			
Received applications for laboratory	31	Rs.16, 00,000/=.	
Received applications for Consultants	54		
Selected laboratories	27		
Selected consultants	47		
6. Committee to Evaluate Project		From this allocation Rs.1227680.00 were utilized by EPC Unit and balance referred to HRD.	
Meetings conducted	6		
Evaluated project proposals	29		
7. H&M Committee			
Meetings conducted	10		
Evaluated projects proposals	32		
8. Review water quality standards			
Meetings conducted	8		
9. Handle standard EPL numbering system			
Issued "A" Category- Fresh EPLs	896		
Issued A Category renewals	1342		
12. Trainings / workshops			
Presentations / lectures delivered	6		
Conducted workshops	12		
EPC unit attended Meetings	21		
13.EIA TEC committee meetings	22		
14. National Green Award Programme			Expenses were born
15. Chemical Accident Prevention and			
			Expenses were born



3.2. Lab Services Unit

3.2.1 Air Quality, Noise and Vibration Monitoring

3.2.1.1. Ambient Air Quality Monitoring.

Ambient Air Quality monitoring was carried out in Colombo Fort Monitoring Station during the 2012 and only the parameter PM¹⁰ was measured to ascertain the air quality of the Colombo city as other instruments are out of order to measure other parameters such as NO₂, SO₂, CO.

3.2.1.2. Air quality status in Sri Lanka

Variation of annual averages of particulate matter PM¹⁰ at Colombo Fort monitoring station is shown below. Even though the annual average of PM¹⁰ concentration at Colombo Fort monitoring station exceeds the maximum permissible levels and it shows decreasing trend over last 12 years.

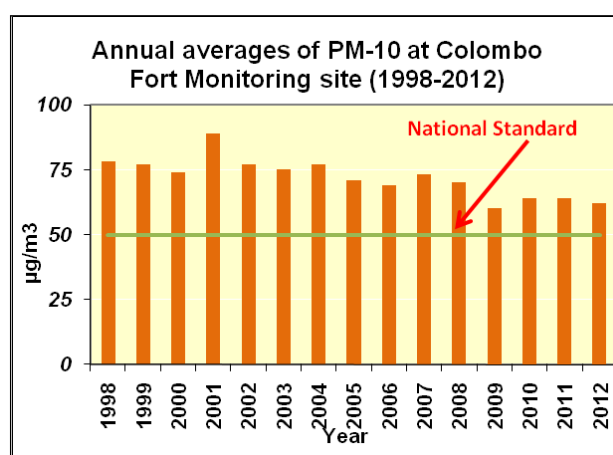


Figure 1 Variation of PM¹⁰ annual average in last decade in Colombo City.

In control of ambient air quality in Sri Lanka, it is mandatory to control source emissions as well as non-source emissions. As a strategy for source emission control, the Central Environmental Authority has finalized Source Emission Control standards for Sri Lanka.

These standards were approved by Board of Management of the CEA and allowed to practice as interim standard until gazetted under National Environmental Act. During the year 2012, five stack emission measurements have been carried out with the available limited resources.

In the year 2012 also, a staff member of the Air Quality Monitoring Unit obtained an opportunity to undergo JICA training on “Air Pollution Source Management”. This was the third training opportunity in the same field and this knowledge is very important for future air pollution control activities in Sri Lanka.

3.2.1.3. Emission Inventory preparation

A national and international training workshops were held in May 2012 under Male Declaration on Control and prevention of air pollution and its likely trans-boundary effects for south Asia. The main objective of national training was to initiate data collection network through stakeholder organizations with provide basic hands on experience on emission inventory. The main objective of international training was to provide hands on experience on Compilation of emission inventory and development of integrated assessment modelling which is a prime requirement in air quality management.



Figure 2 National workshop in Central Environmental Authority



Figure 3 International Workshop in Hotel Renuka, Colombo

3.2.1.4 Trans-boundary Air Pollution Monitoring

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 Malê Declaration in parallel with other South Asian countries.

3.2.1.5. 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 under the recommendation of Male Project Monitoring committee in Doramadawala, Mihinthale and rain water collected in wet only collectors and bulk collectors are analyzed for anions, cations and amount of precipitation.

3.2.1.6. Rainwater Sampling

Rainwater samples were collected in weekly basis from the collector located around 7m height from the top of rock (around 20m height from ground) in the open area by using 6 inches diameter glass funnel with sampling bottle of 5l. Electric conductivity (Ec) and pH are being measured at the site by using water quality checker (Horiba U-10). Filtered samples are analyzed by Ion Chromatograph(IC) (Dionex ICS 900). All samples are stored in the refrigerator till analysis.

Parameter	2009			2010			2011 (Up to march 2012)		
	Mean \pm sd	Min	Max	Mean \pm sd	Min	Max	Mean \pm sd	Min	Max
Ec (mS/m)	0.87 \pm 0.42	0.30	2.00	1.79 \pm 1.49	0.6	5.1	0.97 \pm 0.38	0.5	1.5
pH	5.96 \pm 0.64	4.85	7.21	5.84 \pm 0.38	4.96	6.37	5.88 \pm 0.50	6.58	5.05
NH ₄ ⁺ (μmol/l)	15.57 \pm 8.43	4.77	33.98	12.83 \pm 5.67	7.32	24.89	5.92 \pm 2.51	3.60	9.15
Na ⁺ (μmol/l)	5.91 \pm 3.04	0.30	9.30	8.46 \pm 4.22	4.57	18.33	29.58 \pm 16.15	0.83	42.39
K ⁺ (μmol/l)	4.67 \pm 3.28	0.03	9.46	4.98 \pm 1.88	2.71	8.47	1.30 \pm 1.55	0.46	4.45
Ca ²⁺ (μmol/l)	7.4 \pm 6.03	0.25	22.01	6.07 \pm 2.63	3.02	10.28	8.06 \pm 5.11	0.35	12.2
Mg ²⁺ (μmol/l)	4.41 \pm 2.58	0.45	7.98	4.80 \pm 2.53	1.81	8.68	1.61 \pm 1.17	0.21	3.09
SO ₄ ²⁻ (μmol/l)	2.33 \pm 0.87	1.48	4.64	2.98 \pm 1.75	0.19	5.33	7.19 \pm 3.61	1.83	10.54
NO ₃ ⁻ (μmol/l)	3.03 \pm 1.87	0.29	6.64	2.49 \pm 1.67	0.23	5.08	9.70 \pm 5.61	2.48	15.71
Cl ⁻ (μmol/l)	33.85 \pm 19.02	2.4	72.64	32.32 \pm 18.92	3.53	55.99	19.58 \pm 11.38	3.81	32.52

	+Mean \pm sd	Min	Max	Mean \pm sd	Min	Max
Ec (mS/m)	2.24 \pm 3.04	0.10	5.90	1.18 \pm 0.43	0.60	1.80
pH	6.32 \pm 0.54	5.29	7.47	6.50 \pm 0.69	5.18	7.20
NH ₄ ⁺ (μmol/l)	18.88 \pm 8.58	8.26	34.98	23.82 \pm 6.29	13.36	30.54
Na ⁺ (μmol/l)	9.14 \pm 7.54	0.52	25.80	16.57 \pm 12.58	0.52	36.00
K ⁺ (μmol/l)	1.94 \pm 1.62	0.15	4.94	2.19 \pm 1.94	0.43	5.60
Ca ²⁺ (μmol/l)	6.72 \pm 5.20	0.30	14.17	13.76 \pm 7.04	0.30	22.23
Mg ²⁺ (μmol/l)	2.86 \pm 1.98	0.74	7.94	3.14 \pm 1.74	0.99	5.88
SO ₄ ²⁻ (μmol/l)	4.12 \pm 2.24	0.27	7.61	8.55 \pm 4.51	3.29	18.28

3.2.1.7. 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 NO₂, SO₂ and ground level ozone in ambient air on monthly basis. PM¹⁰ is also being carried out on weekly basis at Doramadalawa site. .



Figure 4 Instruments installed at Doramadalawa monitoring site

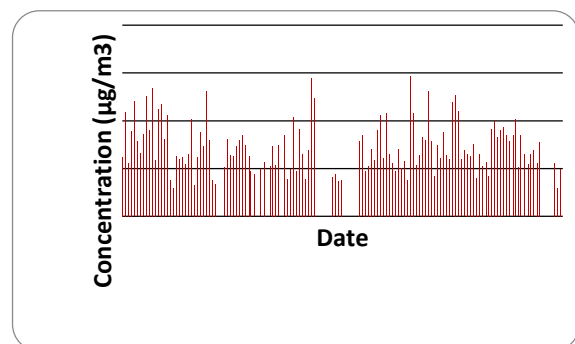


Table 3 Variation of PM¹⁰ concentration at Doramadalawa site



3.2.1.8 Noise and vibration measurements / Industrial noise measurements.

Noise pollution is also a major environmental problem causing public nuisance in Sri Lankan community. Laboratory 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. Laboratory entertain requests made by clients for the purposes of industrial noise level measurements on commercial basis.

During the year 2012, 146 noise measurements, 40 suspended particulate matter measurements, 12 volatile organic concentration measurements and 3 fiber measurements have been carried out.

Review of existing industrial noise regulation was recommended by board of management of CEA it has been submitted for legal division for further processing.

3.2.2. Water Quality Monitoring Laboratory

Purpose of Monitoring	No of Samples
EPL	132
Legal	19
Complaint	46
Monitoring	31
Common Treatment Plant	36
Industrial Commercial	145
Other commercial	95
Surface Waters	408
Total	912

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 2012 the laboratory could be able to collect and analyzes 912 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

Table 1 Progress of Sampling

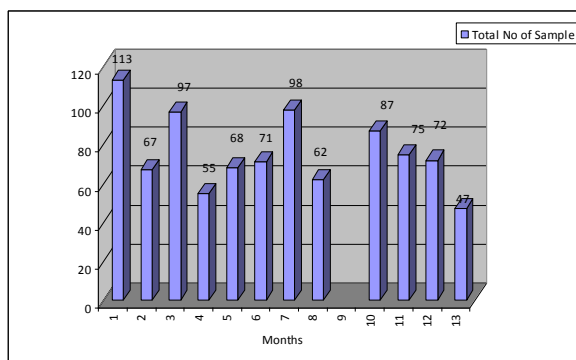


Figure 1 Graphical Presentation of Monthly monitoring progress in 2012

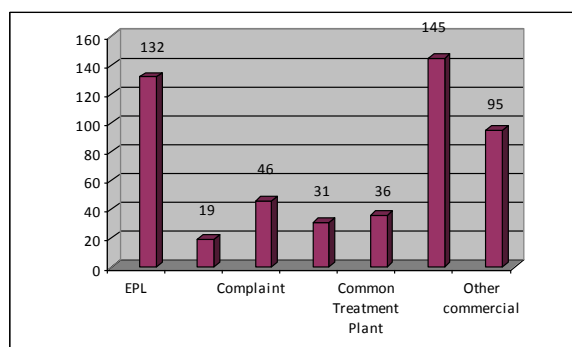


Figure 2 Graphical Presentation of Monitoring of Industrial Effluent during in 2012

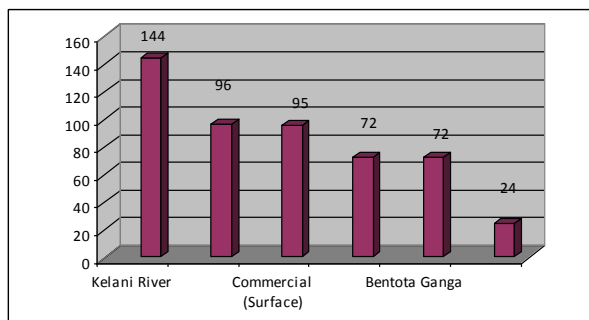


Figure 3 Graphical Presentation of Monitoring of surface water samples in 2012

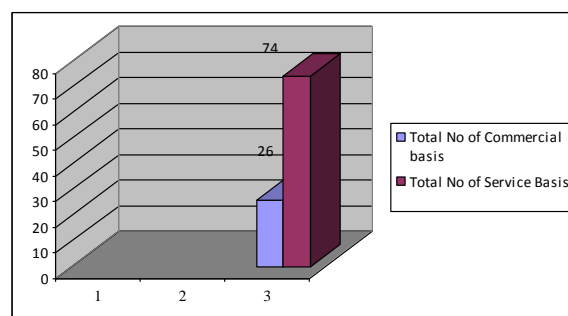


Figure 4 Graphical Presentation of Monitoring on commercial basis over service basis

3.2.2.1 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 wewa

Physical, chemical microbiological parameters of the surface water at preselected sampling location were carried out during 2012 as usual

3.2.2.2 Earning of Commercial Testing

The laboratory could be able to earn g Rs 1,397,569.96 million only by providing of 26 % commercial service to the outside customer.

3.2.2.3 Assistance provided to the other divisions

As facilitation for industrial community in complying environmental norms and criteria, EPC division has initiated an annual registration programme for environmental consultants and analytical laboratories. In this regard , the monitoring and evaluation of the environmental



laboratories and consultants were carried out by the staff of the laboratory along with the EPC officers. Monitoring of the Trans-boundary air pollutants for physical chemical and heavy metals in Dutu wewa and Dramadalawa were carried during the year 2012 under Male – declaration Project.

3.2.2.4 Court Appearances to give expert evidence

During this year officers of the laboratory appeared in courts to give expert evidence in relation to the cases filed by the CEA, the Police, general public and Non Governmental Organizations. During the year 2012 officers of the laboratory appeared in court for 7 instances for giving expert witnesses.

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 2012.

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), 61 licenses were issued during year 2012.

In order to facilitate implementation of regulations on scheduled waste management, organized two technical workshops on management of Bio Medical waste for government hospital in Colombo district and healthcare personnel (Public and Private sector) In Matara District.

3.3.2 Implementation of Basel Convention

Importation of waste materials listed in the List 'B' of Basel Convention for industries

Sri Lanka has ratified the Basel Convention (BC) on Trans-boundary 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).

The Department of Customs refer to the CEA when Waste/Scrap and recycled material such as PVC, Foam rubber, Polyethylene are imported into the country in order to get the CEA's opinion prior to release the consignment. Some of these imported waste materials are coming under the List B of the BC while some are not. In order to streamline the process, the CEA developed guidelines for the approval procedure and it was adopted by the NCC for the Implementation of BC. These guidelines are currently being practiced to ensure the cleanliness of the material being imported and 100% usage without leaving any residue being disposed in the country. Accordingly, 84 numbers of inspections have been undertaken to inspect the respective industries and the containers imported during the year 2012. The CEA has issued letters of no objection to release the containers for 84 consignments.

Trans-boundary 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 15 transits and 07 exportations (trans-boundary movement) of waste materials listed in the List "A" of the Basel Convention. In addition CEA has given approvals for 01 importation of waste materials listed in the List "B" of the Basel Convention.

3.3.3 Implementation of Rotterdam Convention

Meetings of the Technical Advisory Committee for the Management of Industrial Chemicals in Sri Lanka for Implementation of Rotterdam Convention

Two meetings of Technical Advisory Committee for Chemical Management were held during the year 2012 and decisions were taken to eliminate the asbestos related diseases in Sri Lanka by controlling the use of asbestos and to controlling the lead content in all decorative paints used in Sri Lanka.

3.3.4 Updating National Chemical Profile of Sri Lanka and preparation of a Chemical Management Plan

Initiatives were taken to implement this Project with the funds received from the "Strategic Approach to International Chemical Management" (SAICM) Programme of UNEP. The total financial allocation for this project is US\$ 232,532.



3.3.5 Management of Electronic and Electrical Equipment (WEEE)

Work shop on Industrial Hazardous waste and E waste management held on 20th November 2012.

Hazardous wastes generated from various commercial, industrial and institutional sources cause an immense environmental problem in Sri Lanka resulting in affecting health and quality of life of the people, particularly the residents in urban and sub urban areas. Most of the waste generated is disposed in haphazard manner in unsuitable locations while some are disposed of along with the municipal solid wastes. Dumping of such wastes might cause serious health and environmental problems.

According to some recent studies and estimations it was revealed that, about 50 000 MT of hazardous waste is annually generated in Sri Lanka quantity wise.

Apart from the generating of industrial hazardous waste, Sri Lanka is now confronted with emerging issue of generation of Electrical and Electronic Waste.

In order to provide a viable solution at national level for the emerging environmental issue on E waste management, the Central Environmental Authority has taken several initiatives to streamline and regularize management practices in the country.

Apart from the regulatory role CEA has taken vital steps to facilitate the hazardous waste management in the country. Awareness on proper management of the Hazardous waste to educate the industrialists and stakeholders involve in Hazardous waste generation and management on the application of the most appropriate combination of environmental control measures and strategies is considered as a crucial requirement.

Considering these grounds Waste Management Unit has organized a national level workshop on Industrial Hazardous Waste and E Waste Management. The Workshop was held at the BMICH complex on 20th December 2012 with the patronage of Chairman, CEA Mr. Wimal Rubasinghe and also the participation of Director General and other Deputy Director Generals and Directors. Key resource person of the workshop is Dr. Sunil Heart Senior Lecturer, Department of Environmental Science, School of Engineering, Griffith University, Brisbane, Australia.

Representatives from the industries that have been identified as critical sectors such as pesticide formulation, paint manufacturing, textile dying, E waste management etc., Officers of the government stakeholder institutions and officers of the CEA participated the workshop.



3.3.6 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

Geo responsible award organized by Holcim (Lanka) Ltd.

Waste management programmes organized by NAITA



4. Environmental Management & Assessment Division

4.1. Environmental Impact Assessment (EIA) Unit

4.1.1 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 2012, total of 100 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 10 projects were granted while 15 projects were given concurrence to other project approving agencies in granting IEE/EIA approvals. One project was rejected granting approval and 74 projects were being processed.

List of projects approved / rejected during 2012 under EIA / IEE regulations by the EIA Unit;

No.	Name of the Project	EIA/IEE
1	Koggala Eco – five star villa resort project, Koggala, Galle	EIA
2	Proposed waste to Energy project, Meetotamulla	EIA
3	Mass scale waste to energy project at Kaduwela.	EIA
4	Proposed Surface Water Extraction from a Reservoir across Per Aru in Vavunia	EIA
5	Badulla, Hali Ela and Ella Integrated Water Supply Scheme	IEE
6	Proposed Project to Setup a Plant for Bottle Grade PET Resin, IPZ at Hambantota	IEE
7	Maha Oya Mini Hydro Power Project	IEE
8	Industrial Estate at Achchuveli, Jaffna	IEE
9	60 Roomed Hotel at Ariyalai, Jaffna	IEE
10	Malabe Low Level Road Link (IT North Road)	IEE
Rejected		
1	Proposed project to setup Surfactant and Detergent manufacturing	EIA



List of projects for which concurrence was given to other Project Approving Agencies in granting IEE / EIA approvals;

No.	Name of the Project	EIA/IEE
1	North East Power Transmission Devt. Project (PAA – My. of Power & Energy)	IEE
2	10 MW Solar Thermal Power Generation Project, Vavuniya (PAA – Forest Dept.)	IEE
3	Kivula Mini Hydro Power Project (PAA – Mahaweli Authority of Sri Lanka)	EIA
4	Gravel Extraction Project for Reconstruction of Railway Line from Medavachchiya to Thalaimannar (PAA – Forest Dept.)	IEE
5	Metal Quarry at Leenawatta, Paddukka (PAA – Geological Survey & Mines Bureau)	IEE
6	Metal Quarry at Oddusudan, Mulaitivu [Thaddayamali Forest Reserve] (PAA – Forest Dept.)	IEE
7	Metal Quarry at Kebithigollawa, Anuradhapura by Thudawa Brothers (PAA – Forest Dept.)	IEE
8	Metal Quarry at Kebithigollawa, Anuradhapura by Opulant Metal Works (PAA – Forest Dept.)	IEE
9	Metal Quarry at Kebithigollawa, Anuradhapura by Maga Engineering Company (PAA – Forest Dept.)	IEE
10	Proposed 35 Storage Luxury Hotel and Mixed Devt. Project with 650 Rooms and 300 Apartments in Colombo 01 (Shangri-La Hotel Project) (PAA – Coast Conservation Dept.)	EIA
11	Proposed 50 Villas and 410 Roomed Five Star Hotel Project in Hambantota (Shangri-La Hotel Project) (PAA – Coast Conservation Dept.)	EIA
12	Metal Quarry at Oddusudan, Mulaitivu [Chamalankulam Forest Reserve] (PAA – Forest Dept.)	IEE
13	Metal Quarry at Oddusudan, Mulaitivu [Chamalankulam Forest Reserve] by Sinetro Holdings (PAA – Forest Dept.)	IEE
14	“A” Grade Metal Quarry at Wenrasapuram, Kantale (PAA – Forest Dept.)	IEE
15	Offshore Oil Exploration in Mannar Basin by Cairn Lanka (PAA – Marine Environmental Protection Authority)	EIA

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

No.	Name of the project	EIA/IE
1.	Proposed Thalapitigala Reservoir Project	IEE
2.	Uma Oya Supplemental EIA – Krindi Oya Basin Development	EIA
3.	Upper Elahera Canal Devt. Project	EIA
4.	Lower Malwatu Oya Reservoir Project	EIA
5.	Proposed Maduru Oya Right Bank Development Project (System B)	EIA
6.	Proposed Yan Oya Devt. Project	EIA
7.	Construction of NWP Diversion Canal from Bowetenna Reservoir to Divert Mahaweli Water to Upper Mi Oya and Hakwatuna Oya Basin in Kurunegala District	EIA
8.	Proposed Morana Reservoir Project at Rideemaliyadda, Badulla	EIA
9.	Proposed Bibile Sugar Development Project.	EIA
10.	Proposed Five Star (Beire City Hotel) with Service Apartment and	EIA
11.	Five Star Hotel at Weerawila	IEE
12.	Mattala International Airport Hotel	IEE
13.	Five Star Hotel and Service Apartment at D R Wijewardena Mawatha	EIA
14.	Proposed sports complex project in Nuwara Eliya	IEE
15.	2 x 250 MW Coal Power Plant in Trincomalee	EIA
16.	132 KV Transmission Line from Polpitiya to Pannipitiya	IEE
17.	132 KV Transmission Line Project from Mannar to Anuradhapura Via	IEE
18.	Proposed 132 Kv Transmission line project from Nadukuda to Mannar	IEE
19.	Mawanana Mini Hydro Power Project at Neluwa	EIA
20.	Manakola Mini Hydro Power Project	IEE
21.	Makumbura Town Devt. Project	IEE
22.	Shifting of Maning Market to Peliyagoda	IEE
23.	Jaffna – Kilinochchi Sanitation Project	EIA
24.	Proposed Waste Water Collection, Treatment and Disposal System for	EIA
25.	Proposed Waste Water Disposal System for Galle Town	EIA
26.	Proposed Waste Water Disposal System for Negombo Town	EIA
27.	Proposed Waste to energy Project at Karadiyana	EIA



No.	Name of the project	EIA/IE
28.	Northern Expressway Project	EIA
29.	Proposed Rail Road from Horana to Kottawa	EIA
30.	Proposed Kurunegala – Dambulla – Habarana Railway Extension	EIA
31.	Homagama Western By pass	IEE
32.	Approach Road to Kelanisiri Bridge to Kelenimulla -Mulleriyawa -	IEE
33.	Defense Head Quarters Complex Access Road Project	IEE
34.	Proposed Project to Set Up a Special Zone for Heavy Industry	EIA
35.	Proposed project to Burn ETP Sludge in Biomass Boiler, MAS Fabric	IEE
36.	Proposed Project to Set Up Fertilizer Storage, Blending and Bagging	IEE
37.	Proposed Sooriya Wewa Export Processing Zone	EIA
38.	Mirijjawila Export Processing Zone	EIA
39.	Proposed Sugar Refining Project at IPZ, Hambantota	IEE
40.	Proposed Sooriyawewa Investment Promotion Zone	EIA
41.	Proposed Project to Set Up an Educational Institute at Industrial Park,	IEE
42.	Proposed Cement Manufacturing Project, Hambantota Port Complex	IEE
43.	Mattala International Airport Stage II	EIA
44.	Offshore Sea Sand Dredging Project for Reclamation of Colombo Port	IEE
45.	Proposed Kelebokka Tree Felling Project	EIA
46.	Proposed Alakole Tree Felling Project	EIA
47.	Proposed Woodside Tree Felling Project	IEE
48.	Proposed Midland Tree Felling Project	IEE
49.	Proposed Kiul Oya Reservoir Project	EIA
50.	Proposed Maduru Oya Right Bank Devt. Project	EIA

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 which were referred to them.

**List of projects for which assistance was given to other PAAs in processing IEEs / EIAs;**

No.	Name of the project	EIA / IEE
1	Eco Tourism Hotel Project at Naiduwa, Balapitiya (PAA – Dept. of Wildlife Conservation)	IEE
2	Proposed 151 Roomed Hotel Project at Kuda Waskaduwa, Kalutara (PAA – Coast Conservation Dept.)	IEE
3	Proposed Krrish Square, Colombo (PAA – Urban Development Authority)	EIA
4	Proposed Centuria Eco-Friendly Meditation Retreat at Udawalawa (PAA – Department of Wildlife Conservation)	EIA
5	Proposed Ella Eco-village park project, Ella (PAA – Department of Wildlife Conservation)	IEE
6	Proposed Infrastructure Devt. Works in the Vicinity of Rawana Ella (PAA – Department of Wildlife Conservation)	IEE
7	Gatembe Mini Hydro Power Project (PAA – Mahaweli Authority of Sri Lanka)	EIA
8	Moragolla Hydro Power Project (PAA – Mahaweli Authority of Sri Lanka)	EIA
9	Dambullu Oya Mini Hydro Power Project (PAA - Mahaweli Authority of Sri Lanka)	EIA
10	Chandrika Wewa Mini Hydro Power Project (PAA - Mahaweli Authority of Sri Lanka)	IEE
11	Kudawa Mini Hydro Power Project (PAA – DWLC)	IEE
12	Upper Rat Ganga Mini Hydro Power Project (PAA – DWLC)	IEE
13	Gomala Oya Mini Hydro Power Project (PAA – DWLC)	IEE
14	Waste Water Disposal Project at Sri Jayawardenapura, Kotte (PAA – UDA)	EIA
15	Proposed Waste Water Disposal System for Chilaw Town (PAA – UDA)	EIA
16	Proposed Waste Water Disposal System for Puttalam Town (PAA – UDA)	EIA
17	Infinity Knowledge City Project in Puttalam (PAA – FD)	Not
18	Proposed Urban Park Project in Polonnaruwa (PAA – DWLC)	IEE
19	“A” Grade Mechanized Metal Quarry at Ipologama, Karuwalagaswewa (PAA – Forest Dept.)	IEE
20	“A” Grade Mechanized Metal Quarry at Kalahagala, Polonnaruwa (PAA – DWLC)	IEE



21	“A” Grade Metal Quarry at Dimbulagala in Polonnaruwa (PAA – MASL)	IEE
22	“A” Grade Metal Quarry at Mankulam, Manthei, Mulaitivu (Maga) (PAA – Forest Dept.)	IEE
23	Habarana – Sampoor 220 Mv Transmission line Project (PAA – My. of P & E)	IEE
24	Sanitary Landfill site at Gonadikawatte	EIA

4.1.2 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 the year 2012, are;

1	Outer Circular Highway to the City of Colombo Project
2	Southern Transport Development Project
3	Kalu Ganga Reservoir and Agricultural Extension Project
4	Colombo – Katunayake Expressway Project
5	Uma Oya Multi Purpose Devt. Project
6	Moragahakanda Agricultural Devt. Project (PAA - My. of Agri.)
7	Proposed Rambukkan oya Reservoir Project
8	Forest Rock Garden Hotel Project at Nochchiyagama
9	Proposed project for Rehabilitation of Gohagoda Dump Site and Establishment of an Integrated Solid Waste Management System for
10	Mattala International Airport Stage I
11	Rajjamma Mini Hydro Power Project (PAA – MASL)
12	Maduru oya Mini Hydro Power Project (PAA – MASL)
13	Kithulgala Mini Hydro Power Project
14	Branford Mini Hydro Power Project (PAA – MASL)
15	Ambewela Wind Power Project (PAA – DWLC)
16	Koladeniya Mini Hydro Power Project at Nawalapitiya (PAA – MASL)
17	Ross Estate Mini Hydro Power Project (PAA – MASL)
18	Madugate Mini Hydro Power Project (PAA – FD)
19	Naya Ganga Mini Hydro Power Project
20	Colombo Port Expansion Project (PAA – CCD)



4.1.3 Streamlining of EIA/IEE procedure

4.1.3.1 Review of EIA regulations

The list of prescribed projects gazetted in the Government Gazette extraordinary No. 772/22 dated 24th 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 different levels of approval procedures.

Amended prescribed project list and regulations are to be submitted to the Department of Legal Draftsman.

4.1.3.2 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. An advertisement was published in the Daily News for registration of consulting organizations. Consulting Organizations having experience in different specialist areas for technical guidance and preparation of EIA reports to be selected from the applications received.

4.1.4 Implementation of Strategic Environmental Assessment (SEA)

CEA has initiated actions to carry out Strategic Environmental Assessment for Northern Province, Uva province and Gampaha District Development Plan. These studies are being continued.

SEA for the Northern Province Regional Development Plan

CEA in collaboration with the Disaster Management Centre has carried out a SEA for the Northern Province. All the sensitive areas in the Northern Province have been identified through the study. In addition the areas suitable for development and resources requirement for development activities have also been identified. The study is now completed and final report is awaiting.

SEA for the Gampaha District:

CEA in collaboration with Disaster Management Centre initiated action to carryout SEA for the Gampaha District. The major objective of this study is to facilitate optimum use of natural resources for development, minimize environmental pollution and to control ad-hoc development in the Gampaha District. The study is now in progress. In order to identify the level of pollution in the Gampaha District, an industrial survey has been carried out and interim report has been proposed based on the findings of the survey. The draft SEA report is under preparation.

**SEA for the Uva Province:**

CEA also initiated action to carry out a SEA for the Uva province based on the proposal submitted by the National Physical Planning Department. The funding will be provided by the UNDP.

The SEA study aims to provide a frame work to protect the environmentally sensitive areas in the Uva Province, while evaluating the cumulative impacts from the multiple development projects plan for the entire Uva province.

The study is still at its early stage. A stake holder meeting to discuss the current status of the study area was held on 28.01.2012.

4.1.5 Other activities

In addition to the above activities, following meetings / site inspections were also attended by the EIA unit during 2012.

- Steering Committee meetings on National Highway Sector Project
- Steering Committee meetings on Outer Circular Highway Project
- Steering Committee meetings on Northern Road Connectivity Project
- Steering Committee meetings on Provincial Road Rehabilitation Project
- Steering Committee meetings on Moragahakanda & Kaluganga Agriculture Development 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
- Individual clearances for Southern Transport Development Project / Outer Circular Highway Project
- Legal Consultation with Attorney General's Department with respect to Court cases relevant to the Unit
- Investment of facilitation forums conducted by BOI

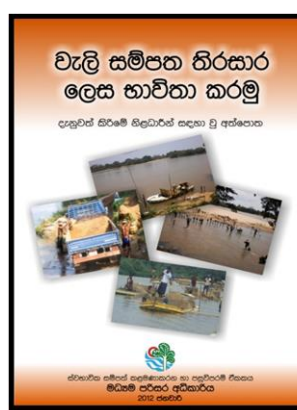
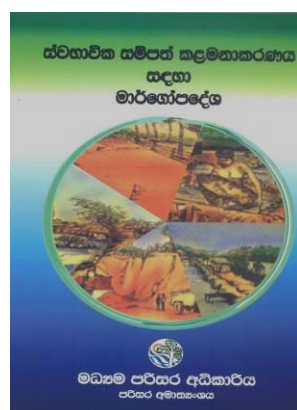
4.2. Natural Resources Management & Monitoring Unit

The main functions of this Unit include Natural Resources Management (NRM), declaration of Environmental Protection Areas (EPAs), management of declared EPAs, and conservation and management of Wetlands in the country. Formulation of regulations, preparation of guidelines, on NRM, implementation of project approval procedure for permitted activities within the Environmental Protection Areas under the provisions of the National Environmental Act, implementation of Wetland Action Plan according to the National Wetland Policy and preparation of information material on Natural Resources Management, Environmental Protection Areas, and wetlands activities relevant to the above functions are carried out by this unit.

4.2.1 Natural resources management activities

Natural resources Management and Monitoring Unit holds the responsibility of management of natural resources of the country with the assistance other relevant agencies involved in management of natural resources. Guiding of these agencies are done with the coordination with Provincial and District offices of the Authority. During the period of year 2012 following activities were carried out with respect to the Natural Resources Management.

Two meetings on Inter Agency Co-ordination Committee on Natural Resources Management were held with participation of all stakeholder agencies involve in NRM. Recognizing the need for updating the NRM Guide book prepared in 1997 (as guidelines, approval procedures other activities with respect to the natural resource management have been change) the guide book was reviewed and amended in consultation with stakeholder agencies and reprinted and distributed among all stakeholder agencies as guidelines to be followed. A Trainers training manual on sand mining and leaflet were prepared and distributed among provincial and district offices of this authority and the other relevant agencies to use at the workshops/ awareness programs etc.



In order to prevent visual pollution and to maintain the picturesque and exquisite of the water falls, important Policy decisions were taken with respect to the implementation on Mini-hydro power projects at the 383 recorded waterfalls in the country, as not to grant approvals for Mini-hydro power projects at the above recorded water falls. Identified the environmentally, culturally, and historically important locations and erected the information boards in one selected location in each district giving a message on importance and the value of these locations.



Jaffna

Officials of this unit have attended ten workshops as resources persons organized by other institutions on Natural Resources. Especially for the school pioneers, other students and the awareness program conducted for the STF offices of the Matara Kegalle, Ampara Districts by the Water Partnership institution. Prepared and submitted the document on responsibilities for which CEA will be responsible for the disasters and standard operational procedures for the National Emergency Plan to the Disaster Management Center.

Project proposals relevant to natural resources received to this unit were evaluated and provided necessary comments/ observations to relevant institutions circulars on the procedure that should be followed, for issuance of environmental recommendations on Paddy land filling and tree falling in estate sector were prepared and distributed among all the Provincial offices of the CEA. Legal consultations and the court cases were attended relevant to issues on natural resources. Observations / comments were provided for cabinet papers- memorandums sent by the various ministries and the institutions relevant to environment management.

Environmental recommendations were issued for 27 Bridges of the Rural Bridges. Guideline for construction of bridges (small & medium scale) were prepared & distributed among provincial office.



4.2.2 ENVIRONMENTAL PROTECTION AREAS (EPAs)

4.2.2.1. Declaration of EPAs

With a view to protecting areas with unique ecosystems and managing environmentally sensitive areas having fragile eco systems, which are scattered throughout the country with no legal protection, the CEA took action to declare such areas as Environmental Protection Areas under the provisions of 24 C and 24 D of the National Environmental Act. Having declared, CEA was responsible for physical planning and development within such areas. Eight EPAs Muthurajawela buffer zone (Wattala), Bolgoda Lake , Maragala Mountain Range (Monaragala), Wathurana Swamp Forest (Kalurara), Knuckles Mountain Range, Hanthana Mountain (Kandy), Lake Gregory (Nuwara Eliya) & Thalangama Tank (Kaduwela) have been declared up to date.

During the period of year 2012, five (5) sites/places, proposed Bentota EPA, proposed Koggala EPA, proposed Dadigamuwa Kanda EPA, and the proposed Gin Oya EPA were processed for declaration as EPAs. The Gazette notifications have been prepared for the proposed Bentota and Koggala EPAs. Identification of boundaries and detailed study report were completed as per the procedure of the declaration. Of the above proposed EPA's proposed Gin oya EPA totally falls within the coastal zone as per the amended Coast Conservation Act, the details of the proposed area handed over to the Dept. of Coastal Resources and Coastal Resources Conservation in order to consider the conservation. Initiated the preliminary activities of the declaration of Proposed Pansalthanna EPA.

4.2.2.2. Implementation of administrative procedure for permitted activities within the EPAs

During the period of year 2012, six projects within the Bolgoda EPA and three hundred and thirty eight (265 approved and 73 rejected)projects within the Hanthana EPA were processed under the administrative procedure of approvals for permitted activities within the EPAs as per the Gazette notifications jointly with the Western provincial office and the Central provincial office respectively.

4.2.2.3. Management of declared EPAs

A Management Plan for Gregory Lake EPA is under preparation. Study of the land use and road network maps and creation of a GIS data base of Hanthana EPA were completed with the University of Peradeniya. Initiated the preparation of a management plan for Hantana and Maragala kanda & Bolgoda Lake EPAs.

Six awareness programs were carried out to make aware the stakeholder agencies on Guidelines prepared for management of Bolgoda EPA, and Hanthana EPA in order to manage declared EPAs as sustainable manner. A special programme for the festival seasonal with relevant institutions was implemented in the Gregory lake EPA. Three (3) meeting of the Protected Area Management Committee two for Maragala kqanda EPA, one for Bolgoda EPA were held with relevant institutions, in order to discuss the issues relevant to EPAs and to make proper co-ordination among stakeholder agencies.

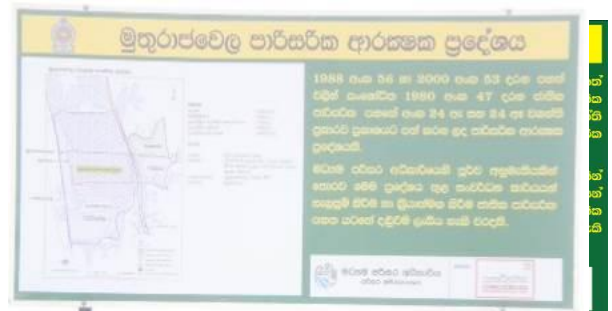


Awareness programs

Leaflets on Bolgoda and Hantana EPAs were prepared and distributed among stakeholder agencies, public and the school children and also used at the awareness programs



Boundary demarcation of Bolgoda EPA with the assistance of survey department is in progress. Erection of 20 sign boards were completed in Bolgoda and Muthurajawela EPAs. Ten no of sing boards displayed at the Muthurajawela EPA with the financial assistance of the Asset line Pvt. Ltd getting involvement of private sector institutions on environmental conservation.



4.2.2.4. Monitoring of declared EPAs

In order to maintain the status and the sustainability of the declared EPAs, monitoring inspections were carried out and follow up actions were taken. Accordingly, 44 monitoring inspections in eight declared EPAs {Muthurajawela EPA -3, Walawwe watta EPA-3, Thalangama EPA-5 Bolgoda EPA-24, Maragala Kanda EPA—3,Hanthana EPA -3, Gregorylaka EPA -3} were carried out .



Maragala EPA



Gregory Lake EPA – Monitoring



Maragala EPA – Monitoring

4.2.3 WETLAND MANAGEMENT

The NRM& M unit of the CEA is responsible for implementation of National Wetland Policy and Strategies for ensuring sound management of the wetland eco systems in the country.

4.2.3.1. World Wetland Day

The national program, the Island Wide Quiz Programme on wetland conservation and management was held to celebrate the World Wetland Day falling on 2nd February by the CEA, jointly with the Department of Wildlife Conservation & Ministry of Education. The national program was conducted among school Children Island wide and winners were awarded with cash prizes at the national program held on 2nd Feb 2012 in Colombo. The national programme was followed by the

nine provincial programs which were conducted at provincial level with the assistance of the provincial offices of the CEA.





National Wetland Steering Committee

The implementation of National Wetland Policy (NWP) and the conservation strategies by the CEA and the other relevant agencies were coordinated through the National Wetland Steering Committee (NWSC) chaired by the Secretary, Ministry of Environment, where issues related to wetland conservation are discussed.

Three (3) National Wetland Steering Committee (NWSC) meetings chaired by the Secretary, Ministry of Environment, were held and several important decisions relevant to wetland management and conservation were taken during the year 2012.

4.2.3.2. Updating the Wetland Database

Initiated updating the National Wetland Database for the purpose of Wetland Management and data verification was completed in 5 provinces.

4.2.3.3. Establishment of Village Wetland Management Committee

A village level wetland management committee for Bolgoda Wetland was established in order to get active participation of the villagers for conservation and management of wetlands.

