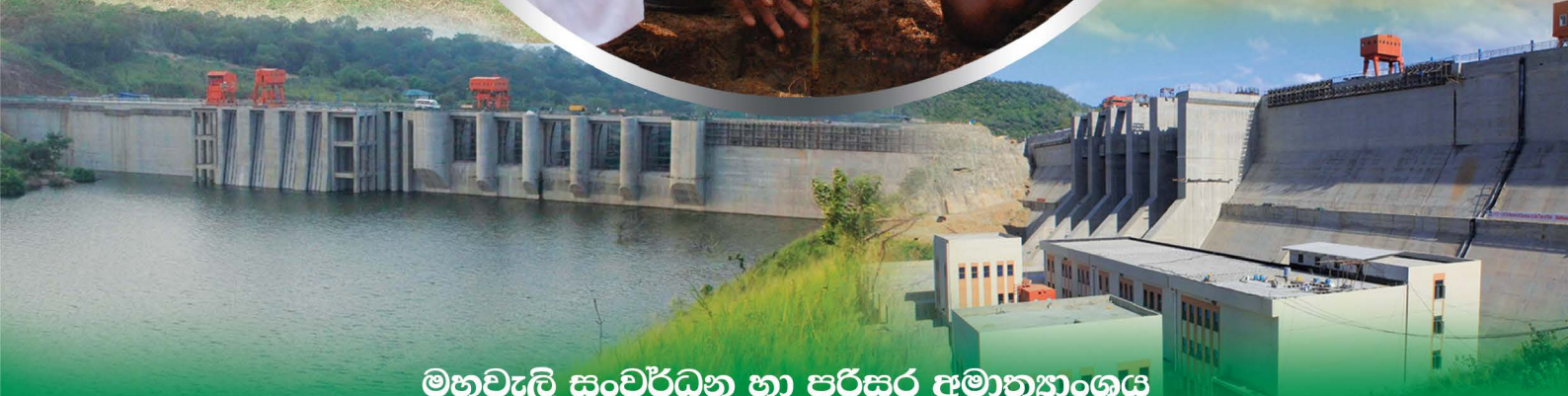




லாபீகை கார்டு காதல லாபால னா டீனூதி
ANNUAL PERFORMANCE REPORT & ACCOUNTS
வருடாந்த ஸெயற் திறன் அறிக்கை மற்றும் கணக்குகள்

2016



ஹலாஹி கலாபீரலன னா ஸரீகர அலாநகாண்டை
Ministry of Mahaweli Development and Environment
மகாவலி அபிவிருத்தி மற்றும் சுற்றாடல் அமைச்சு



ANNUAL PERFORMANCE REPORT & ACCOUNTS 2016

*Ministry of Mahaweli Development and Environment
Sri Lanka*

MAJOR FUNCTIONS OF THE MINISTRY

- 1. Formulation of policies, programmes and projects, monitoring and evaluation in regard to subjects of Mahaweli development and environment and those subjects that come under the purview of Departments, Statutory Institutions and Public Corporations listed in Column II*
- 2. Implementation of Mahaweli development programmes*
- 3. Activities under the purview of the Mahaweli Authority Act and activities related to agencies established under the Act*
- 4. Adoption of necessary measures for the development of national and international cooperation in relation to protection of environment for the present and future generations*
- 5. Contribute towards sustainable development*
- 6. Formulation of policies and plans in respect of environmental conservation and management*
- 7. Forests and Forestry matters*
- 8. Protection and conservation of forests, fauna and flora*
- 9. Promotion of commercial forestry aimed at meeting the country's timber requirement*
- 10. Formulation and effective implementation of programmes to combat environmental pollution*
- 11. Prevention of marine pollution*
- 12. Coast conservation and protection*
- 13. Regulation and promotion of the Gem and Jewellery industry and trade*
- 14. Matters relating to all other subjects assigned to Institutions listed in Column II*
- 15. Supervision of the Institutions listed in*

AGENCIES COMING UNDER THE PURVIEW OF THE MINISTRY

- Forest Department
- Department of Coast Conservation and Coastal Resource Management
- Central Environmental Authority
- Sri Lanka Mahaweli Authority
- Marine Environment Protection Authority
- National Gem & Jewellery Authority
- State Timber Corporation
- Geological Survey and Mines Bureau
- Central Engineering Consultancy Bureau
- Gem & Jewellery Research & Training Institute

MULTIPURPOSE DEVELOPMENT PROJECT

- Uma Oya Multipurpose Development Project
- Moragahakanda / Kaluganga Development Project
- Mahaweli Water Security Investment Programme

ABBREVIATIONS

<i>ABS</i>	-	<i>Access to Genetic Resources & Benefit Sharing</i>
<i>ADP</i>	-	<i>Ad Hoc Working Group on Durban Platform</i>
<i>AirMAC</i>	-	<i>Air Resource Management Center</i>
<i>APN</i>	-	<i>Asia Pacific Network for Global Change Research</i>
<i>BAQ</i>	-	<i>Better Air Quality</i>
<i>BES</i>	-	<i>Biodiversity and Ecosystem Services</i>
<i>BOBLME</i>	-	<i>Bay of Bengal Large Marine Ecosystem</i>
<i>BOI</i>	-	<i>Board of Investments</i>
<i>BRS</i>	-	<i>Basel Rotterdam Stockholm</i>
<i>BRT</i>	-	<i>Bus Rapid Transit</i>
<i>CBO</i>	-	<i>Community Based Organization</i>
<i>CDM</i>	-	<i>Clean Development Mechanism</i>
<i>CEA</i>	-	<i>Central Environmental Authority</i>
<i>CECB</i>	-	<i>Central Engineering Consultancy Bureau</i>
<i>CES</i>	-	<i>Center for Environmental Studies</i>
<i>CGTTI</i>	-	<i>Ceylon German Technical Training Institute</i>
<i>CLO</i>	-	<i>Crown Land Ordinance</i>
<i>CMR</i>	-	<i>Colombo Metropolitan Region</i>
<i>COP</i>	-	<i>Conference of Parties</i>
<i>CSIRO</i>	-	<i>Commonwealth Scientific and Industrial Research Organization</i>
<i>CVF</i>	-	<i>Climate Vulnerable Forum</i>
<i>CZMP -2016</i>	-	<i>Coastal Zone Management Plan- 2016</i>
<i>DHQC</i>	-	<i>Defense Headquarters Complex</i>
<i>DNA</i>	-	<i>Designated National Authority</i>
<i>DPMM</i>	-	<i>Department of Project Management and Monitoring</i>

<i>DPSU</i>	-	<i>Divisional Project Support Units</i>
<i>EAGSDL</i>	-	<i>Exploration and Assessment of Gem Deposits in Sri Lanka</i>
<i>EDM</i>	-	<i>Every Drop Matters</i>
<i>EIA</i>	-	<i>Environment Impact Assessment</i>
<i>EPA</i>	-	<i>Environment Protection Area</i>
<i>EPC</i>	-	<i>Environmental Pollution Control</i>
<i>EPL</i>	-	<i>Environment Protection License</i>
<i>EPP</i>	-	<i>Environmental Pioneer Programme</i>
<i>EPR</i>	-	<i>Extended Producer Responsibility</i>
<i>EPZ</i>	-	<i>Export Processing Zone</i>
<i>ER</i>	-	<i>Environmental Recommendations</i>
<i>ESM</i>	-	<i>Environmentally Sound Management</i>
<i>EUD</i>	-	<i>European Union Delegation</i>
<i>FD</i>	-	<i>Forest Department</i>
<i>FO</i>	-	<i>Forest Ordinance</i>
<i>FOs</i>	-	<i>Farmer Organizations</i>
<i>GEF</i>	-	<i>Grid Emission Factor</i>
<i>GEF</i>	-	<i>Global Environmental Facility</i>
<i>GJASL</i>	-	<i>Gem and Jewellery Association of Sri Lanka</i>
<i>GJRTI</i>	-	<i>Gem and Jewellery Research and Training Institute</i>
<i>GSMB</i>	-	<i>Geological Survey and Mines Bureau</i>
<i>GOSL</i>	-	<i>Government of Sri Lanka</i>
<i>GPS</i>	-	<i>Global Positioning System</i>
<i>GWP</i>	-	<i>Global Warming Potential</i>
<i>HCFCs</i>	-	<i>Hydrochlorofluorocarbons</i>
<i>HLP</i>	-	<i>Haritha Lanka Programme</i>
<i>HPMPs</i>	-	<i>HCFCs Phase-out Management Plans</i>

<i>IACCCC</i>	-	<i>Inter Agency Coordinating Committee meetings on Climate Change</i>
<i>IAEWG</i>	-	<i>Inter Agency Expert Working Group</i>
<i>IAS</i>	-	<i>Invasive Alien Species</i>
<i>IESPs</i>	-	<i>Integrated Environment Solution Plans</i>
<i>INDCs</i>	-	<i>Intended Nationally Determined Contributions</i>
<i>IOD</i>	-	<i>International Ozone Day</i>
<i>IPS</i>	-	<i>Institute of Policy Studies</i>
<i>ISEWP</i>	-	<i>Improving System Efficiencies and Water Productivity</i>
<i>ITI</i>	-	<i>Industrial Technology Institute</i>
<i>IUCN</i>	-	<i>International Union for Conservation</i>
<i>JICA</i>	-	<i>Japanese International Corporation Agency</i>
<i>KFAED</i>	-	<i>Kuwait Fund for Arab Development</i>
<i>KMTC</i>	-	<i>Kalu Ganga-Moragahakanda Transfer Canal</i>
<i>KOICA</i>	-	<i>Korean International Corporation Agency</i>
<i>KP</i>	-	<i>Kyoto Protocol</i>
<i>LA</i>	-	<i>Local Authorities</i>
<i>LBFP</i>	-	<i>Local Bank Funded Roads Rehabilitation Project</i>
<i>LMOs</i>	-	<i>Living Modified Organisms</i>
<i>M&E</i>	-	<i>Monitoring & Evaluation</i>
<i>MASL</i>	-	<i>Mahaweli Authority of Sri Lanka</i>
<i>MC</i>	-	<i>Municipal Council</i>
<i>MDP</i>	-	<i>Mahaweli Development Program</i>
<i>ME&RE</i>	-	<i>Ministry of Environment & Renewable Energy</i>
<i>MEAs</i>	-	<i>Multilateral Environmental Agreements</i>
<i>MEPA</i>	-	<i>Marine Environment Protection Authority</i>
<i>MFF</i>	-	<i>Multi-tranche Financing Facility</i>
<i>MLBCRP</i>	-	<i>Minipe Left Bank Canal Rehabilitation Project</i>

<i>MoE</i>	-	<i>Ministry of Environment</i>
<i>MOU</i>	-	<i>Memorandum of Understanding</i>
<i>MRB</i>	-	<i>Mahaweli River Basin</i>
<i>MTA</i>	-	<i>Material Transfer Agreement</i>
<i>MWSIP</i>	-	<i>Mahaweli Water Security Investment Programme</i>
<i>NAMAs</i>	-	<i>Nationally Appropriate Mitigation Actions</i>
<i>NAP</i>	-	<i>National Adaptation Plan</i>
<i>NAP</i>	-	<i>National Action Program</i>
<i>NAPHLP</i>	-	<i>National Action Plan for Haritha Lanka Programme</i>
<i>NCPCP</i>	-	<i>North Central Province Canal Program</i>
<i>NCSD</i>	-	<i>National Council for Sustainable Development</i>
<i>NEA</i>	-	<i>National Environmental Act</i>
<i>NEAP</i>	-	<i>National Environmental Action Plan</i>
<i>NECCCA</i>	-	<i>National Expert Committee on Climate Change Adaptation</i>
<i>NECCCM</i>	-	<i>National Expert Committee on Climate Change Mitigation</i>
<i>NEERI</i>	-	<i>National Environmental Engineering Research Institute</i>
<i>NGJA</i>	-	<i>National Gem and Jewellery Authority</i>
<i>NGO</i>	-	<i>Non Governmental Organization</i>
<i>NGRS</i>	-	<i>National Green Reporting System</i>
<i>NGRSSL</i>	-	<i>National Green Reporting System of Sri Lanka</i>
<i>NIP</i>	-	<i>National Implementation Plan</i>
<i>NOSCOP</i>	-	<i>National Oil Spill Contingency Plan</i>
<i>NOU</i>	-	<i>National Ozone Unit</i>
<i>NPC</i>	-	<i>National Project Coordinator</i>
<i>NPDIC</i>	-	<i>National Poison and Drug Information Centre</i>
<i>NPSC</i>	-	<i>National Policy Support Component</i>
<i>NRC</i>	-	<i>National Research Council</i>