4.2.3.4. Wetland Magazine

Initiated to prepare and publish a wetland magazine including research papers and articles on wetlands related activities

4.2.4 MEETINGS PARTICIPATED FOR TECHNICAL GUIDANCE

During the year 2012 following meetings were attended and provided the technical guidance.

- Planning Committee meetings at UDA
- Planning Committee meetings at SLLRDC
- National Steering Committee meetings on Bio-safety, Invasive species at ministry of Env't.
- Project Committee and the Technical Evaluation Committee (TEC) on Hambantota Port Development Project (Business ventures) Sri Lanka Ports Authority
- Project Committee and the Technical Evaluation Committee on Trincomalee Port Development Project (Business ventures) at Sri Lanka Ports Authority-
- Project Committee meeting on proposed Weras Ganga Project. at SLLRDC
- Rural Bridges construction project at my. of Economic Development



- Development of Mahagama Vein Quartz Deposits at my. Of Env't.
- Manufacturing of fiber glass boats for deep sea fishery at my. Of Env't.
- Aquaculture development projects (TEC meetings) at NAQ!DA
- National Monitoring Committee on sand mining – Manampitiya)
- National Biotechnology Committee at national Science Foundation
- Environmental Council meetings at CEA
- Legal consultations at Dept. of Attorney General
- One stop Unit meeting at Srilanka Tourism development Authority
- Meeting on new Act of the SLLRDC at the. of Env't.
- Meeting on draft regulations on Billboards & Hoardings at CEA
- National Science day school program held at BMICH conducted by the NSF
- Meeting regarding the release of lands belong to Forest Dept. for various activities applied by the investors and the developers at My of Env't.
- Divisional Coordinating Committee meeting at Bandaragama DS office.
- Second bi national stakeholder consultation workshop on sustaining the gulf of Mannar.-Jaffna. At my . of Defense and Urban Development
- Workshop on Early warning systems of disasters organized by Disaster Management Centre HARTI.
- 5th monsoon forum organized by Meteorological Department at Taj Samudra hotel
- Consultation forum on draft Act of proposed National Building Research Institute ,
- National Project Committee meeting on Participatory coastal Zone Restoration and Sustainable Management in the Eastern Province of Post tsunami Srilanka at My. of Defense and Urban Development
- Workshop on proposed bio safety act organized by the NSF
- Committee meeting on "Divesting of land acquired for Greater Colombo Flood control & Env't. Improvement Project" at SLLRDC. –
- Committee meeting on "Disaster Management" at Ministry of Disaster Management.



- Committee Meeting of EE &A Div (CEA) on preparation of Leaflets.
- Meeting on formulation of interim guidelines for the Coastal water based development and development activities within the coastal zone at my. of Defense.
- Meeting regarding development of Hamilton Canal at District Secretariat at Gampaha
- Workshop of Wetland Policies and Co- Management in Sri Lanka and Bangladesh held at Galle Face hotel organized by My. Env't.
- National Steering Com. meetings on Proposed Colombo Monorail Project. At My. of Transport
- Scoping meeting and the site visit on proposed hazardous waste disposal facility at Meepe, padukka
- Scoping meeting & inspection on Metal Quarry project at Thannana/
- TEC meetings on Evaluation of Variations of Fuel escalation -Off Shore Sand Mining & Pumping at My. of Env't.
- Workshop (NSF) on identification of gaps in research on Ocean & marine science at NSF
- Walk for conservation of Thalangama Tank organized by Over Seas School of Colombo
- TEC meeting at the NAQDA for issuing Aquaculture Management Licenses.
- Meeting on Policy on sitting of high polluting Industries in upstream to water intakes.
- Final auditing inspections of industries for "GREEN AWARDS"
- Meeting on the "Provincial Agro Services Authority" statute at Western Provincial Council
- Meeting on proposed Mirissa Fishery Harbor Development Project. at MEPA
- Meeting on Development of Canal Reservations of Colombo City at SLLRDC
- Environmental Forum on "Greening the Economy"
- Meeting on formulation of interim guidelines for the Coastal water based development and development activities within the coastal zone
- Workshop on Knowledge and experience sharing seminar on Disaster Management was held at Auditorium of the Ministry of Disaster Management.
- Symposium on Water Professionals Day was held at Auditorium of the Post Graduate Institute of Agriculture.



- Workshop on Capacity building programme on integration of environmental contribution to the system of National Economic of the country
- Scoping committee meeting on Makumbura new town ship Development Project at CEA
- Workshop on Disaster Risk Reduction at SLIDA
- Meeting on Regional Projects on Living Resources of Gulf of Mannar at IUCN
- Meeting with DMC to identified responsibilities of the CEA on National Emergency Operational Plan.
- Seminar on Climate change and wetlands at Department of Meteorology.
- Training programme on Environmental Impact Assessment.
- Workshop on Local interpretation guidelines for sustainable tea production
- Survey on identifying sand deposits in Kelani River conducted by GSMB
- Meeting on Introduction of Regulations for Water Source Protection & Mitigation under NWS&DB Act
- Meeting on preparation of TV Spots & Leaflets on Waterfalls at CEA.

4.3. Geo-Informatics Unit

The main goal of the unit is to contribute towards successful implementation and or facilitating implementation of relevant provisions of the National Environmental Act in order to protect and manage the environment of Sri Lanka by way of applying Geographic Information System (GIS) & Remote Sensing (RS) technologies.

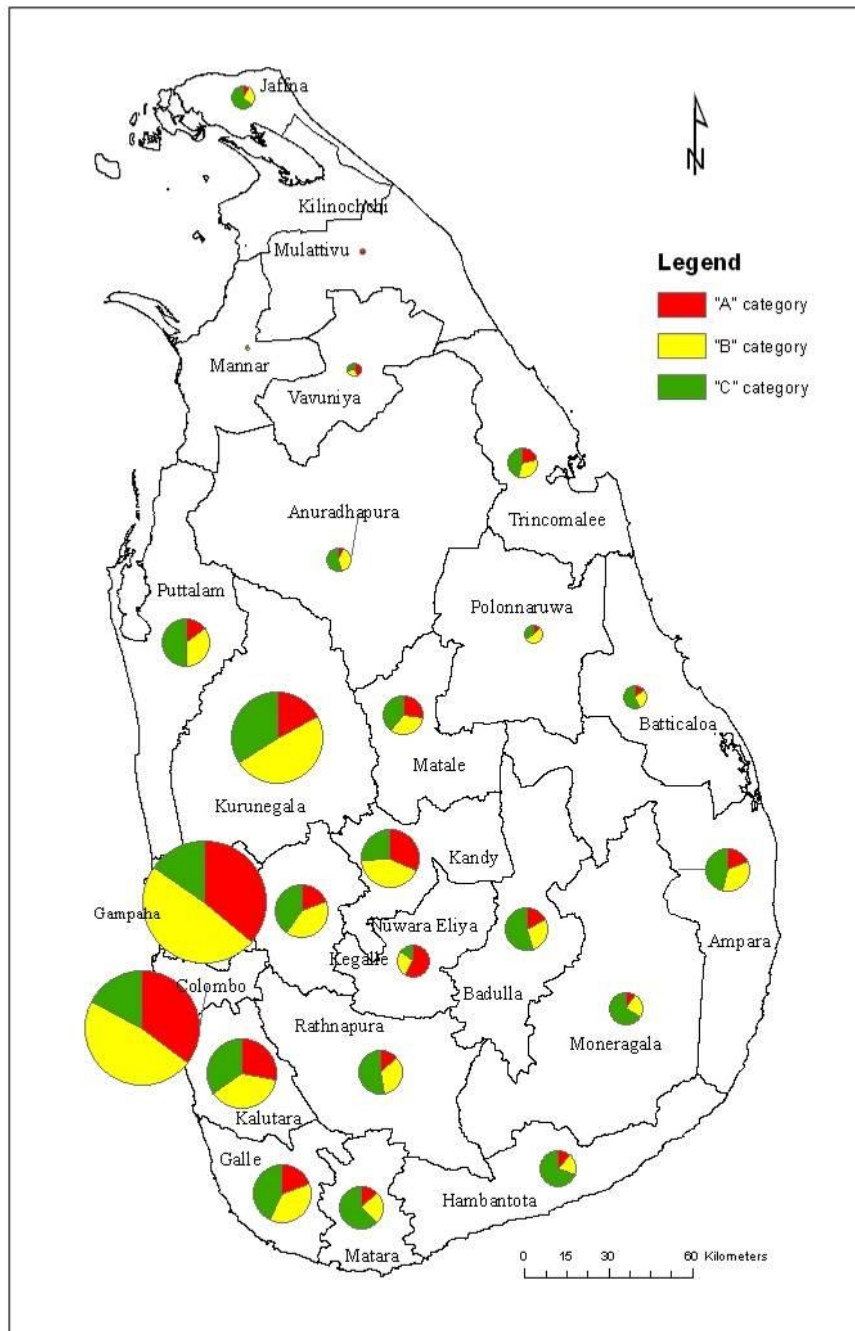
4.3.1. Development & Updating GIS based Environmental Resource

Information System

GIS based Environmental Resource Information System (Spatially referenced data bases) assists in environmental planning, management, monitoring, analysis, identification of suitable sites for development projects and preparation of Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) reports, disaster preparedness plans, and awareness activities in Sri Lanka.

Under this activity, updating of the Industrial database and GIS based Environmental Resource Information System of Sri Lanka which are being maintained by the Geo-informatics unit of the CEA were done using the collected environmentally related information and Socio economic data. Total

Industries (prescribed for EPL process A, B and C category) located in Sri Lanka are about 42,250 except "C" category data in Western and Central Provinces.



Spatial distribution of Industries in Sri Lanka

4.3.2. Preparation of District Resources Profile CDs & District

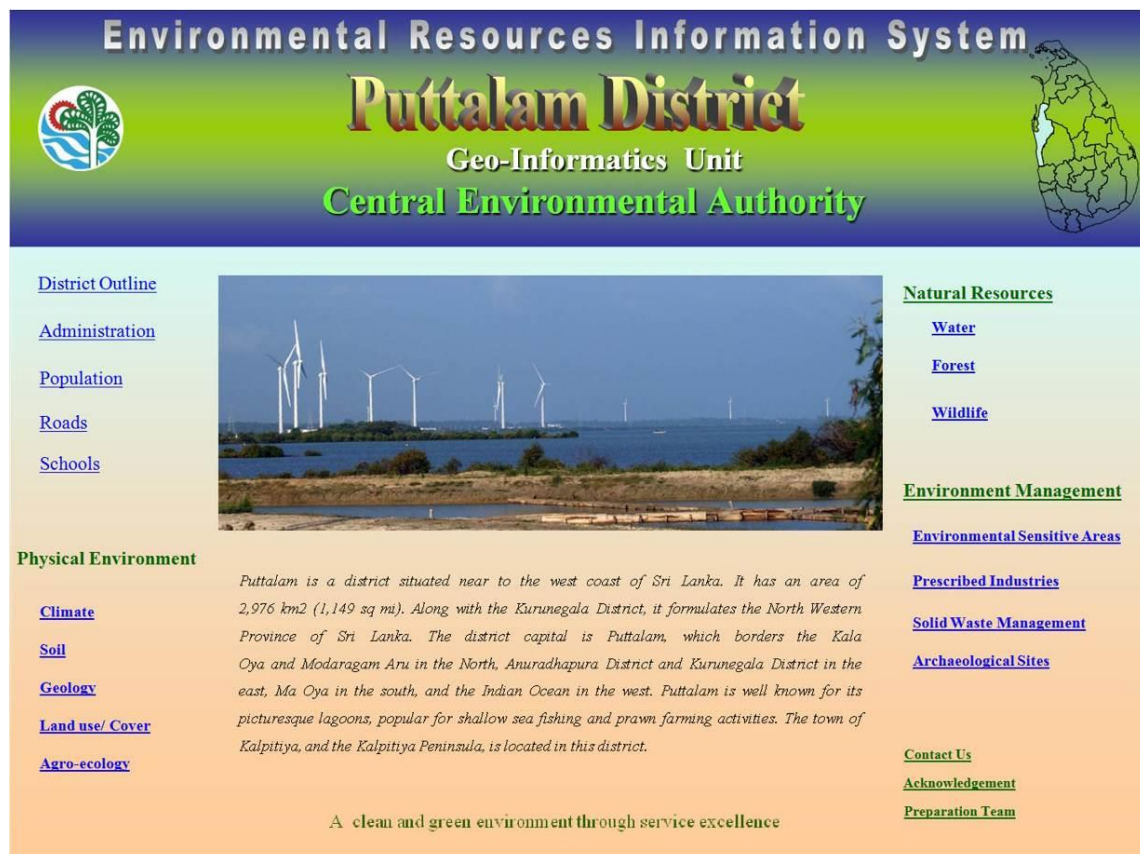
Environmental Sensitive area CDs

These are produced to disseminate the information and data of the GIS based Environmental Resource Information System which are being maintained and updated by the Geo-informatics unit of the CEA.

4.3.2.1 District Resources Profile

Digital District Resources Profile contains environmentally related information and Socio economic data of a district at divisional secretariat level. Compact Discs (CD) were prepared and printed for Kurunegala and Puttalam Districts.

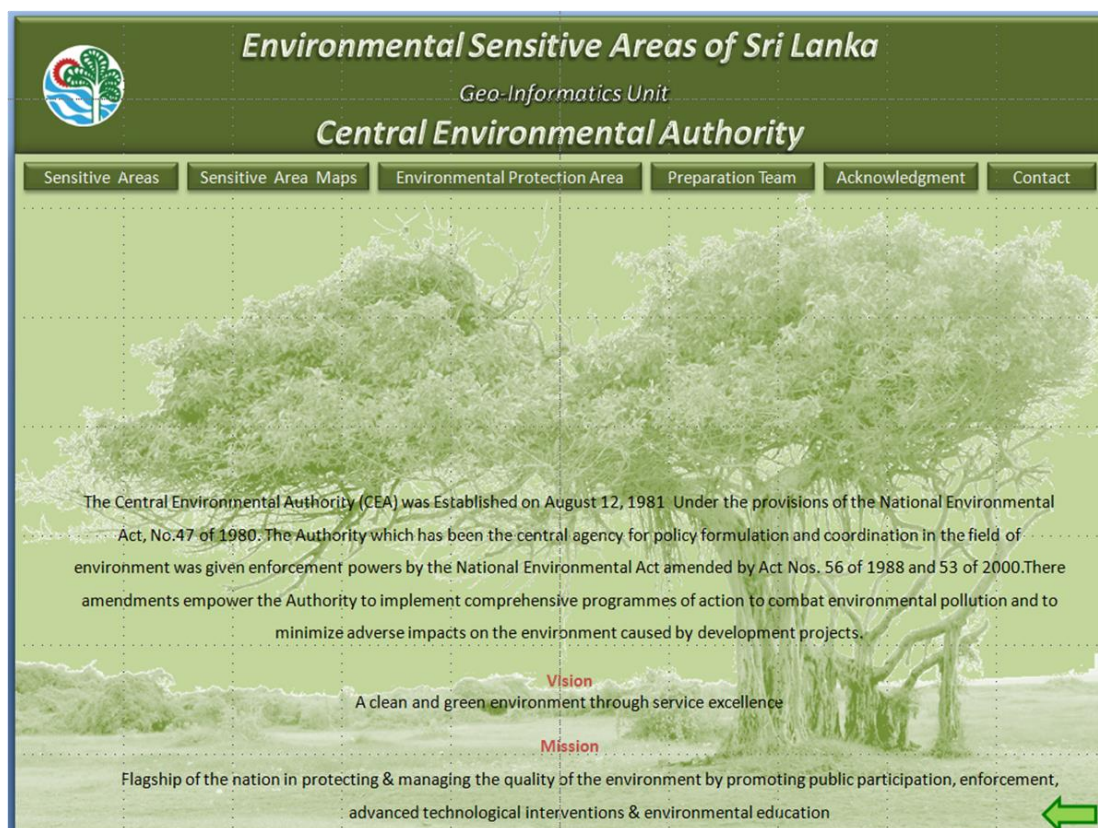
Front page of the Puttalam district compact disc



4.3.2.2 Environmental Sensitive areas of Sri Lanka - CD

Environmental Sensitive Area maps which have been included in the CD are based on the areas specified in **Part III** of the Schedule of the Gazette Extra Ordinary No. 772/22 of 24th June 1993 and subsequent amendments (EIA regulation) and the areas declared by the CEA as Environmental Protection areas so far under the provision of the National Environmental Act.

A CD consisted of all the data / information of Environmental Sensitive Area are being prepared in three languages (Sinhala, Tamil & English)



Front page of the Environmental Sensitive areas in compact disc

4.3.3. Studies and technical expertise

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 unit with collaboration of Japanese Aerospace Agency (JAXA) and Asian Institute of Technology (AIT), Thailand.

Accordingly, 42 wetlands have been identified in the South Eastern River Basin using Alos PALSAR Satellite remote sensing technology together with field survey. The main objective of this study is to identify the highly important wetlands to declare as environmental protection areas while updating the National Wetland Directory.

As part of technology transfer and capacity building, an advance PALSAR Remote Sensing training program was conducted at the CEA from 14th to 18th May 2012 by AIT and JAXA for the CEA staff and other stakeholder agencies such as Department of Wild life, Forest, Irrigation and Survey.

The progress of the study was presented in 19th Asia-Pacific Region Space Agency Forum (APRSAF) on December 10-14, 2012 in Kuala Lumpur, Malaysia.

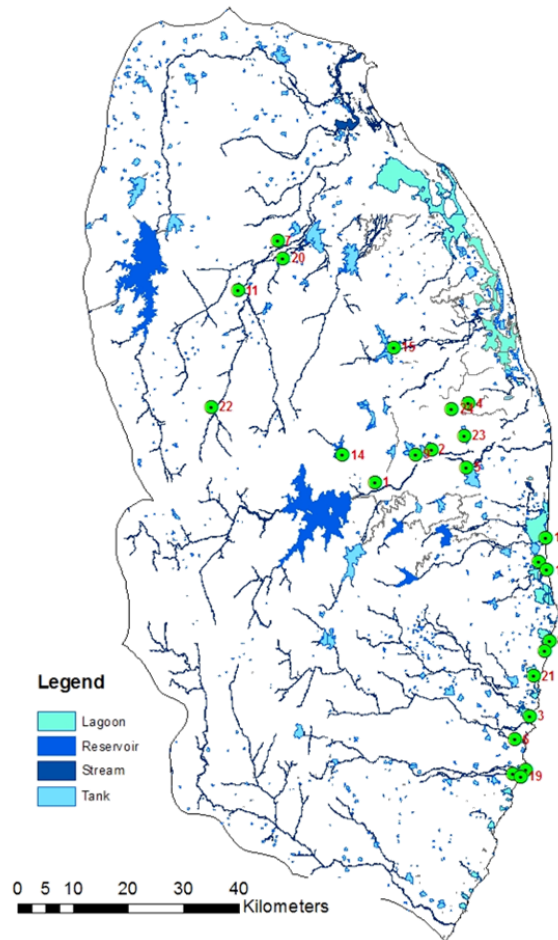


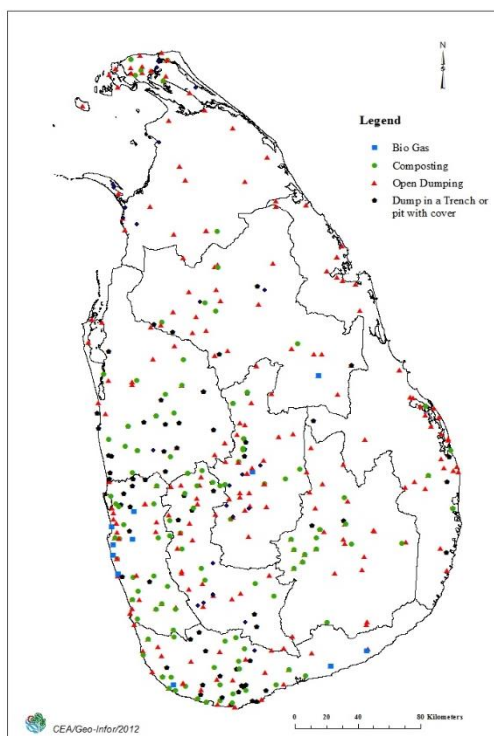
Fig. Location map of the field surveyed wetlands in the south Eastern river basin

4.3.4 Developing a GIS database for solid waste management

Under this project, data / information related to solid waste management were collected from 340 Local Authorities. In addition, environmentally related information and Socio economic GPS data were collected in 07 Divisional Secretariat Divisions of Colombo District. These information and data were incorporated into GIS based database for solid waste management. Spatial distribution maps were prepared using the data.

For updating of this database it had been planned to purchase 40 GPS units to distribute among the regional offices of the CEA. This could not be fulfilled due to unavailability of allocated fund i.e. 1.3 million of this project.

Spatial distribution of Solid Waste Management sites in Sri Lanka.



4.3.5. Strategic Environmental Assessment for Uva Province.

Data collected from Badulla and Moneragal districts were compiled and provided to Disaster Management Centre.

4.3.6. Capacity building and Strengthening of the Officers of the CEA

Training of the CEA officers on handling of Industrial database, Environmental Resource Information System and GPS units were conducted.

4.3.7. GIS services on commercial basis

Earnings for year 2012

No	Institute	Services provided	Earnings/Rs
1	Water Resources Board	Industrial data for 5 DSDs in Gampaha District	414005.76
2	Ceywater Consultant Pvt. Ltd.	Environmental Sensitive area maps for Water supply project in Anuradhapura North	15993.60
3	Ministry of Irrigation and Water Resources	Environmental Sensitive area maps of Kaluganga River basin development Project	19729.24
4	Nippon KOEI C. Ltd	Environmental Sensitive area maps of Transmission line from Polpitiya to Habarana	3427.20
5	CECB	Environmental Sensitive area maps of Morana Badulla Irrigation Project	5712.00
6	Urban Transportation Project- JICA	Environmental Sensitive area maps of Gampaha, Colombo and Kalutara Districts	19473.80
7	M.G. Consultants	Environmental Sensitive area maps of proposed Railway line from Kurunegala to Habarana	5712.00
8	CECB	Environmental Sensitive area maps of proposed Kolonna Balangoda Water supply project	7996.80
9	Y.P.S. Yamasinghe	Digital Sensitive area map of proposed Incinerator	3141.60
10	A. Priyantha	Sensitive area CDs of Badulla and Moneragala Districts	400.00
		Total	495592.00



4.3.8. Other activities

Following services (maps & analysis) were provided to the other Units of the CEA

EIA Unit-

- I. Map of Kiul Oya Irrigation Project, Wind power project in Mannar and Solar power project in Vavuniya
- II. Maps for Maduru Oya left bank irrigation project
- III. Kandekaduwa Agricultural project map
- IV. A map of Maduruoya Irrigation project
- V. "Denawaka river map
- VI. A map of Hidden valley Eco Golf project,
- VII. Achchuweli Industrial zone map,
- VIII. Yan Oya map
- IX. Anura wewa & Dendro power plant location map of Ambalantota
- X. A map for Naya Ganga Mini hydro power project
- XI. Noice map, Lower Umaoya, Hasalaka, Heenganga maps (Irrigation Project)
- XII. Pahalakumbura Mini project map

NRM Unit –

- I. Thalangama and Muthurajawela Environment Protection Area (EPA) maps,
- II. Site selection for rubber plantation and Dendro power plantation and Gliricidea power plantation in Haldummulla
- III. Thalangama tank and Muthurajawela EPA maps with locations. Prepared the new boundary of Muthurajawela EPA
- IV. A map of showing locations for display boards in Muthurajawela EPA
- V. A map of showing locations for display boards in Wathurana EPA being edited.
- VI. EPA showing Grama Niladhari divisions in Kalutara District.
- VII. Map of Maragala 500m contour marked to re-demarcate the EPA
- VIII. Demarcate Local Authority boundaries for Hantana EPA map



- IX. Gin oya proposed environmental protection area map, Bolgoda and Koggala
Environmental protection area maps according to the CCD Act.

Water Quality Lab-

- I. Water quality sampling location map of Nuwara wewa
- II. Water quality Sampling location map for Mhaweli river basin
- III. Kurunagela wewa Water quality sampling location map

EPC unit-

List of industries under category No 68 in District basis was prepared and New categorization was done as per of UK system

District and Provincial Offices

- I. Landslide prone area maps and 5000 feet contour maps have been prepared and distributed to District and Provincial Offices
- II. Metal quarry and its surrounding map prepared for Kalutara District Office
- III. Mini hydro Location map prepared for Kegalle Provincial Office
- IV. Kegalle Provincial Office- location map of a quarry site

Planning and Monitoring Unit-

Solid Waste collection and generation maps of Sri Lanka

For other agencies

- I. Industrial maps for Gampaha SEA
- II. Ministry of Environment- A map of Kelani river basin (Pavithra Ganga)
- III. All eight Environmental Protection area maps to the Survey Department.



5.0 Legal Unit

MISSION

“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.

The Legal Unit has filed and finalized a number of cases during the year 2012. Accordingly, 251 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 64 cases have been freshly filed during the year 2012.

5.1.1 Performance of the Western Province in Enforcement of NEA

There were about twenty four (24) cases filed by the CEA in the Western Province during the year 2012.

Thirty (30) cases were pending in Magistrate Court (MC) Colombo, in MC Moratuwa, in MC Mt. Lavinia, in MC Kesbewa, in MC Kaduwela in MC Avissawella, in MC Panadura and MC Gangodawila and in Court of Appeal during the year 2012.

About thirty (30) cases were pending in Gampaha District and that includes MC Gampaha, MC Minuwangoda, MC Negombo, MC Pugoda, MC Kadawata, MC Attanagalla and MC Mahara.

Further, there were 05 cases pending in MC Kalutara District in year 2012 and those were in Kalutara and Matugama Districts.

5.1.2 Performance of the Central Province in Enforcement of NEA

There were about ninety seven (97) 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, eighteen (18) fresh cases were filed in Central Province in year 2012.



5.1.3 Performance of the Uva Province in Enforcement of NEA

Six (06) cases were pending in Uva Province in year 2012. Among those, four cases were freshly filed. There was one case in MC Welimada, two cases in Bandarawela MC, two cases in Wellawaya MC and one case in Bibila MC. Two (02) cases were concluded in the year 2012.

5.1.4 Performance of the Southern Province in Enforcement of NEA

Seven (07) cases filed in Southern Province in M.C. Galle, Matara, Balapitiya and Walasmulla. One (01) case has been finalized in year 2012. There is one case pending against the CEA in year 2012.

5.1.5 Performance of the Eastern Province in Enforcement of NEA

Two (02) cases were filed by the CEA in the Eastern Province in year 2012.

5.1.6 Performance of the Sabaragamuwa Province in Enforcement of NEA

Fifteen (15) cases were pending in Year 2012 in Sabaragamuwa Province. Amongst those, seven cases were freshly filed in year 2012. There were two cases in pending at MC Embilipitiya, 03 cases in MC Ruwanwella, , 01 case in MC Ratnapura, 04 cases in MC Kegalle, 01 case in MC Kalawana, two cases in MC Awissawella and further two cases were pending in High Court of Kegalle.

5.1.7 Performance of the North Central Province in Enforcement of NEA

There were nine cases pending in North Central Province in year 2012 and that includes MC Anuradapura, Thambuththegama, MC Polonnaruwa MC Higurakgoda.

5.2.1 Overall Performance

After filing legal action, several industries were closed including Piggeries. 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.

5.2.2 Cases filed against the CEA

Twelve cases have been filed against the CEA in year 2012 in District Courts of Colombo, Anuradapura, Mt.Lavinia, Gampaha, Kegalle, and Horana. There are about fifty one (51) cases pending during the year 2012.

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



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

5.2.3 Cancellation, Refusal 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 five (05) industries and one hundred and nine (109) letters have been sent refusing to issue the EPL and one (01) letter has been sent suspending the operation of the industry.

Further, one show cause letter has been sent in year 2012.

Further, number of files have been sent to the EPC Division, Provincial Offices, District Offices and the laboratory of the CEA in order to collect the water samples, to conduct the noise measurement tests and inspection reports with necessary instructions from the Legal Division.

5.2.4 Null & Void Letters

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

5.2.5 Conditions of the Environmental Protection Licenses

Conditions of EPL with regard to fresh EPL have been checked by the Enforcement 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.

5.2.6 Appeal Hearings at the Ministry of Environment

Officers of the Legal Unit attended about thirty (30) appeal hearings conducted by the Secretary, Ministry of Environment and Original files pertaining to the industries were forwarded to the Ministry in order to conduct appeal hearings.

5.2.7 Notarial Work

The Legal Unit has prepared several agreements to obtain various services from the Consultants on various technical matters for implementing projects and to rent out the buildings.

5.2.8 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.

5.2.9 Consultations

Officers of the Legal Unit attended 14 consultations at the Attorney General's Department in order to prepare objections relating to the cases filed against the CEA and for the cases filed by the CEA at the trial stage of the court cases.

5.2.10 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.

5.2.11 Advices

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

5.2.12 Legal Notices.

Legal Notices were sent to seventeen (17) industries which had been causing environmental pollution.

5.2.13 Inspections

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.

5.2.14 Awareness

Officers of the CEA attended for 23 awareness programmes in following locations in order to make the public aware about the National Environmental Act.

- Cultural centre of Vavunia



- Katana police training institute
- Maradana police training institute
- Jaffna District Secretariat
- Attidiya Nature Field Centre
- Gampaha District Secretariat
- Kesbewa Divisional Secretariat
- Pelawatta National Training Institute
- Ratmalana Divisional Secretariat
- Galle Face Hotel
- Moratuwa Divisional Secretariat
- Athurugiriya Training Institute
- Centre for Environmental Justice
- Kotikawatta Cooperative Society Training Centre
- Kolonnawa Divisional Secretariat
- Lankem Company

Further, one officer representing the Legal Unit participated for a training of the environmental regulators in India.

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.

5.2.15 Human Rights Inquiries

Officers of the Legal Unit attended several inquiries at the Human Rights Commission and had submitted reports including environmental matters and employers' problems.

5.2.16 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.



6.0 Environmental Education & Awareness Division (EE&A)

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 participation for the conservation of environment and to make environment friendly management process. In order to achieve its' objective, Environmental Education and Awareness Division implemented the following programs for various target groups among the public. Recurrent and Capital funds were used to implement the following programmes.

6.1 Production of Bi Annual Magazine

Environment Education and Awareness Division initiated to print "Soba Ketha" bi annual magazine at the aim of dispersing the messages to the diverse group in Sri Lanka. In this way, 1st issue of the colour magazine was printed and circulated with 44 pages comprising current environmental issues along with several environmental features.

6.2 Promotional and Awareness Programs

6.2.1 Preparation of Educational Material (Posters and Leaflets)

Posters and Leaflets are printed to disseminate message on contemporary issues related to environment in Sri Lanka. In this fashion, 50,000 Dengue leaflets were printed.

Apart from that, 20,000 leaflets in each under mentioned topics were drafted and handed over to print them.

- I. Invasive Animals
- II. Invasive plants
- III. Wetlands
- IV. Global Warming
- V. Disaster and Land Slides
- VI. Biodiversity
- VII. Landslides



6.2.2 Promoting home gardening to get reliance in self food production at local level (in parallel to Divi Neguma Program)

EEA Division launched 17 creative home gardening programmes parallel to Devi Naguma programme with the participation of 1200 housewives in various part of Sri Lanka. The details are given bellow.

S.No	Place	No. of Programmes
01	Palintha nuwara	01
02	Agalawatta	01
03	Thimpirigasssa	01
04	Mathugama	01
05	Kalluthara	01
06	Wallalawita	01
07	Thodangoda	01
08	Milleniya	01
09	Beruwala	01
10	Morawewa	01
11	Komarangadawella	01
12	Polanaruwa	01
13	Annuradhapura	01
14	Ampara	02
15	Batticalloa	02
Total		17

6.2.3 Formation of Eco Clubs

Environmental Educational programmes are introduced from the primary level schools (Grade 01 – 05) to make influence values, behaviors and attitudes of children.



Production of Medals and Certificates

Medals, Certificates and other relevant materials were produced to implement the programme successfully. Details of the Eco-club materials produced for the year 2012 are as follows

S.No	Items	Nos.
01	Thurulatha certificates	17,500
02	Vihanga certificate	7,000
03	Soba Medals	6,000
04	Leaflets	4,000

Distribution of medals

Eco-club materials were distributed in the process of implementation. Details of the Eco-club materials distributed for the year 2012 are as follows

S.No	Items	Nos.
01	Thurulatha certificates	11,300
02	Vihanga certificate	4,600
03	Soba Medals	2,543
04	Guide books	33

6.2.4 Effective Use of Electronic and Print Media.

Electronic and Print media were used to disperse the messages in accordingly.

Programme	No. of Programmes	Other details
Press release	73	CEA main activities related press release to Media
Newspapers articles	27	Current environmental issues and CEA related subjects.
TV interviews	6	National Environmental Camp, World Environmental day and National Green Award related interviews.
Media coordination	25	Whole media arrangements of done by various divisions and Major projects.
"Sobaketha" TV programme	42	Every Monday 6.30 p.m. had telecast on ITN.
"Sobaketha" Radio	22	Every Monday 7.30 p.m. had telecast on commercial service of SLBC.



Programme	No. of Programmes	Other details
Environmental Newsletter	3 issues	Published as a quarterly news bulletin included major activities and information of the CEA.
Radio short messages	135	30 second radio message telecast for 1 - 1/2 month over SLBC

6.2.5 “Virindu” Competition

A singing competitions categorized under “Virundu” related to the environment was conducted for school students and public. Arrangements are underway to provide voice training to the winners from such selected best script by eminent professionals.

6.2.6 Organize Promotional Exhibitions

Environmental Education and Awareness Division build awareness, educate environmental related knowledge and involve the issues through exhibiting models as it is a powerful tool to address various environmental issues delightfully.

EEA Division Participated and installed exhibition stall in the following events held in various places.

S.No	Places
01	"Vidudaya" exhibition at Kirindiwela central college, Gampaha
02	EDEX exhibition at BMICH.
03	Deyata Kirula exhibition.
04	Exhibition at Pitipana Mahida Rajapaksha Vidyalaya, Homagama
05	"Ananda Abhiman" at Anantha College, Maradana
06	Vishakha College, Bambalapitiya.
07	National Institution of health Science, Kaluthara
08	Saranath Vidyalaya, Kuliypitiya
09	Maliyadeva school, Kurunagala
10	Sri Subuthi National School , Battaramulla
11	De Soyza Navodaya Vidyalaya, Moratuwa



S.No	Places
12	Princes of wales College, Moratuwa
13	Zahira College, Maradana
14	Alluthgama school

6.2.7 Adopt Practical Programs.

EEA Division established Nature Field Centers (5 Centers) to provide opportunities to build awareness in a practical way. Programmes for school children were conducted with various topics undermentioned related to environment at the Attidiya Nature field centre.

Number of Programmes conducted. -39
 Number of students participated - 1127

Themes of programs conducted

- | | |
|--------------------------------------|---|
| 1. Wetland | 8. Butterflies. |
| 2. Bio-Diversity | 9. Mangroves. |
| 3. Industrial Waste Management | 10. Environmental conservation. |
| 4. Conservation of power and Energy. | 11. Water Conservation |
| 5. Environmental Pioneer Programme. | 12. Snakes. |
| 6. Plastic waste management | 13. Climate change. |
| 7. Aquatic Resources and management | 14. Birds. |
| 8. Ozone layer. | 15. Health and Environmental Protection |
| 7. Waste Management. | 16. Global Warming etc. |

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

EEA Division carried out programmes for school children envisaging comprehensive topics related to the environment.

In this way, 14 programmes were conducted on various topics at CEA Auditorium



- | | | |
|-----|----------------------------------|-------|
| I. | Number of programmes conducted | - 14 |
| II. | Number of students participated. | - 682 |
| II. | Number of Teachers participated | - 26 |

6.2.9 Conduct awareness programs on current issues - organized to eradicate contemporary burning issues on environment - Eradicating Dengue.



Dengue prevention programmes were conducted in 25 Districts with the participation of the various shareholders.

Apart from that, a programme was launched with the participation of the under mentioned institutions at Battaramulla.

- | | | | |
|------|--|------|---|
| I. | Foreign Bureau. | I. | Police - Thalangama. |
| II. | Coconut Cultivation Board. | II. | Divisional Secretariat - Kaduwella. |
| III. | Ministry of Cooperative - Western Province. | III. | Municipal Council Kauwella. |
| IV. | Road Development Authority - Western Province. | IV. | National Water Supply and Drainage Board. |
| V. | Carlton Sports Network. MOH-Kaduwella. | V. | Divisional Engineering Office. |
| | | VI. | Department of Registration. |
| | | VII. | Road Development Authority. |

6.2.10 The World Environment Day - various activities are organized in accordance with the theme of the World Environment Day of the respective year.

Cartoon and Photographic competitions were conducted under limited and open category to mark the World Environment Day 2012. In this line 768 cartoons and 270 photographs competed for the competition.





Winners were selected by the professional in the relevant field. Prizes were given to the winners at the final event held at the Royal College, Colombo.

Media Unit activities -2012

Activities under the main divisions and two projects of CEA coordinate and covered by media unit for the environmental communication. All of 2012 Media unit activities are as follows;

Programme	No. of Prog.	Other details
Press release	73	CEA main activities related press release to Media
Newspapers articles	27	Current env. issues and cea relate subjects
TV interviews	6	National Env. camp, World Env. day and National Green Award related interviews
Media coordination	25	Whole media arrangements of done by various divisions and Major projects
Sobaketha TV prog.	42	Every Monday 6.30 p.m. had telecast on ITN
Sobaketha Radio Prog.	22	Every Monday 7.30 p.m. had telecast on commercial service of SLBC
Envi. Newsletter	3 issues	Published as a quarterly news bulletin with cea major activities and information.
Sobaketha magazine	2 issues	Published as a 44 pages colour magazine with current env. issues and several env. features
Radio short messages	135	30 second radio message telecast 1 1/2 month over SLBC
Viridu competition	1	Plan the viridu programme use as a powerful envi. communication tool open and school level in island wide competition
Suwasara Thaksalawa	1	The competition of best env. friendly schools, selected 6 schools district level basis by questioner and judge panel
NGO registration	26	NGO registrations aim to introduce of envi. pathway for community based organizations
Pictorial board updates	25	Photos printed related CEA major functions in gradually



6.3 National Environmental information Centre

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 analyses 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 2012 are as follows:

Collection of Environmental Book Development

10 Nos. of Environmental books and 23 Nos. of Environmental Journals have been purchased. 5970 Nos. of books are acquisitioned and classified.

Documentation Services & Processing Works

6.3.1 National Environmental Information Centre maintained following Databases and entered 1775 data.

- CEA Database for Library book catalogue
- IND Database for Newspapers
- EIA IEE Database for EIA / IEE reports

6.3.2 Create a Barcode System for library books

- Labeling on books -14,000 nos. and printing of new member cards.

Library Publications

05 issues of "Current Contents" on Environmental Periodicals and 04 issues of "Environmental News Paper Index" are compiled for the year 2012.

Exchange of Environmental Information

- 1520 No. of environmental information exchanged with international and local Libraries and other organizations.



- 475 local users have obtained the library facilities from Environmental Information Centre.
- Lending of 3400 no. of books and sending reminders.

Library Network Activities

- Handling of information request with HELLIS / SLLA / SLSTIC/AGRINET/NL&DSB library networks.
- Participated for 13 no. of Library meetings and workshops.

Other Activities

- Issued new membership cards to CEA staff
- Renewal of the institutional membership of the British Council for 2012/2013 and issued the cards for CEA staff
- World Environmental Day activities**2012**
- Coordination with food suppliers and supply of lunch packets for exhibitors
For 2days

National Environment Pioneer Camp 2012

- Preparation of programme, agenda, duty list, ID cards and menus etc.
- Handling of student registration work.
- Purchasing of prizes for cultural events.
- Providing of accommodation facilities for students and office staff.
- Printing of 900 T-Shirts and delivered them.
- Scanning of 34833 no. of pages under National Digitization Project and
- 1500 pages for EIA / IEE database.
- Preparation of monthly and quarterly reports

Income

- Sales of CEA publications - 1548 Nos. Rs. 122,638.00,
(Books, Posters, Leaflets & CDs)
- Photocopying charges - 9164 Nos. Rs. 45,820.00



7.0 Planning & Monitoring Unit

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.

Updating of Corporate Plan

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 2008-2012 was updated incorporating the goals and strategies in achieving effective inputs to the environmental sector. In 2012, the Corporate Plan was updated for next five years to lead the CEA in covering more areas of the mandate given by the NEA realistic and attainable manner. The updated Corporate Plan was approved by the Board of the CEA.



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 11 District offices including Gampaha, Nuwara Eliya, Kaluthara, Rathnapura, Ampara, Batticaloa, Hambanthota, Monaragala (Buththala), Matale, Kilinochchi & Mathara which were being operated by 2012.

Parliamentary Consultative Committee

Numerous complaints from Parliament Members on different issues had been received to the CEA in 2012. 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 with a participation of Parliamentary Members.

Two committee Meetings were held in 2012.

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 2012, there are 4,870 numbers of EPL (B category) data and 1,350 no of EPL (B category) data have been entered to database in 2012.



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 a 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, 23 such meetings were held and Planning & Monitoring Unit did all the coordination and Secretarial work of this task.

Meetings

Planning and Monitoring unit participated in various Meetings coordinating and contributing important role.

“Deyata Kirula” Programme which was held in Oyamaduwa in Anuradhapura district was coordinated in establishing development programmes and participating to the exhibition.

**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.

Treasury funded programmes

- Pilisaru Programme (Rs. 546 Mil.)
- Post-Consumer Plastics Management Programme (Rs.118 Mil.)
- Strengthening of Laboratory of the CEA (Rs. 1.5 Mil.)
- School Pioneer Programme (Rs. 5 Mil.)
- National Environmental Information Centre (Rs. 2.5 Mil.)
- Ambient Air Quality Monitoring in Sri Lanka (Rs. 120 Mil.)

Foreign Funded Project

- KOICA - Korea International Corporation Agency
- EDCF - Economic Development Corporation Fund

KOICA stands for Korea International Corporation Agency funded projects and it has Rs. 80 million fund allocation whereas EDCF stands for Financial Assistance of Economic Development Corporation Fund and it has allocated Rs. 95 Million for the project.



8.0 Complaint Unit

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 five 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 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 Environmental 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.

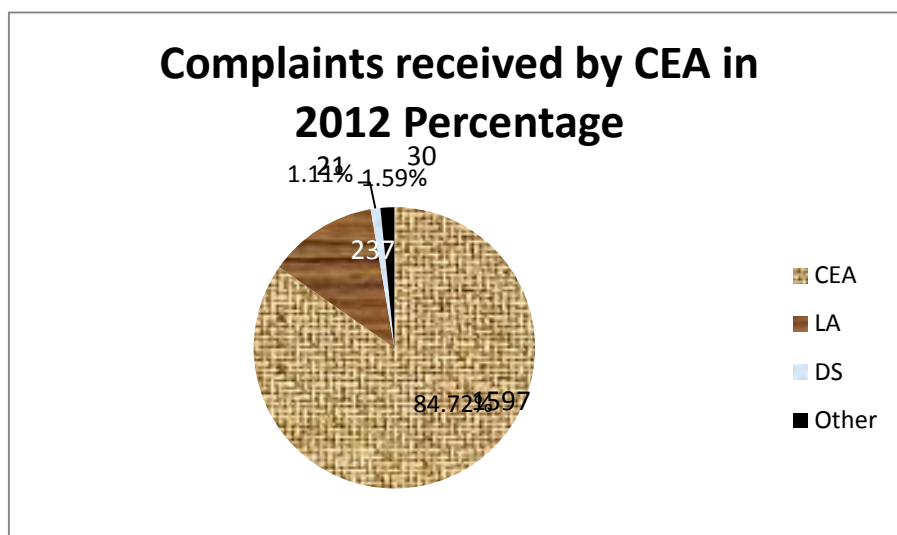
Complaints received to the unit since July 2012 are registered through a computer software. Up to now, those complaints registered in this software are being transferred to the relevant Provincial Offices and District Official of CEA for taking necessary actions and follow up actions are being taken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



During the Year 2012 the unit received 1885 complaints.

Following pie chart shows the institutions which are responsible for solving complaints received during the year 2012.

During the past year CEA referred 1597 complains to relevant institutions Details are show below.



The summary of the complaints referred to the relevant institutions as follows.

	Relevant Offices and Units	No. of	Percentage
1.	Colombo District Office, CEA	349	18.5
2.	Gampaha District Office, CEA	284	15.1
3.	Kalutara District Office, CEA	165	8.8
4.	Environmental Impact Assessment Unit, CEA	02	0.1
5.	Natural Resources Management Unit, CEA	01	0.1
6.	Solid Waste Management Unit, CEA	08	0.4
7.	Environmental Pollution Control Division, CEA	35	1.9
8.	Legal Unit, CEA	02	0.1
9.	Laboratory, CEA	03	0.2
10.	Police Unit, CEA	37	2
11.	Pilisarua Project, CEA	03	0.2
12.	Ampara District Office, CEA	15	0.8
13.	Batticaloa District Office, CEA	02	0.1
14.	Central Provincial Office, CEA	121	6.4



	Relevant Offices and Units	No. of	Percentage
15.	Eastern Provincial Office, CEA	21	1.1
16.	Hambantota District Office, CEA	20	1.1
17.	Matara District Office, CEA	38	2
18.	North Central Provincial Office, CEA	63	3.3
19.	North Western Provincial Office, CEA	121	6.4
20.	Sabaragamuwa Provincial Office, CEA	92	4.9
21.	Southern Provincial Office, CEA	140	7.4
22.	Uva Provincial Office, CEA	74	3.9
23.	Northern Provincial Office, CEA	01	0.1

Two hundred and eighty eight complaints were referred to other responsible institutions during the reporting period and the details are given bellow.

	Relevant Offices and Units	No. of Complaints	Percentage (%)
1.	Local Authorities (relevant)	237	12.6
2.	Divisional Secretariats	21	1.1
3.	Other relevant Institutions	30	1.6

On the other hand, 42% out of total No of complaints (1885) have received from the Western Province and 43% of such complaints were reported from the District of Colombo.



9.0 Decentralization of the CEA

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 except North Western 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 except Northern Districts, monthly under the chairmanship of District Secretaries.



10. Regionalization Programme of the CEA

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, 60% of the prescribed activities are located in the Western Province. It is 13% in the Central Province and 17% in the Southern Province. The rest that is 10% 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 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					
		2010		2011		2012		2010		2011		2012	
		"A"	"B"	"A"	"B"	"A"	"B"	"A"	"B"	"A"	"B"	"A"	"B"
WPO	Colombo	223	236	148	210	113	110	427	-	512	20	519	114
	Gampaha	142	227	168	166	118	122	218	-	260	14	189	59
	Kalutara	91	134	69	103	59	48	174	-	200	21	200	49
CPO	Kandy	83	121	74	88	72	54	54	1	81	4	70	17
	Matale	37	49	32	33	29	31	35	2	64	5	50	4
	Nuwaraeliya	4	7	13	9	8	8	16	-	7		13	2
SuPO	Galle	34	100	63	129	41	81	63	15	79	11	100	63
	Matara	53	74	23	96	33	81	31	22	79	6	63	55
	H'thota	27	41	39	45	29	31	20	-	26	1	42	32
SaPO	Kegalle	38	91	36	69	36	86	32	1	39	3	77	54
	Ratnapura	56	89	40	79	30	72	31	12	39	7	88	15
NcPO	A'pura	39	151	38	55	109	73	26	1	64	3	88	18
	Polonnaruwa	11	27	5	18	14	18	155	4	22	1	29	2
EPO	Trincomalle	19	48	21	28	22	25	10	9	23	4	28	14
	Ampara	13	58	7	62	12	34	7	7	15		3	2
	Bataloa	17	58	2	37	6	39	-	-	3	8	16	9
	Vavunia	8	1	14	3	29	8	-	-	7		16	0
	Mannar	1	3		5	-	8	14	16	1		0	0
UPO	Badulla	11	36	17	37	46	39	13	9	26	6	23	12
	Monaragala	6	24	2	33	21	50	13	-	4	1	17	3
NPO	Jaffna	5	35	12	24	23	16		-	25	1	24	3
	Kilinochchi	-	-	-	-	-	2	-	-	0	-	0	2
	Mulathi	-	-	-	-	4	2	-	-	0	-	2	0
Total		918	1610	823	1329	854	1038	1204	100	1576	116	1657	529



During the year 2012, 854 “A” category EPLs and 1657 “B” category EPLs were issued as afresh while 1038 “A” category EPLs and 529 “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 neighbouring residents. Since 2000 however, the CEA grants site clearance only for a limited (80) number of activities which are high polluting in nature. But, the number has increased up to total of 1,772 recommendations (1,668 approvals and 104 rejections) by 2012. 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

Trincomalee districts which indicates that entrepreneurs prefer for the investments. It shows that Investment have been tremendously increased from 2010-2012 in Killinochchi, Batticaloa and Trincomalee Districts.

Recommendations for siting of new industries

Province	District	No. of Applications received			No of inspections made			No of Approvals granted			No of Rejections		
		2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
WPO	Colombo	111	136	140	108	192	146	83	82	106	1		
	Gampaha	119	154	171	116	110	140	112	58	124	17	15	15
	Kalutara	86	135	116	77	125	98	64	102	93	4	8	17
CPO	Kandy	56	155	125	44	91	85	50	77	96	7	10	15
	Matale	17	72	85	50	61	77	27	54	79		8	5
	Nuwaraeliya	6	19	24	9	18	21	14	14	10			2
SuPO	Galle	69	102	87	73	118	101	43	67	81	10	19	11
	Matara	47	80	78	44	79	87	34	59	45	8	21	18
	H'thota	33	58	57	31	54	43	23	39	41	2	6	
SaPO	Kegalle	31	96	98	27	56	22	15	58	66	1	5	4
	Ratnapura	59	83	111	50	34	25	18	48	79	3	15	1



NCP O	A'pura	172	164	199	113	126	213	112	81	135	6	2	5
	Polonnaruwa	18	16	38	15	14	33	9	11	6			
EPO	Trincomalle	48	98	51	39	66	51	15	91	45	2	7	
	Ampara	61	28	116	55	34	110	27	60	111		3	
	Baticaloa	37	89	32	35	92	32	18	88	69			
	Mannar	9	56	45	8	47	39	6	69	40		2	
	Vavunia	6	37	18	7	37	19	13	26	16			
UPO	Badulla	63	117	197	68	98	183	48	79	105	1	1	5
	Monaragala	38	44	60	27	30	65	24	28	55	2		2
NPO	Jaffna	276	155	122	152	120	110	161	97	107	16	3	3
	Kilinochchi	14	117	195	24	107	131	6	99	123	2	3	
	Mulathi		11	42		9	47		8	28			1
NWP O	Kurunegala			10			10			8			
	Puttlam									0			
Total		1376	2022	2217	1172	1718	1779	952	1395	1668	82	128	104

During the year 2012, 2217 new industries requested recommendation for their venture whereas 1779 applicants were granted recommendations and 104 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 2012, No. of 1534 industrial pollution complaints and 427 natural resources management related complaints, total of 1966 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 2012

District	No. of complaints received		No. of complaints solved		Referred for legal action	Referred to other Institutions		Referred to EPL
	EPC	NRM	EPC	NRM	EPC	EPC	NRM	
Colombo	191	8	159	6	1	7		12
Gampaha	433	18	139	4	24	78	5	64
Kaluthara	202	42	52	2	1	42	6	4
Kandy	36	15	3		2			
Matale	17	6						
Nuwaraeliya		6						
Galle	78	3	31	6		10	1	
Matara	35	1	23	8	3			3
H'thota	9							
Kegalle	109	66	18	24	1	3	16	
Ratnapura	66	33	44	39	1		16	
A'pura	88		1			3		3
Polonnaruwa	44		3			1		4
Trincomalee				1				
Ampara	20		3					12
Bataloa	5	2	5	2				
Mannar	1							
Vavunia								
Badulla	3	3	4	2	1	2		3
Monaragala	7	4	2	1				1
Jaffna	18	1	4					
Kilinochchi	1							
Mulathi								
Kurunegala	113	143	4	3		24	38	5
Puttlam	58	46		3		4	15	
Total	1534	427	495	101	33	177	97	111

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.

Type of Audit	No of Companies Audited
Stage 1	01



Type of Audit	No of Companies Audited
Stage 11	03
Surveillance	03
Re-certification	02
Total	09

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 2012 under EIA/IEE regulation by the EIA unit .

Province	District	No. of Applications			Approval granted			No of Rejections		
		2010	2011	2012	2010	2011	2012	2010	2011	2012
WPO	Colombo		2	8			6			
	Gampaha	9	4	2		2	1			
	Kalutara		1	9			5			
SuPO	Galle	2	11	4		5	3	1		1
	Matara	3	9		3			3		
	H'thota	5	1	26				2		
CPO	Kandy	303	237	304	302	226	181	9	17	13
	Matale	30	42	102	197	175	48	3	2	1
	Nuwarael	34	97	66	35	115	59			
SaPO	Kegalle	7	23	4	4	4				
	Ratnapura	20	5	14	3	4	4			
UPO	Badulla	10	2	1	1	4				
	Monaragal	1	3							
EPO	Trinco	20			14					
	Ampara	4			3	1				



	Batticaloa	2			2					
	Mannar	2			1					
	Vavunia			4	4					
NCPO	A'pura		1	3			1			
	Polonnaruw						1			
NPO	Jaffna	47			19			1		
	Kilinochchi		2							
	Mullaithivu		3							
Total		499	443	338	581	536	233	19	19	8

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 **4,605** 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 2012 on Non-Prescribed Activities

Province	District	No. of Applications	Approval granted	No. of rejections	Compliance monitoring
WPO	Colombo	95	8		
	Gampaha	256	155	6	98
	Kalutara	266	435		3
SuPO	Galle	72	71		
	Matara	4	24	3	1
	H'thota	6	66	4	2
CPO	Kandy	280	408	4	
	Matale	175	249		
	Nuwaraeliya	26	74		
SaPO	Kegalle	2	215	13	
	Ratnapura	7	312	8	2
UPO	Badulla	417	344	11	
	Monaragala	327	372	3	
EPO	Trincomalle	327	313		
	Ampara	83	99		1
	Batticaloa	71	146		
	Mannar	70	85		
	Vavunia	26	36		
NCPO	A'pura	302	249	2	
	Polonnaruwa	199	89		



NPO	Jaffna	20	5		
	Kilinochchi	49	22		
	Mulathi				
NWPO	Kurunegala	539	609		
	Puttlam	175	181		
Total		3417	4605	54	107

The table above indicates the details of such recommendations granted in 2012

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 7.1 below.

Requests presented to the Hanthana Management Committee for approvals

Category	Number
Requests received for approval	284
Requests recommended for approval	201
Requests with pending approval	22
Approval rejected requests	61

B. Knuckles Conservation Programme -

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

C. Gregory Lake Conservation activities



Assistant to prepare Urban Development Plans

The WPO assisted the UDA to prepare the Urban Development Plan for Kotikawatta-Mulleriyawa Urban Development Plan. The plan was incorporated environmental sensitivity GN divisions according to the Cabinet paper on declaration of Kelani River basin as an environmental sensitive area to protect the quality of Kelani water. Also the concerns on facilitating small scale industrial development were suggested for the plan.

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 15th – November 15th)

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.

All provincial offices contributed to conduct awareness programmes on 11.10.2012 in district offices and inspections on breeding sites were also conducted. In these events, home to home awareness programs were held with the participation of all relevant stakeholders.

Income and Expenditure of the Provincial Offices' in 2012 (Rs.)

Province	Income			Expenditure		
	2010	2011	2012	2010	2011	2012
WPO	30,993,000	33,070,444	32,905,163		15,267,719	20,671,226
CPO	9,549,000	9,872,672	11,944,309	5,169,000	5,430,070	6,431,895
SuPO	8,300,000	9,558,090	12,101,210	6,691,000	7,854,99	8,050,989
SaPO	8,361,000	9,021,319	11,357,345	3,970,000	6,103,98	5,033,323
NCPO	8,616,000	8,657,640	12,209,617	2,804,000	3,092,921	3,452,897
EPO	8,784,000	9,718,908	13,983,808	3,858,000	3,815,073	4,778,359
UPO	6,230,000	8,305,522	10,309,693	2,378,000	2,228,682	3,705,319
NPO	2,573,000	4,060,139	4,475,807	717,000	927,773	1,985,325
NWPO			4,196,408			2,729,878
Total	85,416,000	92,264,734	113,483,360	38,291,000	44,721,214	56,839,211



11.0 Treasury Funded Special Projects Implemented by the CEA

11.1 National Post Consumer Plastic Waste Management Project

11.1.1 Introduction

Sri Lanka imports a considerable amount of plastic raw materials and finished products in each year and major portion of them remains as post consumer plastic waste, which causes severe environmental & health problems and impacts. The objective of the National Post Consumer Plastic Waste Management Project (NPCPWMP) is to address the behavioral change necessary among the Sri Lankan consumers to ensure proper disposal of plastic waste and to put in place the necessary logistics to enable the collection and recycling of post consumer plastic waste. This program envisages the maximum recycling of plastic waste which also generates foreign exchange savings to the country.

National Post Consumer Plastic Waste Management Project seeking solutions to post consumer plastic waste menace in the country was executed during period from January 01st, 2007 to 31st December 2009 on the approval of Cabinet of Ministers. Considering the importance and the timely necessity of this project, the Cabinet of Ministers has approved to extend the project for further three years period from January 01st 2010 at a total financial allocation of Rs. 1050 million. This project was initially funded by 1% CESS imposed on imports of all Plastic raw materials and finished goods and thereafter it was increased up to 10% on reducing prices of virgin plastics due to a fuel price drop in 2009. This project is monitored by Plastic Partnership Committee by the members of which were appointed from the Private Sector and Government Institutions comprising five and four respectively. The program will be funded by a CESS on imports under HS 39 code by the Department of Sri Lanka Customs and transferred those funds to the General Treasury under CESS funds. The funds to implement program activities are issued by the General Treasury on the consent of the Ministry of Environment and supervision of the Central Environmental Authority.

11.1.2 Activities implemented during the Year 2012

11.1.2.1 To strengthen the plastic waste collecting and recycling network in the country.

The project initialized and implemented the program operations throughout the year in the strategic views of aware, guiding, standardizing and developing post consumer plastic waste collecting & recycling mechanism in the country. For the purpose of achieving program objectives, project focuses 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.



11.1.2.2 To construct the plastic and polythene waste recycling model plants at the Local Government Authorities

In order to facilitate for local government authorities on the proper plastic / polythene waste recycling model plants, the project constructed two (02) large scale model recycling plants investing Rs. 15.0 millions at Balangoda Urban Council and Kurunegala Municipal Council. Also, project awarded two 02 plastic waste crushers and polythene compactors for the purpose of converting small pieces with the logistic facilities. The ultimate objective of this model plant is to streamline the collection network around the region and systematical recycling process to be implemented. The above two plants have been successfully implemented and the construction of the plastic / polythene waste model plant is being constructed at Matara Municipal Council.

11.1.2.3 To construct the plastic and polythene waste collecting yards at the public places

In order to introduce and implement the proper plastic / polythene waste collecting mechanism in the public and most sacred places in Sri Lanka, the project initiated and constructed a collection centre at most sacred Sri Padha (Investment – Rs. 2.5 million) in collaboration with Ambagamuwa Pradhesiya Sabha. The objective of this centre is to collect all the polythene and plastic waste generating during the six months pilgrim season during the particular year. Another collecting yard is expected to construct at Galgamuwa Pradhesiya Sabha by investing 1.0 million (approximately) for the purpose of creating and implementing proper waste collection and storing to forward the process of recycling.

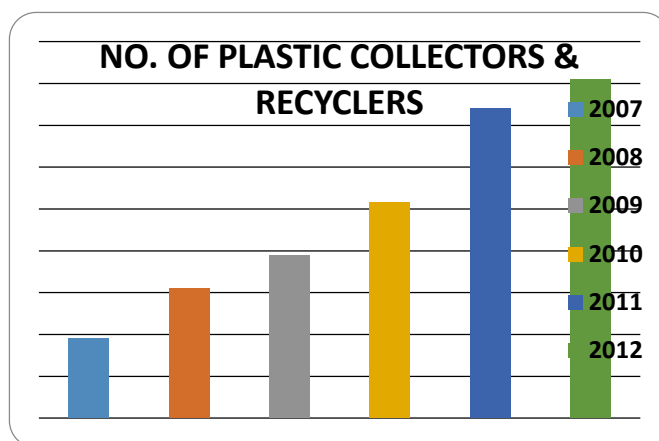
11.1.2.4 To provides infrastructure facilities the private sector collectors and recyclers

This is a mega event that project is being implemented during the year under review. The project selected three major private recyclers under the government procurement guidelines. The project in the beginning initiated this program western province by nominating one recycler per each district (Colombo. Gampaha & Kaluthara). Total investment for this activity is Rs. 15.0 million. All the construction and installation process is being implemented where as the agreements were signed between CEA and particular recyclers. Especially, this event is first ever implemented by the project, CEA. After implementing this project, this opportunity would be an avenue to motivate all the collectors and recyclers in the region for collecting plastic / polythene waste with contaminated waste and to increase the no. of recyclable waste. Then it would be applied to increase the use of recyclable plastic / polythene raw materials to the particular products thereby saving foreign exchange due to the importation of plastic goods and raw materials.



YEAR	NO OF PLASTIC COLLECTORS & RECYCLERS
2007	38
2008	62
2009	78
2010	103
2011	148
2012	162

In addition, the total no. of plastic collectors and recyclers were increased from 148 no in the year 2011 to 162 no during the year under review.



11.1.2.5 Distribution of woven polypropylene Bags in order to educate and adhere on proper waste disposal and segregation practices

In the strengthening of proper waste disposal in to the environment, the project office distributed 8155 no. of woven polypropylene bags in the year 2012 to encourage the local authorities, schools, govt. organizations, and other different community groups for their proper disposal of plastic / polythene waste accordingly.

11.1.3 No. of events with regard to the training development and awareness raising on program activities implemented during the year 2012 are as follows.

Type of events	No. of
Awareness events (schools , teachers, daham schools NGO/CBO, Residential camps & other training events)	64
Training workshops for environmental teachers	08

Type of events	No. of
Training workshops in Local Authorities	02
Training workshops for school children, Government officers, community leaders and members	05
Residential training / Awareness events – for school children	02
Residential training / Awareness events – for Local Authorities' staff	01

In addition, project caters in demonstrating ideal visual dramas and documentaries as well as distributing handbills, posters etc for the purpose of educating different targeted communities in the country.

11.1.3.1 To conduct various promotional campaigns in order to strengthen the plastic waste collecting and recycling network in the country.

The project implemented promotional campaigns to promote on how to dispose the plastic / polythene waste by way of performing shramadhana campaigns on waste collecting & referring into general public such as; telecasting environmental friendly TV programs (Sobhaketha at ITN), printing advertisements in souvenirs, maintaining hotline (**0773-909090**), and conducting waste management, training & community participatory community events and national / regional wise programs at sacred places; Sri Padha, Kataragama, Tissamaharamaya, Anudhapura Poson program, Kandy Esala Perahera, Trincomalee, Deyata Kirula National Exhibition in Anuradhapura, National Green Awards, World Environmental Day and other programs etc. For this purpose, the following activities were implemented during the year under review.

A few of the important highlights extracted from the program events is shown below.



Plastic / Polythene Recycling Model Plant Complex – Balangoda Urban Council



Plastic / Polythene Recycling Model Plant Complex – Kurunegala Municipal Council



Plastic / Polythene Recycling Model Plant Complex – Matara Municipal Council (Construction - In – progress)



Plastic / Polythene Recycling Collecting & Storing Centre – Sri Padha, Nallathanni

Awarding of 03 no of plastic / polythene waste washing plants in order to strengthen 03 no. of district wise mega private sector recyclers in Western Province (each plant for Colombo, Gampaha and Kaluthara Districts)



Residential Workshop held for the Heads of North Western Provincial Local Government Authorities



Awareness programs conducting for School and Daham Pasel childrens



An Awareness Program for Pre-School Teachers



An Awareness Program for Government Officers



Staff Training & development Program at Kurunegala Municipal Council



Staff Training & development Program at Balangoda Municipal Council



Annual Esala Festival promotional campaign conducted at Ruhunu Maha Kartaragama Maha Devalaya



Deyata Kirula national Exhibition 2012 - Oyamaduwa Anuradhapura



National Exhibition for World Environmental Day – 2012 at Royal College - Colombo



Sri Lanka Plast" International Exhibition 2012 – Contribution for Theme Pavilion





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.

Progress of the activities of the Environmental Pioneer Programme in 2012

Introduction

The Environment Education and Awareness Division (EEA) of the Central Environmental Authority (CEA) is responsible for building awareness and providing education to the public towards harnessing their participation for the conservation of environment and to make them to more concern on environment.

In order to achieve the objectives, Environmental Education and Awareness Division implement the Environmental Pioneer programs (EPP) for school children. As school children are an imperative congregation of various target groups among the public, because of they represent by 20% in Sri Lankan population, Environmental Pioneer Programme (EPP) is implemented as a one of the inherent programme for the secondary level school children by EEA across the Island with the goal to motivate and commit to work individually and towards finding feasible solutions for current environmental issues, collectively.

EPP is a highly successful program conducted by the CEA under the guidance of Ministry of Environment, in collaboration with the Ministry of Education. This program was started in 1984 with a selected group of school children in “Maligawatta” area in Colombo. Today EPP is well established programme at schools in Sri Lanka and 6936 schools have already been enrolled under CEA and nearly 200,000 of environment pioneer members are involved.

The necessary funds to implement the following programmes were provided by the Ministry of Environment.

11.2.1 Promote Environment Education and Awareness programmes at School level.

Environment Education and Awareness Division conducted the training programmes for teachers and leaders of the Environmental Pioneer Programme to build the capacity of them in the field of environment in compliance with the action plan 2012 under the Ministry fund



11.2.1.1 Training Programs for Teachers.

16 teacher training programmes at the Zonal level were conducted in order to strengthen the Environment Pioneer programme in the under mentioned Districts.

S. No	District	Educational Zone	No. of participant
01	Galle	Ambalangoda	46
		Galle	61
02	Kaluthara	Mathugama	64
		Kaluthara	61
03	Mathara	Mathara	48
04	Kilinochchi	Kilinochchi	67
05	Jaffna	Jaffna & Vadamarachi	66
		Thenmarachchi and Delft	68
06	Mannar	Mannar	77
		Madu	78
07	Vavuniya	Vavuniya	85
08	Kegalle	Mavanella	48
		Kegalle	58
		Dhehembivita	56
09	Trincomalee	Trincomalee	62
		Mahadivulwewa	58
Total	09	16	995

11.2.1.2 Leadership Training Programs for selected Pioneers

With the objective of building leadership capacity among Pioneers, 6 leadership training programmes were conducted in the under mentioned Districts. Leaders of the Environmental Pioneer Programmes were selected for this point.

S.No	District	Place	No. of participant
01	Kandy	Nature Field Centre - Pollgolla	110
02	Anuradhapura	Vivehanandha Tamil Vidyalaya - Anuradhapura	84
03	Hambantota	Divisional Secretariat Auditorium - Thangalle	120
04	Trincomalee	Urban Council Auditorium - Trincomalee	100
05	Kurunagala	Municipal Council Auditorium - Kurunagala	105
06	Colombo	Nugegoda Anula Vidyalaya	122



11.2.1.3 Production of EPP Materials.

The following EPP Medals and Materials were produced to make use of for the EPP for the year 2012.

S.No	Items	Nos.
01	Pioneer Medals	42,000
02	Green Medals	12,500
03	Green Certificates	13,500
04	Silver Medals	3,200
05	Silver Certificates	4,500
06	Gold Medals	575
07	Gold certificates	900
08	Caps	48,000
09	Note book	45,500

11.2.1.4 Increasing Badge holders and membership.

EEA Division takes measures to increase the number of Medallist of the EPP. In compliance with the point, Medals and other materials connected to the environmental pioneer Programme (EPP) were awarded to the Environmental Pioneers for their achievements in the curriculum of the EPP.

The following Medals and EPP materials were distributed in 2012.

S.No	Medals/Materials	Nos.
01	Pioneer	30,987
02	Green	8749
03	Green Certificates	13,300
04	Silver	2,342
05	Silver Certificates	1,876
06	Gold	350
07	Gold Certificates	392
08	Guide book	14
09	Note book	27,850
10	Flag	332
11	Caps	33,650

11.2.1.5 Implementation of Eco Projects at School Level (One school in each district)

27 schools were selected across Island to promote environmental friendly projects within younger generation. This project was implemented with the active participation of Environmental Pioneers.

S. no	District	Divisional Secretariat	Name of the school	Type of the project
01	Kaluthara	Dhodangoda	Koswatha Kanista Vidyayalaya	School gardening



S. no	District	Divisional Secretariat	Name of the school	Type of the project
02	Gampaha	Diulapitiya	Banduragoda Dharmasoka M.V	Bee keeping
03	Puttalam	Arachikattuwa	Bangadheniya M.V	Fruit tree planting
04		Mundal	P/Omer Farook M.V	Bee keeping
05	Badulla	Badulla	Viharamaha Devi Balika M.V	Paper recycling
06	Moneragala	Bibila	Bulupitiya M.V	Bee keeping
07	Mathale	Ukuvela	Ovilikantha M. V	Fruit tree planting
08	Polanaruwa	Hingurakgoda	Mineriy National school	Bee keeping
09	Galle	Akmeema	Janathipathy Balika Vidyalaya	Compost making
10	Hambanthota	Thissamaharama ya	Nathinamvila Kanishta Vidyalaya	Bee keeping
11	Matara	Matara	Dhiyagaha batahira M.V	Fruid and vegetable production
12	Trincomalee	Padavisiripura	Padavi Jayanthi M.V	Bee keeping
13	Ampara	Dhamana	Uksisripura Vidyalaya	Bee keeping
14	Kurunagala	Pannala	Bopitiya M.V	Fruit tree planting
15	Anuradhapur a	Nachchiyathuwa	Kuruvila school	Compost making
16	Kandy	Harishpathuwa	Thoranaagama M.V	Bee keeping
17		Gangawata korale	Ampitiya R.C.Tamil Vid., Ampitiya	Tree planning (Fruits plants)
18	N-Eliya	Kothmale	Delta Gamunupura V	Bee keeping
19		N-Eliya	N/Holy Trinity Central Collage	Tree planning (Fruits plants)
20	Kegale	Kegale	Suwarna Jayanthi M.V	Compost making



S. no	District	Divisional Secretariat	Name of the school	Type of the project
21	Ratmnapura	Rantapura	Kehelovitigama V, udakiriialla	Compost making
22	Matale	Matale	MT/Pakkiyam National Collage, Matale	Tree planning (Fruits plants)
23	Killinochchi	Karachi	Kn/Urithirapuram Maha Vidyalaya	Tree planning (Fruits plants)
24	Ampara	Ninthavur	Km/Al-Ashraq M.M.Vidyalaya	Compositing
25	Mannar	Mannar	Mn/Thoddaveli G.T.M. School,	Paper recycling
26	Jaffna	Jaffna	J/Navanthurai R.C.Vidyalaya.,	Tree planning (Fruits plants)
27	Batticaloa	Manmunai West	Bt/Navatkadu Namagal Vidyalaya	Tree planning (Fruits plants)

11.2.1.6 District Environmental Pioneer News Letter

Each year, EEA Division takes measures to publish District Environmental Pioneer News Letter to disperse the messages among school children. In this view, Newsletters were published in the following Districts

S. No	District	S.No	District
01	Kaluthara	09	Nuwara Eliya
02	Kurunagala	10	Mathara
03	Kandy	11	Kilinochchi
04	Gampaha	12	Batocalloa
05	Hambanthota	13	Galle
06	Moneragala	14	Mannar
07	Vavuniya	15	Trincomalee
08	Anuradhapura	16	Puttalam

11.2.1.7 Environment Pioneer National Camp -2012.



Environment Pioneer National Camp -2012 held at National Cadet Corps, Randembe and Wild life training Research Education and Extension Centre at Randenigale, from 21st to 24th of September 2012 with the participation of 454 students, 78 teachers and 36 officers.

11.2.1.8 Awarding of Presidential Medal

Interviews were conducted for the selection of the Presidential medallists of the Environmental Pioneer Programme. 46 students were selected to award the presidential medal for the year 2012 from 12 schools from various part of Sri Lanka.

Environmental Pioneers from the following schools were passed in the interview.

S. No	Name of the Schools	Number of Medals
01	Udabathalawa Sudharsana M.V, Maspotha	20
02	Thangalla Balika Vidyalaya	05
03	Sumana Balika Vidyalaya, Ratnapura	05
04	Visaka Vidyalaya, Colombo	04
05	Al-Aqsa National School, Kalpitiya	04
06	Surathura Balika M.V, Kuliyaipitiya	02
07	Alvela Vidyalaya, Ukkuwela	01
08	Samuthrathevi Balika Vidyalaya	01
09	Piliyanthala M.V	01
10	Kamuragalla M.V	01
11	Ramanathan College, Chunnakam,, Jaffna	01
12	Muvandheniya Vidyalaya, Mathale	01
Total		46

11.2.1.9 Workshops to develop education activities at Pre-school level - Training & Book Distribution.



Pre-school guide book was printed and distributed among pre-school teachers in order to build the awareness of the pre-school children in the direction of environment. In this line, launching programme of the Pre-school teachers guide book distribution held at the Auditorium of the CEA on 14th August 2012 with 185 pre-school teachers.

11.2.1.10 Events Covering - Done by Audio Visual Unit

Audio Visual Unit of the CEA covers all programmes and activities conducted by the CEA. 64 events were covered by the Audio Visual Unit in this regard.

11.3 Strengthening of the laboratory and Improvement of Quality in Sri Lanka

11.3.1 Surface Water Quality Monitoring under the Strengthening of the CEA Laboratories and Improvement of Environment Quality in Sri Lanka.

The laboratory of the CEA was established in 1981 with minimum requirements for testing facilities. Presently the laboratory is providing environmental monitoring and testing facilities required to control the different kind of industrial emissions and for compliance assessment with existing minimum resources. The present objective of the CEA laboratory is to become reference environmental laboratory in the environmental management sector of the country while providing excellent service to the inter departments and to the other organizations which are actively engaged in environment management in the country. The laboratory of the CEA must be facilitated with state of the art modern analytical instruments to generate data on all kind of pollutants in micro levels to ascertain possible human health hazards or hazard to the micro ecosystems in our natural water resources. There is a huge demand from the general public for such environmental data as the society become environmentally conscious. The CEA laboratory does not have the equipment such as Atomic Absorption Spectrophotometer to measure very low level of highly toxic heavy metal such as Cadmium, Arsenic, Mercury etc. which are harmful to human health and the equipment such as High Performance Liquid Chromatograph and Gas Chromatograph to measure pesticide residues, polycyclic aromatic hydrocarbons and Persistent organic compounds. Therefore the CEA laboratory should be facilitated with required equipment to fulfill the present environmental monitoring demand of the country.



The purpose of this project is to strengthen the CEA laboratories by purchasing of laboratory equipment to fulfill the above requirements and thereby to cater increasing demand of environmental monitoring and assessment requirements which is vital in environment management of the country. The total allocation for this project is Rs 47 Million but 4 Million Rupees were received during 2012.

11.3.2 The project mainly focus on two subject

- Strengthening of the CEA Laboratories by procurement of the state of art equipment

Under this the procurement it was planned to procure the equipment for central laboratory, Air Quality monitoring division and the regional laboratory. All the tender procedure for the procurement process had been completed by September 2012 and due financial constraint the order were not placed or the supply of the laboratory equipment.

- Water Quality monitoring of the selected water bodies in the Country.

Under this several water bodies had been selected to monitor the water quality anin order to collect base line data as well as the control of point and non-point sources. The water bodies assigned for the laboratory at Central Province and central laboratory could be completed regular. But the water bodies assigned for the Eastern Province and the southern province could not be performed due the reason mentioned in the table below .In addition to that l2.0 million rupees had committed for the procurement of glass ware, chemicals and other consumable items related to this project.

Responsibility	Name of surface water body	No. of samples collected per month	Sample collected during 2012
Laboratory Head Office	Ma Oya	8	96
	Dandugam Oya	6	72
	Benthara river	6	72
Central province laboratories	Mahaweli river	8	72
	Gregory lake	7	54
	Kurunegala tank	6	54
	Anuradhapura Nuwara wewa	8	72
Southern province office	Thisa wewa	6	Samples were collected only for 1 month due to
	Menik ganga	6	
	Polhengoda coastal are	6	



	Madu ganga	15	problems in Ruhuna University
Eastern province	Nilaweli beach	Due to lack of Laboratory staff and the closer of the university this activity could not be performed.	
	Pasikuda beach		
Total		508	

Table 1 Progress of Sampling

11.3.2.1 Evaluation of the Water Quality in Kelani River, Dadugam Oya and Ma Oya

Both natural processes and human activities influence the quality of surface waters and groundwater. But domestic use, agricultural production, mining, industrial production, power generation, forestry practices and other factors can alter the chemical, biological and physical characteristics of water in ways that can threaten ecosystem integrity and human health. Deterioration of the quality of freshwater has a direct impact on water quantity as well, since polluted water that cannot be used in a number of activities (drinking, bathing, agriculture, etc.) reduces the amount of usable water within any given area (UN Water 2011, Policy Brief, and Water Quality).

Population density and inequitable resource management have been identified as the root causes of water scarcity, especially in rapidly developing countries (UNEP 2012, GEO 5 Summary for Asia and the Pacific Region)

In Sri Lanka, increasing population, rapid economic development, improper industry structure, and decreasing investments in wastewater and sewage disposal equipment, agricultural chemicals, mining activities and industrial wastewater have been identified as the main water pollution pressures

There are many local water quality issue in Sri Lanka and a number of priority issues of concern. One of these is safeguarding human drinking water supplies. The protection of water quality for domestic use such as drinking and bathing was identified as a priority for assessment. It was selected because of its significance to human health.

11.3.2.2 Evaluation of Water Quality by Using Water Quality Index

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.



Sampling sites were selected basically from the criteria laid down below.

- Locations of major drinking water intakes,
- Major point and non-point sources of waste water discharges
- Sand mining and bathing and other anthropogenic activities ,
- Rough distance between each sampling Location (10 km)
- Ease access to the sampling Location. were used to select sampling locations for all water bodies

Canadian water quality index (CWQI) is selected as the model for the evaluation purpose of these three water bodies. This model was selected as it requires the use of a benchmark or guideline which allowed us to compare values to the proposed CEA's standards , the primary purposes of the proposed CEA's inland water quality standards is to protect public health by describing guideline values for constituents

Of water or indicator of water quality. The Water Quality indexes for every sampling locations were evaluated by applying the Canadian index model in line with the d proposed CEA's inland water quality

Index	Ecological	Colour	Grade	Description(Water Quality of human
95-100	Excellent		A	All measurement are within
80-94	Good		B	Conditions rarely depart from natural
65-79	Fair		C	Conditions sometimes depart from
45-64	Poor		D	Conditions often depart from natural
00-44	Very Poor		E	Conditions usually depart from

Table 2 Calculated index values grades and colors

The Pollution indicators which are having desired Objectives (Drinking water with Simple treatments) according to the proposed CEA's inland water quality standards) were considered for the evaluation of the water quality index. These parameters are pH, Turbidity, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Nitrate, Phosphate, and Faecal Coliform and dissolved form of heavy metal in water such as Chromium and lead.

The standard value used for the evaluation of WQ I are (pH (6.0-8.5) ,Turbidity (5 NTU), Dissolved Oxygen (6 mg/l) , Biochemical Oxygen Demand (3 mg/l) , Chemical Oxygen Demand (15 mg/l)

,Nitrate (5 mg/l) , Phosphate (0.7 mg/l) ,Faecal Coliform (600 MPN) and dissolved form of heavy metal in water such as Chromium (0.05 mg/l) and lead (0.05 mg/L).