<i>NRRP</i>	-	<i>Northern Roads Rehabilitation Project</i>
<i>NSC</i>	-	<i>National Steering Committee</i>
<i>NSF</i>	-	<i>National Science Foundation</i>
<i>NVQ</i>	-	<i>National Vocational Qualifications</i>
<i>NWPCP</i>	-	<i>North Western Province Canal Project</i>
<i>NWS & DB</i>	-	<i>National Water Supply & Drainage Board</i>
<i>NWSC</i>	-	<i>National Wetland Steering Committee</i>
<i>OCR</i>	-	<i>Ordinary Capital Resources</i>
<i>ODS</i>	-	<i>Ozone Depletion Substances</i>
<i>OEWG</i>	-	<i>Open-ended Working Group</i>
<i>OFID</i>	-	<i>OPEC fund for International Development</i>
<i>PBDEs</i>	-	<i>Polybrominated Diphenyl Ethers</i>
<i>PCBs</i>	-	<i>Poly Chlorinated Byphenyls</i>
<i>PDD</i>	-	<i>Project Design Document</i>
<i>PET</i>	-	<i>Project Expert Team</i>
<i>PIN</i>	-	<i>Project Idea Note</i>
<i>PMDSC</i>	-	<i>Program Management, Design and Supervision Consultants</i>
<i>POPs</i>	-	<i>Persistent Organic Pollutants</i>
<i>PPG</i>	-	<i>Project Preparatory Grant</i>
<i>PS</i>	-	<i>Pradeshiya Saba</i>
<i>PSC</i>	-	<i>Project Steering Committee</i>
<i>PSI</i>	-	<i>Pollution Source Inventory</i>
<i>QRM</i>	-	<i>Quarantine Regulators Meeting</i>
<i>RAC</i>	-	<i>Refrigeration & Air Conditioning</i>
<i>RCC</i>	-	<i>Roller-Compacted Concrete</i>
<i>RIP</i>	-	<i>Resettlement Implementation Plan</i>
<i>RKTC</i>	-	<i>Randenigala – Kalu Ganga Transfer Canal</i>

<i>SACEP</i>	-	<i>South Asia Cooperation Environment Programme</i>
<i>SAICM</i>	-	<i>Strategic Approach to International Chemical Management</i>
<i>SBI</i>	-	<i>Subsidiary Body for Implementation</i>
<i>SBSTA</i>	-	<i>Subsidiary Body for Scientific Technologies Advice</i>
<i>SC</i>	-	<i>Stockholm Secretariat</i>
<i>SCAPC</i>	-	<i>Standing Cabinet Appointed Procurement Committee</i>
<i>SCP</i>	-	<i>Sustainable Consumption and Production</i>
<i>SD</i>	-	<i>Sustainable Development</i>
<i>SEA</i>	-	<i>Strategic Environmental Assessment</i>
<i>SFD</i>	-	<i>Saudi Fund for Development</i>
<i>SIWRM</i>	-	<i>Strengthening Integrated Water Resources Management</i>
<i>SLIDA</i>	-	<i>Sri Lanka Institute for Development Administration</i>
<i>SLSEA</i>	-	<i>Sri Lanka Sustainable Energy Authority</i>
<i>SME</i>	-	<i>Small and Medium Scale Enterprise</i>
<i>SNA</i>	-	<i>System of National Accounts</i>
<i>TAP</i>	-	<i>Technology Action Plan</i>
<i>TCCs</i>	-	<i>Technical Coordination Committees</i>
<i>TEV</i>	-	<i>Total Economic Value</i>
<i>TNA</i>	-	<i>Technology Needs Assessment</i>
<i>TOR</i>	-	<i>Terms of Reference</i>
<i>TOT</i>	-	<i>Training of Trainers</i>
<i>TVEC</i>	-	<i>Tertiary and Vocational Education Commission</i>
<i>UAE</i>	-	<i>United Arab Emirates</i>
<i>UC</i>	-	<i>Urban Council</i>
<i>UECP</i>	-	<i>Upper Elahera Canal Project</i>
<i>UGC</i>	-	<i>University Grant Commission</i>
<i>UNCCD</i>	-	<i>United Nations Convention to Combat Desertification</i>

<i>UNDP</i>	-	<i>United Nations Development Programme</i>
<i>UNEA</i>	-	<i>United Nations Environmental Assembly</i>
<i>UNEP</i>	-	<i>United Nations Environment Programme</i>
<i>UNFCCC</i>	-	<i>United Nations Framework Convention on Climate Change</i>
<i>UNGA</i>	-	<i>United Nations General Assembly</i>
<i>UNIDO</i>	-	<i>United Nations Industrial Development Organization</i>
<i>UN-SEEA</i>	-	<i>UN sponsored System of Economic Accounting</i>
<i>VET</i>	-	<i>Vehicular Emission Testing</i>
<i>WED</i>	-	<i>World Environment Day</i>

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1. INTRODUCTION

All government agencies in Sri Lanka are bound to submit a report to the parliament in the middle of the current year on the progress achieved by the respective agencies during the previous year. The Ministry of Mahaweli Development and Environment as a major policy making body in respect of agricultural Development and environment management and natural resources conservation, presents this report named “Annual Performance and Accounts- 2016” for the said purpose. This report provides progress of implementation of programmes and activities by the Ministry during the year 2016 under each mission/thematic area of the “Haritha (Green) Lanka Programme” and “Punarudaya”, which was developed by the Ministry through participatory and interactive process involving all key stakeholders in the agricultural development and natural resources sector of the country.

Keeping in line with the national policy framework, several important projects and programmes have been implemented during the period of progress reporting by the Ministry of Mahaweli Development and Environment and the Institutions under its purview.

As per the decision taken by the Government of Sri Lanka in January 2015, the name of the Ministry has been changed to read as the “Ministry of Mahaweli Development and Environment” Accordingly, the Sri Lanka Mahaweli Authority and the major agricultural development projects of Sri Lanka were also brought under the purview of Ministry of the Mahaweli Development and Environment. The Ministry has carried out several activities in relation to water conservation, agricultural development and environment conservation in the reporting period.

2. PROGRESS OF ACTIVITIES IMPLEMENTED BY THE MINISTRY OF MAHAWELI DEVELOPMENT AND ENVIRONMENT–2016

The Ministry of Mahaweli Development & Environment (then Ministry of Environment & Renewable Energy) initiated the programme on “Haritha (Green) Lanka”(HLP) with a view to address the critical environmental issues that, if left unattended, would adversely affect our economic and social development programmes in July 2009. The National Action Plan for HLP covers ten broad thrust areas/missions namely; Clean Air-Everywhere, Saving the Fauna, Flora and Ecosystems, Meeting the Challenges of Climate Change, Wise Use of Coastal Belt and the Sea Around, Responsible Use of the Land Resources, Doing Away with the Dumps, Water for All and Always, Green Cities for Health and Prosperity, Greening the Industries, and Knowledge for Right Choices. The Action Plan includes short and medium term targets spanning from 2009 to 2016 with comprehensive, achievable and measurable strategies (82) and actions (375). The Plan was implemented by deferent Ministries and governmental and non-governmental institutions.

In 2015, the Ministry of Mahaweli Development & Environment introduced the “Punarudaya” (the Renaissance), The Accelerated National Environment Conservation Program of Sri Lanka with a view to minimizing the environmental issues in the country while ensuring the environmental sustainability during the period of 2016-2018. In preparation of the program, the current environment issue and sub-environment issues were identified and prioritized and the whole programe was coordinated by the Presidential Secretariat. A three (3) year action plan with a budget including physical and financial targets have also been developed in order to execute it from October 2015 to 2018 period. Creation of a livable Waste-free environment through Sustainable Waste Management, Forest Conservation and Development, Establish a livable Environment/Ecosystem through Sustainable Management, Conservation and Utilization of Natural Resources, Conserve and Sustainably Manage Fauna and Flora of Sri Lanka, Create Public Awareness on Environment Conservation and to establish an All-Inclusive Institutional Structure For Environment Conservation are among the main objectives of the program.

This National Action Plan and Accelerated National Environment Conservation Program were developed through a participatory process attended by high level officials of all the relevant Ministries, Departments, Nongovernmental organizations and the private sector, to ensure that sustainability would not just remain a concept but would translate into practical reality. The Ministry, in collaboration with the relevant stakeholders, performed the following functions under each mission/thrust area during the reporting period of January – December 2016.

PART 1

PROGRESS OF MAHAWELI DEVELOPMENT & MULTIPURPOSE PROJECT

MULTIPURPOSE PROJECT

1.1 MORAGAHAKANDA - KALUGANGA DEVELOPMENT PROJECT

1.1.1 Introduction

The Moragahakanda / Kaluganga Development Project consist following main activities under phase 1 developments.

Moragahakanda reservoir construction across Ambanganga which include construction of main dam, two saddle dams, spill way, EMC sluice, UEC sluice, 25 MW Hydropower plant and Power Transmission line(16km)

Kaluganga reservoir construction across Kaluganga which is a main tributary of Ambanganga. This include two rock fill dams, spill way two sluice for LB & RB canal, another sluice for transfer canal & Tunnel.

Construction of transfer canal, tunnel and Upper Elahara Canal (94.5 km) up to Anuradhapura Mahakandara– This is implemented as a separate project on 11th January 2017.

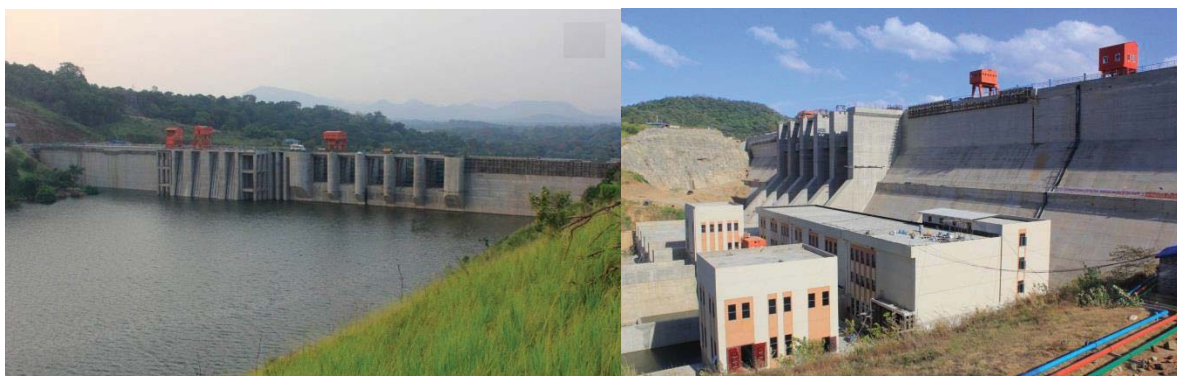
Social and Irrigation Infrastructure development in following two resettlement sites.

- i. Development area under Kaluganga reservoir (Left bank area 1900ha, Right bank area 1700ha) - System F.
- ii. Development area under Kaudulla left bank extension (9000ha) - System D.

Land acquisition and resettlement of affected families (nearly 3000 families)

Implementation of environment mitigation activates given in two EIA reports for Moragahakanda and Kaluganga.

The development activities were commenced in year 2007 and related activates carried out in the year 2016 are given below.





1.1.2 Major Achievements in 2016

➤ Moragahakanda Reservoir Head works

Construction of Rock fill and RCC dams and apparent structures were awarded to Sinohydro Corporation Limited of China as an EPC contract. The contract value is USD 252.3 million and 85% of the contract value is funded by the China Development Bank and 15% from GOSL.

Details of each item covering Moragahakanda Reservoir Head works Development Project are described below;

Item no.	Description of Works	Work done during year 2016 (%)	Cumulative work done up to end of year 2016 (%)	Financial Progress during 2016 (Rs. Mn)
1.0	Construction of main dam	56.1	94.0	8,649.48
2.0	Saddle dam 1 (including apparent structures such as EMC, EUC, Power House, Spillway etc)	20.4	87.0	
3.0	Saddle dam 2	Completed in 2010		

➤ Kaluganga Reservoir Head works

This project is financed by Kuwait Fund for Arab Development (KFAED), Saudi Fund for Development (SFD), OPEC fund for International Development (OFID) and Government of Sri Lanka.

The contract for construction of Kaluganga reservoir construction was awarded to the Sinohydro Corporation Limited of China on 12th march 2014. Contract value is US \$ 124.94Mn. Work commenced on 2nd April 2014.