11.3.2.3 Status of water quality in Dadugam Oya

Six sampling locations have been selected for the assessment of the water quality in Dadugam Oya from the period of April 2011 to September 2012.

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)

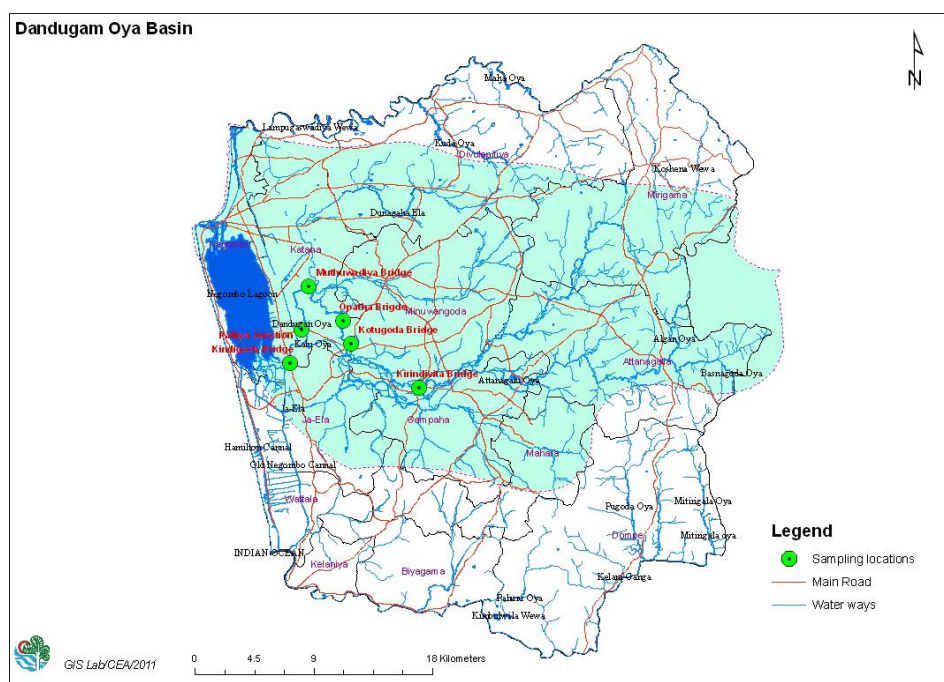


Figure 1 Dadugam Oya Sampling Locations

Sampling Location	Option I				Option II			
	F1	F2	F3	WQI	F1	F2	F3	WQI
Kiridiwita	36.4	20.0	59.6	58	22.2	4.4	1.3	87
Kotugoda	36.4	19.4	61.8	57	33.3	4.4	2.7	81



Opatha	54.5	23.6	56.0	53	44.4	12.6	18.1	71
Muthuwadiya	63.6	24.8	52.1	50	55.6	15.6	23.8	63
Palliya Junction	72.7	31.5	51.8	45	66.7	23.0	27.3	56
Kirindigoda	54.5	32.1	47.6	54	44.4	24.4	33.4	65

Table 3 Summary report of F1 F2 and F3 and Water Quality index according to two options

Sampling Location	Option I				Option II			
	Index Value	Ecological Condition	Grade	Colour Code	Index Value	Ecological Condition	Grade	Colour Code
Kiridiwita	58	Poor	D	Orange	87		B	Green
	57	Poor	D	Orange	81		B	Green
	53	Poor	D	Orange	71		C	Yellow
	50	Poor	D	Orange	63		D	Orange
	45	Poor	D	Orange	56		D	Orange
	54	Poor	D	Orange	65		C	Yellow

Table 4 Summary report of water Quality index, ecological Condition Grade and color code.

According to two option indicators

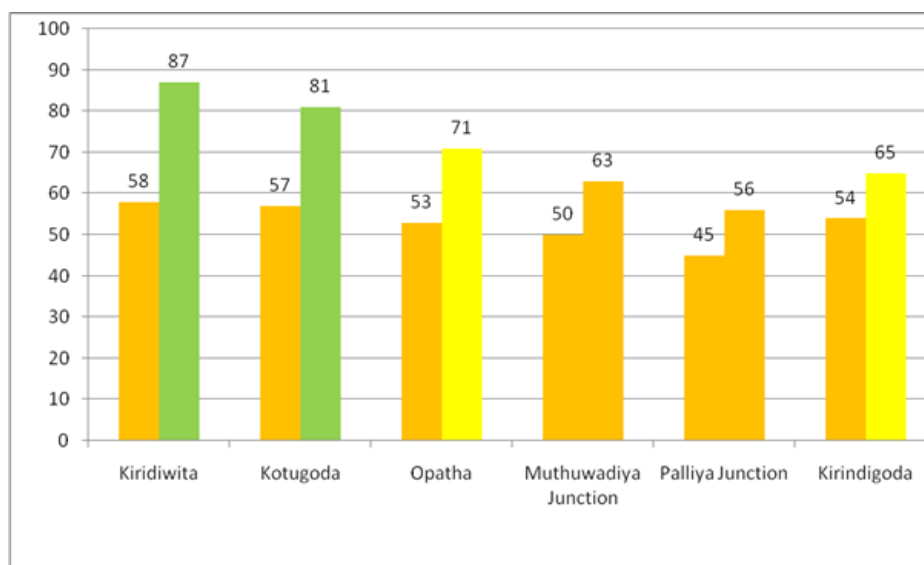


Figure 2 Plot of WQI against Sampling Locations of Duadugam Oya according to two Options



11.3.2.4 Summary description of the water quality of Dadugam oya Water

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 reveal that the quality of the water of Dadugam oya is not satisfactory with respect to all parameters which has been used for the evaluation of the water quality index. It is revealed that the turbidity which indicate the surface runoff and the microbiological contaminant are always exceeded throughout the monitoring period. The Index shows that the ecological condition of the water is poor in all the sampling locations of the Dadugam Oya (Water Quality index is in the range of 45 -64 for all monitoring locations with respect to eleven parameters)

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 are always turbidity and microbiology contaminant. The highest WQI ((with compare to the other location was recorded at Kiridiwita (58) and second highest (57) was recorded at the sampling location Kotugoda. The other parameters in these two locations rarely exceed the standard value during the period of two years.

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 Optha 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 standards of the Central Environmental Authority during the total monitoring period up to August 2012 for all monitoring sites. The significant increases dissolved chromium (from the level of 0.01 mg/l to 0.04 mg/l) could be observed from Opatha to downstream from August 2012. However it is below the level of ambient water quality standard proposed by the CEA, This should be carefully monitored for several months in future. 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 significant difference between the values obtained during the low and high flow rates of the year for all pollutant indicators.

The WQI is gradually decreases up to 45 toward the downstream direction of the Dadugam Oya. The microbiological contaminant is become less significant in downstream from Optha to with compare to the upstream.



The WQI evaluated excluding turbidity and faecal contaminant clearly shows that the domestic sources are more prominent in the upstream site of the Dadugam Oya. (Kiridiwita (87%) and Kotugoda (81%) The Quality of the water could be remarkably improved up to the level of good by controlling the domestic sources such as disposal of sewage and urban runoff.

In the case of the sampling sites, Opatha the water could be slightly increases up to the level of fair by elimination of the domestic contaminant. 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. Therefore immediate measures has to take to control the further deterioration of the water quality of Dudugam Oya

11.3.2.5 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 so 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.

11.3.2.6 Water Quality monitoring of 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
6 58 37	80 11 39	Seethawake Ferry
6 55 02	80 05 53	Wak Oya (Tributeriey)
		Pugoda Ferry
6 56 38	80 08 18	Pugoda Ela (Tributeriey)
6 54 36	80 05 00	Hanwella Bridge
6 54 26	80 03 57	Pusseli Oya (Tributeriey)
6 56 00	79 59 32	Maha Ela (Tributeriey)
		Kaduwela Bridge
6 56 21	79 58 09	Raggahawatte Ela (Tributeriey)
6 56 18	79 56 50	Welivita Bridge
6 57 37	79 52 40	Victoria Bridge

Table 5 Global position of the Sampling Location of Kelani River

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

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 considered to evaluate water quality index for all sampling locations in line with the proposed CEA's inland water quality standards by using water quality data from 2010 to 2012. Since microbiological analysis were not carried out consistently for the total monitoring period. That was not considered for the evaluation of Water Quality index. Faecal coliform and the turbidity are always exceeded the standards in all sampling locations during total monitoring period.

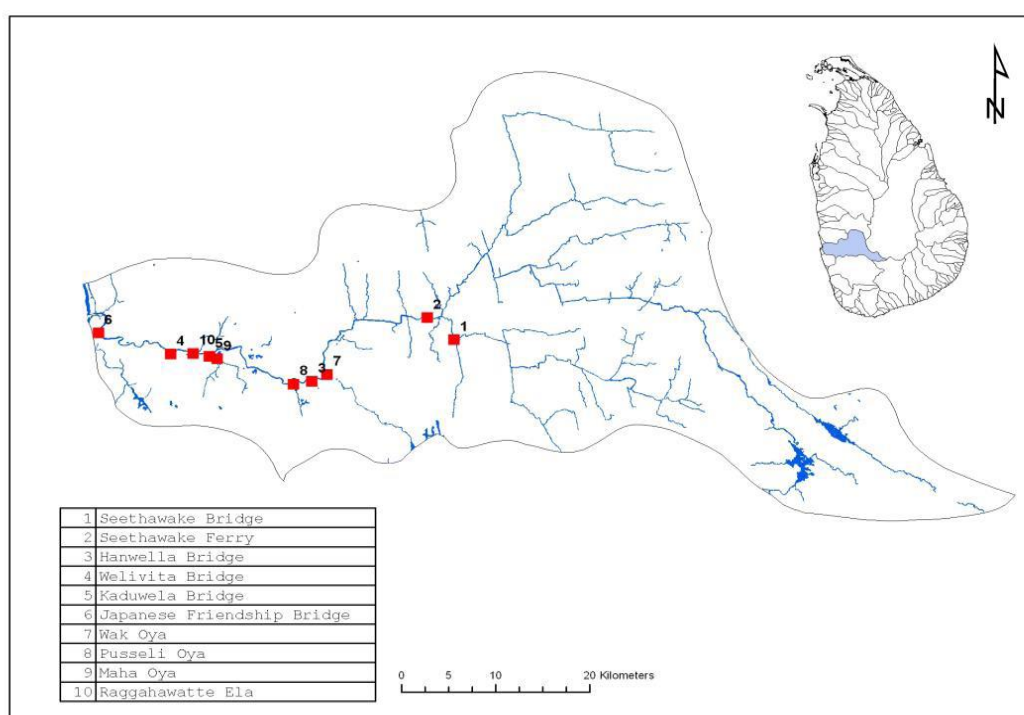


Figure 3 Sampling Locations of Kelani River

Sampling Location	WQI	Ecological Condition	Grade	Color code
Thalduwa	46	Poor	D	Orange
Seethawake	51	Poor	D	Orange
Wak Oya	59	Poor	D	Orange
Pugoda Ferry	66	Fair	C	Yellow
Pugoda Ela	56	Poor	D	Orange
Hanwella Bridge	61	Poor	D	Orange
Pusseli Oya	51	Poor	D	Orange
Maha Ela	22	Very Poor	E	Red
Kaduvela Brdige	60	Poor	D	Orange
Raggahawatte Canal	29	Very Poor	E	Red



Sampling Location	WQI	Ecological Condition	Grade	Color code
Welivita Bridge	68	Fair	C	Yellow
Victoria Bridge	56	Poor	D	Orange

Table 6 WQI against each Sampling locations

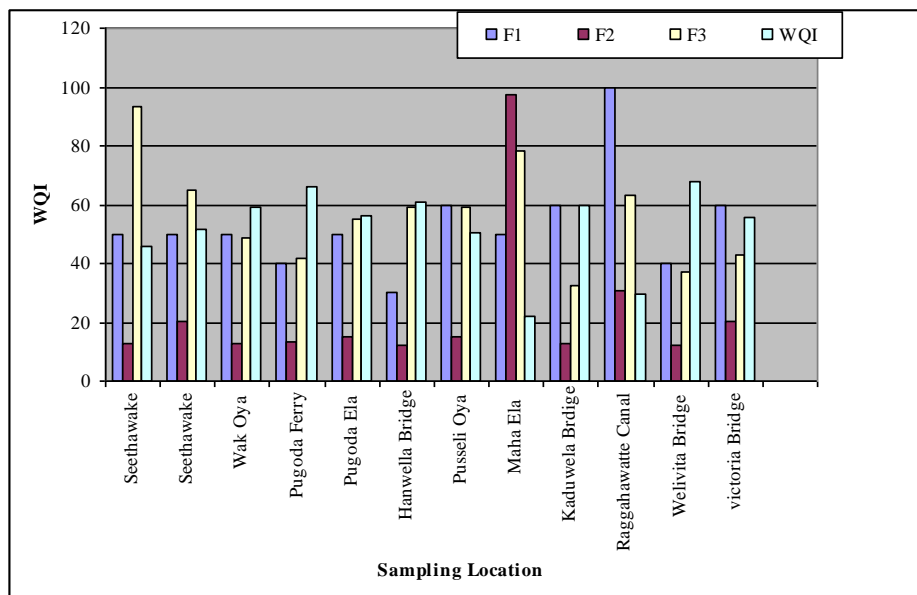


Figure 4 Plot of F1, F2 F3 and WQI against each Sampling locations

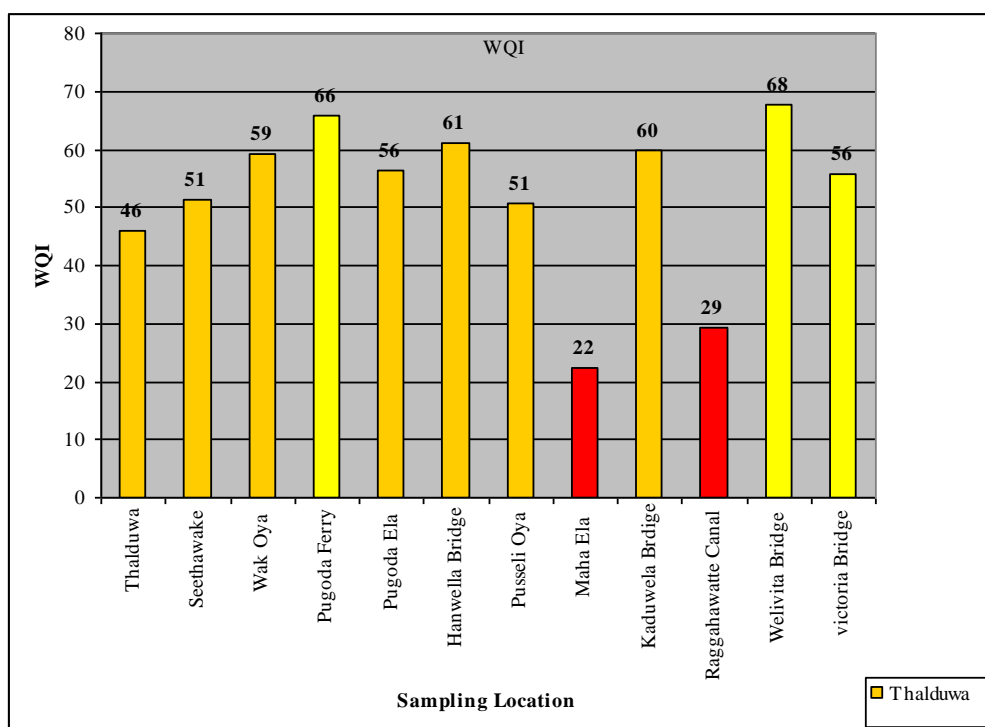


Figure 5 Plot of WQI against each Sampling locations of Kelani River



11.3.2.8 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 location. 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

Least no of parameters and the lowest frequency of deviation from the standard value are recorded in sampling sites at Hanwella and Welivita. Highest no of parameters and the frequencies of deviation from the standards are reported in sampling sites at Seethawake Ferry and Victoria bridge. The water Quality index of these two locations is lower and the ecological condition of the water is poor.

Sampling Site	TURB	DO	COD	BOD	PO4-3	Pb	Cr	Cl
Thalduwa	100 %	7%	7%	7%	0%	7%	0%	0%
Seethawake	100 %	43%	37%	13%	0%	7%	0%	0%
Wak Oya	100 %	10%	7%	3%	0%	2%	0%	0%
Pugoda Ferry	100 %	13%	7%	0%	0%	7%	0%	0%
Pugoda Ela	100 %	26%	13%	6%	3%	3%	3%	0%
Hanwella	100 %	3%	0%	0%	0%	0%	0%	0%
Pusseli Oya	100 %	3%	7%	3%	0%	6%	3%	0%
Maha Ela	100 %	80%	13%	60%	0%	7%	0%	0%
Kaduvela	100 %	7%	3%	7%	7%	7%	0%	0%
Raggahawatte	100 %	27%	36%	7%	0%	3%	0%	30%
Welivita Bridge	100 %	0%	10%	3%	0%	0%	0%	0%
victoria Bridge	100 %	27%	37%	7%	0%	7%	3%	30%

Table 7 Percentage of exceedences of Monitoring Parameters

The highest WQI score in the Kelani river was detected at the middle of the river located at Welivita 68) the lowest score was detected at the sampling site at Thulduwa (46) and Seethawake (51).

The quality of the river water at Thulduwa and seethawake ferry had inferior quality with compare to the lower reach of river and rapidly deteriorated during past three years rapidly. The ecological condition of two sampling sites indicates that the water quality is poor. The sampling site at



Seethawake ferry gets the industrial waste water from the Seethawake industrial zone .The parameters always exceed are COD (37%),BOD (13%) Dissolved Oxygen (43%) and Heavy metals (7%) other than the turbidity.

The sampling sites in the middle of the rivers that is Pugoda Ferry, Hanwella Bridge, and kaduwela Bridge had a superior water quality compared to the its upstream ,may be due to the dilution effect receiving waters from tributaries, . The highest WQI is reported from the sampling sites at Welivita and Pugoda ferry. The ecological condition of these two locations is fair.

The WQI of the main tributaries such as Wak Oya, Pugoda Ela are in the range of 51-59 and the ecological condition is poor.

The worst, very poor ecological condition is reported from the sampling sites at Raggahawatte which flows contaminated industrial waste water from Biyagama Industrial Zone. Most of parameters were exceeded the standard value during the total monitoring period which implies the industrial pollution. The parameters always exceed are COD (36%), BOD (7%) Dissolved Oxygen (27%) and Heavy metals (7%) other than the turbidity.

The secondly contaminated tributary is Maha Oya .It is mostly polluted due to the discharge of organic waste. , Most of the time, the parameters always exceed are COD (13%), BOD (60%) Dissolved Oxygen (80%) and Heavy metals (7%) other that the turbidity.

Microbiological pollutants in some locations may possibly due to the disposal of untreated or partially treated sewage (example, from household latrines and hotels, etc occurring on the banks) .Water Quality indexes evaluated annually is clearly indicated that the river water is deteriorated gradually in all sampling locations

11.3.2.9 Water Quality monitoring of Maha Oya

Maha Oya which originates in the hilly regions around Aranayakje ,Bible rock and Kadugannwa has catchment area 1538 Sq Km and a stream length of 130 km .Average rainfall in most parts of this catchment area usually exceeds 3800 mm per annum Average annual runoff is about 1485 million meters.

Maha oya Originates from Kadugaana district and flows through four districts KEgalle (32 % of the district) Kurunegala (8% of the district) Gampha (23% of the district) and a small portion of puttalam district (2%) covering three provinces as Central, Sabaragama and western. The water shed of maha Oya is characterize with extensive paddy, rubber tea and coconut plantations.

Maha Oya has very little hydro power potential. The most important use of water in the Maha Oya is for the supply of drinking water, presently there are 14 water supply intake is located in the basin serving an urban population of about 200,000.

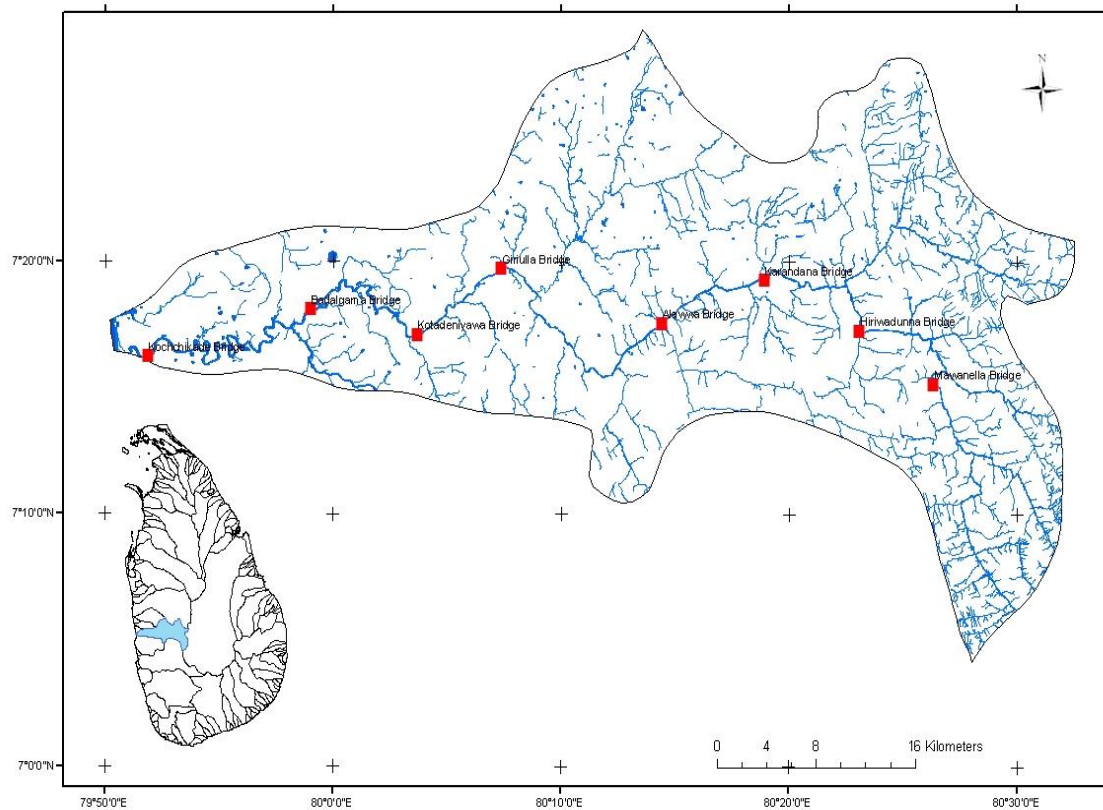


Figure 6 Figure 3 Sampling Locations of Ma oya

Sampling Locations:	GPS Coordinates:
Sampling Point 1 (Kochchikade Bridge)	(79 51 51 E, 7 16 14 N)
Sampling Point 2 (Badalgama Bridge)	(80 11 39 E, 7 18 07 N)
Sampling Point 3 (Kotadeniyawa Bridge)	(80 03 41 E, 7 17 07 N)
Sampling Point 4 (Giriulla Bridge)	(80 07 23 E, 7 19 45 N)
Sampling Point 5 (Alawwa Bridge)	(80 14 26 E, 7 17 34 N)
Sampling Point 6 (Karadana Bridge)	(80 18 55 E, 7 19 17 N)
Sampling Point 7 (Hiriwadunna Bridge)	(80 23 04 E, 7 17 17 N)
Sampling Point 8 (Mawanella Bridge)	(80 26 20 E, 7 15 10 N)



Sampling Location	WQI	Ecological	Grade	Color code
Kochchikade Bridge	53	Poor	D	Orange
Badalgama Bridge	63	Poor	D	Orange
Kotadeniyawa Bridge	68	Fair	C	Yellow
Giriulla Bridge	72	Fair	C	Yellow
Alawwa Bridge	66	Fair	C	Yellow
Karadana Bridge	68	Fair	C	Yellow
Hiriwadunna Bridge	60	poor	D	Orange
Mawanella Bridge	74	Fair	C	Yellow

Table 8 WQI against each Sampling locations of Ma Oya

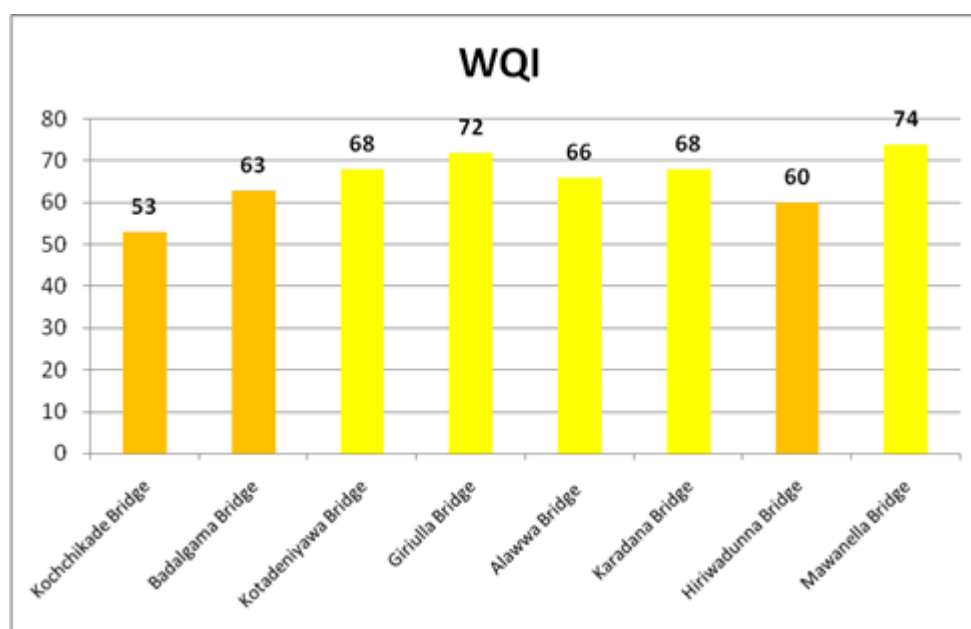


Figure 8 Plot of WQI against Sampling Locations of Maha Oya

The WQI scores for monitoring stations were plotted over station numbers from upstream to downstream. The highest WQI score in the Mahaoya was detected at the most upstream site, located at Mawanella Bridge (Station No: 8) and the lowest score was detected at the most downstream site located at the Kochchikade Bridge. The length of the Mahaoya is nearly 130 Km, the first 30 Km stretch upstream to the Mawanella bridge is considered as upstream and last 30 Km stretch downstream to the Badalgama bridge considered as down

Stream and rest 70 Km stretch considered as Middle stream of the Mahaoya



Upstream-Mawanella Bridge

The most upstream site had the best water quality compared to the other seven. Water quality index ranked first among the eight sites monitored. This site is situated quite to the source of drinking water for the Mawanella town and flows down from mountain terrain therefore, the high rate of aeration occurs. The sources of contamination upstream to this site are few except domestic use such as bathing and washing. This is reflected in the parameter contributions where exceedances are rare and very small when they do occur. Interestingly, the only parameters to exceed always were turbidity and occasional exceedances of other parameters (16.7 % COD, 16.7 % Pb, 16.7%FC)

Midstream – Hiriwadunna Bridge

The midstream site to the Mawanella Bridge had the inferior water quality compared to the upstream site. Water quality index ranked seventh among the eight sites monitored and lower than the upstream value. This site is situated quite close to the Hiriwadunna water intake of NWS & DB flows through a relatively flattened fairly urbanized terrain therefore, rate of aeration is relatively low, this stretch receives substantial amount of wastewater from industrial activities such as rubber factories and vehicle service stations. The anthropogenic activities such as sand mining, bathing and discharge of domestic waste also relatively high and contribute to the inferior water quality and low WQI value. Parameters to exceed were turbidity at all time and other parameters occasionally (16.7%DO, 16.7%COD, 16.7%BOD, 33.3%FC)

Midstream- Karadana Bridge

The midstream site next to the Hiriwadunna Bridge had the better water quality compared to the upstream site. Water quality index ranked third among the eight sites monitored and higher than the upstream value. This site is situated quite close and 100 m upstream to the water intake of NWSDB and flows through a relatively flattened rocky terrain. Therefore, the rate of aeration is fairly high.

This stretch of river receives fair amount of waste water from small scale industrial activities and runoff from agricultural activities. The anthropogenic activities such as sand mining, bathing and discharge of domestic waste are also relatively high and contribute to the inferior water quality and low WQI value. Parameters to exceed were turbidity at all time and other parameters occasionally (16.7% COD, 16.7%FC)

**Midstream –Alawwa Bridge**

The midstream site next to the Karadana Bridge had the inferior water quality compared to the its upstream site. Water quality index ranked fifth among the eight sites monitored and higher than the upstream value. This site is situated side by the Alawwa town flows through a relatively flattened terrain therefore; rate of aeration is relatively low. This stretch of river receives fair amount of wastewater from drainage of Alawwa town, small scale industrial activities and runoff from agricultural activities. The anthropogenic activities such as sand mining, bathing, washing and discharge of domestic waste are also relatively high and contribute to the inferior water quality and low WQI value. But it shows better water quality

Than upstream site may be due to the dilution effect receiving waters from tributaries, Parameters to exceed were turbidity at all time and occasional exceedances of other parameters (16.7%Cr, 50.0% FC)

Midstream – Giriulla Bridge

The midstream site next to the Alawwa Bridge had the better water quality compared to the its upstream site. Water quality index ranked second the eight sites monitored and higher than the upstream value. This site is situated side by the Giriulla town and flows through a relatively flattened rocky terrain therefore, rate aeration is considerably high. This stretch of river receives fair amount of wastewater form drainage of Giriulla town, small scale industrial activities and runoff from agricultural activities. The anthropogenic activities such as bathing, washing and discharge of domestic waste are also relatively low because it flow through a relatively unbranded area but sand mining is highest in this stretch. Aeration less anthropogenic activities and dilution effect of receiving water from. Tributaries contribute to the better water quality and higher WQI value. Parameters to exceed were turbidity at all time and 50% expedience of feacal Coliform bacteria, but non of the other parameters were exceeded during the monitoring period.

Midstream – Kotadeniawa Bridge

The midstream site next to the Giriulla Bridge had the inferior water quality compared to the its upstream site. Water quality index ranked third among the eight sites monitored and lower than the upstream value. This site is situated away from Katadeniyawa town area and flows through a relatively flattened rocky terrain therefore, rate of aeration high. This stretch of river receives fair amount of water from small scale industrial activities and runoff from agricultural activities. Since this stretch flower through a relatively less urbanized area, the anthropogenic activities such as mining, bathing,



Washing and discharge of domestic waste are also relatively low. Parameters to exceed were turbidity at all time and other parameters occasionally (33.3% COD, 16.7%BOD, 16.7%FC)

Downstream – Badalgama Bridge

The midstream site next to the Kotadenivawa bridge had the inferior water quality compared to the its upstream site. Water quality index ranked sixth among the eight sites monitored and lower than the upstream value. This site is situated away from the Badalgama town area and flows through a relatively flattened terrain therefore, rate of aeration is low. This stretch of river receives fair amount of water high and medium scale industrial activities and runoff from agricultural activities. Since this stretch of river flows through a relatively less urbanized area, the anthropogenic activities such as bathing, washing and discharge of domestic waste are also relatively low. The industrial activities and sand are mainly contribute to the inferior water quality and low WQI value. Parameters to exceed were turbidity at all time and other parameters occasionally (33.3% COD, 33.3% BOD, 16.7%FC).

Downstream – Kochchikade Bridge

The downstream site next to the Badalgama Bridge had the worst water quality compared to the all other sites. Water quality index ranked among the eight sites monitored and lowest. This site is situated across the Colombo-Chilow main road and flows through a relatively flattened terrain therefore, rate of aeration is low. This stretch of river receives fair amount of waste water from high and medium scale industrial activities and runoff from agricultural activities. Since this stretch of river flow through a highly urbanized area, the anthropogenic activities such as bashing, washing, sand mining and discharge of domestic wastewater and solid waste are also very high. Since this is closer to the river mouth salinity intrusion occurs regularly and highest during the February-March period. The industrial activities, other anthropogenic activities and salinity intrusion are the main contributors to the inferior water quality and lowest WQI value. Parameters to exceed were turbidity at all time and the occasional exceedence parameters (16.7%DO, 50.0% COD, 33.3% CD.66.7% FC)

The spatial pattern of deteriorating trend of water quality from upstream to downstream was not surprising in the Mahaoya Main reason for this pattern is the major water pollution in the Mahaoya is due to anthropogenic activities which occurs considerably at mid and down strum portion of the river, pollution due to non-point source natural events happens throughout the river evenly therefore, it can be considered as back ground pollution. In addition, downstream portion of the river receives fair amount of treated wastewater from the industries located at the downstream stretch of the river.



11.4 Strengthening of National Environmental Information Centre / Library

National Environmental Information Centre is created by developing the existing library of the CEA. New and additional resources are acquired to strengthen the existing stocks and to widen their coverage. Documentation and information services are introduced while improving the existing services to satisfy the information needs of different categories of users.

This project ensure that the community will have easy, comprehensive, and appropriate & update collections to environmental information sources and thereby will support & promote environmental users to make productivity research on environment.

Beneficiaries of this project;

Environmental Scientist, Researchers, Policy makers, Academics, Industrialists, Entrepreneurs, Administrators, Technologists, Journalists, Information Scientists Extension Workers, Students and General Public.

The objectives of this project are;

- Increasing of user facilities for searching current and retrospective information on environment.
- Developing comprehensive, appropriate and update collection of environment information
- Creating environment libraries and information services in regional level.
- Organizing cooperate programmes for sharing, rationalization and development of decentralized information resources.

Project Activities

11.4.1 Establishment of Information Network

National Environmental Information Centre established a information network to satisfy the information needs of external users in regional and distict offices. Establishment of mini libraries in “Soba ketha “Nature field centres was the main activity under this.

Romassala (Galle District), Bellanwila – Attidiya (Colombo District) and Randenigala (Kegalle District) were the selected Soba Ketha centers for this information network.

**Romassala NFC Library****Kegalle NFC Library**

These libraries maintain their collection focused on environmental subjects to support the awareness programmes conducted by the relevant Nature Field centers.

The National Environmental Information Centre has allocated Rs. 1,300,000.00 to this activity and provided 900 no. of books and other reading materials, reading tables, book racks, 01 computer & 01 printer for each Nature Field Centers.

11.4.2 Database Development & Access facilities

-Rs. 600,000 allocated for this activity and provided internet facilities for about 03 Nature Field Centers for easy access on current envt information and new equipment for National Environmental Information Centre.

- National Environmental Information Centre maintain the following databases and update them

Under this project:

- *CEA database for Library Catalogue*
- *IND database for newspaper articles*
- *EI database for EIA / IEE reports*

11.4.3 Binding of Books

Binding of 750 books and periodicals as volumes for user reference in National Environmental Information Centre.

11.5 Ambient Air Quality Monitoring of Sri Lanka

This project has been designed to establishment of air quality monitoring stations in Colombo and Kandy cities. The main components of the project are procurement of three fixed ambient air quality monitoring stations, procurement of mobile ambient air quality monitoring station, infrastructure development and purchasing of USEPA approved air quality modeling software.



Accordingly tender procedure was followed to procure four monitoring stations, but awarding for procurement of ambient air quality monitoring stations has been suspended by the Board of the CEA due to inadequacies of the selected tenderer. Subsequently, project could not be implemented in 2012.

11.6 Korean International Cooperation Agency (KOICA)

11.6.1 Introduction

The Central Environmental Authority forwarded a project proposal in 16th 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) signed between the Secretary to the Ministry of Environmental & Natural Resources and the Resident Representative of Korea International Cooperation Agency (KOICA) on 24th 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 Central Environmental Authority (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 been taking action to release (lease out on long term basis) an area of nearly 6 hectares of land to the CEA as the core area to construct the landfill site.



11.6.2 Objective

The objectives of the Project are to:

Enhance the capacity of the policy makers and government officials in charge of wastes management;

Establish an integrated waste management system with supportive policy measures and programs for the successful implementation of the system;

Conduct an inventory survey on the sources, volume of generation, collection and/or treatment of household waste;

Design and implement a safe and efficient collection system for household waste generated in the above mentioned region;

Construct a sanitary waste landfill site and other related infrastructures.

11.6.3 Implementing agencies

The implementing agencies of the Project are the Korea International Cooperation Agency on behalf of the Government of the Republic of Korea and the Central Environmental Authority of the Ministry of Environment on behalf of the Government of Democratic Socialist Republic of Sri Lanka.

11.6.3.1 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. The tentative list of equipment and materials is shown in Appendix 1.
- 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 favorable 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.

11.6.4 Earth work for the Sanitary Landfill.

As per the RoD the Sri Lankan government is entrusted with the responsibility of carrying out earth works which includes excavating of soil, banking, and ground leveling and providing infrastructure required for the construction of the Landfill such as access road, electricity, water supply, sewage, drainage, telephone facility etc.

The earthwork for the construction of the landfill at Dompe was awarded to M/s Orient Construction Co. (Pvt.) Ltd. on 9th December, 2010 after having followed the government tender procedures. The total estimated quantity of soil to be excavated was 160,000 cubic meters and the contractor was to

pile up 51,000 cubic meters of soil out of 160,000 cubic meters for the future usage of project site and the balance of 109,000 Cubic meters was expected to be removed from the site.



Landfill area once earth work was completed



Leachate treatment area after completion of earth work

The earthwork for the construction of the landfill at Dompe was completed by the Contractor on 15th May 2012 as per the conditions specified in the RoD/ToR and the design submitted by the KOICA. The overall performance and the quality of the work carried out by the contractor was satisfactory



Excavated soil being piled up near the landfill site

11.6.4.1 Obtain additional 3 acres from the adjoining land from the Land Reform Commission (LRC)

According to the Cabinet approval on 22nd November 2011 by Cabinet paper no 11/2207/527/027 , additional 3 acres was obtained from the Land Reform Commission and the Forest Department for piling of excavated soil after clearing.

Accordingly, Mrs.K.P.K Bandara Menike, a licensed surveyor was employed to carry out a boundary survey and to prepare the survey plan. The original copy of the survey plan was submitted to the LRC to proceed with the releasing of the land.



Mrs.K.P.K Bandara Menike, licensed surveyor was employed to carry out a boundary survey

11.6.4.2 Demarcation of point height and center line

According to the request made by the KOICA, Mr. A.D.C. Kulathunga, licensed surveyor was employed to carry out a demarcation of point height and the center line of landfill.



Demarcation of point height and center line

11.6.5 Infrastructure Development

11.6.5.1 Supply of Electricity to the Sanitary Landfill Site

As per the Agreement, GOSL must ensure the supply of electricity to the site before delivery and installation of the equipment and materials. Upon the request made by the Central Environmental Authority, Dompe Pradeshiya Sabaha has applied to obtain Electricity supply to the site from the Electricity Board. According to that estimates received by the CEA, it is required to supply high-tension



permanent electricity supply to the project site and all the documentation process have been completed and CEA paid a Non-refundable amount of Rs. 6,228,480.00 being the capital contribution for construction of high voltage line, transformer, breaker and metering equipments to bulk supply of 160kVA to the site and deposited of Rs. 200,000.00 for the Security against the consumption to the Ceylon Electricity Board. The CEB requested us to build housing (transformer cubicle) for transformer according to the specification provided by them.

This is a permanent 160 KVA power line and CEB has marked the trees to be removed and trimmed. The trees/assets belongs to the private owners were appraised and the cost estimate amounting Rs. 518,250/= was paid to the Electricity Board.

11.6.5.1.1 Construction of Transformer Cubicle

The contract for the construction of the cubicle was awarded to Senura Construction (Pvt)Ltd for a total amount of Rs 225,654.08 plus Rs. 22,565/41 as contingencies (exclusive VAT and other government Taxes), on the basis that the full payment will be released as one single payment only upon the successful completion of the job.

In the meantime, a temporary connection of electricity was arranged in order to initiate the construction activities.

11.6.5.1.2 Way Leave Compensation for 160 KVA Bulk supply of Electricity to the Sanitary Landfill Site at Maligawatta, Dompe

As mentioned earlier CEA has mobilized the Payments to the CEB and the CEB has started the process of supplying electricity. This is a permanent 160 KVA power line and CEB has marked the trees to be removed and trimmed. The trees/assets belongs to the private owners were appraised and the cost estimate amounting Rs. 518,250/- was paid by the CEA to CEB as the way leave compensation.

11.6.5.2 Supply of water to the Sanitary Landfill Site

According to the Agreement, the Government of Sri Lanka (GoSL) must provide infrastructure required for the construction of the landfill, which also includes supply of water to the site. Upon the request made by the CEA, Dompe Pradeshiya Sabaha has applied to obtain water supply to the site from the National Water Supply & Drainage Board. All the documentation process have been completed and CEA paid Rs. 288,963.40 to extend the existing piping system and Rs. 207,897.60 as the new connection.

11.6.5.3 Development of Access Road

According to the Agreement, the Government of Sri Lanka (GoSL) must provide infrastructure required for the construction of the landfill, which includes development of access road.

Proper access road to the project site is essential component of a Waste Management facility which will facilitate smooth transportation of equipments during the construction period and transportation of waste during the implementation of the project. The access road to the site belongs to PRDA-Western Province and the length is about 1.75 Km in extent.

CEA has contracted out this job to the Dompe Pradeshiya Sabha with the approval obtained from the Board of Directors of the CEA on 18.06.2012. However, due to continuous delay from the part of Dompe Pradeshiya Sabha, CEA has requested immediate assistance from the PRDA-WP “MAGANAGUMA” project as there was no time to follow the government procedures to select a suitable contractor for this activity under competition bidding process as the KOICA was planning to import all the piping and few other construction material from Korea.

Upon the request made by the CEA the PRDA-WP has done the cost estimation for the improvement of access road from the turn off from Kirindiwela- Hanwella main road to the project site and it amounted to Rs. 69.5 million. Since the budgetary provisions made available under the project for infrastructure development was not adequate to cover this expenses, special treasury allocation was considered as necessity in order to meet the cost of road improvement. Therefore, CEA requested the Ministry of Environment to make arrangements to allot an extra allocation amounting Rs. 69.5 million to the Provincial Council-WP under “Provincial District Development Grants” in the supplementary budgetary provisions-2103 for the construction of this road by the PRDA-WP. However, due to the urgency of work they have completed the 1st phase of the improvement of road.



Before construction of Access Road



After completed the 1st phase of the improvement of road.

11.6.5.4 Erect Barbed wire fence around the site.

According to the Agreement, the Government of Sri Lanka (GoSL) must provide infrastructure required for the construction of the landfill, which includes erection of barbed wire fence around the site.

KOICA has mobilized all equipment and materials necessary for the implementation of the Project. As per the Agreement, GoSL must ensure to provide necessary protection to the site before delivery and

installation of the equipment and materials. Therefore, erection of barbed wire fence around the site is necessary. Estimate for erecting barbed wire fence was prepared by the Dompe Pradeshiya Sabaha and approved by the Commissioner of Local Government (Western Province). The Dompe Pradshiya Sabaha has selected a suitable contractor to erect above fence around the site subject to following national procurement guidelines.



Erect Barbed wire fence around the site

11.6.5.5 Ensure security of the site.

The KOICA was already mobilized equipment and materials necessary for the implementation of the project. As per the Agreement, GoSL must ensure the proper security to the site before delivery and installation of the equipment and materials.

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. Initially the purpose of deployment of security was to ensure the protection of the soil being excavated and piled up in the site.



Security Hut at the site

11.6.5.6 Supply Telephone and Internet connection to the site

Pursuant to the request made by the CEA, Divisional Telecommunication Manager of the Gampaha has sent an estimate to obtain Telephone Facility and Internet connection the site on 30.07.2012.

Accordingly, CEA has paid Rs. 26,211.50 to the Sri Lanka Telecom to obtain above connection. The site office of the above project was established on 10.11.2012 and Telecom Connection was supplied after establishment of the project office.

11.6.5.7 Demolishing Old Building

The Samhee construction company selected by the KOICA has requested CEA to remove the old and dilapidated building which existed in the site and was believed to be owned by the Forest Department, to construct new building as per the RoD/ToR conditions and the Design submitted by the KOICA. As per the requested made by the CEA, Forest Department has sent no objection letter to demolish this dilapidated building. Accordingly CEA has made a request from Land Reform Commission (LRC) to get the approval as this land is belonged to LRC. The LRC has granted their approval to demolish that old building subject to the valuation Report which was prepared by the CEA.

After following the government tender procedure Ms '21st Century Property Development Enterprises', 02, Megawelikada Rd, Rajagiriya selected to demolish the said building & they have completed their work successfully. The roofing tiles and door frames removed from the building were stored at the site for selling subject to following open competitive bidding process as per the government tender procedure.



The building before demolishing



a view of the site after removal of building

11.6.6 Removal of Additional Trees

The Sam Hee Construction Co. Ltd has requested to remove 19 Nos of trees in the site, most of them were **Acacia** and **Pinus** trees, for excavation of pipe trench work. Accordingly, in coordination with the Forest Department and State Timber Corporation action was taken to remove said trees.

11.6.7 Payment of Lease to Land Reform Commission

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. Originally this site was belonged to the Land Reform Commission (LRC) and leased out to

Forest Department to setup a commercial forest plantation. The LRC has been taking action to release (lease out on long term basis) 6 hectares as the core area to construct the landfill site.

Accordingly, an extent of 12 Acres 01 Rude 16.88 Perch was released to the CEA on long term lease basis for this nationally important project. The LRC has submitted a letter informing CEA to effect a payment of Rs. 3,102,311/= being the lease for a period of 05 year from 2009 to 2013 and the land valuation cost. The aforementioned payment was made to LRC with the approval of Board of Directors of CEA. This payment was made from the funds provided by the Treasury under the National component of the KOICA Project.

11.6.8 Site Handing Over

The CEA, being the Project Executing Agency has successfully completed the task of earth work and the site was handed over to the KOICA with effect from 07th June 2012 at a function held in the CEA with the participation of the Hon. Minister of Environment and H.E the Ambassador of Republic of Korea to proceed with the remaining construction work.



The site was handed over to the KOICA with effect from 07th June 2012 at a function held in the CEA

11.6.8.1 Waste Management Consultant and the other staff dispatched to the CEA

According to the Agreement Mr. Lee Hee-Mun., Engineer of the Sudokwon Landfill Management Corporation (SLC) Korea was appointed as Resident Supervisor by the KOICA and deployed to the Central Environmental Authority. Mr Lee arrived in Sri Lanka on 01st August 2012, to supervise the project of Establishment of Integrated Waste Management System at Dompe and provide technical consultations to the Central Environmental Authority for one year period.

CEA has provided office space equipped with furniture & equipments, Transport facility with the vehicle donated by the KOICA. The CEA also provided assistance for him to find suitable accommodation near to the CEA office. According to the Board approval of CEA provided

communication facilities and fuel allocation equivalent to the level of a Director position of the CEA plus an assigned driver to Mr. Lee Hee-Mun

Sam Hee Construction Co. Ltd of Korea was selected by the KOICA as the Construction Company and staff officers of the company arrived in Sri Lanka to supervise, coordinate the construction activities.

Based on the service requirement, another three engineers working for the Goldenpow Eng. Company a sub contractor to Sam Hee Construction Co. Ltd arrived Sri Lanka on 30th December 2012 to provide engineering expertise for the above project. They have been engaged in the activities of the above mentioned project by the Sam Hee Construction Co. Ltd as Engineers.

11.6.8.2 Procurement of the service of cargo clearing agent to KOICA Project

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. A total of nearly 37 containers consisting of both 20 feet, are planned to be imported by the KOICA at different intervals.

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, equipments 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, 5th Floor, Y.M.B.A. Building, Colombo at a Unit price of Rs. 46,500/- FOR 20FT Container and Rs. 60,000/- for 40 ft container which is exclusive of VAT and all other government taxes and pay Statutory payments to them such as Custom duties, SLPA charges, Shipping Agents Charges involved in the clearing process including the actual bills of fork lift/crane, over time of the service providers.

Out of the 37 containers a total of 14 containers already arrived to Sri Lanka all were cleared from the customs and loading and unloading activities done by the Sasiri Associates.



Unloading of Drainage and Leachate piping at the site, Dompe

11.6.8.3 Site Visits

A site visit was undertaken on 4th October 2012 with the participation of Hon Basil Rajapaksa, Minister of Economic Development, Hon. Anura Priyadarshana Yapa . Minister of Environment, Hon. Lasantha Alagiyawanna, Deputy Minister of Construction, Engineering Services, Housing and Common Amenities, Hon. Dulip Wijesekara, Deputy Minister of Disaster Management, Hon. Sarana Gunawardena, Deputy Minister of Petroleum Industries, Hon. Upali Gunaratna, Member of Western Provincial Council, H.E. Choi Jong Moon, Ambassador of Republic of Korea, other Local Political Leaders, Mr Charitha Herath, Chairman, CEA Mr. Cho Sang Woo, Resident Representative of Korea, and officials from CEA and the KOICA.



Hon. Ministers visiting the progress of the construction work and planting a tree with Korean Delegation

11.6.9 Construction of Superstructure

11.6.9.1 Importation of Landfill Materials

The Samhee Construction Co. Ltd employed by the KOICA has started the construction work of the landfill . According to the provisions of aforesaid Agreement, the KOICA has dispatched to Sri Lanka some equipment and materials to be used for the project. Among the materials Non Woven Geo textile, Bentonite mat, High Density Polyethylene Sheet (HDPE) , Under- ground drainage Pipes(PE Pipes) and joints, Tarpaulin Sheet, and Leachate collection pipes are few to name. All the material and equipments stored in the site in a well planned manner to prevent any damages.



Landfill liners being carefully stored at the site



Drainage & Leachate collection tubes

11.6.9.2 Installation of Local Site Office



The Samhee construction Company installed site office at the project site.

11.6.9.3 Changing the Landfill Design

The SAMHEE Construction Co. Ltd, the contractor of the above project has a requirement of used (carcass) tires about 31,000 with similar width and diameters to be used as the liner protector. The



Sri Lanka Transport Board, in reply to a request made by the CEA, has informed that they were not in the position to supply that much of used tires as their collection is around 2000 per month. Hence a reasonable quantity of used tires cannot be expected within the available time period expected by the KOICA.




Therefore, Resident Supervisor, Mr. Hee Mun Lee has come up with two alternative suggestions in which two alternative materials such as Poly Propylene (PP) bags and Geo Cell have been proposed as a landfill protector. The member of the Technical Expert Committee (TEC) appointed by the CEA, after having discussed the disadvantages and the benefits, finally recommended to use PP bags instead of Geo Cell or used tires. Accordingly the Korean Consultants will attend to change the Design.

11.6.9.3.1 Filler Material for the PP Bags

Mr. Hee Mun Lee recommended to fill this PP bags with sand, gravel, compost or Municipal Solid waste. However TEC pointed that the cost of sand and gravel were high and the use of compost as a filling material seemed to be wasting of resources as there was a good demand for compost to be used as a soil conditioner in Agriculture and home gardening.

However, Mr. Lee agreed to provide gravel (aggregate) sufficient for the initial stage of the landfill if additional funds can be saved with their budget. However, the laying of the PP bags would become the responsibility of the Sri Lankan government at its cost. The TEC agreed with this suggestion subject to final approval by the management of the CEA.

Table Comparison for Liner Protection materials in the slope of the landfill

	Used Tires	PP Bags	Geo-Cell
Pic			
Filler	sand, gravel, waste sand	sand, gravel, waste sand, compost, municipal solid waste etc..	sand, gravel, waste sand
Method Execution	<ul style="list-style-type: none"> - Lay waste tires sequentially, depending on the progress of landfill - Fill with sand, gravel and waste sand. - Bind Tires with PP rope - Perforate (make holes) Tires to facilitate storm water drainage. 	<ul style="list-style-type: none"> - Put the filler in to the PP bags and sack in each others to make constant building forms in the slope of the landfill 	<ul style="list-style-type: none"> - Install Geo Cell in the slope of the landfill filled with sand, gravel or waste sand.

Advantages	<ul style="list-style-type: none"> - Re-using tires is possible. - Most economical when using sand as a filler material. - Due to the strength of the tires ,the liner will fix properly. - This is a better solution for the other landfills as well. 	<ul style="list-style-type: none"> - Increase landfill capacity - It is easy for fillers. - Price of the PP Bags is low compare with others. - Because of the weight of the PP bags liner will properly fix to the slope. 	<ul style="list-style-type: none"> - Mentioned fillers can be easily filled. - Homogenous Thickness in whole area. - Attractive view - Used in Sudokwan Landfill site in Korea - It is flexible folded during transportation, stretching out during laying.
Disadvantages	<ul style="list-style-type: none"> - Waste tire, size and thickness is not even. Therefore a homogenous thickness cannot be achieved. - Due to rainfall ,filler may scour - During the rainy condition tires will collapse 	<ul style="list-style-type: none"> Maintenance is difficult. Sliding of the PP Bags Easily damaged by the long-term exposure 	<ul style="list-style-type: none"> The Construction cost is high when compare to others. Sliding prevention device is required Less Construction practices
Cost	14,871Won/m ²	96Won/m ²	23,709Won/m ²
Ex.	Sudokwan Landfill Site	Busan saenggok landfill	Gwangju Metropolitan Sanitary Landfill
Recommendation		○	
Remarks	All three materials are help to protect the liners and facilitate to leachate drainage. But among that PP Bags are economically viable and installation is relatively easy, Therefore recommended to use PP woven bags		

11.6.10 Construction of Super structure

11.6.10.1 Replacement of Soil



Removing of top soil

The contractor removed topsoil from carved area to get the well evened bottom surface before installation of drainage lines.

11.6.10.2 Installation of liners on side banks

Lining systems are installed for the purpose of handling the leachate which originates from the water contained in waste itself, waste decomposition, and storm water flow. If such water should flow out to the public water zone or penetrate to the underground without treatment, it could cause serious problems to the living environment. Therefore, the purpose and functions of the lining systems are to transform leachate to hazard-free water as much as possible. Before installation of the liners, all the stones and other large particles were removed from the side banks to get a smooth surface.

Compacting side banks of the landfill

The Geo textile was installed on underneath of the side bank was started. Before installation of this liner contractor checked for presence of irregularities, moderately large protuberants that affect the material. Above that Bentonite mat and the Hi-density Polyethylene liner will install simultaneously. On top of the, a Geo textile will be laid to again as the final layer to protect underneath liners.



11.6.10.3 Under Ground drainage system and Leachate collection



Soil Excavation for the installation of drainage pipes

The drainage line for ground water is buried at the lower most part of the landfill and that will be in use for a long time.

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. PE perforated pipe will be enveloped in 30 cm-thickness with 25-40 mm gravel to prevent any blockage and the drainage pipe will be inclined 2% the same as the floor's incline, to facilitate removal of leachate.

11.6.11 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.

11.6.12 Miniature of Dompe



Miniature of the Dompe Landfill site

According to the requested made by the CEA, action was taken by the KOICA to send the Miniature of the Dompe site to Sri Lanka. Currently, it is kept in CEA premises until the construction of administrative building is completed.

11.6.13 Laboratory Testing

The Sam Hee Construction Co. Ltd, has performed the following tests from NBRO to facilitate their civil construction:

1. Maximum Dry Density of Soil, Organic Matter Content, & Permeability Coefficient
2. Optimum mix proportion of the Soil and Bentonite, Maximum Dry Density, Organic Matter content, permeability Coefficient
3. Sieve analysis



Analysis done by the NBRO



The Resident Supervisor Mr. Lee Hee Mun also carried out the Bentonite test from CEA to find Montmorillonite content and swelling capacity of the Bentonite imported from India.

11.6.14 Financial Progress

The total amount allocated for the project by the Treasury was Rs 80.0 million, and out of which a sum of Rs 70.0 million was released by the end of year 2012.

The total expenditure of the KOICA-funded sanitary landfill project in Dompe, under the domestic component of funds provided by the Treasury for the year 2012 was Rs. 69,908,829.51

The figures under the Foreign component was unable to be retrieved as the services, machineries & equipments are provided directly by the KOICA as this is a grant project.

Table: Financial Progress-2012

	Month	Total Financial Expenditure (SLR)
1	January	5,648,007.94
2	February	8,200,926.18
3	March	8,360,545.25
4	April	10,845,977.63
5	May	6,575,798.62
6	June	612,610.86
7	July	9,796,018.49
8	August	-
9	September	7,145,685.00
10	October	1,376,157.58
11	November	2,218,413.02
12	December	9,128,688.94
	Total	69,908,829.51
	Funds Received from the Treasury	70,000,000.00
Notes to the Financial Statements for the year ended 31.12.2012.		



Note 1. Grants				
KOICA Project was funded by Treasury Grant (Local Component) as follows				
Treasury (Capital/ Recurrent) received in Cash		Rs.70,000,000/-		
Note 2. Lease Rental				
A sum of Rs.3,102,311/- was paid to LRC as Lease Rental for Dompe Site for 5 Years.				
(2009 - 2013)				
Note 3. Depreciation (Schedule 1)				
Note 4	Non Current Assets		(Schedule 1)	
	Cost			30,606,752.00
	Less Accumulated Depreciation			
	Up to date of transfer		21,231,495.69	
	Depreciation for the year		5,400,943.58	26,632,439.27
	Written Down Value			3,974,312.73

Note 5. Advance Receivable(Schedule 2)				2,438,454.80
Amounts advanced to Pilisaru Project to be settled when funds are available.				

Note 6. Capital Grants				
				2012
Balance at the beginning of the year				-
Grants received and utilized to acquire Non-current Assets				-
Grants Received in the form of Non- Current Assets				9,375,256.31
Depreciation and Amortization Expense for the year				(5,400,943.58)
Balance at the end of the year				3,974,312.73
Represented by				
Property, Plant and equipment				3,974,312.73



Note 7. Accrued Expenses				
Orient Construction Company				1,959,090.24

Koica /EDCF Project										
Motor Vehicles as at 31.12.2012(Pilisar Account)										
										Schedule 1
Date of						Annual Depreciation Rate 25%			Total Depreciation Recorded in Pilisar Books	Net Value to be taken by the Koica/EDCF Project
Purchase	Description	Year of Purchase	Asset Identification No.	Purchase Price/Value	2009	2010	2011	2012		
15.07.2009	*Hundai Van	2009	NA-7310	15,433,676.00	1,858,684.65	3,858,419.00	3,858,419.00	2,250,744.42	11,826,267.07	3,607,408.93
07.07.2009	**Hundai Jeep	2009	KH-8628	15,173,076.00	1,818,690.62	3,793,269.00	3,793,269.00		9,405,228.62	5,767,847.38
			Total	30,606,752.00	3,677,375.27	7,651,688.00	7,651,688.00	2,250,744.42	21,231,495.69	9,375,256.31
*Vehicle No.NA-7310 has been transferred to KOICA/EDCF Project w.e.f 01.08.2012							Depreciation on Vehicle No.NA-7310 for 2012			1,607,674.58
** Vehicle No. KH-8628 has been transferred to KOICA /EDCF Project w.e.f 01.01.2012							Depreciation on Vehicle No.KH-8628 for 2012			3,793,269.00
							Total Depreciation Charge 2012			5,400,943.58



Journal Entries- KOICA Project 2012					
				Debit	Credit
1	Asset Account			30,606,752.00	
	Capital Grant				30,606,752.00
2	Capital Grant			21,231,495.69	
	Accumulated Depreciation				21,231,495.69
3	Depreciation 2012			5,400,943.58	
	Accumulated Depreciation				5,400,943.58
	(Being Depreciation on Vehicles)				
4	Earth Work			1,959,090.24	
	Retention Payable				1,959,090.24
	(Being Balnce Retention Payable to Orient Lanka Construction)				

	Accumulated Depreciation (JV2)	21,231,495.69	
	Accumulated Depreciation (JV3)	5,400,943.58	
		26,632,439.27	



Central Environmental Authority			
KOICA PROJECT			
Statement of Financial Position			
as at 31.12.2012			
	Note	Rs.Cts	Rs.Cts
Asset			
Non Current Assets	4		3,974,312.73
Current Assets			
Advance Receivable	5		2,438,454.80
Total Assets			6,412,767.53
Liabilities			
Non-Current Liabilities			
Capital Grants	6		3,974,312.73
Current Liabilities			
Accrued Expenses	7		1,959,090.24
Bank Over Draft			371,956.95
Total Liabilities			6,305,359.92
Total Net Assets			107,407.61
Revenue Grant and Surplus/(Deficit)			198,577.67
Less Withdrawal			(91,170.06)
			107,407.61



Central Environmental Authority						
KOICA PROJECT						
Cash Flow Statement for the year ended 31.12.2012						
					Rs. Cts.	Rs. Cts.
Cash Flows from operating activities						
	Net Surplus/(Deficit) for the year					198,577.67
Adjustments for						
	Depreciation					5,400,943.58
	Deferred Revenue					(5,400,943.58)
	Finance Cost					3,475.00
operating surplus before working capital changes						202,052.67
Increase /Decrease in trade and other receivables					(2,438,454.80)	
Increase /Decrease in trade payables					1,959,090.24	(479,364.56)
Cash generated from operations						(277,311.89)
Finance cost Paid					(3,475.00)	
Cash withdrawal- Ministry					(91,170.06)	(94,645.06)
Net cash from operating activities						(371,956.95)
Net increase in Cash and Cash equivalents						(371,956.95)
Cash and Cash equivalents at 1 January 2012						0
Cash and Cash equivalents at 31 December 2012						(371,956.95)

SCHEDULE 1										
Koica Project										
Motor Vehicles as at 31.12.2012										
Date of						Annual Depreciation Rate 25%			Total Depreciation Recorded in Pilisaru Books	Net Value to be taken by the Koica/EDC F Project
Purchase	Description	Year of	Asset	Purchase	2009	2010	2011	2012		
		Purchase	Identificat ion No.	Price/Value						
15.07.2009	*Hundai Van	2009	NA-7310	15,433,676.00	1,858,684.65	3,858,419.00	3,858,419.00	2,250,744.42	11,826,267.07	3,607,408.93
07.07.2009	**Hundai Jeep	2009	KH-8628	15,173,076.00	1,818,690.62	3,793,269.00	3,793,269.00		9,405,228.62	5,767,847.38
			Total	30,606,752.00	3,677,375.27	7,651,688.00	7,651,688.00	2,250,744.42	21,231,495.69	9,375,256.31
*Vehicle No.NA-7310 has been transferred to KOICA/EDCF Project w.e.f 01.08.2012							Depreciation -2012			
** Vehicle No. KH-8628 has been transferred to KOICA /EDCF Project w.e.f 01.01.2012							Vehicle No.NA-7310 for 2012 (5 months)			1,607,674.58
							Vehicle No.KH-8628 for 2012 (1 Year)			3,793,269.00
							Total Depreciation Charge 2012			5,400,943.58



11.7 Project for the Construction of Solid Waste Disposal Facilities in Sri Lanka (EDCF Project)

11.7.1 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.

11.7.1.2 Scope of Project

- Constructing a sanitary landfill in each of four locations:
 - Panadura
 - East Nuwaragampalatha, Anuradhapura
 - Udunuwara
 - Hikkaduwa
- Establishing plans for leachate management methods
- Establishing plans for landfill gas management
- Analyzing conditions of prospective locations
- Estimating wastes



- Evaluating waste disposal methods and capacity/dimensions of facilities

11.7.1.3 Expected Benefits and Results

The solid waste treatment facilities of this project will help Sri Lanka build an infrastructure for keeping 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, in turn reducing the incidence of illness and need for treatment at hospitals and increasing working days, productivity, and thereby 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, and 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 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

■ Project Locations



Malamulla Site

In case of Malamulla site, there was a problem of illegal encroachment of several families into the site and therefore, the Eximbank, Korea has been informing the CEA to report them to course of action the CEA was planning to implement to resolve this issue.



Proposed site at Malamulla



The Divisional Secretary, Panadura (PDS) who legally owns the land has made a court case at the Panadura Courts against the illegal encroachers. In the meantime, he informed that out of more than 73 illegal encroachers who were occupying the site earlier, there were only a few living in the site. Since the courts process has been taking a considerable long, time action was taken to find an amicable solution with the Pradeshiya Sabaha, Panadura (PPS) and PDS to carry out a re-survey and redeem the most wanted area of the Malamulla site for the EDCF Project.

With the direct involvement of the Chairman, CEA a series of fruitful discussions with all the concerned parties were held at CEA to achieve this end. The parties involved were PDS , PPS, Waste Management Authority-WP, Commissioner of Local Government (WP), and the CEA. All the parties agreed that this project should be implemented due to its important, therefore any issue regarding the illegal settling within the site allocated to the landfill should be resolved amicably as there is ample opportunities to do so without resorting to legal actions. 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.

As outcome of a meeting held on 06.02.2012 a draft MOU was prepared and circulated among all the stakeholder parties by the CEA. In the MOU each party has it's owns roles and responsibilities to be accomplished. This was taken up for discussion at a meeting convened on 26.04.2012 where all parties agreed to sign the MOU very early which will subsequently lead to a formal Agreement. Accordingly, the final MOU prepared and circulated among all the parties concerned for signing on 17.07. 2012

A high level meeting was held at the Parliament on 11th October 2012 with the leadership of Hon. Anura Priyadarshana Yapa, Minister of Environment attended by Hon. Reginold Cooray, Minister of Minor Export Crop Production (Political leadership of the area), Chairman of Panadura Pradeshiya Sabaha, Divisional Secretary (Pananadura) and all Heads of related Government, Provincial and Local institutions to discuss and resolve the issue with regard to remaining 7 encroachers. At the said meeting, it was unanimously decided to provide an alternative location for the remaining 07 encroachers.

In the meantime, CEA informed the PDS the exact area required for the proposed project and requested them to release this land to CEA as early as possible to proceed with the follow-up actions.



Meeting with Local Politicians and the relevant officials

11.7.2 Gonadikawatta Site

Out of the aforementioned four sites, one Sanitary Landfill will be constructed in a land called Gonadikawatta within the jurisdiction of Udunuwera 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.

In the case of proposed site at Udunuwera, the CEA has already taken action to takeover a land from the Land Reform Commission (LRC) an extent of nearly 11 ha situated in Gonadikawatta, Udunuwera 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 12 acres and negotiations are under way with the LRC.

11.7.2.1 Access Road

Proper access road to the Gonadikawatta site is an essential components of Integrated Waste Management facility which will facilitate smooth transportation of equipment during the construction period and transportation of waste during the implementation of the project.

From Kadugannawa-Gampola main Road there are two access roads to the site, though the conditions differ significantly in terms of the distance, width, convenience, motorability, slope and surface condition. The details of the two access roads are as follows:

Access Road 1 is called Manikkawatta Nonawatta Gonadika Road

Access Road 2 is called Helasirigama-Gonadika Road

Both the access roads are somewhat narrow and exist under very dilapidated condition it is required to be widened and improved. This is essential prerequisite to ensure convenient movement of vehicles (mostly the



heavy vehicles) and also for smooth transportation of equipments and other machineries during the construction and operation phase of the landfill.

The table 1, below depicts the challenges/disadvantages to be confronted if these roads are to be improved to facilitate convenient vehicular movement.

Table 1: Comparison of Advantages/Disadvantages of the two roads

Parameters	Access Road 1	Access Road 2
Distance to the site from Gampola-Kadugannawa Road	6.35Km	2Km
Acquisition	No Acquisition	Heavy acquisition needed.
Nature of the road	Convenient and minimum engineering interventions are required.	Steep slopes and hence heavy engineering interventions are required.
Ownership	3.6 Km belongs to PRDA and 2.75 Km belongs to Pussellawa Plantation *	Said to be owned by the Udunuwera Pradeshiya Sabaha
Benefit to the nearby community	More compared to the Access Road 2	Less compared to the Access Road 1

**After completing the road improvements, it is suggested to acquire the road sector falling within the Pussellawa plantation (2.75 Km) by the Provincial Road Development Authority of Central Province (PRDA-CP) and total maintenance of the road will be carried out by the PRDA-CP.*

Considering the facts given in the Table 1, the Access Road 1 (Manikkawa Nonawatta Gonadika Road) can be recommended to be developed as the main access road to the proposed site while the Access Road 2 can be improved and used as an alternative access road in case of an emergency.

Accordingly, on the request made by the CEA, the Provincial Road Development Authority of Central Province carried out an inspection and suggests the following improvements to the Access Road 1. They also prepared an estimated budget along with a BOQ to carry out the improvements suggested above.

- Increase the width of the road to 7m and 4 m will be carpeted (Asphalt Concreted) and shoulders will be formed by Granulated material which will be painted by emulsion code. Reinforced concreted Passing bays will be developed in each kilometer (total of 05 bays)
- 45x45cm reinforced concreted drains in one side of the road.
- Improvement of existing culverts and build new culverts as and where necessary

- construction of a bridge
- Construction of retention walls as and where necessary
- Improving the road base by putting ABC in 150mm thickness.

This estimates also consists of improving a part of the Access Road 2 (Helasirigama-Gonadika Road) Even though the improvements of Access roads is a must for successful implementation of the sanitary landfill project as has been highlighted in several meetings held with the political leadership in the area which were also attended by key government institutions in the province, there are no budgetary provisions made available in the EDCF project for infrastructure development such as development of access roads.

Therefore special treasury allocation is necessary in order to meet the cost of road improvement as described in the foregoing. As per the estimate submitted by the PRDA-CP the cost for total improvements of the Access Road is about Rs. 274.0 million. Therefore CEA requested from treasury through Ministry of Environment to allot an extra allocation amounting Rs. 274 Million to the Provincial Council Central province under “Provincial District Development Grants” in the Budgetary Provisions-2013 for the construction of this road by the PRDA-CP.



Proposed site view



Left side view of the proposed site



Right side view of the proposed site



11.7.2.2 Meetings

Several meetings were conducted with the participation of the Hon. Minister of Higher Education and Hon. Minister of Environment, Hon. 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.

The following meetings were held to finalized the waste supply to the project by each Local Authorities:

- Meeting held at Thilanka Hotel Kandy with the participation of Environment Minister Hon. Anura Priyadarshana Yapa, Higher Education Minister Hon. S.B. Dissanayaka. Provincial Council Members, Head of Local Authorities in Kandy District, Chairman/CEA, officials from CEA and officials from other relevant Institutes regarding the Gonadikawatta proposed Sanitary Landfill site.
- Meeting was held at the Central Provincial office of the Central Environmental Authority on 01st March 2012 for the Technical Officer, & Supervisors of the relevant Local Authorities.
- Meeting was held at the Chief Secretariat office of the Central Province on 1st March 2012 regarding the finalization of the amount of waste allocate for the each Local Authorities to the propose project.

Table 2: Amount of waste to be received from each Local Authority to proposed project

Local Authority	Total waste collection tons/day	Total waste receive to Gonadikawatta Tons/day	Waste to receive to Gonadikawatta Composting Plant Tons/day	Total waste for Gonadikawatta Landfill Tons/day
Gampola UC	12	12	7.2	4.8
Udawalapala PS	5	5	3.5	1.5
Kadugannawa UC	3	3	1.8	1.2
Yatinuwera PS	3	2	-	2.0
Udunuwera PS	6	6	3.6	2.4
Akurana PS	3	1 /Week	-	1/Week
Kundasale PS	6	1	-	1.0
Gangawatakorelae PS	7	3	-	3.0
Kandy MC	135	50	30	20
		70	42(if transport vehicles are provided)	28
Pathadumbehera PS	5	2/WEEK	2/Week	2/week
Gangaihalakorale PS	2	2	2/WEEK	2/WEEK

11.7.2.3 Environmental Impact Assessment (EIA) of Gonadikawatta

As mentioned in the foregoing, the CEA has been endeavoring to obtain financial assistance from the government of South Korea through Korean Eximbank to develop one of the four Sanitary Landfill Project

at Gonadikawatte, Kandy with a view to providing a final disposal facility to 11 Local Authorities in Kandy District.

It is also being planned to setup a compost plant at the same location to convert the organic fraction of the Municipal Solid Waste to compost alongside the aforesaid landfill. 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 22nd 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 which acts as the Project Approving Agency (PAA) has issued the ToR for an Environment Impact Assessment Report (EIA) on 22nd April 2011. The 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. TEC Meeting was conducted with the participation of relevant stakeholders to review the draft EIA report. The comments of the meeting also forwarded to the CES for further modifications of the report.

11.7.3 Keerikkulama Anuradhapura site:

The above landfill is planned to be established adjoining to the compost plant complex constructed at Keerikkulama site, Nuwaragampalatha, Anuradhapura 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 Central Nuwaragampalatha PS. Residual waste generated after the composting process will be directed to this landfill for final disposal.

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.



Proposed site at Keerikkulama, Anuradhapura

11.7.4 Monroviawatta, Rajgama site

Monroviawatta land is situated within the Rajgama PS limits in Southern Province. This land belongs to Land Reform Commission (LRC) and LRC provided the area of 8ha to Pilisaru Project to establish Composting Plant and a sanitary landfill site under the EDCF Project to serve a number of Local Authorities in the Galle district. Accordingly, Seven Local Authorities namely Rajgama PS, Ambalangoda PS, Ambalangoda UC, Hikkaduwa UC, Balapitiya PS, Gall MC and Bope Poddala PS are supposed to use this landfill site as their final disposal facility.

Arrangements are currently being made to take over an additional extent of 5ha and negotiations are under way with the LRC.



Proposed site at Rajgama

11.7.5 Establishment of Project Management Unit (PMU)

The Cabinet of Ministers has granted approval at its meeting held on 27.04.2011 for a Cabinet Memorandum submitted by the Hon. Minister of Finance & Planning on “Construction of Solid Waste Disposal Facilities Project” to enter into a loan Agreement with the EDCF of Eximbank, Korea to obtain a loan in Korean Won not exceeding the equivalent of US\$ 33,536,000 to finance for the above project.

A Project Report titled “Establishment of Project Management Unit for the Construction of Four Sanitary Landfills in Sri Lanka under Economic Development Cooperation Fund, Korea” was prepared by the CEA and it was forwarded to Management Services Department (MSD) through the MOE requesting its approval to create carder posts in order to setting up a Project Management Unit in the CEA with a dedicated project staff with specific responsibilities assigned to ensure the timely implementation of the project activities.



Pursuant to the request, MSD has granted approval on 23rd January 2012 for 17 staff positions of the above project. In addition, according to the request made by the CEA, cadre positions for Deputy Project Director & Project Accountant were also approved by the MSD on 30.04.2012 and 11.07.2012 respectively.

Therefore, arrangements have been made to setup the EDCF funded Solid Waste Final Disposal Facility Project in the CEA and to recruit requisite core personnel while procurement of necessary equipments, office space, furniture and other facilities for the smooth implementation of the project were being carried out.

11.7.5.1 Procurement of Furniture to the EDCF Project

The CEA has agreed to allocate the mezzanine floor of the CEA to locate the EDCF project and hence Project initiated action for the procurement of office furniture (Tables, Chairs, and Cupboards etc, subject to following the procurement guidelines published by the National Procurement Agency. Accordingly following items were procured:

- Executive Table
- Office Tables
- Conference table
- Office chairs
- Visitors chairs
- Steel Office cupboards
- Steele Filing cabinets
- BACK Cabinet and High Cabinets.

11.7.5.2 Procurement of Computers and Printers to the EDCF Project.

To implement the project activities effectively, the office is to be equipped with required office equipment and furniture as necessary. The technical specifications for all necessary IT equipment and accessories were developed by a TEC and approved by the Project Procurement Committee (PPC) appointed by the Ministry of Environment.

Accordingly quotations were called from 08 reputed dealers selected from Rainbow pages on 05th September 2012 and the response was very poor. Therefore it was decided to rescind the process. Taking into account the urgent requirement of providing the said IT equipment to the project staff and the availability of funds for the procurement of above items in the EDCF project, limited time quotations were called from the Sri Lanka State Trading Corporation Ltd., a fully government owned organization functioning



under the purview of the Ministry of Co-operatives and Internal Trade for procuring 12 numbers of Desktop Computers, 12 numbers of UPSs and 04 numbers of Laser Printers. The PPC approved the recommendations given by the TEC. Hence the above items were purchased from STC at a total cost of Rs. 1,726,885.68 (exclusive vat).

11.7.6 Selection of Foreign Consultant for the Consultancy Work

11.7.6.1 Preparation of Request for Proposal (RFP) for the Consultancy Services

The Standard Request for Proposals (SRFP) has been prepared by the Export-Import Bank of Korea for Project Executing Agencies to use in the employment of Consultants for loan projects whose legal agreement makes reference to the Guidelines for the Employment of Consultants under the EDCF Loan.

Hence, a Technical Evaluation Committee and the Cabinet Appointed Consultant Procurement Committee (CPCC) were established to prepare and finalize the RFP document.

According to the EDCF Guideline of the Korean Eximbank, the preparation and finalization (final draft form) of the Request for Proposals (RFP) document are being carried out by the CPCC supported by the Technical Evaluation Committee (TEC).

In this process the draft RFP was sent back & forth to Korean Eximbank for their comments and advice. After revised several times, the Korean Eximbank has sent their approval for the draft Request for Proposals (RFP) concerning the consulting services for the captioned project subject to modification as per their comments.

According to the recommendation of TEC & CPCC action was taken to forward some clauses of the RFP to the Department of Trade, Tariff and Investment Policy & External Resources Department of Treasury for further clarifications.

11.7.6.2 Short listing of Consultants

According to this Guidelines for the Employment of Consultants under the EDCF Loan the Expression of Interest (EOI) was called from the list of consultants sent by the Eximbank.

Following are the long list of companies received from the Eximbank and hence contacted for calling EOI:

1. Kunhwa Engineering and Consulting Co. Ltd
2. Dohwa Engineering Co. Ltd
3. Isan Corporation
4. Sunjin Engineering and Architect Co. Ltd
5. Dongbu Engineering Co. Ltd



6. Byucksan Engineering Co. Ltd

7. Kyong-Ho Engineering and Architects Co. Ltd

Expression of Interest from the above Long List of Consultancy companies were received and from that TEC & CPCC prepared a short list of consultancy list. The CPCC's acceptance & recommendation in respect of the short listing of consultants were submitted to the Eximbank of Korea. The Eximbank has given their no objection & approval for CPCC's recommendation for the short list of consultants.

Following are the Short List of companies selected for calling Request for Proposals:

1. Kunhwa Engineering and Consulting Co. Ltd
2. Dohwa Engineering Co. Ltd
3. Dongbu Engineering Co. Ltd

11.7.7 Financial Progress

Total expenditure of the EDCF -funded project was Rs. 9,774,604.29 under the Government of Sri Lanka in the year 2012.