Details of each item covering Kaluganga Reservoir Head works Development Project are described below;

Item no.	Description of Works	Work done during year 2016 (%)	Cumulative work done up to end of year 2016 (%)	Financial Progress during 2016 (Rs. Mn)
2.0	Construction of main dam	54.7	68.8	4,919.23
3.0	Saddle dam	18.0	24.7	

➤ **Downstream Development Works**

Two resettlement sites namely System F coming under Kaluganga downstream (3600 ha) and System D under Kaudulla LB extension area (7000 ha) have been developed by using domestic funds (DF). Details of each items are described below.

Survey

➤ **Right Bank of Kaluganga**

- Surveying of road network was completed
- Surveying of canals are 65% completed

➤ **Left bank of Kaluganga**

- Surveying of Hamlet centers Ma Oya, Thorapitiya and Wellewelaare 95% completed.
- Surveying of canals are 95% completed

➤ **Medirigiriya development area in system D**

- Surveying of canals are 45% completed

➤ **Building Constructions**

Kaluganga-Right Bank

- 20 buildings are newly started and one building was completed in 2016.
- 35 buildings were under construction in Kaluganga Right Bank area at the beginning of 2016. In those, 22 of them were completed during 2016.

Kaluganga-Left Bank (Moragahakanda)

- 15 buildings were newly started and 4 of them were completed during 2016.
 - 11 buildings were under construction in LB area. In those, 9 of them were completed during 2016.
- **Roads**

Kaluganaga– Right Bank

- Main Road (surfacing with Asphalt concrete – 10 km) – 95% completed
- Market Roads (4 km) – 70% completed
- Hamlet Roads - 22.159 km completed up to sub gravel base and 13.15 km completed with Asphalt concrete.

Kaluganga LB (Moragahakanda)

- Main Road (Road surfacing with Asphalt concrete 27.82 km) – 90 % completed
- Market Roads (3.15 km) – 70% completed
- Hamlet Roads (10.4 km) – 77 % completed

Medirigiriya development area in system D

- Main Road (Road surfacing with Asphalt concrete – 8.5 km) - 80% completed
- Hamlet Roads (11 km) - completed

➤ Irrigation Development work

Right Bank of Kaluganga

- Canals (8.57 km) – 80% completed

Left Bank of Kaluganga

- Canals (36.29 km) – completed
- Ridee Ella reservoir – 95% completed

Medirigiriya development area in system D

- LB branch canal extension (1.3 to 8.0 km) – 90% completed
- LB branch canal extension (8.0 to 16.0 km) – 50% completed
- Sub branch canal (4 km) – 20% completed

➤ Land Acquisition & Resettlement

As per the socio economic survey 2874 families will be affected due to both Moragahakanda & Kaluganga reservoir head works projects. Resettlement plan is already prepared and it is distributed among the affected families. Land acquisition work is in progress.

The following table illustrates the resettlement activities related to Moragahakanda reservoir effected families during the year 2016;

GN Division	No of families resettled		Families received Rs. 16 lakhs instead of irrigable highlands and		Families received Rs. 12 lakhs instead of Irrigable lands	
	Cumulative (as the end of 2016)	During 2016	Cumulative (as the end of 2016)	During 2016	Cumulative (as the end of 2016)	During 2016
Thalagoda	268	32	29	4	40	4
Kadawatha	219	57	40	26	84	38
Kambarawa	254	59	47	13	29	28
Galporugolla	135	53	50	18	24	21
Elagamuwa	208	168	64	26	41	40
Medhapihilla	149	147	107	56	26	24
Kongahawela	28	28	28	0	0	0
Moragolla	0	0	0	0	0	0
Maragamuwa	11	11	11	0	0	0
Millagahamulathenna	100	100	91	91	20	20
Rajawela	0	0	0	0	0	0
Total	1372	655	467	234	264	175

Resettlement activities related to Kaluganga reservoir effected families during the year 2016;

GN Division	No of families resettled		Families received Rs. 16 lakhs instead of irrigable highlands and		Families received Rs. 12 lakhs instead of Irrigable lands	
	Cumulative (as the end of 2016)	During 2016	Cumulative (as the end of 2016)	During 2016	Cumulative (as the end of 2016)	During 2016
Karandamulla	177	2	0	0	3	3
Guruwela	10	0	0	0	0	0
Galgedawela	24	24	2	2	0	0
Rawanagama	82	82	11	11	8	8
Gonawela	73	73	7	7	3	3
Pallegama	160	160	17	17	18	18
Miniranketiya	133	132	4	4	15	15
Halminiya	1	0	0	0	0	0
Imaduwa	0	0	0	0	0	0
Gangahenwela	0	0	0	0	0	0
Rambukoluwa	0	0	0	0	0	0
Akarahediya	4	0	0	0	0	0
Total	664	473	41	41	47	47

➤ **Land Acquisition & compensation**

The following chart describes the compensation paid in each development area during 2016;

Moragahakanda	- Rs. 1,501.13 million (for 3082 lots)
Kaluganga	- Rs. 905.00 million (for 1164 lots)
Medirigiriya	- Rs. 12.12 million (for 24 lots)

➤ **Environmental Clearance and Impact Mitigation**

Environmental impact mitigation measures given in the Moragahakanda - Kaluganga Projects EIA reports have been implemented in parallel to the construction activities since the year 2007.

Based on both EIA reports (Moragahakanda and Kaluganga) environmental management plans have also been prepared.

Following activities were implemented in the year 2016.

Moragahakanda Development Project

- **Buffer Zone Development**

Tree planting in the 100m reservation (Buffer zone) of Moragahakanda Reservoir and maintenance of 12 Km of buffer zone plantation (6,500 plants) which established since the year 2010 and continued in the year 2016.

- **Forestry Programme**

Implemented by Project

Improvement of Forest Covers in the Catchment Areas

- Tree planting was carried out at five different locations to enrich the forest cover in the Moragahakanda immediate catchment area.
- Avenue planting and riverine planting - Tree planting in the vacant areas of the Kumbiyangahaela - Elahera new road (08 km) and 500 No. of Kubuk, 1500 No. of Meeand 300 No. of Nelliplants were planted.
- Aricants, Kumbuk and Mee plants - 1800 Nos. were planted at Andawela stream banks.
- Establishment of Model Organic Garden with 10 types of traditional vegetable by only using organic manure and improvement of the fruit garden planting continued.
- Maintenance of the Herbal Garden, ethno botanical garden and endemic garden established in 2014 and also continued in 2016. Herbal garden established with medicinal plants and endemic plants was improved and successfully maintained.
- Establishment of rural plant nurseries in Moragahakanda watershed area - 02 Nos. of rural plant nurseries were established in the Moragahakanda watershed area (Rajawela, Opalgala) 4000 Plants produced were issued to farmers who have followed the soil conservation measures.
- No. of fire belts established and maintained at the immediate catchment for the purpose of impact mitigation of Forest and Grass Lands fire.