Table: Financial Progress-2012

Se.No.	Month	Total Financial Progress (Rs)
1	January	-
2	February	-
3	March	-
4	April	476,521.89
5	May	151,064.99
6	June	179,097.27
7	July	-
8	August	940,136.63
9	September	311,234.61
10	October	567,323.33
11	November	360,669.28
12	December	6,788,556.29
	Total	9,774,604.29
	Funds Received from Treasury	10,000,000.00



Central Environmental Authority						
EDCF PROJECT						
Statement of Financial Position						
as at 31.12.2012						
Rs.Cts				Note	R.Cts	Rs.Cts
		Assets				
10,000,000.00		Non Current Assets				
		Property Plant & Equipment		2		5,131,924.85
		Current Assets				
		Bank Balance			697,267.06	697,267.06
		Total Assets				5,829,191.91
		Non-Current Liabilities				
		Capital Grant		3		5,131,924.85
		Revenue Grant and Surplus		4		922,662.77
		Less Withdrawal				(225,395.71)
3,945,412.38		Total Liabilities				5,829,191.91
6,054,587.62						

Central Environmental Authority						
EDCF PROJECT						
Cash Flow Statement for the year ended 31.12.2012						
					Rs. Cts.	Rs. Cts.
Cash Flows from operating activities						
	Profit before Taxation					6,054,587.62
Adjustments for						
	Depreciation				-	
operating surplus before working capital changes						6,054,587.62
Increase /Decrease in trade and other recievables						
Increase /Decrease in trade payables						-



Cash generated from operations						6,054,587.62
Cash withdrawal-Ministry					(225,395.71)	(225,395.71)
Net cash from operating activities						5,829,191.91
Cash flows from investing activities						
Purchase of Non-Current Assets						(5,131,924.85)
Net cash used in investing activities						(5,131,924.85)
Net increase in Cash and Cash equivalents						697,267.06
Cash and Cash equivalents at 1 January 2012						0
Cash and Cash equivalents at 31 December 2012						697,267.06

Note 3. Capital Grant		
Balance at the beginning of the year		-
Grants received and utilized to acquire Non-current Assets		5,131,924.85
Grants Received in the form of Non- Current Assets		
Depreciation and Amortization Expense for the year		
Balance at the end of the year		5,131,924.85

Represented by		
Property, Plant and equipment		5,131,924.85

Note 4. Revenue Grant and Surplus		
Net Surplus /(Deficit) for the period		6,054,587.62
Less transfer to Capital Grant		(5,131,924.85)
Balance at the end of year		922,662.77



Note1.				
EDCF Project was funded by Treasury Grant (Local Component) as follows				
Treasury (Capital/ Recurrent) received in Cash		Rs.10,000,000/-		
Property Plant & Equipment as at 31.12.2012				
<u>Note 2</u>		EDCF Project		
	Partition Work	Furniture & Fittings	Computers	Total
Cost as at 01.01.2012				
Addition during the Year	1,678,737.76	1,720,387.13	1,732,799.96	5,131,924.85
Less Disposals				-
Cost as at 31.12.2012	1,678,737.76	1,720,387.13	1,732,799.96	5,131,924.85
				-
Accumulated Depreciation				-
as at 01.01.2012				-
Depreciation for the Year				-
Less Depreciation on Disposals				-
Accumulated Depreciation as at 31.12.2012	-			-
Written Down Value as at 31.12.2012	1,678,737.76	1,720,387.13	1,732,799.96	5,131,924.85
Note: No Depreciation Charge was provided for the year 2012 as the actual utilization of Assets was in January 2013.				



12.0 Corporate Governance Report

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 31.12.2012 was 803 and the existing staffs were 668.

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 12 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.

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), Deputy 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.

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 month 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.

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.

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 synchronise with the format in which the Annual Accounts are presented.

Accordingly, in 2012 the Corporate Plan for the institution has been prepared for the period of 2012 – 2016 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 2012 were prepared based on the corporate plan considering deviations & it was approved by the Board of the CEA for implementation.

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

As reflected in the above title, this Division has three units namely, human Resources Development & Human Resources management Unit, Administration Unit and Finance headed by Directors.

13.1 HUMAN RESOURCES DEVELOPMENT UNIT

Training & Development of the staff is one of the main functions of the HRD Unit. A part 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 year 2012.

(i) Local Training -

- Arranged and facilitated 33 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 2012
- Under such programmes, following group trainings and Workshops were arranged during the year 2012.

Name of the Training Programme / Workshop	No. of Officers participated
1. Three Days Training Programme on Inspection & Report Writing for DEOs attached to the Northern & Eastern Province	36 Officers
2. Four Days Training Programme on EIA	45 Officers
3. Two day Training Programme on MAs (1 st Group)	29 Officers
4. Three Days Training Programme on Inspection & Report Writing for DEOs attached to the Southern Province (1 st Group)	44 Officers
5. One day workshop on Waste to Energy: Potential of Sri Lanka	10 Officers
6. Workshop on Facilitating Resource Allocation in Renewable Energy Development	32 Officers
7. Development of the Software for Compliant Handling	30 Officers
8. Two day Training Programme on MAs (2 nd Group)	42 Officers
9. Three Days Training Programme on Inspection & Report Writing for DEOs attached to the Southern Province (2 st Group)	50 Officers
10. Four Day Training Programme on Waste Management Treatment Technology for the CEA Officers	50 Officers

Above group training and the individual training opportunities were provided under the Treasury Fund.



(ii) Foreign Training -

85 officers were given opportunities and 62 were selected to be trained mainly on short term foreign training in the field of Environmental Management, Environmental Pollution Control, Hazardous Waste Management, Solid Waste Management, Air Quality Monitoring, Ambient Water Quality Monitoring, Geographical Information System, and Climate Change.

(iii) Disciplinary Action -

During 2012, 20 Nos. of preliminary inquiries carried out by the HRD Unit.

13.2 Human Resources Management Unit

Total approved cadre of CEA as at 01.01.2012 was 802. The position of Director (Planning) post was created with the approval of Department of Management Services.

In accordingly, approved cadre of CEA as at 31.12.2012 was 803 and the existing staffs were 668.

Mr. Charitha Herath, Chairman of the CEA resigned for the post with effect from 21.11.2012 and Mr. Wimal Rubasinghe assumed duties as Chairman in the CEA on 22.11.2012.

Recruitment, Promotion, Resignation, Vocation of Post and Retirement of Year 2012

Designation		2012			
		Recruit.	Promotion	Resig/VOP/Tr.	Retirement
1	Senior Manager Director		5		
2	Middle Manager Deputy Director				1
	Assistant Director	1		1	
3	Junior Manager Planning Officer	2			
	Assistant Legal Officer	0			
	Chemist	1	1		
4	Enforcement / Extension/Oper. Snr. Emtl. Officer		8	2	
	Div. Emtl. Officer / Emtl. Officer	5		12	
	Emtl. Enforcement Officer	4		5	



Designation		2012			
		Recruit.	Promotion	Resig/VOP/Tr.	Retirement
5	Management Assistant (Tech)				
	Translator			1	
	Laboratory Assistant	1			
6	Management Assistant (Non-Tech)	4		4	
7	Primary Level (Skilled)				
	Driver			1	1
8	Primary Level (Unskilled)				
	Labourer	2	0	3	
		20	14	29	2

13.3 Finance Unit

Notes to the financial statements for the year ended 31.12.2012

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 668.

13.3.2. BASIS OF PREPARATION

13.3.2.1 Statement of Compliance.

The financial statements of Central Environmental Authority comprise the balance sheet, statement of income and expenditure, Cash flow statement and note to the financial statements. These statements are



prepared in accordance with Sri Lanka Accounting Standard 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.

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 as prescribe in the **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.
6. Building – Color Washing 100% p.a. (Fully write off).

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.

13.3.3.2 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.

13.3.3.3 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.

13.3.3.4 Cash and Cash equivalents

Cash and cash equivalents comprise cash in hand, deposit held at call with bank.



13.3.3.5 Cash flow Statement

Cash flow Statement has been prepared using the indirect method

13.3.3.6. 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.

13.3.3.7 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.

13.3.3.8 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 base 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 non current liabilities in the balance sheet.

According to The Treasury, a fund is not necessary, as they will grant the funds when required.

13.3.3.9 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.

13.3.3.10 Comparative information

Where necessary, comparative figures have been rearranged to conform to the current year's presentation.

13.3.3.11. 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.

13.3.3.12. 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.

13.3.3.13.Accounting of Grants

i. Government Grants

The accounting policy adopted for Government Grants including the methods of presentation as per **LKAS 20 - Accounting for Government Grants & Disclosure of Government Assistance**.

- 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 2012.

Rs.

Treasury - Recurrent	277,671,000
Treasury - Capital – in cash	21,800,000
Treasury - Capital – Motor Vehicle	8,650,000
Plastic Project	712,000
E- Waste Project	288,400
Donation (Library Books)	25,508
Library Information Centre	1,046,124

Capital grant has been used as follows;

Rs.

Conducting Secondary School Level Environment Education Programs	3,067,070
Office equipment - Treasury	6,758,995
Office equipment – Library Information Centre	751,254
Office equipment - Plastic	712,000
Office equipment – E-Waste	288,400
Building	112,000
Library Books- Treasury	806,393
Library Books - Donation	25,508
Furniture	728,710
Furniture - Library Information Centre	294,870
Name Board	106,400
Regional Office Capital Expenses	9,255,746
Nature Field Centre	5,000
Motor Vehicle - Donation	8,650,000



13.3.3.14. 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.

13.3.3.15. Investment

Investment in fixed deposit and short term deposit has been stated at cost. Income from such investments has been accounted on accrual basis.

13.3.3.16. Contingencies & Commitments

It may be noted that the 51 number of cases have been filed at court against the Central Environmental Authority, for which there will be no financial commitments. (Annexure)

13.3.3.17. 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 04th 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.

CENTRAL ENVIRONMENTAL AUTHORITY					
STATEMENT OF FINANCIAL PERFORMANCE					
FOR THE YEAR ENDED DECEMBER 2012					
		Note	2012	2011	
			Rs.	Rs.	
<u>Operating Revenue</u>	-				
Recurrent Grant	- Treasury		277,671,000.00	275,997,000.00	
	- Others	4	69,785,098.70	53,586,855.36	
Differed Revenue			39,439,503.56	37,263,985.30	
Other Revenue		4	165,094,317.59	142,354,783.66	
School Programme	- Treasury		3,067,070.33	5,000,000.00	
Total Revenue			555,056,990.18	514,202,624.32	
<u>Operating Expenses</u>	-				
Personnel Emoluments		5	332,554,266.21	303,173,110.42	



Travelling		6	16,417,781.18	14,539,339.06
Supplies & Consumable Used		7	35,202,449.11	27,429,863.08
Maintenance		8	15,321,897.38	18,086,067.68
Contractual Services		9	38,903,563.39	33,576,278.78
Research & Development		10	14,314,197.56	15,102,434.34
Depreciation and Amortizations		11	39,439,503.56	37,263,985.30
Other Operating Expenses		12	3,767,653.39	4,010,894.40
Project Activities		13	89,569,455.04	54,412,218.54
Total Operating Expenses			585,490,766.82	507,594,191.60
Surplus/(Deficit) from Operating Activities			(30,433,776.64)	6,608,432.72
Finance Cost	-			
Bank Charges			201,540.00	303,171.62
Total Non Operating Expenses			201,540.00	303,171.62
Net Surplus/(Deficit) for the Period			(30,635,316.64)	6,305,261.10

CENTRAL ENVIRONMENTAL AUTHORITY				
STATEMENT OF FINANCIAL POSITION				
AS AT 31 DECEMBER 2012				
		Note	2012	2011
<u>Assets</u>	-		Rs.	Rs.
Non Current Assets				
Property, Plant & Equipment		14	314,917,328.53	325,038,024.93
Investment		15	9,960,000.00	9,960,000.00
Goods in Transit and Work in Progress		16	-	4,573,203.00
Current Assets	-			
Inventories		17	9,921,312.84	5,998,630.19
Trade & Other Receivables		18	70,496,932.06	67,626,955.39
Prepayments		19	7,594,196.74	4,410,304.74



Cash & Cash Equivalent		20	86,453,781.05	87,294,990.94
Total Assets			499,343,551.22	504,902,109.19
Liabilities				
Current Liabilities				
Payable		21	49,761,447.72	37,108,280.67
Accrued Expenses		22	39,216,131.63	43,959,269.64
Differed Revenue Reserve			10,418,480.00	10,137,020.00
Compost Bins Reserve			7,879,480.63	7,802,480.63
Bank Overdrafts- BOC Pelawatte - 2937341				-
Non Current Liabilities				
Recurrent Grant		23	36,849,585.23	26,521,836.03
Provision for Gratuity	-	24	126,351,923.38	110,125,260.56
Total Liabilities			270,477,048.59	235,654,147.53
Total Net Assets			228,866,502.63	269,247,961.66
NET ASSETS/EQUITY				
Accumulated Fund			73,573,242.64	73,573,242.64
Excess B/F			(46,873,284.08)	(53,178,545.18)
Excess/(Deficit) for the year			(30,635,316.64)	6,305,261.10
Capital Grants		25	232,801,860.71	242,548,003.10
			228,866,502.63	269,247,961.66

Note 4 A				2012	2011
Operating Revenue				Rs.	Rs.
Other Recurrent Grants					
Environmental Resources Information System				845,304.41	245,956.00
Male Declaration Project				892,161.25	404,986.69
Development of Data Base for Evt. Polluting Activities				150,659.00	1,360,001.91
KITA Programme				-	142,301.43
Plastic Waste Management Project				52,429,659.83	42,820,635.04
Ambiant Air Quality Programme				-	651,000.00
Water Quality - Large Scale				-	506,459.20



Environmental Pioneer Programme-Ministry			8,000,000.00	5,000,000.00
Community Base Waste Quality Mgt. Programme			-	527,241.00
Water Quality Monitoring Programme			149,385.38	374,699.96
Monitoring of Water Quality in Three Main Water Bodies			-	374,443.11
Wetland Day CBL			535,463.13	887,212.00
E Waste Programme			2,331,518.00	291,919.02
Pilisaru Project (Caps)			2,148,854.40	
GIS Information Systems			130,850.50	-
Strengthening of Laboratory			1,677,976.80	-
SAICM Hazardous Waste Management			377,216.00	-
SAICM Environment Pollution Control			116,050.00	-
Total			69,785,098.70	53,586,855.36

Note 4B				2012	2011
Operating Revenue				Rs.	Rs.
Other Revenue					
Inspections Fees				82,248,788.64	68,070,044.73
License Fees				36,445,893.64	32,093,664.46
BOI Inspections Fees				3,834,786.00	2,727,500.00
BOI License Fees				3,170,000.00	2,980,000.00
Consultancy Fees				614,660.06	742,351.66
Test Blast				2,821,623.04	2,152,564.63
EIA & IEE Projects Income				1,612,418.39	5,158,674.72
Hazardous Waste Programme				995,945.42	494,108.27
EIA & MHP Ownership Transfer				-	175,000.00
Water Quality				1,502,438.14	906,103.78
Court Case Income				361,835.00	637,167.00
Digital Map				493,139.02	68,463.21
World Environmental Day				9,490,000.00	115,000.00
Go Green Tree Planting Project				25,000.00	50,000.00
National Green Awards				12,500,000.00	-
Environmental PB Camp				-	75,000.00
Proficiency Testing Programme				-	102,500.00
Bolgoda Name Board				-	150,000.00
Seminar for Investors & Industries				-	76,255.00
Building Rent				4,196,400.00	4,171,370.76



Auditorium Fees				64,500.00	55,500.00
Interest Income				2,522,456.10	2,097,613.63
Weeravila Bungalow Fees				86,630.00	102,453.00

Note 4B Contd;					
Operating Revenue					
Other Revenue					
Non Refundable Tender Deposit				547,089.00	174,839.49
Insurance Claims -CEA				51,245.00	273,200.26
Miscellaneous Income				516,470.14	293,026.99
Settlement of Bond-Mrs. Panditharatne				275,000.00	325,000.00
Vehicle Hiring Charges MALE and Others				510,000.00	
Awareness Programme				88,000.00	-
Implementation Basel Convention				120,000.00	-
30th Anniversary Donation				-	1,000,000.00
Sale of Books & Publications				-	17,566.50
Surplus on Motor Cycle Ownership Transfer				-	7,555,887.12
Transfer of Non Moving Recurrent Grants				-	9,513,928.45
Total				165,094,317.59	142,354,783.66

Note 5				2012	2011
				Rs.	Rs.
Personal Emoluments					
Salaries and Wages				264,136,652.35	239,382,297.75
EPF Contribution				36,981,844.95	33,206,189.61
ETF Contribution				7,425,791.39	6,644,690.45
Overtime & Holiday Pay				5,440,657.24	6,504,587.73
Provision for Gratuity				18,210,201.78	17,162,990.56
Allowance to Board Members				191,554.00	121,116.00
Allowance to Council Members				62,864.00	60,712.00



Entertainment Expenses				104,700.50	90,526.32
Total				332,554,266.21	303,173,110.42

Note 6				2012	2011
				Rs.	Rs.
<u>Travelling Expenses</u>					
Domestic				11,355,677.56	10,788,619.67
Foreign				5,062,103.62	3,750,719.39
Total				16,417,781.18	14,539,339.06
Note 7				2012	2011
				Rs.	Rs.
<u>Supplies & Consumable Items</u>					
Stationery & Office Requisites				7,431,051.73	6,065,403.16
Fuel & Lubricants				27,110,046.28	19,661,648.67
Uniforms				200,665.00	201,673.40
Printing				63,414.50	74,729.00
Newspapers				313,606.00	288,137.00
Periodicals, Fax sheet and Posters				83,665.60	1,138,271.85
Total				35,202,449.11	27,429,863.08

Note 8				2012	2011
				Rs.	Rs.
<u>Maintenance</u>					
Vehicles Repairs & Maintenance				8,234,996.46	10,446,005.66
Building & Structure				2,963,656.81	3,374,428.27
Office & Lab Equipments				4,123,244.11	4,122,717.93
Generator				-	142,915.82
Total				15,321,897.38	18,086,067.68

Note 9				2012	2011
				Rs.	Rs.
<u>Contractual Services</u>					



Electricity				11,224,194.21	9,672,649.37
Security Services				6,935,251.30	5,841,327.74
Insurance				4,233,868.98	3,747,335.16
Postage				2,003,169.00	1,852,406.30
Telephone				6,321,151.21	5,312,166.90
Building Rent				3,916,806.48	2,396,656.54
Water Supply				775,272.05	771,338.21
Nation Building Tax				2,452,947.80	2,114,257.28
Audit Fees				700,000.00	710,787.00
Membership Fees				340,902.36	1,056,579.53
Economic Service Charge				-	100,774.75
Total				38,903,563.39	33,576,278.78

Note 10			2012	2011
			Rs.	Rs.
<u>Research & Development</u>				
Envt. Education & Awareness Expenses		10.1	3,373,191.31	3,876,869.50
Envt. Pollution Control		10.2	4,019,512.09	4,067,649.69
Cost of Compost Bin			4,532.00	30,360.00
Legal Expenses			1,409,378.00	1,831,049.23
Envt. Management & Assessment		10.3	2,822,875.48	2,488,835.80
Human Resources Development			2,684,708.68	2,807,670.12
Total			14,314,197.56	15,102,434.34

Note 11	2010	2011
	Rs.	Rs.
<u>Depreciation</u>		



Building				1,035,134.38	4,859,163.85
Building - Color Washing				2,542,104.71	635,526.77
Motor Vehicles				8,182,874.38	7,340,157.71
Nature Field Centre				484,713.94	484,630.65
Furniture & Fittings				9,249,753.18	5,453,188.60
Office Equipment				10,099,485.60	9,925,286.37
Laboratory Equipment				6,203,190.53	6,246,882.95
Library Books				579,864.47	568,432.25
Name Board & Garden Chairs				89,861.84	87,790.17
Regional Office				972,520.53	931,635.84
Plant & Machinery				-	731,290.14
Total				39,439,503.56	37,263,985.30

Note 12				2012	2011
				Rs.	Rs.
<u>Other Operating Expenses</u>					
Advertising				230,244.00	349,697.52
Miscellaneous				475,942.77	425,996.06
Welfare Expenses				2,737,728.00	2,331,302.97
Written off of WHT Receivable				180,000.00	-
Written off of GST Receivable				143,738.62	-
30th Anniversary				-	903,897.85
Total				3,767,653.39	4,010,894.40

Note 13			2012	2011
			Rs.	Rs.
<u>Project Expenses funded by Foreign Agencies</u>				



Male Declaration			13.1	892,161.25	404,986.69
Plastics Waste Minimization Project			13.2	52,429,659.83	42,820,635.04
Environmental Resources Information System			13.3	-	245,956.00
KITA Programme			13.4	-	142,301.43
Development of Data Base for EP Activities			13.5	150,659.00	1,360,001.91
Environmental Pioneer Program-Ministry			13.6	7,754,669.71	4,904,703.87
Community Based Water Quality Programme			13.7	-	527,241.00
Water Quality Monitoring Programme				149,385.38	374,699.96
Wetland Day CBL				535,463.13	887,212.00
E Waste Programme				2,331,518.00	291,919.02
World Environmental Day				9,536,744.88	115,000.00
Environmental Information Centre			13.8	845,305.13	
National Green Awards				12,641,795.43	-
GIS Information Systems				130,850.50	-
SAICM Hazardous Waste Management				393,266.00	-
SAICM Environment Pollution Control				100,000.00	-
Strengthening of Laboratory of CEA				1,677,976.80	-
Ambiant Air Quality Programme				-	272,359.22
Water Quality - Large Scale				-	82,014.29
Water Quality Monitoring in Three Main Bodies				-	374,443.11
Environmental PB Camp				-	75,000.00
30th Anniversary Donation Expenses				-	1,378,745.00
Go Green Tree Planting Project				-	5,000.00
Bolgoda Name Board				-	150,000.00
Total				89,569,455.04	54,412,218.54

Note 14	2012	2011
	Rs.	Rs.
<u>Property, Plant & Equipment</u>		



Land				27,453,088.65	27,453,088.65
Building			14.1	146,409,017.87	147,391,382.74
Building - Color Washing			14.1	-	2,542,104.71
Motor Vehicles			14.1	12,309,544.54	11,842,418.92
Mobile Laboratory			14.1	3.04	3.04
Furniture & Fittings			14.1	14,135,002.80	20,410,150.58
Office Equipment			14.1	51,793,229.50	52,571,765.10
Laboratory Equipment			14.1	14,939,589.54	20,559,310.07
Library Books			14.1	3,736,476.44	3,484,440.31
Plant & Machinery			14.1	1.00	1.00
Regional Office			14.1	40,197,797.20	34,376,606.08
Name Board			14.1	459,395.67	442,857.51
Nature Field Centre			14.1	3,484,182.28	3,963,896.22
Total				314,917,328.53	325,038,024.93

Note 15				2012	2011
				Rs.	Rs.
<u>Investment</u>					
Treasury Bills - Bank of Ceylon				9,960,000.00	9,960,000.00
Total				9,960,000.00	9,960,000.00

Note 16				2012	2011
				Rs.	Rs.
<u>Goods in Transit and Work in Progress</u>					
Desktop Computers 07 Nos				-	671,160.00
UPS 07 Nos				-	31,773.00
Laser Printers 04 Nos				-	60,000.00
Office Equipment - Laboratory				-	999,360.00
High End Computers 04 Nos				-	547,300.00
Laptop Computers 05 Nos				-	486,000.00



Lab Equipments				-	648,300.00
Furniture - Monaragala				-	159,943.00
Furniture - Kilinochchi				-	159,943.00
Furniture - Kurunegala				-	72,424.00
Regional Office Construction - Kandy				-	400,000.00
Regional Office Construction - Galle				-	94,000.00
Regional Office Construction - Anuradhapura				-	243,000.00
Total				-	4,573,203.00

Note 17				2012	2011
				Rs.	Rs.
<u>Inventories</u>					
Stationery & Office Requisites				2,126,973.98	1,646,445.26
Books & Publication				7,170,721.76	4,163,720.46
Motor Spare Parts				570,748.00	160,608.71
Electrical Items				52,869.10	27,855.76
Total				9,921,312.84	5,998,630.19

Note 18				2012	2011
				Rs.	Rs.
<u>Trade & Other Receivable</u>					
Miscellaneous Advances			18.1	357,750.00	251,762.10
Purchase Advances			18.2	1,010,872.81	2,055,802.62
Distress Loan				47,982,524.97	48,224,064.28
Tsunami Loan			18.3	20,277.95	21,111.29
Festival Advances				793,100.00	747,600.00
Deposits Receivables			18.4	811,695.00	633,515.00
Motorcycle Insurance (DO)				242,122.02	214,192.13
Family Medical Insurance				946,993.47	1,685,083.20
Special Advances				310,458.50	605,708.50



VAT Receivable				2,471,655.82	9,346,724.68
EIA Projects			18.5	13,769.00	-
Motorcycle Loan -Drivers			18.6	2,368,069.20	907,320.00
Rent receivable -Plastic & Pilisaru Project				1,127,894.25	459,000.00
Plastic Waste Management Project Purchase Advance			18.7	390,000.00	-
EIA Advance			18.8	130,883.50	157,690.00
Cash Imprest				90,000.00	90,000.00
Cash Adv. -Development of Data Base for EP Activities			18.9	-	22,920.00
Flood Loan Receivable			18.10	740,463.60	1,854,404.97
Plastic Waste Cash Advance			18.11	-	26,318.00
Pilisaru Project - National Camp, Randenigala Expenses				509,342.00	-
Pilisaru Project - Green Awards Expenses				4,375,000.00	-
Plastic Project - Green Awards Expenses				4,000,000.00	
Holcim Lanka Ltd - Green Awards Expenses				750,000.00	
Pilisaru & EDCF Projects - Salaries				544,059.97	-
Male Project (Fuel Cost) Receivable				510,000.00	-
GST Receivables				-	143,738.62
Receivable - WHT				-	180,000.00
Total				70,496,932.06	67,626,955.39

Note 19				2012	2011
				Rs.	Rs.
<u>Prepayments</u>					
Payments in Advance			19.1	6,594,196.74	3,410,304.74
Plastic Waste Management Advance Imprest				1,000,000.00	1,000,000.00
Total				7,594,196.74	4,410,304.74



Note 20				2012	2011
				Rs.	Rs.
<u>Cash & Cash Equivalents</u>					
Bank of Ceylon, Pelawatte - Main A/C 0-002937303				71,290,982.46	73,550,089.82
Bank of Ceylon, Pelawatte - MALE - 0002972309				3,229,185.59	2,722,546.84
Bank of Ceylon, Pelawatte - DEO - 2937330				(310,288.54)	(475,897.17)
Bank of Ceylon, Corporate Branch, 1608				11,196,914.61	9,964,045.75
Bank of Ceylon, Pelawatte, Polycsess 2937361				1,046,986.93	1,534,205.70
Total				86,453,781.05	87,294,990.94

Note 21				2012	2011
				Rs.	Rs.
<u>Payable</u>					
Deposit Payable		21.1		53,000.00	53,000.00
National Camp				8,000.00	8,000.00
Chairman's Fund				8,218.66	8,218.66
EIA Projects		21.2		44,284,808.71	-
MHP Projects		21.3		86,518.00	86,518.00
Refundable Tender Deposit				1,379,979.80	1,099,640.97
Medical Insurance Claims				291,409.49	222,318.98
Upper Kothmale Water Quality				728,146.75	728,146.75
Land Fill Construction at Mawanella				156,584.00	156,584.00
Stamp Duty Payable				1,298,922.16	907,887.05
Interest Received in Advance (Fixed Deposit)				597,000.08	351,337.25
Retention for construction				565,643.62	276,991.11
Recovery - Camera				56,000.00	32,000.00
Motor Cycle Insurance				69,851.00	63,851.00
Implementation Basel Convention				174,365.45	174,365.45
Solid Waste Management Allowance (DO)				3,000.00	3,000.00



Note 21				2012	2011
				Rs.	Rs.
Total				49,761,447.72	4,171,859.22
Note 22				2012	2011
				Rs.	Rs.
<u>Accrued Expenses</u>					
Salaries and Wages				13,741,619.23	13,144,268.84
Employee Provident Fund				3,106,801.26	2,951,866.47
Employee Trust Fund				618,420.43	591,281.61
Over time				431,601.50	517,476.03
Gratuity Allowance				221,137.50	681,939.75
Local Traveling				1,238,718.45	1,790,481.13
Foreign Traveling				1,000.00	27,767.22
Welfare Expenses				75,792.00	85,749.00
Repairs & Maintenance of Building				260,741.72	276,757.59
Repairs & Maintenance of Office Equipment				166,004.18	224,716.50
Repairs of Motor Vehicles				555,670.10	664,683.11
Security Charges				1,441,273.87	1,375,049.39
Electricity Charges				742,060.50	735,541.50
Fuel and Lubricant				1,105,156.71	1,292,478.67
Stationery				235,412.50	139,108.34
Postage				28,388.00	23,631.00
Telephone Charges				610,461.47	408,061.64
Newspapers				24,220.00	2,150.00
Water supply				22,855.91	35,692.94
Legal Expenses				698,763.00	213,340.00
VAT (VAT to Accrued Expenses)				134,538.00	2,758,666.15
Ambient Air Quality Monitoring				428,458.00	327,174.40
Audit Fees				1,488,480.00	1,400,000.00
Office Building Rent				312,500.00	89,780.00
Plastic Expenses				1,443,211.91	830,288.85
Note 22 (Contd;)					
Nation Building Tax				888,543.52	404,642.02
Distress Loans- Stamp Duty				500.00	1,725.00
NRM Division				209,157.60	437,987.84
Planning and Operational Unit				300,000.00	428,118.14
Motor Cycle Loan				100.00	225.00
EPC Division (Laboratory)				1,400,000.00	760,880.00
Allowance to Council Members				600.00	1,200.00
Miscellaneous Expenses				5,155.00	-



Note 21				2012	2011
				Rs.	Rs.
Pollution Control Division				372,320.00	-
Local Training				341,492.50	-
Allowance to Board Members				1,200.00	-
Advertising				108,375.00	-
Printing				63,414.50	-
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	-
Admin Overhead				-	589,807.00
Printing of Quarterly Newsletter				-	115,000.00
Office Furniture				-	1,011,987.00
Admin Pay for Judges				-	109,500.00
Purchase of Lab Chemicals				-	264,266.50
Development of Data Base for Evt. Polluting Activities				-	173,699.18
Office Equipments				-	4,130,685.14
T.V.Programme				-	2,469.09
Stamp Duty				-	801,425.90
Regional Office Construction				-	1,023,618.93
Construction of Building				-	148,677.48
Gio- Informatics				-	9,917.00
Conduct Awareness Programme				-	170,516.00
Promotion of E,E&A				-	195,360.00
Maintenance of Lab Equipment				-	182,338.91
Monitoring of Water Quality in Three Main Bodies				-	184,589.38
Community Based Water Quality Mgt. Programme				-	250.00
Water Quality Monitoring Programme				-	13,884.25
E Waste Management Project				-	5,300.00
Bolgoda Name Board Expenses				-	150,000.00
Development of Educational Materials				-	163,000.00
Promote Environmental Friendly Products				-	941,224.00
Conduct Campaign on Environ				-	71,850.75
Lab Equipment				-	843,300.00



Note 21				2012	2011
				Rs.	Rs.
Environmental Pioneer News Letters				-	33,875.00
	Total			39,216,131.63	43,959,269.64

Note 23				2012	2011
				Rs.	Rs.
<u>Recurrent Grants</u>					
Male Declaration				4,377,564.13	3,958,050.38
Plastic Waste Grant				14,879,218.59	14,920,878.42
GIS Project				67,009.13	197,859.63
Development of Data Base for Evt. Polluting Activities				110,732.07	261,391.07
Large Scale Water Quality Grants				659,936.65	659,936.65
KITA Grant				105,822.02	105,822.02
Water Quality Monitoring Programme				275,914.66	425,300.04
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				2,428,162.98	5,048,080.98
Wetland Day CBL				253,324.87	127,788.00
Strengthening of CEA Laboratory				2,322,023.20	-
Strengthening of National Information Centre				108,571.59	-
SAICM Hazardous Waste Management				7,842,576.50	-
SAICM Environment Pollution Control				2,602,000.00	-
Total				36,849,585.23	26,521,836.03

Note 24	2012	2011
	Rs.	Rs.



Provision for Gratuity				126,351,923.38	110,125,260.56
-					
Total				126,351,923.38	110,125,260.56

Note 25				2012	2011
				Rs.	Rs.
<u>Capital Grant</u>					
UNITAR Capital Grant				126,124.80	165,155.53
FRMP Capital Grant				213,707.00	279,226.82
Dutch Capital Grant				11,064,734.86	21,960,691.05
EA1P Grant				5,613,104.65	4,405,769.87
Capital Grant - Treasury Fund				44,510,533.98	88,490,418.38
Asian Development Bank				340,977.00	1,163,205.11
UNDP				441,360.00	545,643.50
WHO				115,335.00	1,322,950.10
APPELL Project				31,028.00	38,249.40
World Bank				127.00	1,506,047.48
Grant of Library Books				305,078.21	414,694.00
International Development Association				128,381,434.67	91,970,825.17
IRMP				1,288,713.21	672,748.95
UNEP				151,597.20	400,687.59
Ceylon Tobacco Company				5,097.20	13,350.18
Grant of Motor Vehicle				8,650,000.00	235,648.28
UNEP Capital Grant				4,200.00	5,998.33
E-Waste Capital Grant				47,222.90	53,079.91
Plastic Waste Management Capital Grant				4,484,048.41	4,180,290.85
GIS Capital Grant				799,658.54	863,448.48



Capital Grant					
Household Waste Minimizing Project - Gampaha				236,239.40	266,667.48
Post Tsunami Capital Grant				106,450.00	120,160.91
Nature Field Centre Grant				425,000.00	282,200.36
Mezzanine Floor				22,500,000.00	16,215,500.04
Development of Data Base for Evt. Polluting Activities				1,153,284.68	1,339,031.24
South Asia Program				73,500.00	79,324.12
Safe Disposal Mobile				342,400.00	60,000.00
John Keels Foundation				106,380.00	118,200.00
Library Information Centre				1,046,124.00	-
Pioneer Program - Ministry Found				238,400.00	-
USAID				-	81,187.35
Netherlands				-	480,409.07
UNICEF				-	51,353.37
Maligawatte Improvement Funds				-	20,951.30
NAREEP				-	154,830.20
UNIDO (IRRP)				-	1,213,390.85
NORAD				-	1,458,658.30
Hundred Million Trees				-	206,593.52
Sacap Focal Activities Funds				-	56,244.64
Greater Colombo Flood Contribution				-	87,471.74
Survey on Industries				-	40,707.45
NWP(ADB) Projects				-	9,231.97
NAREPP (Local Authority)				-	22,763.60
Envt. Promotional Projects				-	3,928.36
Foreign Aids				-	156,296.53



Upgrading of E-Mail Facility				-	5,921.36
IS EIA Projects				-	29,436.59
NAREPP (Office Equipments)				-	265,215.08
Anniversary Grant				-	1,034,198.69
	Total			232,801,860.71	242,548,003.10

14.0 Report of the Auditor General on the Financial Statements



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கணக்காய்வாளர் தலைமை அபிபதி திணைக்களம்
AUDITOR GENERAL'S DEPARTMENT



මගේ අංකය }
எனது இல } TM/L/CEA/FA/2012
My No }

ඔබේ අංකය }
உமது இல }
Your No. }

දිනය }
திகதி } 04 October 2013
Date }

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 2012 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 comprising the statement of financial position as at 31 December 2012 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 provisions 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 Environmental Act. No. 47 of 1980. My comments and observations which I Consider should be published with the Annual Report of the 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 10 June 2013.

1:2 Management's 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.

අංක 306/72 පොල්දූව පාර,
බත්තරමුල්ල, ශ්‍රී ලංකාව

දුරකථනය }
தொலைபேசி } 2887028 -34
Telephone. }

இல. 306/72, பொல்துவ வீதி,
பத்தரமுல்லை இலங்கை

ෆැක්ස් අංකය }
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ඉලෙක්ට්‍රොනික් තැපෑල }
#- மெயில் } oaggov@slt.net.lk
E-mail. }



1:3 Auditor's Responsibility

My responsibility is to express an opinion based on my audit. I conducted my audit in accordance with Sri Lanka Auditing Standards. 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 performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgments, including the assessment of the 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 that are appropriate in the circumstances, 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 the financial statements. Sub-sections (3) and (4) of Section 13 of the Finance Act, No. 38 of 1971 give discretionary powers to the Auditor General to determine the scope and extent of the audit.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

1:4 Basis for Qualified Opinion

My opinion is qualified based on the matters described in paragraph 2:2 of this report.



2. Financial Statements

2:1 Qualified Opinion

In my of 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 Environmental Authority as at 31 December 2012 and its financial performance and cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

2:2 Comments on Financial Statements

2:2:1 Accounting Deficiencies

The following observations are made.

- (a) Two items of laboratory equipment amounting to Rs. 3,966,417 and 02 computers amounting to Rs. 312,928 had been given to the Authority by the Pilisaru Project and these equipment had not been accounted as assets of the Authority.
- (b) Head office petty cash imprest of Rs. 50,000 and balances of 06 bank current accounts aggregating Rs. 40,000 had been shown under other receivable accounts.
- (c) Even though a sum of Rs. 126,351,923 had been accounted as employees gratuity provision as at 31 December 2012, according to computation under and over provisions of Rs. 714,609 and Rs. 596,946 respectively had not been included in gratuity provision.



2.2.2 Unexplained Differences

Even though the amount payable to green awards ceremony of the Authority was Rs. 3,000,000 as per financial statements of Pilisaru Project, the amount receivable as per the financial statements of the authority was Rs. 4,375,000. Actions had not been taken to account the correct amount by reconciling the identified difference.

2.2.3 Accounts Receivable and Payable

The following observations are made.

- (a) Age analysis for accounts payable amount of Rs. 49,761,448 as per the financial statements had not been presented. Even though 08 payable balances valued at Rs. 1,217,833 had remained for 2 to 05 years those balances had not been settled.
- (b) Age analysis for accounts receivable shown in the financial statements amounting to Rs. 70,496,932 had not been presented.

2.2.4 Lack of Evidence for Audit

The relevant evidences had not been presented to audit for each subjects amounting to Rs. 11,758,516.

Subject	Amount	Evidence not Presented
	Rs.	
Field Inspection and Licence Fees (Provincial Offices)	3,205,866	Receipts
BOI Inspection Fees	3,834,786	Detailed Registers/ Schedules
Divisional Offices Current Accounts	40,000	Confirmation of Balance and Bank Current Accounts Numbers



Planning and Operational Expenses	300,000	Detailed Registers/ Schedules
Recurrent Provisions of Male Project	4,377,564	Age Analysis
	<u>11,758,216</u>	

2.2.5 Non-compliance with Laws, Rules, Regulations and Management Decisions

The following non - compliances were observed.

Reference to Laws, Rules and Regulations etc.	Non- compliance
(a) Section 32(3) and (4) of National Environmental Act No. 47 of 1980	Details of fees charged in 08 revenue items aggregating Rs. 14,935,029 had not been published in a Gazette.
(b) Declaration of Assets and Liabilities Act No. 1 of 1975 as amended by Act No. 74 of 1988.	Twenty three officers had not declared assets and liabilities during the year 2012.
(c) Public Enterprises Circular No. 118 (a) of 23 May 1997.	Even though the 1/20 allowance for the officers working in Post Usage Plastic Project in weekends and public holidays could only be taken once per month, a sum of Rs. 114,500 had been paid for 05 officers performing duties from 01 to 06 days period per month.
(d) Public Enterprises Circular No. PED 28 of 01 January 2005.	Even though approval of Director of Public Enterprises Department should be taken to acquire vehicles on lease or hire purchase, such an approval had not been taken.



- | | |
|---|---|
| <p>(e) Treasury Circular No. 842 of 19 December 1978 and Management Audit Circular No. DMA/2009(2) of 01 September 2009.</p> <p>(f) Public Administration Circular No. 12/2000 (iv) of 20 January 2012.</p> | <p>The fixed assets register had not been updated by including the depreciation adjustment entries.</p> <p>Even though the allowance of Rs. 500 per day should have been paid to trainees for practical training, the Authority had paid only Rs.300.</p> |
|---|---|

2.2.6 Transaction not Supported by Adequate Authority

Funds amounting to of Rs. 14,148,854 of Pilisaru Project and Plastic Project had been used by the Authority in activities such as Green Awards Festival, World Environmental Day and caps for environment guide without the approval of the Treasury.

3. Financial Review

3.1 Financial Results

According to the financial statements presented the operations of the Authority for the year under review had resulted a deficit of Rs. 30,635,317 as compared with the surplus of Rs. 6,305,261 in the preceding year. Accordingly, the deficit for the year had decreased by Rs. 36,940,578 as compared with that of the preceding year. Increase in the personal emoluments by Rs. 29 million and project expenditure by Rs.35 million in the year under review had been the main reason for this deficit.



4. Operating Review

4.1 Performance

4.1.1 Post Usage Plastic Project

The following observations are made.

- (a) Number of non-started activities which were included in action plan of the year 2012 of the Post Usage Plastic Project was 09. Also 18.5 per cent work of financial activities had not been implemented. Therefore the activities of the project had not been performed according to a proper plan.
- (b) Even though agreement had been signed on 04 May 2012 to construct a plastics and polythene waste recycle model center in Matara Municipal Council by spending a sum of Rs. 4,800,000, the work had been commenced a delay of more than 08 months. i.e. on 24 January 2013.
- (c) Even though a sum of Rs. 1,950,000 had been spent on survey of usage of polythene bags, actions had not been taken to implement 05 recommendations mentioned in survey report submitted on 15 October 2012.

4.1.2 Environment Protection License

The following observations are made.

- (a) The correctness of the information mentioned in the applications had not been verified when issuing environment protection licence for implementing environment protection programmes which was an objective of the National Environment Act No. 47 of 1980. Therefore streamlining, maintaining and controlling had not been happen properly for releasing, depositing and effects of other polluting ways of waste that is danger and also could be danger to environment. For an example follow up actions had not been done for controlling of water pollution as per the paragraph 2:2 of the environment licence issued on 24 November 2011.



- (b) Even though the information with regard to the procedure of issuing of environment protection licence had been entered to the computer information system by the environment pollution control unit, there were deficiencies of updating those information as a result of often defects in soft wares and hard wares, and management had not made attention to avoid them.
- (c) Internal control system to identify immediate expiries of environment protection licence before its expiry had not been implemented within the institute. Therefore when expiring of environment protection licence issued by the Authority, 04 to 10 months time period had been spent to direct the relevant factory to take remedial actions (sending reminders, conduct field inspections) for its renewal.
- (d) Even though the authority of issuing of environment protection license for “a” and “b” type factories should be done by provincial offices of the Authority (relevant actions to receive the license) as per the paragraph 23 “b” of National Environment Act No. 47 of 1980 and the Gazette Notification No. 1533/16 of 25 January 2008, while examining of 15 environment protection licence files it was observed that steps whatsoever had not been taken for legal actions as at 31 March 2013 against the factories even after completing 14 days of sending reminders for the environment protection licence to be renewed as at 31 August 2012.
- (e) Even though the validity period of environment protection licence issued by Western Provincial office of the Authority for 97 factories had been expired as at 31 August 2012, the said factories were operated without taking a new environment licence or renewed licence for the old licence (i.e. without having a environment protection licence). Authority had not taken actions even as at 31 March 2013 to send reminders, to take proper actions, to do investigations or to take legal actions. Therefore the internal control system of renewal procedure of environment protection licence was at a weak level.



- (f) According to the information of industrial survey conducted by geographical information and technological unit of the Authority for the period 2009-2011, type 'A' factories identified by the Authority were 6,700. Out of them, environment protection licence (EPL) had been issued for 2,711 factories as at 31 December 2011. There were 600 institutions engaging in issuing of environment protection licences and 3,989 factories or 60 per cent of the total type 'A' factories had been operated without having environment protection licence.
- (g) Type 'B' factories identified by the Authority were 11,971 and environment protection licence had been issued for 3,773 factories as at 31 December 2011. 8,198 factories were being operated without having environment protection licence.
- (h) When examining 15 files of environment protection licence issued by the Western Provincial Office of the Authority relating to the year 2012, the standard format for inspection reports prepared by senior or divisional environment officers had not been introduced even as at 31 August 2013 and advance programmes for environment officers had not been prepared.
- (i) Inspection format had not been prepared by including all information with relate to inspection and as the information included in the inspection report would be decided accordingly the senior or provincial environment officers, reports were different to each other and inconsistencies were available.
- (j) The Western Provincial Office had not used even the incomplete inspection report format used at present. Most of the information needed had not been included in reports as inspection officers prepare reports in different to each other.



4.2 Management Inefficiencies

Even though awareness should be done by translating the monitoring manual of Male Declaration Project to prepare a report regarding economic and social impact of air pollution in to local language and Rupawahini Documentary Programme on air pollution, that activity had not been done.

4.3 Operating Inefficiencies

4.3.1 Operating Deficiencies

The following observations are made.

- (i) Even though a sum of US \$ 17,000 had been allocated as per the estimate of memorandum of understanding entered on 07 June 2010 with relate to the Male Declaration Project phase iv, the annual expenditure classification had not been prepared.
- (ii) Even though the objective of Post Usage Plastic Project is to manage post usage plastics, an expenditure of Rs. 3,269,206 had been made for 09 activities in the year 2012 contrary to those objectives. Other than this a sum of Rs. 4,500,000 had been taken from the Project for activities done Concurrently to World Environmental Day by the Authority.



4.3.2 Projects Implementation

The following observations are made.

(a) Pilisaru Project

- (i) The officers were recruited who were not acquired qualifications required for those posts, when recruiting for the posts of Senior Engineer and Deputy Manager (Public Relations) of the project and aggregating Rs. 6,403,600 had been paid as salaries and allowances from year 2008 to 2012.

Also a sum of Rs. 6,957,514 had to be paid additionally from the Project for outsourcing consultancy services to design and plan the large scale composts yards constructions due to the lack of knowledge and experience of the Senior Engineer on the related field.

- (ii) Five large scale compost yards had been constructed by the Project in Kolonnawa, Monroviyawatta in Hikkaduwa, Nuwaragampalatha in Anuradhapura, Pohorawatttha in Kalutara and Yudhaganawa in Medirigiriya by spending a sum of Rs. 415,177,352 during the period 2008-2013. Managing of 35-50 metric tons per day had been planed from that large scale compost yard. However the daily receipt of garbage in Hikkaduwa compost yard was only 10 tractor loads at the time of physical verification.

10-15 metric tons of garbage to Pothuvilkumbura yard in Kolonnawa and 30 metric tons of garbage to Pohorawatta yard in Kalutara had been received daily. Therefore the compost yards had not been functioned according to plans.

- (iii) Even though a sum of Rs. Million 180.35 had been spent during the time period from year 2008 to 2012 for awareness programs on separation of household garbage by the Project, successful results had not been achieved from them. Also 13 garbage carriage belt systems had been purchased by



spending a sum of Rs. 16,136,081 separation of garbage had been done manually and conveyor belt systems used in large scale compost yards at Pothuvilkumbura yard in Kolonnawa, Pohorawatha yard in Kalutara, Monroviyawatta in Hikkaduwa had not been functioned properly.

- (iv) A sum of Rs. 49,581,503 had been given to Badulla Municipal Council to establish Solid Waste Management Project and the expenditure was fruitless due to the decision of utilizing that land for improvement of the sports complex.

(b) Construction of Solid Waste Disposal Facilities Project under the Korean Economic Development Cooperating Fund Loan

Preparation of plans and to start construction works of three land reclamations such as Gonadhikawatta in Kandy, Rajgama in Hikkaduwa and Keerakkulama in Anuradhapura had been delayed for a year due to the delay in signing of loan agreements between Sri Lankan government and Korean government.

4.4 Solid Waste Management Project

The following observations are made with regard to the contract awarded for the agreement valued at Rs. 37,597,609 for construction activities of the Project of reclamation and preparation of sanitary garbage land at Dompe.

- (a) A loss of Rs. 19,483,222 had been occurred due to awarding the contract to sixth (06) highest bidder without considering the reasons for lower quotations of bidders who were quoted lower prices.
- (b) Even though the contractor should pay to the Project for the removed soil 88,648 cubic meters at the of Rs. 45 per cubic meter as per the agreement, a loss of Rs. 30,140,320 had been occurred to the Project as the payment was made to the contractor at the at the rate of Rs. 295 per cubic meter.



4.5 Idle and Under Utilized Assets

Twenty seven testing equipment of the laboratory had been out of order for number of years and all testing done using those equipment had been stopped half way.

4.6 Projects Starting in Lands/Properties not Acquired Properly

A sum of Rs. 6,326,850 had been spent by the Authority on construction activities of Sobaketha center and no documents had been presented to audit with regard to acquisition of the land.

4.7 Staff Administration

According to the information furnished to audit, the cadre of the Authority as at 31 December 2012 was as follows.

Type	Approved Cadre	Actual Cadre	Number of Vacancies
Higher Management Level	21	20	1
Middle Management Level	76	68	08
Operational Management Level	705	579	126
	802	667	135
	=====	=====	=====

Non-appointing of officers for 14 vacant posts which were vacant due to the 14 officers of the Authority work in outside projects and institutions by taking no-pay leave and therefore those posts were vacant for a longer period.



4.8 Vehicles Utilization

The following observations are made.

- (a) Even though the Authority has a sufficient vehicle fleet, a sum of Rs. 2,477,496 had been paid to a private institute of hiring vehicles during the year under review for taking vehicles on hire basis. There was no agreement as per the Annexure 3(C) of Public Enterprises Circular No. P.E.D. 12 of 02 June 2003 and Ministry of Policy Planning and Implementation Circular MDP/MPRD/Veh of 11 October 2002 issued in that regard and that service had been taken continuously from the same institute without following the procurement procedures. Also the rate agreed according to the request of the supplier of hiring vehicles without any approval had been spent from Rs. 2,900 to Rs. 3,200 for the first 80 km and from Rs. 34 to Rs. 38 for the additional 1km.
- (b) Though the Vans taken by the Post Usage Plastics Project on hire basis should be travelled a minimum of 3,500 km per month, the total payable amount of Rs. 660,000 had been paid as hiring km for the vehicle taken from January to October 2012 on monthly hire basis having travelled only 16,456 km. Hence unutilized numbers of km were 18,544.
- (c) A sum of Rs. 1,746,306 had been spent by the Project for 02 vehicles for the 10 months of year 2012. In addition to those 02 hiring vehicles, hiring vehicles had been taken from another private institute without the approval and a sum of Rs.1,293,284 had been paid in the same period to that institute without the approval.
- (d) At the time of calling for quotations on hiring vehicles it had been mentioned that advances would not be paid. But 02 instances aggregating Rs. 175,000 had been given as advances by the Project.



5. Accountability and Good Governance

5.1 Internal Audit

In reviewing of internal audit reports issued by the internal audit unit in the year under review, the Authority had not taken actions to submit to the Auditor General about the explanations of the Authority and action taken on those reports issued by the internal audit with regard to the issuing of environment protection license, examination of environment complaints and progress on the complaints directed by the head office to provincial offices, un-reconciliations between duties in revised advance programs (Eastern Provincial office) given to divisional environment officers and duty progress notes made in the files.

5.2 Audit Committees

Even though nearly a period of 03 years has elapsed following the discussions made in relation to environment complaints data system, the data systems had not been implemented even as at 31 August 2013.

5.3 Budgetary Control

It was observed that the budget estimate had not been utilized as effective management control system as it was revised at the end of the year.

Also budget estimates had not been prepared to identify income of provincial offices and the income of the head office separately.

5.4 Tabling the Annual Report

The annual report of the Authority for the year 2011 had not been tabled in parliament.



5.5 Uncompleted Audit Para(s)

The following observations are made.

- (a) Complaints had been received several times within the period of 4 ½ years from 12 March 2007 to 11 October 2011 with regard to the environment protection licence issued to a spray painting factory, and even though the environment protection licence had been issued by the Authority during the 4 ½ years, the reasons for the complaints had not been justified during the field inspections.

- (b) Amendment to the National Environmental Act. No. 47 of 1980

Even though the approval of the Cabinet of Ministers had been granted to amend the National Environment Act No. 47 of 1980 and to instruct the Legal Draftsman to draft the required amendments in a manner inclusion of requirements stated in the paragraphs 2.2 and 2.3 of the Cabinet Memorandum dated 21 July 2006 submitted by the Hon. Minister of Environment referred as amendment, following amendments had not been made.

As per the directives of the decision of Cabinet of Ministers on 21 June 2006, the Legal Draftsman had been directed to draft a bill to amend the National Environmental Act No. 47 of 1980. Accordingly amendments had not been made in the Act up to 31 May 2013 for 18 items identified for improvements. Although it was directed by the Committee on Public Enterprises held on 15 November 2011 that the National Environment Act should be amend according to the Corporate Plan for the period of 2008-2012 under identified major issues, such amendments had not been made even by 31 May 2013.

- (c) According to Chapter III of the Establishments Code as amended by Public Administration Circular No. 06/97 of 03 February 1997, even though acting appointments can be made only for the period of 3 months 19 officers of the Authority had been working in the acting posts for more than 3 months and therefore a sum of Rs. 1,193,830 had been paid as allowances. Even though this



had been reported in the preceding year, appropriate actions had not been taken in this regard by the management.

5.6 Fulfilling the Environmental and Social Responsibilities

The following observations are made.

- (a) According to the action plan for the year 2012 of the Authority the air quality monitoring stations had been established in Colombo Fort by the air quality division under ambient air quality monitoring project in Sri Lanka such as control air quality in desired activities, control sound and vibration, control vehicle eco test, and implement Male Project. But the air quality monitoring station established near the Colombo Fort train station to measure air quality such as carbon monoxide, sulphurdioxide, nitrogen dioxide, ozone particulate matter has been in out of order since year 2008.

Although the measurement data of air quality should be recorded, equipment needed for measure such data had not been available in the Authority. Although the qualified bidder had been selected in proper order to purchase 04 air quality monitoring stations (three fixed ambient air quality monitoring station and one mobile monitoring station) as per the activity plan of 2012, that procurement had not been awarded even as at 10 December 2012. In this instance the main objective of air quality monitoring object of the Authority could not be implemented.

- (b) Air emission from vehicles as the main air pollution factor in Sri Lanka and though its serious effect to urban areas is being identified, the environment pollution due to air emission from vehicle could not be measured as the Authority has no equipment to monitor air quality, by issuing of extra ordinary Gazette notification No. 1533/17 of 25 January 2008 with the expectation of controlling air emission from vehicle (controlling air emission and certification).



- (c) Although the provision of Rs. 120 million had been adjusted in year 2012 by the National Budget Department to acquire air quality monitoring equipments for the Authority, the prior approval had been given to purchase 04 moving air test equipments by using those allocations. But collect data relating to air pollution as the main objective of the Authority could not be made due to suspension of activities of procurement committees and non-operating such committees in efficient, effective and urgent manner.
- (d) Actions had not been taken according to paragraph 23 of National Environmental Act, against releasing of waste to the canal by 10 housing schemes and factories with regard to the canals pollution under Dehiwala-Mount Lavinia and Moratuwa Municipal administration area which were developed by Lunawa Project as per releasing sewerage systems and other chemical wastes to Canals and drains.

6. Systems and Controls

Weaknesses in systems and controls observed in audit had been brought to the attention of the Chairman of the Authority from time to time. Special attention is needed in respect of the following areas of control.

- (a) Accounting and utilizing of computer soft ware
- (b) Budgetary Control
- (c) Control over fixed assets
- (d) Procurement procedure
- (e) Provision for gratuity
- (f) Environment Protection Act
- (g) Staff administration

H.A.S Samaraweera
Auditor General



15.0 'Pilisaru' National Solid Waste Management Project

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 Pilisaru 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 'Pilisaru' Waste Management Program for which the Cabinet of Ministers approved in principle on 25th 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 Pilisaru National Solid Waste Management Project (PP) was established in CEA with effect from 1st January 2008 subsequent to an approval given by the Cabinet of Ministers on 19th December 2008 for a separate Cabinet Memorandum titled '*Pilisaru Programme- A National Approach for Solid Waste Management in Sri Lanka- Establishment of the Pilisaru Project*' which was submitted by the MENR.

The overall guidance for the implementation of the *Pilisaru* program is provided by a high level National Committee on SWM (called as 'National Pilisaru Platform') co-chaired by the Secretaries of the Ministries of Environment & Natural Resources and the Local Government & Provincial Councils (MLGPC).

Earlier Pilisaru Program is implemented for a period of 3 years commencing from January 2008 in the form of a Project titled 'Pilisaru 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 'Pilisaru 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 1st 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, 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 -2012 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 -2012 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 progress') 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**

This building has to be constructed next to the Unloading and sorting area as the sorted waste end up in this. The waste is divided in to piles to be composted and all the operations are taken place here. 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 Pilisar 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 2012 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.

During the year 2012 minor improvement works were done in the compost plant to easy handling the processing of composting under the request of the Kolonnawa Urban Council which is the operating agency of the plant. Improvements to the waste unloading area were improved in order to construct a roof canopy and a motorable access to the unloading area. The value of the improvement is Rs. 1.0 Million.

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. During the year 2012, minor improvement works were done in the compost plant to ease the handling and processing of composting under the request of the Solid Waste Management Authority of the Western



Province, which is the operating agency of the plant. Improvements to rainwater drains and leachate tanks were implemented in order to prevent the flow of leachate towards roadside drains. The value of the improvement is Rs .0.3 million.

c. Compost plant at Keerikkulama at Nuwaragampalatha, Anuradhapura

The existing access road was improved for a distance of 2 km from the main road.

d. Compost plant at Monroviawatta, Rajgama

The compost plant complex at Rajgama was completed and handed over to the Southern Provincial Council. The plant complex comprises a waste unloading area, sorting belts, open piling area, under cover piling area, and sieving and value addition area. In addition the plant complex has facilities for storing recyclable items, office, workers rest rooms and water supply. The plant commenced its operations and seven Local Authorities in Galle district are benefitted for treatment of MSW collected daily. The non-compostable wastes are sorted out and recyclable materials are stored separately in for sale. The operations are monitored by a committee where the Southern Provincial Office of the CEA and the Pilisaru Project also represented. The construction was completed in year 2011 and contractor's defects liability period is in year 2012

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 70% up to end of the year 2012.

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 km² 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 20m³ per day of in-house septic tanks sewage.

The tender was called for the construction of the plant in April 2012 and awarded the contract to the private contractor in July 2012. The construction period is Six Months.

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 60% of the construction up to now. The Total cost of the Construction is Rs, 83,324,200.54.



Since this land is being used for dumping garbage at present the developing area had to be cleared prior to commence the construction. The construction of the sewage treatment plant has been completed up to 90%. The compost plant construction is shown around 50% progress. The plant construction is due its completion by mid January 2013. 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 initiated for planning a compost plant for Jaffna Municipal Council.

g. Compost plant at Maligawatta, Dompe

The entire site at Maligawatta, Dompe was handed over to KOICA to complete the rest of the work in the sanitary landfill. The proposed compost plant at this site was postponed till the site is handed over to the CEA after completion of the landfill by the KOICA.

15.7.2 Small- To Medium-Scale Compost Plants for Local Authorities

The Pilisaru Project evaluates project proposals from Local Authorities (LAs) and other government institutions (such as military bases and educational establishments) requesting technical and financial assistance for solid waste management facilities. A primary activity of the Pilisaru Project is to construct and implement small- and medium-scale composting facilities as an interim means of waste treatment and processing. Requests for assistance are evaluated for waste quantity and infrastructure needs, and necessary documentation and approvals are obtained to award assistance to a grantee.

N	Local Authority	Waste	District	Approved	Advance Paid
1	Mahaoya PS	1	Ampara	4,727,725.18	945,545.04
2	Padiyatalawa PS	1	Ampara	4,572,661.38	914,532.76
3	Damana PS	1	Ampara	3,901,116.45	743,069.80
4	Namaloya PS	1	Ampara	4,284,956.92	816,182.27
5	Padaviya PS	3	Anuradhapur	6,918,065.07	1,383,613.01
6	Talawa PS	3	Anuradhapur	5,760,734.81	1,152,146.96
7	Talawa PS -	3	Anuradhapur		1,153,849.82
8	Horowpothana PS	1	Anuradhapur	5,323,275.50	1,013,957.24

9	Kebithigollewa PS	2	Anuradhapur	6,764,089.32	1,288,397.97
10	Sri Lanka Air	2	Badulla	2,523,755.02	504,751.00
11	Sri Lanka Air	3	Gampaha	6,513,787.75	1,302,757.55
12	Tissamaharama PS	7	Hambantota	4,303,379.42	860,675.88
13	Lunugamwehera	2	Hambantota	5,171,133.72	984,977.85
14	Valikamam South	3	Jaffna	4,972,920.99	947,223.05
15	Bulathkohupitiya	2	Kegalle	3,244,642.95	648,928.59
16	Ukuwela PS	2	Matale	3,439,155.55	687,831.11
17	Thalawakelle-	2	Nuwara Eliya		1,316,280.50
18	Puttalam PS	4	Puttalam		1,477,875.47
18	T O T A L	43	10		18,142,595.87

15. 7.2.1 COMPOST PLANT AT PADAVIYA PS

Padaviya Pradeshiya Sabha (PS) is located in the Anuradhapura District of the North Central Province of Sri Lanka. The total extent of the Pradeshiya Sabha domain is 125 km² and comprises the main towns of Padaviya; Parakramapura; Bogashandiya; Janakapura; and Sri Pura.



Gate at the compost plant



Chain-link fence at Padaviya PS

The total population of the Pradeshiya Sabha area is 35,100. Municipal waste is collected from the 1,200 households; 16 industries; 5 weekly fairs; 12 hotels; 3 hospitals; and 8 schools within the PS area.

The compost plant being constructed for the Padaviya PS is designed to handle a waste quantity of 3 metric tons per day. The facility is located on a state land of area 1 acre and 2 roods 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. 6,918,065.07 for the construction of the waste processing / compost facility in the Padaviya PS. 20% of the total allocated cost was released as a mobilization advance. Financial assistance for this project was awarded in January 2012 as part of the Deyata Kirula National Development Program 2012 conducted in the Anuradhapura area. More than 60% of the construction has been completed and an interim bill has been submitted to the Pilisaru Project for reimbursement.

15.7.2.2 COMPOST PLANT AT TALAWA PS



Pilisaru officers evaluating construction

The Talawa PS is located in the Anuradhapura District of the North Central Province of the country. The total extent of the PS area is 71 km² and comprises a population of 86,709.

A waste quantity of 3 metric tons is collected each day from the 31,250 households; 28 institutions; 335 industries; 5 weekly fairs; 28 hotels; 9 hospitals; and 18 schools within the PS jurisdiction. The main towns within the Talawa PS area are: Talawa; Andarawewa; Eppawala; Thambuttegama; and Kalankuttiya.

The small-scale compost project is being constructed on a land area of 4.04 hectares at a total budgeted cost of Rs. 5,760,734.81. 20% of the total allocated cost was released as a mobilization advance. Financial assistance for this project was awarded in January 2012 as part of the Deyata Kirula National Development Program 2012 conducted in the Anuradhapura area. More than 40% of the construction work has been completed and an interim bill has been submitted by the PS and is currently being processed by the Pilisaru Project for reimbursement.



Evaluation of ongoing construction

15.7.2.3 Compost Plant at Talawa Ps - Thambuttegama

The Talawa PS was provided with financial and technical assistance for two solid waste management / compost facilities. One serves the general PS area, as described above; the other, services the Thambuttegama Economic Zone within the Talawa PS area.

The Thambuttegama Economic Zone is located within the Talawa PS area in the Anuradhapura District of the North Central Province of the island and comprises an area of 40 km². The 7,500 households contribute to the population of 19,000.

The compost project is located at a site of area 4.4 hectares known as Oragodayayawatta. The waste management facility has been designed to process a quantity of 3 metric tons of waste per day. 20% of the total allocated cost of Rs. 5,769,249.11 was released as a mobilization advance. Financial assistance for this project was awarded in January 2012 as part of the Deyata Kirula National Development Program 2012 conducted in the Anuradhapura area. Construction is ongoing and an interim bill has been submitted by the PS and is currently being processed by the Pilisaru Project for reimbursement.

15.7.2.4 Compost Plant at Bulathkohupitiya Ps

The



Office and worker rest room



Open and under cover pilina



Drainaae and leachate tank

Bulathkohupitiya Pradeshiya Sabha is located in the Kegalle District of the Sabaragamuwa Province of Sri Lanka. The domain of the PS is 125 km² 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 and a 20% mobilization advance was released in May 2012 to facilitate the commencement of construction. 90% of the construction has been completed and an interim bill submitted by the PS is currently being evaluated by the Pilisaru Project for reimbursement.

15.7.2.5 Compost Plant at Puttalam Ps

The Puttalam PS is located in the Puttalam District in the North Western Province. The total land extent of the PS area is 191 km². The population of the PS area is 54,174 and includes 18,900 households; 355 shops; 155 industries; 31 institutions; 19 hotels; 15 schools; 9 weekly fairs; and 3 hospitals. The main towns within the Puttalam PS area are: Mundalama; Madurankuliya; Palaviya; Udappuwa; Marichchikattuwa; and Borngroule Estate. The Puttalam PS collects 4 tons of waste per day from within its jurisdiction.

The Pilisaru Project awarded financial and technical assistance to the Puttalam PS in the amount of Rs. 7,389,377.35 to build a compost facility as a means of sorting, treating, and processing municipal solid waste to reduce the impact of its disposal on the environment. A mobilization advance of 20% of the approved budget was released to the Puttalam PS in May 2012 to facilitate the commencement of construction work on the compost site. Construction work at the site is ongoing.



Ongoing construction at the Puttalam PS



15.7.2.6 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 km² 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. A mobilization advance of 20% of the approved budget was issued to the PS in May 2012.

15.7.2.7 Compost Plant at Ukuwela Ps



Unloading / Sorting area



Open piling area



Undercover piling area

The Ukuwela PS is located in the Matale District of the Central Province. The population within the 82 km² 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 and a 20% mobilization advance of Rs. 687,831.11 was released in May 2012. Construction work is ongoing at the site.

15.7.2.8 Compost Plant at Mahaoya Ps

The Mahaoya PS is located in Ampara District of the Eastern Province and comprises an area of 720 km² 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.

15.7.2.9 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 km². 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 ongoing and the Padiyatalawa PS has submitted a bill to the Pilisaru Project for reimbursement.

15.7.2.10 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.



Proposed compost facility site



Disbursement of the mobilization advance for reimbursement.

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. Building has started and the base has submitted one interim bill to the Pilisaru Project

15.7.2.11 Compost Plant at Damana Ps

Located in the Ampara District of the Eastern Province, the Damana PS comprises an area of 334 km² 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. A 20% mobilization advance was issued to the Damana PS in November 2012 in line with the Deyata Kirula National Development Program of 2013. Initial construction work has been commenced.

15.7.2.12 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 km² 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; Walimuwapothana; 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.

15.7.2.13 Compost Plant at Kebithigollewa Ps

The Kebithigollewa PS comprises an area of 406 km² 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.

15.7.2.14 Compost Plant at Lunugamwehera Ps

The Lunugamwehera PS is located in the Hambantota District of the Southern Province of the island. The total land extent of the PS area domain is 247 km² and comprises a population of 31,098. A waste quantity of 2 tons per day is collected from the 8,173 households; 19 government institutions; 163 stores; 25 schools; 2 hotels; and 1 hospital, among other entities.

The Pilisaru Project approved the construction of a compost / waste management facility at a total estimated cost of Rs. 5,171,133.72 and released a 20% mobilization advance payment of Rs. 984,977.85 in November 2012 to facilitate the initiation of construction work. The compost facility is being constructed at a site of 4 hectares known as Kadawara Forest.



15.7.2.15 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 km² 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. In November 2012, a 20% mobilization advance payment was issued to the Namaloya PS to commence construction work. The project is being established at a site of 1 acre known as Polwatte.

15.7.2.16 Compost Plant at Thalawakelle-Lindula Uc

The Thalawakelle-Lindula Urban Council (UC) is located in the Nuwara Eliya District within the Central Province of Sri Lanka. The population of the UC 12,699 and comprises an area of 1.92 km². Waste is generated and collected from 2,440 households; 20 institutions; 4 industries; 3 schools; 1 weekly fair; and 1 hospital. The Thalawakelle-Lindula UC sought assistance from the Pilisaru Project to help manage their municipal solid waste.

The Pilisaru Project approved the establishment of a compost plant with the capacity to process 2 metric tons of waste per day at a total cost of Rs. 6,910,472.63. A mobilization advance of Rs. 1,316,280.50 was released to the UC in November 2012 to facilitate the commencement of construction work on the compost facility. Construction work on the compost plant has begun at the 1 acre site at Hooly Road.

15.7.2.17 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.

15.7.2.18 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. Construction work has been started and the first interim bill was received and is being processed by the Pilisaru Project.

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.

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. Unless waste transportation is strengthened the compost plants will not be operated at the full capacity. Tenders were awarded to procure a total of 75 waste transport tractors and 77 trailers for local authorities all over the island.

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
	Total		75	77

15.7.5 Supply of waste sorting conveyor belts

Three conveyor belts were installed at the Rajgama PS – Monroviawatte large-scale compost site to facilitate the sorting and processing of waste being treated at the site. Waste collected from the participating townships is unloaded and sent along the conveyor belts. Laborers on each side of the belt separate waste materials into recyclables (glass, plastics, metals, etc.) and biodegradable waste, which is further processed and converted into compost.

15.7.6 Supply of Sievers for Processing Compost

The compost produced is sold for agricultural purposes and sieving followed by packing is a vital component of the process. The sieving compost needs a huller with required mesh size. As such, 29 No of sieving machines were procured and distributed to LAs for operation at the compost plants.

15.7.7 Supply of skid steer loaders

Skid steer loaders were provided to two local authorities that operate large-scale compost facilities. Two skid steer loaders were provided to the Rajgama PS to facilitate operations at the Monroviawatte compost facility. Another two skid steer loaders are to be issued to the Kolonnawa UC for assistance with waste management / compost activities at the site.

15.7.8 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.



15.7.9 Planning and designing sanitary landfills for residual waste disposal

15.7.9.1 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.

15.7.9.2 Matara Long-term Landfill

In 2009 Matara municipal Council was funded by Pilisaru Project for establishing a composting project at Kotawila, Weligama. But the residual waste was disposed at Piladuwa Matara up to 2012 and this activity created number of environmental issues in the area. As a solution for these problems, Pilisaru Project assisted the Matara MC and constructed a low cost landfill in adjacent land to the compost site at Kotawila, Weligama. The Pilisaru project spent 2034556.83 Rs for this activity and addition to that the Pilisaru project spent 4505931.49 Rs for rehabilitation of open dump yard at Piladuwa, Matara. Construction of sanitary landfill for Matara MC is one of the other projects started in 2012 by the Pilisaru Project. Soil investigations of the proposed land have been started for designing this landfill site.

15.7.9.3 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. Chairman of P/S was requested to clear the site with JCB to obtain levels along L/S & C/s.s on the existing Ground.

15.7.9.4 Badulla landfill

The Badulla Municipal Council utilized the playground located within the city to dump MSW for last 30 years. The renovation and improvements to the play ground 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, Soranatota the project



design a landfill facility for 40,000m³ of MSW already available in the play ground. The design consists of leachate management system, operational methodologies and post closure options.

15.7.9.5 KOICA funded Sanitary Landfill at Maligawatta, 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. 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 been taking action to release (lease out on long term basis) 68 acres of the land to the Pilisaru Project and out of which 6 hectares have been selected as the core area to construct the landfill site.

With the completion of earth works the entire site was handed over to the KOICA for completion of the landfill. The implementation of the compost project at the site will be commenced once the landfill is completed and the site is handed over the CEA by the KOICA.

15.7.9.6 Landfill gas monitoring

Equipments were procured for monitoring landfill gas analyzer and micro emission analyzer. The equipments are used for landfill gas testing in the laboratory of the CEA.

15.7.10 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.

15.7.11 Research project on low cost compost bin

A research programme was conducted to introduce a low cost compost bin for the use at house-hold. The empty chemical bins are awaiting a disposal option in chemical formulating industries and those barrels were collected with the approval of Registrar of Pesticides and converted into compost bins. These compost bins are now in use at pilot scale to test the performance of bacteria to digest organic waste into compost. Once the results are analyzed the bin could be introduced to launch a pilot project.

15.7.12 Sundara Gampaha Programme

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. The Kelaniya Pradeshiya Sabha will collect separated waste and transported to the waste compost plant. The organic waste will be converted into compost and other recyclable materials are sold. 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 will be provided a compactor for transport of waste to the compost plant. Necessary procurement procedures were followed to purchase compost bins, compactor and waste separation bins. Construction of the compost plant is nearing completion.

15.7.13 Promoting home composting

Upon the requests of Local Authorities 2500 compost bins were procured and to be distributed under 50% concessionary rate.

15.7.14 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 Oyamaduwa, Auradhapura. Kuda katharagama Devalaya, Soragune Devalaya, Tissamaharama PS were also issued waste collection bins.

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 2012 for relevant personnel of local authorities and institutions at which the Project has provided financial assistance for the establishment of compost facilities. All programs were conducted with the expert instruction of Dr. Sumith Pilapitiya. The Weligama UC waste management facility was used as the location for hands-on training.

The following training programs were conducted by the Pilisaru Project:

No.	Category of participants	Dates	No. of participants
1	Chairpersons and Secretaries	May 21 – 22, 2012	50
2	Managers from Local Authorities/Institutions	August 10 – 11, 2012	50
3	Laborers and Site Supervisor of Rajgama PS – Monroviawatte large-scale compost facility	August 20-24, 2012	11
4	In plant training for Laborers and Site Supervisor of Rajgama PS – Monroviawatte large-scale compost facility	August 9, 2012	20

The training program for the Chairpersons and Secretaries and the Managers included a 2-day residential training. Day 1 was reserved for lectures and theoretical studies; Day 2 was hands-on practical training on the composting process. The training program for the laborers and supervisor of the Rajgama PS – Monroviawatte compost facility was an intense 7-day training program on the wind row composting process using the solid waste as raw material.

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.



Heads of Local Authorities sorting waste



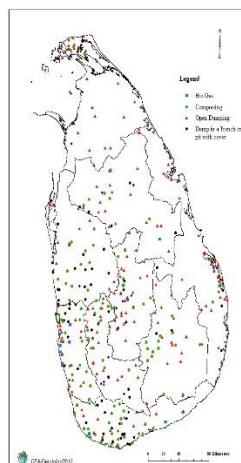
Dr. Pilapitiya explaining the composting process

An

evaluation to assess the effectiveness and overall success was carried out at the end of all the training programs. More than 95% of the attendees has scored very high ratings and commented that the training was highly successful in the context of the course content, technical integrity, practical experience exposed, and the logistic arrangements etc.

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 2012 Exhibition	B.M.I.C.H	20 th to 22 nd January
2	Deyata Kirula 2012 Exhibition,	Oyamaduwa, Anuradhapura	4 th – 10 th February 2012
3	Ratasaru Pilisar - Cartoon exhibition	Colombo	February 2012
4	Ananda Abhiman 2012	Ananda College, Colombo -10	26 th to 31 st March 2012
5	"Soba 2012" - National Environmental Day	Royal College,	5 - 6 June 2012
6	Ratasaru Pilisar - Cartoon exhibition	Royal College,	5 – 6 June 2012
7	Participate 'Inco 2012' 3 days exhibition	BMICH	July 2012
8	Exhibition at Saranathissa M.V Mathugama	Mathugama	August 2012
9	Sarabimani 2012	Kuliyapitiya,	August 2012
10	Govijana Udanaya Exhibition held at Bandarawela	Bandarawela	September 2012
11	Exhibition held at Gothami Balika Vidyalaya,	Colombo 10	October 2012
12	University of Sri Jayawardenapura	UOJ	November 2012



13	International Symposium Science and Technology 2012	University of Sri Jayawardenepura	November 2012
14	Bodyline (Pvt.) Ltd. "Family Day" exhibition organized by MAS Holdings	Horana	December 2012
15	Medical exhibition, Kalutara	Kalutara	December 2012
16	Exhibition at the University of Kelaniya	Organized by Department of	December 2012

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 / foundation stone laying 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 Opening / Foundation Stone Laying / Agreement Signing

No.	Local Authority / Gov Institution	Date of Opening
1	Opening Ceremony of the Rajgama Pilisar Composting Plant	February 2012
2	Conducted a waste management awareness programme for the Boiriya Central College, at CEA Auditorium.	March 2012
3	Opening event at the Royal College mini composting site.	June 2012
4	Organized and Participate Nivithigala Waste Recycling Center opening event.	December 2012

15.10.3 Publishing of Advertisements in Newspapers / Souvenirs/Events

- Waste management awareness message Published in Sithamgallena Rajamaha Viharara perahera
- Souvenir advertisement Published for Gampaha Bandaranayaka College.
- Published souvenir advertisement in Christmas carol souvenir of St.Josephs's College
- Published St.Josephs's Collage College sport meet Advertisement
- Designed & published paper advertisement for National Environment day on Proper Waste Management
- Display waste management advertisement in "Neethi Ranga" annual event
- Souvenir advertisement Published for Gampaha Bandaranayaka College.



- Souvenir advertisement Published for Sri Jayawardenapura MV for maroon & silver night.
- Souvenir advertisement Published for Gothami Balika Vidyalaya, Colombo 10, for commerce day 2012
- Souvenir advertisement Published for Vishaka Vidyalaya Colour's night – 2012
- souvenir advertisement in Vishaka Vidyalaya for Miyasi vishaka 2012
- A message was broadcasted the ITN television channel during the National Environmental Day
- A message was broadcasted the LAKHADA radio channel during the National Environmental Day
- Published waste management advertisement in lankaelink web site.

15. 10.4 Other Programs on Awareness of Solid Waste Management

1. Held a awareness programme of waste separation at Dhamma school in Sri Nigrodaramaya, Bussa;
2. Participate waste management activities at 'Deyata Sevana' National tree planting programme in Water's edge;
3. Organized and sponsored the National Green Awards 2012 event;
4. Conducted an Awareness Programme on SWM and Environment protection for the Member of Presidents Security Guard at Presidents House;
5. Conducted a waste management awareness programme at the Vocational training College, Anuradhapura;
6. Organized "World Environment Day "National event in Royal College;
7. Organized the "Tour de green" Bicycle parade;
8. Participated in the Dengue programme at Kotikawatha-Mulleriyawa Pradeshiya Sabha;
9. Conducted a Waste Management awareness Programme and Waste, Composting bins distribution event at Sri Sudharshanaramaya , Urumuththa, Akuressa;
10. Funding "Esala Perahara 2012" programme for waste management awareness programme;
11. Attended the Dengue Prevention Programme in Battaramulla area

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

During the year 2012, 'Pilisaru' project has recruited a total of 13 personnel and the details are given below.

Position	Recruited	Resigned
Senior Engineer	1	-



Project Officer	2	1
Project Engineer	1	2
Project Assistant	1	4
Project Secretary	1	-
Draft Person	1	1
Procurement Assistant	1	1
Accounts Assistant	1	1
Clerk	1	-
Driver	1	1
Office assistant	2	1
Total	13	12

As at 31st December 2012 the project is manned by a total cadre of 30 staff. The existing staff is listed below;

Position	No.
Project Director	1
Deputy Project Director	1
Deputy Manager (Planning & Implementation)	1
Deputy Manager (Procurement)	1
Deputy Manager (Public Relations)	1
Deputy Manager (Legal)	1
Senior Engineer	2
Accountant	1
Junior Accountant	1
Project Engineer	1
Project Officer	3
Project Assistant	2
Quantity Surveyor	1
Administrative Officer	1
Project Secretary	1
Draft person	1
Clerk	6
Driver	3
Office assistant	1
Total	30

15.13 Financial progress

The project was allocated a sum of Rs. 546 Million for the year 2012. The total financial progress of the project was Rs. 405 Million i.e. being 74% progress. However, the project was able to effect payments for works done only up to Rs.220 Million and awaiting liquidity to make the rest of the payments.



Pilisararu Final Accounts

15.13.1 Pilisararu Auditor General Report

Notes to the Final Account 2012

Accounting Policies and Notes to the Account

Summary of Accounting Policies

1.1 General

1.1.1 Statement of Compliance

The Balance Sheet and the related Statement of Financial Performance, Cash Flow and the Accounting Policies and notes to the Accounts of Pilisararu Solid Waste Management Project have been prepared in accordance with the Sri Lanka accounting Standards laid down by the Institute of Chartered Accountants of Sri Lanka.

1.1.2 Basis of Preparation of Final Account

The Final Account of the project is prepared in accordance with historical cost conversion with generally accepted accounting policies.

No adjustments have been made for inflationary factors affecting the account.

The said Account is prepared in Sri Lankan Rupees (Rs.)

1.1.3 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.

1.1.4 Property Plant and Equipment

1.1.4.1 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 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 .



1.1.4.2 Depreciation

Provision for Depreciation is calculated by using the straight line method on cost of revaluation of all Property Plant and equipment in order to write off such amount over the estimated useful economic life of such asset.