➤ Forestry Programme - Dept. of Forest Conservation

Rs. 43.07 million was provided to Forest Department under MoU signed between MASL & FD for the enrichment of forest plantation, enrichment planting, buffer zone development, establishment of fire belts, boundary demarcation, stream bank conservation and maintenance of forest plantation.

- Enrichment planting establishment and maintained - 128 ha.
- Established & maintenance of Fire belts - 33 Km
- Invasive plants control - 260 ha

➤ Plant Production in Central Plant Nurseries

25263 Plants were produced in 2016 and 19,955 plants were issued for tree planting programme which is carried out by Moragahakanda Project. Therefore the remaining plant quantity on 31.12.2016 was 47,240.

➤ **Soil Conservation Measures**

78 Nos. of homesteads were developed with implementing soil conservation measures in Senagama, Rajawela and Pilihudugolla areas in the Moragahakanda immediate catchment. Approved incentive allowances were paid for farmers for the promotion of adaptation of soil conservation measures.

➤ **Wildlife Conservation Programme**

Rs. 20.0 Mn provided under MoU signed between DWC (Dept. of Wildlife Conservation) and MASL for Moragahakanda Project and the following activities were completed.

- Establishment of the Live Fence - Establishment of the Live Fence parallel to electric fence with Agave planting maintained.
- Maintenance of electric fence - Maintenance activities of the two elephant fences. (Sadawasalakanda to Pabbiliya electric fence and Sigiya to Wewala electric fence)
- Electric fence at the Bambaragahawatta to Haduwela to be improved by Department of Wildlife Conservation.
- 04 Wildlife tanks (NamalWewa, Labuwewa, MahaiyawaWewa, and Redi Ella) were constructed by the project.
- 10 Km access roads in Anganmadilla national park was constructed.

➤ **Biodiversity Conservation Programme**

Biodiversity conservation phase I was completed and planning work for the Biodiversity Implementation Programme Phase II (Animal Rescue Programme) was also completed.

➤ **Rehabilitation of the Small Scale Irrigation System and Improvement of Living Condition in the immediate watershed areas.**

- | | | |
|--------------------------------|---------|----------------------------|
| • Agricultural Roads - 09 Nos. | - 35 Km | |
| • Foot bridge | - 01 | } Total Cost - Rs. 15.0 Mn |
| • Agro well | - 01 | |
| • Culvert | - 01 | |
| • Field channel | - 03 | |
| • Retaining wall | - 01 | |
| • Anicut | - 01 | |

Farmer Production and Income Generating Activities

Four homesteads developed with Cashew, Pepper in watershed area.

Training & Capacity Building for the Officers

Five awareness programs were completed.

Archeological Conservation

All Archeological Conservation activities of Moragahakanda Project have been fully completed.

Timber Removing at Reservoir Bed Areas.

- 90,000 No. of trees which were removed in the reservoir bed through the Timber Corporation (STC) with the approval of the Department of Forest Conservation and Department of Wildlife Conservation. Required all temporary access roads were also constructed in the reservoir bed area to facilitate the timber transportation.
- The part of bed clearing was carried out to facilitate the reservoir impounding process.

➤ **Construction Related Environmental Monitoring Activities were carried out.**

Kaluganga Project

Buffer Zone Development

2500 plants in 100 m reservation of Kaluganga reservoir were planted.

Tree planting Programme

Implement by Project

- Tree planting in river reservation - 3500 plants were planted in the 60 m reservation of Kaluganga area.
- Avenue planting, tree planting & landscaping of new town building were carried out.
- 04 rural plant nurseries were established.

Implemented by Forest Department

Rs. 25.23 million was provided to Forest Department according to the MoU signed between MASL & FD for the enrichment of forest plantation, buffer zone development, establishment of fire belts, boundary demarcation and maintenance of forest plantations.

- **Enrichment planting - 20 ha.**
- **Maintenance of enrichment planting - 113 ha.**

Plant Production in Central Plant Nursery

32000 plants were produced in 2016 and 17800 plants were issued for tree planting programme for the Kaluganga catchment.

Distributed plant packages (100 plants) for 110 schools for National Environmental day of the year 2016.

Soil Conservation Measures

30 homesteads developed with soil conservation measures (24Acs) in the Kaluganga watershed

- **Rehabilitation of the Small Scale Irrigation System and Improvement of Living Condition in the Watershed.**

Rehabilitation of 05 anicuts was completed.

Wildlife Conservation Programme

Rs. 49.7million provided under MoU signed between DWC (Dept. of Wildlife Conservation) and MASL for Kaluganga Project in 2016.

- **Establishment of the live fence** - Establishment of the live fence parallel to electric fence with Agave planting, Citrus and Boganvila
- **Establishment of Central Elephant Control Unit in Guruwelawith following facilities in 2015 and continued in the year 2016.**
 - A vehicle allocated with 400 liters of fuel per month
 - Provide elephant crackers - 2000 No. per month
 - Accommodation facilities
 - Telephone, electricity etc.
 - Subsistence for wildlife officers
- **Established and continued of village elephant control committees** - 08 committees (LaggalaPallegama, Athulanthota, Guruwela (No. 34), Kajuwatta, Maoya, Kabaragoimada, Thorapitiya) established and continued.
- **Construction of Rest Rooms and Guard Rooms for the Maintenance of Electric Fence** - Construction of 06 rest rooms and watcher huts completed.
- **Maintenance of new settlement electric fence (60 Km) is being continued.**

Biodiversity Conservation Programme

- **Removal of invasive species in the project area** - Salvinia in the Tank no. 04 was removed and commenced compost production unit of Central Plant Nursery.

- Fish translocation programme was implemented at Kaluganga dam site river diversion location.

Training & Capacity Building for the Officers

- Six awareness programs were completed including Soil Conservation & Nursery Management Programs.
- Three training programs (06) were conducted for school children on environmental conservation and farm management.

Solid Waste Management and Other Environment Conservation

Solid Waste Management Programs at Theligamu Oya continued.

Obtaining Environment Licenses

- Sand mining license - 01
- Extension of Q1 - Quarry site license for the contractor of Kaluganga dam constructions.
- Monitored environmental impacts mitigation activities at the construction sites.

➤ **Financial Performance**

Finance code	2016 Budget (Rs. Mn)	Revised Budget (Rs. Mn.)	Expenditure (Rs. Mn)
DF – 11	7,050.00	7,050.00	6,418.28
DFA - 12	5,800.00	10,650.00	9,478.26
RFA - 14	1,900.00	1,900.00	1,227.67
FARDF - 17	1,800.00	2,900.00	2,673.33
Total	16,550.00	22,500.00	19,797.54

Please refer the attached financial & physical performance reports for further details.

No	Activity	Allocation (Rs. Mn.)	Expenditure (Rs. Mn.)	Physical Progress (%)
1.0	Dam Supervision & Construction			
	DF (11)	300.00	189.44	63.15
	DFA (12)	10,650.00	9,478.26	89.00
	RFA (14)	1,900.00	1,227.67	64.61
	FARDF (17)	2,900.00	2,673.33	92.18
1.1	Saddle dam balance work DF (11)	0.10	0.01	10.00
	Sub Total	15,750.10	13,568.71	86.15
2.0	Downstream Development			
2.1	Survey DF(11)	23.00	21.32	92.70
2.2	Buildings DF(11)	531.20	492.14	92.65
2.3	Roads DF(11)	1,225.00	1,139.66	93.03
2.4	Irrigation Infrastructure DF(11)	555.00	438.59	79.03
	Sub Total	2,334.20	2,091.71	89.61
3.0	Land Aqu. & Resettlement DF(11)	3,500.00	3,335.57	95.30
4.0	Environment Mitigation DF(11)	300.00	240.33	80.11
5.0	Procurement of furniture & equipment	35.00	24.98	71.37
6.0	Capital Expenditure on General Overheads	580.70	536.24	92.34
Total		22,500.00	19,797.54	87.99

1.1.3 Cabinet Memorandums

During 2016, the following cabinet memorandums were forwarded to the parliament for the endorsement of the cabinet

Cabinet paper No and date forwarded	Title	Cabinet decision	Present Status
16/0992/704 /023 of 2016.05.17	Provide relief for people who are affected by Moragahak and Kaluganga Development Project	<ol style="list-style-type: none"> 1. Grant compensation as per I, II, III and IV procedures mentioned in proposal 2 in the cabinet memorandum for the families affected by the project enabling to complete the MKDP within due time frame and 2. To pay these compensations utilizing Rs. 2234.8 Mn out of Rs. 7.05 bn of financial provision reserved for the MKDP under the domestic funds from the budget estimates of this year <ol style="list-style-type: none"> I. People who prefer to the alternative solution instead of lands 12 lakhs for 410 families = Rs. Mn. 492 16 lakhs for 535 families = Rs. Mn. 856 II. Compensation instead of lands for the people who got married from 2011.12.31 to 2015.12.31 16 lakhs for 350 families = Rs. Mn. 630 III. Compensation for the people who build additional structures after the initial survey (due to the delay in project, building considered only up to 2015.12.31) – Rs. Mn. 172 IV. Compensation for affected people of Wemedilla tank 	<ol style="list-style-type: none"> I. 12 lakhs provided to 176 families and 16 lakhs provided to 271 families II. Not processed in 2016 III. 47 families provided compensation Rs. Mn. 23.94 IV. Held by the Secretary of the Ministry

1.2 UMA OYA MULTIPURPOSE DEVELOPMENT PROJECT (HEADWORK)

1.2.1 Project Objectives

The main objective of Uma Oya Multipurpose Development Project (UOMDP) is trans-basin diversion of 145 MCM of excess water annually from Uma Oya basin to Kirindi Oya basin for alleviating the water scarcity in the Southeastern dry zone without affecting the water users and environment in Uma Oya basin. This will provide water to irrigate around 4500 ha of new land and to around 1500 ha of existing agricultural land in Moneragala District and will provide 30 MCM of drinking and industrial water requirements in Moneragala and Hambantota Districts. An underground power station with an installed capacity of 120 MW will be constructed which will add around 231 GWh of electrical energy annually to the National Grid.

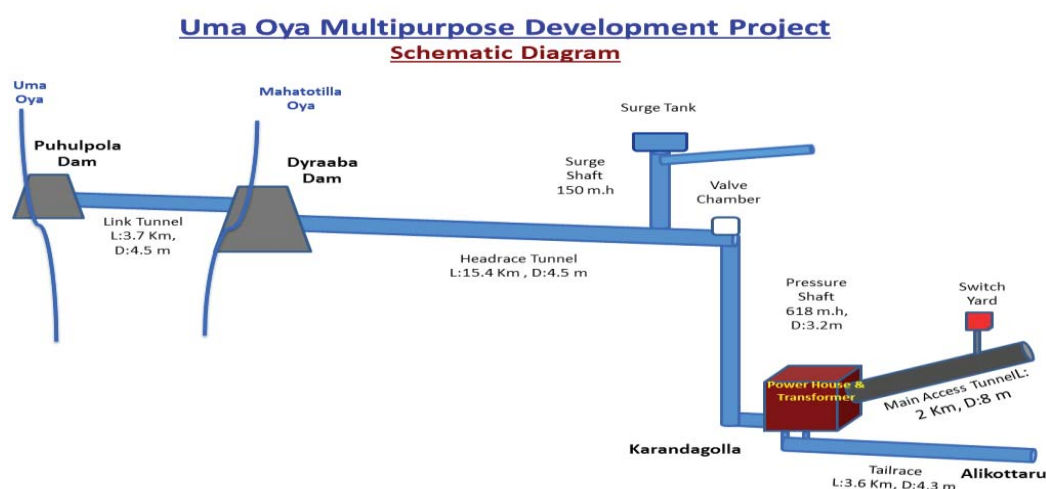
Further, in Badulla District, drinking water will be provided to Bandarawela area from Dyrabaa reservoir and to Atampitiya area from Puhulpola reservoir.

➤ Project Components

The Total cost of the Project is USD 514.5 million plus LKR 15,474.25 million and is comprised of two major components, viz. the Head Works and the Downstream Development Works in Kirindi Oya Basin.