Asset Category

Motor Vehicle	Over 04 Years
Office Equipment	Over 04 Years
Furniture	Over 10 Years
Laboratory Equipment	Over 10 Years
Building	Over 40 Years

1.1.5 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.

The balance number of Compost bins and the separation bins value has been adjusted for the Final Account at the end of the year of the Project.

Available balance at the end of year of Promotional items such as Pilisaru Caps, T-shirts and Cloth Bags also considered as closing Stocks.

1.1.6 Cash and Cash equivalents

For the purpose of Cash flow Statement cash and cash equivalents are defined as cash in hand and cash at bank.

1.1.7 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.



1.1.8 Terminal 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 in conformity with Sri Lanka Accounting Standard No; 16 –“Cost of Retiring Gratuity”

(b) Defined Contribution Plans –EPF and ETF

All employees who are eligible for defined Provident Fund Contributions and Employee Trust Fund Contribution are converted by relevant contributory funds in line with respective status

1.1.9 Deferred Revenue

1.1.9.1 Government Grants

Government Grant are credited to the Statement of Financial Performance 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.

1.5 Statement of Financial Performances

1.5.1 Revenue

a) Government Grants

Grants related to revenue nature recognized in the Statement of Financial Performance in which it is received as per the SLAS 24.

Income from Compost Bins

Income from compost bins have been recognized in cash basis at a deeply subsidies rate.

b) Non Refundable Deposits

Receipts from non refundable deposits have been considered as miscellaneous income and recognized on cash basis.

1.5.2 Expenditure

All expenditure incurred in the running of the Project and the marinating the Property Plant and Equipment in the Project of efficiency has been charged to statement of performance in arriving at the proper presentation of the Account.



1.6 Other Information

Staff:

There were 30 number of employees employed in the project at the end of the year 2012 including 04 numbers from the Central Environmental Authority.

Joint Project:

The KOICA Project which was continued as a joint project since 2009 with the Pilisaru project has been discontinued its operation with effect from 01.07.2012 and all adjustments relevant for the Capital Grant and the Non-Current Assets Accounts have been adjusted accordingly.

Pilisaru Project					
Statement of Financial Performance					
For the year 2012					
	Not e	2012		2011	
Revenue		-	-	-	-
Grants	1		220,960,000.00		486,200,000.00
Sales Proceeds from Compost Bins	2		4,488,817.97		8,645,737.50
MISL Income			261,618.21		-
Nonrefundable deposits	3		170,000.00		102,500.00
Deferred Revenue			10,308,234.63		15,682,013.11
			236,188,670.81		510,630,250.61
Expenses		-	-	-	-
Establishment of Mager Compost Plants	-	-		-	-
	-	-		-	-
Kolonnawa		301,572.54		64,810,561.09	
Kalutara Pohorawatta		1,047,561.87		19,895,100.43	
Hikkaduwa , Monoraviawatta		19,980,525.70		87,855,551.81	
Kurunegala,Sundarapola		22,861,335.32		75,116.16	
Anuradhapura, Nuwaragampalatha		2,154,847.96		13,533,107.88	
Medirigiriya, Polonnaruwa		-		68,118.43	
Gonadikawatta, Kandy		-		132,950.95	
Operating Cost for Major Compost Plants	4	6,161,683.84		5,974,918.59	
Improvements for Mager Composting Plants		1,086,312.51			



Pilisar Project					
Statement of Financial Performance					
For the year 2012					
Planning and Design Of Major Composting Plant		1,703,346.10	55,297,185.84	-	192,345,425.34
<u>Establishment of Landfill Sites & Transfer Stations</u>					
Planning, design and implementation of landfills at selected locations		-		4,564,976.99	
Waste Management Improvement Programme in Matara		4,255,164.23	4,255,164.23	7,235,528.89	11,800,505.88
<u>Small Scale Composting Plants & Facilitation of SWM Programmes</u>					
Small Scale Compost Plants for Local Authorities	5	77,341,133.04		29,845,603.14	
O& M and Improvements for Small Scale Compost Plants		1,645,089.35		718,943.56	
Monitoring of Operations of Compost Plants established by Pilisar Project		137,083.11		130,618.99	
Bio Gas Plants for Local Authorities, Hospitals, Military Camps Government Institutions		1,191,629.80		12,488,434.13	
Management of E-waste, Biomedical-Healthcare Waste, Chemical Waste		162,798.50		4,395,479.62	
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		31,519,722.92	
Supply of Waste Collection & Transport Vehicles and Land filling equipments/ Machineries		158,041,852.04		19,435,582.18	
Waste Management Promotional Activities		17,744,815.82		20,810,203.65	
Establishment of SWM Projects by National SWM Supporting Center				14,405,855.37	
Deyata Kirula National Development exhibition		2,491,024.06		75,559,706.63	
Monitoring of ground and surface water quality in relation to waste management				223,051.00	
Development of GIS data base on Solid Waste Management		1,769,636.80		3,630,004.04	
Land fill site Gas Monitoring		-		4,208,400.00	
Improved Waste Management in schools through Strengthening of environmental pioneer programme		14,416,876.65			
National approach for recognition of waste minimisation/management programme for government/private sector establishments and entrepreneurs		5,025,000.00		3,383,896.61	



Pilisar Project					
Statement of Financial Performance					
For the year 2012					
Provide Marketing Opportunities for compost/establish quality control standards/facilitate standards of compost		43,470.00		16,052.00	
Research & Development				535,500.00	
Trainig on operational & maintenace for stakeholders of large and medium scale composting land filling, awareness and education in ISWM for all stakeholders/Trainnig Capacity		901,893.13		3,455,806.48	
Estalishmment of SWM Trainig Center in Kandy		570,772.28	302,556,118.79	521,053.50	225,283,913.82
-	-	-	-	-	-
<u>KOIKA Expenses</u>					
Administrative Measures				27,389.82	
Measures Of Construction of Landfill				18,757,204.43	
Project Operation & Maintenance				197,737.20	18,982,331.45
-	-	-	-	-	-
<u>Operating Expenses</u>					
Training and Capacity Building of project staff		-		-	
Transport (Fuel & maintenance)		4,314,404.83		3,301,705.33	
Office Supplies		2,002,498.96		1,317,123.16	
Salaries for Project Staff	6	20,111,113.59		19,671,372.96	
EPF		1,969,976.15		1,745,348.24	
ETF		492,493.91		440,652.35	
Over Time,Subsistance & Special Allowance		2,483,390.58		2,277,630.72	
Communication / postage		349,013.11		904,967.00	
Rentals		3,408,800.05		3,528,800.00	
Project Coordination, Management		204,066.00		128,603.75	
Bank Charges and Debit Tax		20,100.00		273,779.62	
Contingencies / Miscellaneous - Other		34,700.00		91,271.02	
Depreciation of non Current Assets	7	10,308,234.63		15,682,013.11	
Vehicle Services & Repair		2,383,072.50	48,081,864.31	2,487,159.19	51,850,426.45
Total Cost			410,190,333.17		500,262,602.94
Receipts over Expenses			(174,001,662.36)		10,367,647.67



Pilaru Project					
Statement of Financial Performance					
For the year 2012					
			236,188,670.81		510,630,250.61

Pilaru Project				
Statement of Financial Position				
as at 31st December 2012				
		Schedule	2012	2011
Asset				
-	-			
Non Current Assets		1	5,544,525.94	24,040,774.89
	-	-	5,544,525.94	24,040,774.89
-	-			
Current Assets				
Bank Balance			12,376,929.24	11,354,244.81
Cash Imprest			30,000.00	-
Consumable Stock		2	460,170.50	2,004,689.50
Prepayment		3	191,202.84	827,830.80
Advance receivable		4	680,000.00	922,224.99
Mobilisation Advance		5	45,627,495.09	37,665,076.68
Receivable -CEA		6	33,404.93	-
Receivable		7	200,000.00	100,000.00
				-
	-		59,599,202.60	52,874,066.78
	-		-	
Total Assets			65,143,728.54	76,914,841.67
Liabilities				
Accrued Expenses		8	191,887,664.83	21,478,139.58
Retention Payable		9	19,982,460.20	15,850,789.36
Gratuity Payable		10	814,769.95	783,195.00



Pilisar Project				
Statement of Financial Position				
as at 31st December 2012				
Payables to CEA	11	4,535,655.30	-	
Payables to KOICA and EDCF	12	2,438,454.80		
Refundable Deposits	13	350,000.00	300,000.00	
Total Current Asstes		220,009,005.08	38,412,123.94	
<u>Net Asset</u>		(154,865,276.54)	38,502,717.73	
Capital Grant and Surplus	14	(154,865,276.54)	38,502,717.73	
		(154,865,276.54)	38,502,717.73	

<u>Schedules for Position Statement as at 31.12.2012</u>									
Schedule 01									
Non Current Assets									
Asset Category	Balance as at 01.01.2012	Additions During the Year	Disposals During the year	Balance as at 31.12.2012	Cumulative depreciation as at 01.01.2012	Depreciation for the year 2012	Depreciation on Disposal	Cumulative Depreciation as at 31.12.2012	Net Value
Motor Vehicle	51,406,752.00	-	30,606,752.00	20,800,000.00	34,100,066.34	7,450,744.42	21,231,495.69	20,319,315.07	480,684.93
Furniture	2,737,843.50	-	-	2,737,843.50	767,429.55	273,784.35		1,041,213.90	1,696,629.60
Buildings (Garage)	1,500,000.00	-		1,500,000.00	74,265.82	37,500.00		111,765.82	1,388,234.18
Equipment	9,120,805.78	1,187,242.00	-	10,308,047.78	6,505,103.42	2,459,968.40		8,965,071.82	1,342,975.96
Laboratory Equipment	862,374.60	-	-	862,374.60	140,135.87	86,237.46		226,373.33	636,001.27
	65,627,775.88	1,187,242.00	30,606,752.00	36,208,265.88	41,587,001.00	10,308,234.63	21,231,495.69	30,663,739.94	5,544,525.94
		Note 03				Note 02			



Note 01			
Following vehicles have been transferred to the EDCF and KOICA Projects.			
Vehicle No;	Cost	Date of Transfer	Cummulative Depreciation as at the date of Transfer
KH -8628	15,173,076.00	01.01.2012	9,405,228.62
NA-7310	15,433,676.00	01.08.2012	11,826,267.07
	30,606,752.00		21,231,495.69

Note 02	
Depreciation on Non-Current Aseets	
Motor Vehicles	7,450,744.42
Euipment	2,459,968.40
Furniture	273,784.35
Building	37,500.00
Laboratary Equipment	86,237.46
	10,308,234.63
(Refer Statement of Performance Note 07 -Calculation for depreciation for further details)	

Note 03					
Non-Current Assets Additions during the year					
Date	Description	Category	Nos	Amount	Total
03.02.2012	Hitachi LED TV	Office Equipment	1	199,999.00	199,999.00
03.02.2012	Ultra Tone System	Office Equipment	1	39,595.00	39,595.00
13.02.2012	Defender 1KV UPS	Office Equipment	31	4,480.00	138,880.00
15.05.2012	Payroll Package			55,000.00	55,000.00
24.07.2012	USB Pen Drives	Office Equipment	5	750.00	3,750.00
09.10.2012	Internet Dongles	Office Equipment	1	2,490.00	2,490.00
17.10.2012	Desktop Computers	Office Equipment	4	103,000.00	412,000.00
17.10.2012	UPS	Office Equipment	4	5,432.00	21,728.00



Note 03					
Non-Current Assets Additions during the year					
17.10.2012	Laptop computers	Office Equipment	2	122,900.00	245,800.00
17.10.2012	Laser Printers	Office Equipment	1	68,000.00	68,000.00
					1,187,242.00

Schedule 02			
Consumable Stocks			
Description	Quantity	Rate	Value Rs.
Compost Bins	3	2,550.00	7,650.00
Waste Collection Bins RPC	30	3,250.00	97,500.00
Cloth Bags	2473	140.00	346,220.00
T'Shirts	14	475.00	6,650.00
Pilisaru Caps	17	126.50	2,150.50
Total			460,170.50

Schedule 03		
Prepayments		
Description	Date	Amount
Sri Lanka Insurance	31.12.2012	191,202.84
(Insurance premium paid for 2013 for 8021 PB 7565 and KH 4484		
Total		191,202.84

Schedule 04					
Current Assets-Advance Receivable					
Description	Date	Advance No;	Cheque No,	Amount Rs.	Subsequent Settlement
Chairman-CEA	28.12.2012	P/T/12/28	237470	5,000.00	02.01.2013
Department of Local Government	02.11.2012	P/C/12/20	237345	500,000.00	16.01.2013
Divisional Secretariat-Pannala	25.10.2012	P/C/12/19	237328	175,000.00	06.02.2013
				680,000.00	



<u>Schedule 05</u>		
Mobilization Advances-Recoverable Amount		
Major Projects	Rs.	Rs.
Hikkaduwa-Road Construction	3,719,043.52	
Kurunegala -Major Site	10,317,833.38	
Bio Gass Plants -Isuru Engineers	1,000,000.00	15,036,876.90
Mini Projects Local Authorities		
Bandarawela UC	-	
Boralesgamuwa UC(Sampathpiysa)	326,906.64	
Thissamaharama	860,675.88	
Kegalle UC	311,364.77	
Elpitiya PS	300,000.00	
Kelaniya PS	1,250,627.43	
Mawathagama PS	728,418.92	
Mahawa PS	309,690.60	
Nikaweratiya PS	244,916.65	
Thanamalwila PS	360,301.25	
Thanamalwila PS/Sevanagala	519,164.44	
Galenbindunuwewa Pradeshiya Sabha	1,280,662.97	
Ipalogama Pradeshiya Sabha	241,693.48	
Kahatagasdigiliya Pradeshiya Sabha	1,299,527.68	
Medawachchiya Pradeshiya Sabha	519,811.07	
Rambewa Pradeshiya Sabha	1,299,527.68	
Thirappane Pradeshiya Sabha	1,114,405.12	
Alawwa Pradeshiya Sabha	651,651.49	
Chavakachcheri Urban Council	1,042,886.60	
Hambantota Pradeshiya Sabha	512,638.94	
Ja-Ela Urban Council	1,576,525.52	
Malimbada Pradeshiya Sabha	734,147.64	
Polpithigama Pradeshiya Sabha	398,169.30	



Ruwanwella Pradeshiya Sabha	1,043,984.58	
Wanathavilluwa Pradeshiya Sabha	668,678.35	
Padaviya PS	1,037,709.76	
Thalawa PS	864,110.22	
Thalawa PS - Thambuttegama	1,003,849.34	
Bulathkohupitiya PS	566,663.29	
Puttalam PS	1,477,875.47	
Ukuwela PS	687,831.11	
Mahaoya PS	945,545.04	
Padiyatalawa PS	914,532.28	
Damana PS	743,069.80	
Armoured Corps Training Institute, Galkulama	103,582.42	
CDF Camp-Galkiriyagama	51,353.97	
Sri Lanka Air Force - Katunayake	1,302,757.55	
SLAF Diyathalawa	504,751.00	
Kaththankudi	1,669,226.50	
Chawakachcheri	1,121,383.44	
		30,590,618.19
		45,627,495.09

<u>Schedule 6</u>		
<u>Receivable from CEA</u>		
Payee/Client	Amount	Subsequent date of settlement
Receivable Kalutara Divisional Office	4,071.00	02.02.2013
Receivable Gampaha Divisional Office	16,012.18	02.01.2013
EPP Commissioner	1,816.00	18.01.2013
Key Duty	11,505.75	to be deducted from outstanding rent
	33,404.93	



<u>Schedule 07</u>	
Receivables	
Description	Amount Rs.
Fuel Deposit -Nadeesha Travel	200,000.00
	200,000.00

<u>Schedule 09</u>		
Retention Payable		
Description	Amount Rs	Amount Rs
Retention Payable- 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	
Hikkaduwa Compost-G.G.C International	2,485,810.66	
Mini Land Fill- Matara	732,442.64	
Kalutara-Waste Management Authority -Renovation	5,776.50	
Kurunegala Mager Composting Site-Theshan Engineers	1,920,455.71	
		10,376,401.21
Retention Payable- Mini Construction projects		
Local Authority		
Bandarawela UC	409,528.92	
Rajgama PS	14,364.71	
Attanagalla PS	270,305.36	
Bulathsinghala PS	235,409.04	
Horana PS	224,267.00	
Kegalle UC	130,280.32	
Kirinda-Pohulwella PS	281,519.59	
Hali-Ela PS	324,927.70	
Karadeniya PS	54,488.04	



Niyagama PS	60,082.77	
Baddegama PS	35,789.48	
Elpitiya PS	105,812.34	
Mathugama PS	100,221.23	
Akurana PS	253,441.14	
Pathahewaheta PS	207,237.88	
Polgahawela PS	332,523.99	
Matale MC	193,049.61	
Rattota PS	154,987.17	
Seethawaka PS	64,300.11	
Mirigama PS	345,283.22	
Kelaniya PS	694,793.01	
Beliatta PS	270,649.68	
Udubaddawa PS Collecting Centre	22,584.81	
Galgamuwa PS	290,155.95	
Mulatiyana PS	112,400.48	
Ambalantota PS	51,362.44	
Mawathagama PS	197,445.20	
Rideegama PS	201,726.55	
Mahawa PS	193,556.63	
Nikaweratiya PS	82,711.55	
Ambagamuwa PS	229,461.86	
Anamaduwa PS	94,751.82	
Nivithigala PS (SWMCollect Centre)	132,125.59	
Kuruwita PS (SWMCollect Centre)	146,627.35	
Galnewa Pradeshiya Sabha	264,762.30	
Ipalogama Pradeshiya Sabha	302,116.85	
Medawachchiya Pradeshiya Sabha	309,339.59	
Rajanganaya Pradeshiya Sabha	264,762.30	
Alawwa Pradeshiya Sabha	189,707.49	
Chavakachcheri Urban Council	49,354.00	



Ja-Ela Urban Council	87,559.85	
Malimbada Pradeshiya Sabha	200,347.96	
Polpithigama Pradeshiya Sabha	136,813.10	
Wanathavilluwa Pradeshiya Sabha	48,825.44	
Weeraketiya Pradeshiya Sabha	111,067.40	
Padaviya PS	169,807.10	
Thalawa PS	126,681.54	
Thalawa PS - Thambuttegama	36,728.06	
Bulathkohupitiya PS	54,843.53	
Armoured Corps Training Institute, Galkulama	86,318.69	
Sri Lanka Navy- DAKSHINA Galle	10,331.00	
CDF Camp-Galkiriyagama	44,867.15	
6th Bn Sri Lanka Light Infantry Army Camp Mahakanadarawa (2011)	92,369.77	
Royal College	103,561.19	
Kelaniya University - Faculty of Medicine Ragama (2011)	67,156.28	
kakathivu	63,604.73	
JKDU	51,566.15	
Gampaha 1	15,698.50	
Gampaha 2	199,696.50	
		9,606,059.01
		19,982,460.20

Schedule 10					
Gratuity Provision as at 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 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
					814,769.95
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.					

**Schedule 11****Payable to Central Environmental Authority.**

Description	Date of Bill	Amount	Date of Subsequent Payment
National Green Award	03.12.2012	3,000,000.00	13.02.2013 (Rs. 2,000,000)
Building Rent Rent Oct -Nov Dec -2012	31.12.2012	772,200.00	
National Camp Randenigala(Jambori)		509,342.00	
Staff Salaries December 2013	25.12.2012	254,113.30	
		4,535,655.30	

Schedule 12**Payable to EDCF Project**

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
		2,438,454.80

Schedule 13**Refundable deposits- as at 31.12.2012**

Date	Name	Receipt No;	Amount
18.08.2010	Wemara Construction(Pvt)Ltd.	61022	10,000.00
20.08.2010	ST.Mary's construction	61003	10,000.00
23.08.2010	Chaminda Construction	61009	10,000.00
23.08.2010	Panthila Civil Engineering	61010	10,000.00
23.08.2010	Furni Dianamic Engineering (Pvt)Ltd.	61012	10,000.00
23.08.2010	Gamini Construction	61015	10,000.00
25.08.2010	Sooriya Builders	61019	10,000.00
25.08.2010	Sumanasekera Construction	61021	10,000.00
26.08.2010	Star Constructionand Engineers (Pvt)	61025	10,000.00
27.08.2010	Isuru EngineeringServices (Pvt)Ltd.	61033	10,000.00
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	Statte 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	Asselaarachchi 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	Asselaarachchi 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
			350,000.00

<u>Schedule 14</u>		
Capital Grant	<u>2012</u>	<u>2011</u>
Capital Grant	8,760,125.67	28,126,457.58
Surplus 2009	8,102.08	8,102.08
Surplus 2010	510.40	510.40
Surplus 2011	10,367,647.67	10,367,647.67
Surplus 2012	(174,001,662.36)	-
	(154,865,276.54)	38,502,717.73

Notes to the Statement of Performance as
at 31.12.2012



Note 01	
Grant in the year of 2012	Pilisaru
Received Grants	220,960,000.00
	220,960,000.00

Note 02	
Compost Bin Income	Rs.
Pradeshiya Sabha -Udubeddawa	45,000.13
Pradeshiya Sabha -Jaela	900,005.00
Plastic Project-CEA	3,249,993.60
Compost bin Income Collection- CEA	293,819.24
	4,488,817.97

Note 03			
Non- Refundable deposits- 2012			
Name	Date	Receipt No;	Amount
Aselaarchchi Construction (pvt)Ltd	04/19/2012	63173	7,500.00
Teshan Engineering (Pvt) Ltd	04/20/2012	63175	7,500.00
R H Steel Building Systems	04/24/2012	63181	7,500.00
R E Weerakoon Company	04/25/2012	63183	7,500.00
Regal Motors (Pvt) Ltd	05/08/2012	63190	2,500.00
ATSL International (Pvt) Ltd	05/09/2012	63193	7,500.00
Micro Cars Ltd	05/09/2012	63191	2,500.00
General Seles Company (Pvt) Ltd	05/09/2012	63194	2,500.00
CIC Agri Biotech (Pvt) Ltd	05/09/2012	63195	2,500.00
United Tractor & Equipment (Pvt) Ltd	05/09/2012	63196	2,500.00
Hovael Holdings (Pvt) Ltd	05/09/2012	63197	2,500.00
Diesel & Motor Engineering PLC	05/10/2012	63198	2,500.00
Brown & Company PLC	05/10/2012	63200	2,500.00



Dax Engineering Co., (Pvt) Ltd	05/10/2012	63501	2,500.00
Brown & Company PLC	05/10/2012	63502	2,500.00
Senok Trade Colombo (Pvt) Ltd	05/11/2012	63504	2,500.00
Wimal Engineering (Pvt) Ltd	05/11/2012	63505	2,500.00
Wimal Agro Tractors (Pvt) Ltd	05/11/2012	63506	2,500.00
Solex Engineering (Pvt) Ltd	05/11/2012	63507	2,500.00
Hayleys Agriculture Holidays Ltd	05/14/2012	63509	2,500.00
Formers (Pvt) Ltd	05/14/2012	63510	2,500.00
Accey Industrial Systems (Pvt) Ltd	05/14/2012	63511	2,500.00
Mecfab Engineering Company	05/14/2012	63513	2,500.00
S T C General Corporation	05/16/2012	63514	2,500.00
Sathosa Motors PLC	05/16/2012	63515	2,500.00
Sumudu Engineering Works	05/16/2012	63517	2,500.00
United Motors Lanka PLC	05/18/2012	63518	2,500.00
Jinasena (pvt)Ltd	05/18/2012	63519	2,500.00
Samarakoon Tractor Industry	05/18/2012	63521	2,500.00
Charles Sons Ltd	05/23/2012	63522	2,500.00
Solex Technologies (Pvt) Ltd	05/23/2012	63525	2,500.00
Machine Impex (Pvt) Ltd	05/25/2012	63527	2,500.00
Associated Motorways (pvt)Ltd	05/28/2012	63529	2,500.00
Fashion Holdings (pvt) Ltd	05/30/2012	63530	2,000.00
Weighironioco Leoli (Pvt) Ltd	06/01/2012	63532	2,000.00
A T A International (Pvt) Ltd	06/01/2012	63533	2,000.00
Weigh Right (Pvt) Ltd	06/06/2012	63535	2,000.00
Ceylon Weight Machine Center	06/12/2012	63540	2,000.00
Neil Merine Plastic (Pvt) Ltd	07/19/2012	63560	2,500.00
Watergate Trading Company	07/24/2012	63561	2,500.00
Watergate Trading Company	07/24/2012	63562	3,000.00
Media Max Solution (Pvt) Ltd	07/27/2012	63564	2,000.00
DAD Engineering (Pvt) Ltd	07/30/2012	63568	2,000.00
Premium International (Pvt) Ltd	07/30/2012	63571	2,500.00
Premium International (Pvt) Ltd	07/30/2012	63572	2,000.00
Premium International (Pvt) Ltd	07/30/2012	63573	3,000.00
R P C Polymers (Pvt) Ltd	07/30/2012	63575	3,000.00
R P C Polymers (Pvt) Ltd	07/30/2012	63574	2,500.00
Wayamba Polymers (Pvt) Ltd	07/31/2012	63577	3,000.00



Walagamba primary Collage	07/31/2012	63578	2,500.00
Sashiro International	08/03/2012	63581	2,000.00
Atula plastic Company	08/07/2012	63583	2,000.00
R N Media (Pvt) Ltd	08/09/2012	63585	2,000.00
Pioneer Business Solutions(pvt)Ltd	08/09/2012	63586	2,000.00
Timex Laminating	08/10/2012	63587	2,000.00
good Vision	08/10/2012	63588	2,000.00
Digital Sign Advertising	08/10/2012	63589	2,000.00
United Motors Lanka PLC	09/25/2012	63603	2,000.00
Indra Traders (Pvt) Ltd	09/25/2012	63656	2,000.00
Diesel & Motor Engineering PLC	09/27/2012	63657	2,000.00
Associated Motorways (pvt)Ltd	10/03/2012	63661	2,000.00
Total			170,000.00

Note 04

Operation & Management Cost for Major Compost Plant	
Actual Payments as at 31.12.2012	3,226,134.68
Payable Amount	2,935,549.16
	6,161,683.84

Note 05

Small scale Compost Plants for Local Authorities	
Actual Payments as at 31.12.2012	73,334,616.07
Payable Amount of Retention	4,006,516.97
	77,341,133.04

Note 06

Salaries for the Project Staff	2012
Salary	19,897,820.64
Patee Tax	175,343.00
Gratuity Provision	31,574.95



Stamp Duty	6,375.00
	20,111,113.59

Note 07					
Calculation for Depreciation					
	Opening Balance	Rate	Depreciation on opening balance 2012	Depreciation on additions /transferred 2012	Total Depreciation for 2012
Motor Vehicle	20,800,000.00	25%	5,200,000.00	2,250,744.42	7,450,744.42
Furniture	2,737,843.50	10%	273,784.35		273,784.35
Buildings (Garage)	1,500,000.00	2.5%	37,500.00	-	37,500.00
Equipment	9,120,805.78	25%	2,280,201.45	179,766.96	2,459,968.40
Laboratry Equipment	862,374.60	10%	86,237.46	-	86,237.46
	35,021,023.88		7,877,723.26	2,430,511.38	10,308,234.63



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கணக்காய்வாளர் தலைமை அறிப்பித் திணைக்களம்
AUDITOR GENERAL'S DEPARTMENT



මගේ අංකය
எனது இல
My No

විවර්ණ/විද්‍යාල/විද්‍යා/2012

ඔබේ අංකය
உமது இல
Your No.

දිනය
திகதி
Date

2013 දෙසැම්බර් 31 දින

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මධ්‍යම පරිසර අධිකාරිය.



පිළිසරු ව්‍යාපෘතියේ 2012 දෙසැම්බර් 31 දිනෙන් අවසන් වර්ෂය සඳහා වූ මූල්‍ය ප්‍රකාශන පිළිබඳ විගණකාධිපති වාර්තාව

සමාංක සහ 2013 අගෝස්තු 30 දිනැති ලිපියට යොමු වේ.

02. ඉහත ලිපිය සමඟ එවන ලද මාගේ වාර්තාවේ ඉංග්‍රීසි අනුවාදය මේ සමඟ එවා ඇත.

Shafika
P. J. S. S. S.
 වි.වි.වි.වි. සමරවිට
 විගණකාධිපති

D/Finance
[Signature]
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 මධ්‍යම පරිසර අධිකාරිය

- පිටපත්:-
1. ලේකම්, පරිසර හා පුනර්ජනනීය බලශක්ති අමාත්‍යාංශය
 2. ලේකම්, මුදල් හා කුම සම්පාදන අමාත්‍යාංශය

Project Director p.l.san
[Signature]

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கணக்காய்வாளர் தலைமை அபிபதி திணைக்களம்
AUDITOR GENERAL'S DEPARTMENT



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எனது இல } TM/L/Pilisaru/FA/2012
My No }

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உமது இல }
Your No. }

දිනය }
திகதி } 30 August 2013
Date }

Chairman,
Central Environmental Authority.

Report of the Auditor General on the Financial Statements of Pilisaru Project for the year ended 31 December 2012

The audit of financial statements of the Pilisaru Project for the year ended 31 December 2012 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 through Pilisaru Project Division established in the Central Environmental Authority and the Project is executed by the Ministry of Environment and Renewable Energy.

The main objectives are the ensuring of conservation of resources and solid waste management, developing the knowledge and skills of persons regarding solid waste management, implementation of solid waste management projects, monitoring of programmes, providing facilities, providing necessary financial allocations, establishing a solid waste recycling banking system and taking legal action regarding the local authorities which do not manage solid wastes properly.

According to the financial plan for 6 years, the total allocation is Rs. 5.6 billion. Of this, it was expected to obtain Rs. 2.675 billion from the General Treasury and Rs. 3 billion from "Green Levy" introduced in the Budget 2008.

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According to the Project Proposal, although Pilisaru Project was decided to be commenced on 01 January 2008 and completed by 31 December 2011, as the Project could not be completed within the prescribed period, it was recommended by the Cabinet Paper No. 10/1905/432/008 and Cabinet Memorandum 10/2010 to extend the Project for a period of 03 years from 01 January 2011 and to arrange for the provisions necessary to implement the Project within next three years (2008 -2010) within the limit of approved provision amounting to Rs. 5.6 billion. According to the Action Plan for the year 2012 the estimated cost of the Project was Rs. 600,000,000.

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 review 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 presentation. 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 included such tests 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 on a continuing basis to show the expenditure of the Project from the funds of the Government of Sri Lanka, the progress of the Project in financial and physical terms, the assets and liabilities arising from the operations of the Project 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, and
- (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 year ended 31 December 2012 and the financial statements give a true and fair view of the state of affairs of the Project as at 31 December 2012 in accordance with Generally Accepted Accounting Principles,
- (b) the funds provided had been utilized for the purposes for which they were provided, and
- (c) satisfactory measures had been taken by the management to rectify the issues highlighted in my previous year audit report.

4. Financial Statements

4.1 Financial Performance

According to the financial statements, a summary of the expenditure of the Project for the year under review amounting to Rs. 399,882,098, expenditure for the previous year amounting to Rs. 484,580,589 and the cumulative expenditure as at 31 December 2012 amounting to Rs. 884,462,687 is shown below.

Item	Expenditure for the year 2012	Expenditure for the year 2011	Cumulative expenditure as at 31 December 2012
	Rs.	Rs.	Rs.
i. Construction of Compost yards	55,297,185	192,345,425	247,642,610
ii. Construction of Landfills	4,255,164	11,800,505	16,055,669
iii. Small scale compost yards and domestic compost bins	302,556,119	225,283,914	527,840,033



iv.	Transport(Fuel and maintenance)	4,059,468	2,765,910	6,825,378
v.	Supply of office Stationer	2,002,499	1,317,123	3,319,622
vi.	Salaries	22,573,584	21,857,374	44,430,958
vii.	Postal and Communication	349,013	904,967	1,253,980
viii.	Coordination and Management of Projects	204,066	128,604	332,670
ix.	Office Rent Office Expenditure	3,408,800	3,528,800	6,937,600
x.	Overtime	2,483,391	2,277,631	4,761,022
xi.	Bank Charges and Debit Tax	20,100	273,780	293,880
xii.	Expenditure relating to the Korean International Cooperation Agency (KOICA expenses)	-	18,982,331	18,982,331
xiii.	Insurance	254,937	535,795	790,732
xiv.	Service and repairs of Vehicles	2,383,072	2,487,159	4,870,231
xv.	Miscellaneous	34,700	91,271	125,971
		-----	-----	-----
		399,882,098	484,580,589	884,462,687
		=====	=====	=====



5. Audit Observations

5.1 Accounting Deficiencies

Following observations are made.

- (a) Unsettled mobilisation advances amounting to Rs. 6,367,019 as at 31 December 2012 had not been shown in the financial statements.
- (b) Although a sum of Rs. 3,000,000 had been shown as payable to the Green Award Ceremony of the Central Environmental Authority in the financial statements of the Project, a sum of Rs. 4,375,000 had been shown in the financial statements of the Authority as receivable from the Project. Action had not been taken to identify and adjust the difference accordingly.

5.2 Non compliance with Laws, Rules, Regulations and Management Decisions

Following non compliances were observed.

Reference to Laws, Rules, Regulations etc;	Non compliance
(a) Financial Regulations 103(ii) (f), 104(i) and 105(i)	Losses amounting to Rs. 6,050,000 caused to a vehicle had not been recovered from the officers responsible.
(b) Public Finance Circular No. PF/429 dated 19 March 2008 and Guideline No. 5.4.4(1) of the Procurement Guidelines of the Democratic Socialist Republic of Sri Lanka	Although a maximum of 20 per cent of the contract sum could be paid as mobilization advance, 30 per cent or Rs. 6,812,874 had been paid as advances for 03 small scale compost projects.



- (c) Public Administration Circular
No.13/2008 dated 26 June 2008

(i) Paragraph 04

Although an assigned vehicle had been provided for the Project Director, pool vehicles had been used by him in 36 instances.

(ii) Paragraph 07

Six officers had travelled from Office to residence exceeding the limit of 50 kilometers.

- (d) Public Administration circular
No.41/90 dated 10 October 1990

Although the fuel consumption of vehicles should be tested once in 06 months, it was not done so.

- (e) Public Enterprises circular
No.118 (a) dated 23 May 1997
and Section 10 of Chapter VIII
of the Establishments Code.

Although the 1/20 allowance for being engaged in duty on Public Holidays is entitled for only one day per month, contrary to this a sum of Rs. 260,896 had been overpaid to 9 officers for 03 days in a month.

5.3 A sum of Rs. 19,466,819 had been spent for Central Environmental Authority extraneous to the objectives of the Project out of the funds received for the Pilisaru Project without the approval of the Secretary to the Ministry.

5.4 The Project had owned 4 vehicles and a sum of Rs. 1,737,255 had been spent on hire of vehicles during the year 2012. This was 40 per cent of the expenditure on fuel and maintenance for the year .



5.5 Idle and Underutilised Assets

(a) Projects not commenced

Pradeshiya Sabha / Urban Council to whom advances had been granted	Advance granted	Idle period	Others
-----	-----	-----	-----
	Rs.		
Kalawana Pradeshiya Sabha	903,180	3 years and 2 months	Project not commenced
Elpitiya Pradeshiya Sabha	15,252,311	3 years and 3 months	Project not commenced
Galenbindunuweva Pradeshiya Sabha	1,280,663	2 years	Project not commenced as the properties of the Pradeshiya Sabha had been prohibited.

(b) Delayed Projects

Local Authority	Estimated Amount	Amount paid as at 31 December 2012	Date of completion of work as per agreement	Period of delay as at 31 December 2012
	Rs.	Rs.		
Kelaniya Pradeshiya Sabha	13,895,860	9,750,216	31 January 2011	One year and 11 months
Mawathagama Pradeshiya Sabha	6,070,157	1,214,031	04 April 2011	One year and 8 months
Kattankudy Urban Council	8,346,132	1,669,226	29 May 2012	7 months
Nikawaratiya Pradeshiya Sabha	2,465,256	989,320	04 April 2012	8 months
Total	30,777,405	13,622,793		

5.6 Cadre Management

Following observations are made.

- (a) According to the financial statements, the total expenditure incurred on staff amounted to Rs. 25,056,974 and it was 52 percent of the total operational expenditure.



- (b) When the recruitments were made to the posts of Senior Engineer and the Deputy Manager (Public Relations) of the Project, officers who do not have qualifications required for the posts had been recruited and a sum of Rs. 6,403,600 had been paid as salaries and allowances from the year 2008 to 2012. Further, as the Senior Engineer did not have necessary qualifications and experience on designing and planning regarding construction contracts, Rs. 6,957,514 had to be spent to obtain consultancy service on designing and planning from external parties when constructing large scale compost yards.

5.7 Fulfilment of Environmental and Social Responsibilities

A sum of Rs. 180.35 million had been spent by the Pilisaru Project on the awareness programmes from the year 2008 to 2012 regarding the separation of domestic garbage. Further, 13 carrier belt systems had been purchased by spending Rs. 16.14 million for the separation of garbage. Further, these carrier belt systems had not been implemented in the large scale compost yards of Kolonnawa, Pothuvilkumbura, Kalutara Poharawatha and Hikkaduwa Mon-Roviawaththa.

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	(Million)	(Million)	(Million)	(Million)	(Million)	(Million)
Amount spent on supply of separated garbage bins (according to the information furnished)	16.80	40.80	12.75	19.43	5.30	95.08
Awareness Programmes	<u>0.72</u>	<u>10.94</u>	<u>35.06</u>	<u>20.81</u>	<u>17.74</u>	<u>85.27</u>
	17.52	51.74	47.81	40.24	23.04	180.35
	=====	=====	=====	=====	=====	=====



6. Physical Performance

6.1 Operational Inefficiencies

Following observations are made.

- (a) Five large scale compost yards had been constructed spending Rs. 415,177,352 by Pilisaru Project during the period 2008-2013 in Kolonnawa, Hikkaduwa Mon-Roviawatta, Anuradhapura Nuwaragampalatha, Kalutara Poharawatta and Medirigiriya Yudaganawa. It had been planned to manage 35-50 Metric Tons of garbage daily in a large scale compost yard. However, at the time of physical verification 10 tractor loads of garbage at Hikkaduwa compost yard, 10-15 Metric Tons of garbage at Kolonnawa Pothuvilkumbura compost yard and 30 Metric Tons of garbage at Kalutara Poharawatta compost yard had been received daily. Accordingly, it was observed that garbage necessary to the capacity of the compost yard had not been received as planned.
- (b) Following observations are made regarding compost yards.
 - (i) Hikkaduwa Monroviawaththa compost yard
 - About 10 tractor loads of categorized garbage were being received to the yard. Further, as about 10 tractor loads of uncategorized garbage had been dumped separately without being managed, it had caused environmental pollution.
 - Although it was planned to receive garbage to the compost yard from 7 Local Authorities, the garbage from only 3 Local Authorities had been received.
 - Electricity connection had not been obtained for the water motor up to 31 December 2012. Due to water leakage from roof and gutters the activities of the yard could not be properly carried out.



- Since the estimated quantity of garbage had not been received to Hikkaduwa compost yard, compost had not been produced as intended even up to 31 December 2012 and 2 huller machines and a bobcat machine had been idling.
- (ii) Kolonnawa Pothuvilkumbura compost yard
- Since the garbage received from Sedawatta and Orugodawatta areas had not been separated these garbage had been dumped in the neighbouring Colombo garbage sites without taking into the yard.
 - The garbage about 800 metric tons collected daily by the Colombo Municipal Council had been dumped in open space and due to this net fence constructed around the compost yard spending Rs. 769,557 and the road provided for the arrival of garbage lorries had been disturbed.
 - Although 03 carrier belt systems had been fixed for the Kolonnawa compost yard spending Rs. 3,723,711, the carrier belts had become inoperative. The Project Engineer had certified that these 03 carrier belt systems had been properly fixed and functioning and the payments had been made. But these had become inoperative within a short period of 2 ½ months.
- (iii) Although a sum of Rs. 38,555,020 had been spent on awareness programmes during the years 2011 and 2012, it was observed in the examination of the compost yards that the tendency of public to separate and dispose of the garbage was very weak.

H.A.S. Samaraweera

Auditor General