➤ The Head Works

The cost estimate of Head Works components of the Project is USD 514.5 million plus LKR 6,122 million and comprised of following constructions:



Schematic Diagram

- (1) Construction of a reservoir across Uma Oya at Puhulpola with a 35 m high roller compacted concrete dam.
- (2) Construction of a reservoir across Mahatotille Oya in Dyraabawith a 50 m high roller compacted concrete dam.
- (3) 3,718 m long Link Tunnel connecting the two reservoirs
- (4) 15,446 m long Headrace Tunnel from Dyraaba to Karandagolla
- (5) 618m high Vertical Pressure Shaft
- (6) 150 m high SurgeShaft and 15m diameter Surge Chamber
- (7) 120 MW Underground Power Station
- (8) 3,600 m long Tailrace Tunnel
- (9) Switch Yard and 23 km long 132 kV Transmission Line connecting to Badulla Grid Substation and
- (10) Other infrastructure for the Project consisting of 14 km long access roads, construction of residential camps, office complexes and site laboratories at respective work sites including necessary facilities.

Construction of Head Works is done on an EPC Contract and the contract commencement date was 15th March 2010 and the Environmental Approval for this component was given on 12th April 2011. The original scheduled date of completion of construction was 15th November 2015 and the date of completion of UOMDP has now been revised to 30th June 2019 including 12 months of defects liability period.

1.2.2 Major Achievements

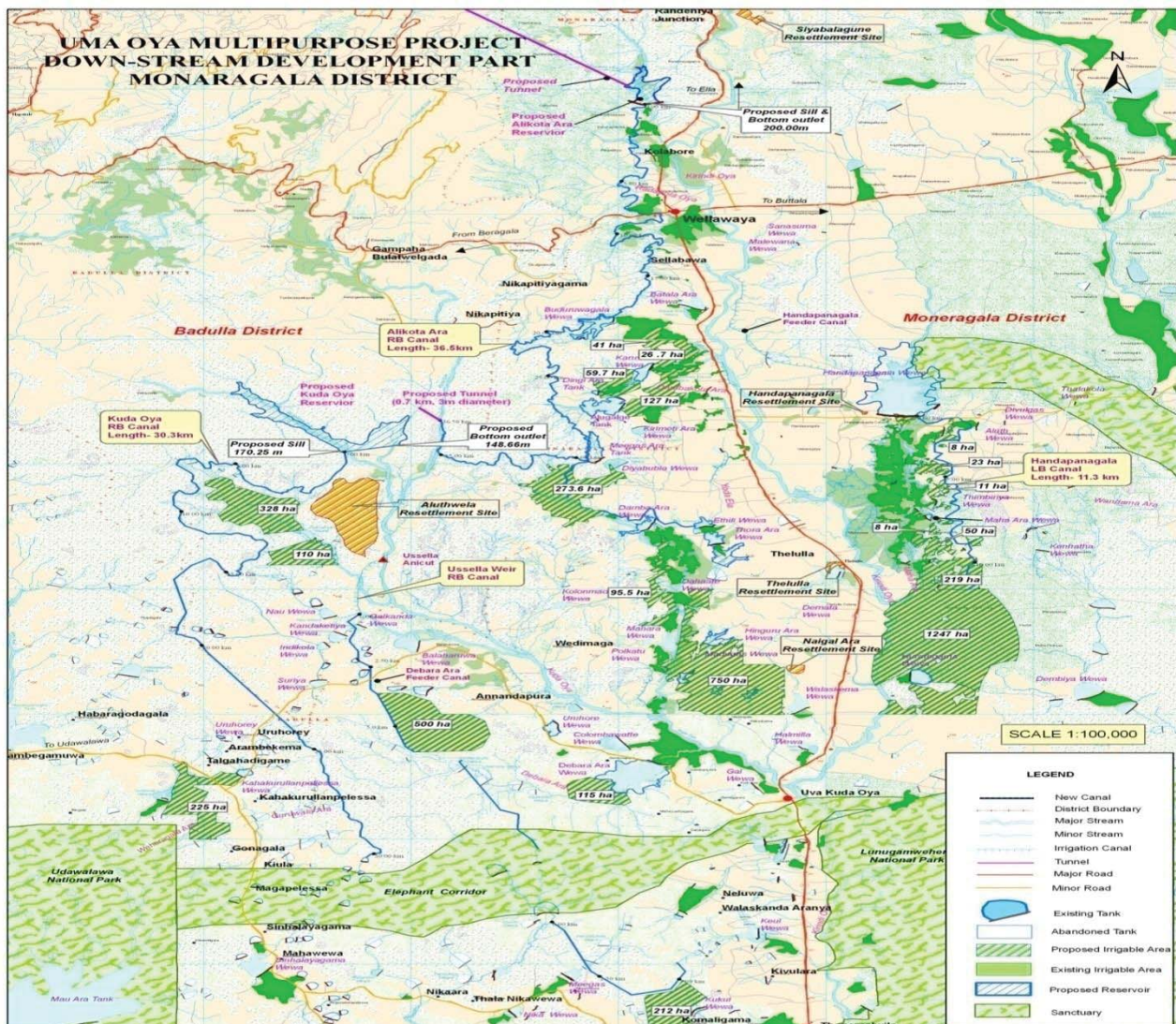
➤ Downstream Development Works in Kirindi Oya Basin

The main purpose of the developments within Kirindi Oya Basin under UOMDP is to develop the necessary irrigation and water transfer infrastructure in order to make use of an estimated 145 MCM of water diverted from Uma Oya into Kirindi Oya basin. The project area is located in the Moneragala District except the two regulating reservoirs of AlikotaAra and Kuda Oya which are in the boundary of Badulla District.

The main features of the developments within Kirindi Oya basin under UOMDP include following developments below the Tailrace of Power Station:

- (1) Construction of AlikotaAra reservoir (capacity of 6.5 MCM) across AlikotaAra, a tributary of Kirindi Oya
- (2) Construction of Kuda Oya reservoir (capacity of 29.0 MCM) across Kuda Oya, a tributary of Kirindi Oya
- (3) Enhancing capacity of existing Handapanagala Tank from 6.5 MCM to 14 MCM
- (4) Construction of 18 km Transfer Canal from AlikotaAra reservoir to Kuda Oya Reservoir including two tunnel sections of 600 m and 400 m long
- (5) Construction of 30 km long Transfer Canal from Kuda Oya to Sinhalayagama Tank.
- (6) Construction of 11.3 km long LB Main Canal and provision of irrigation facilities under Handapanagala Tank
- (7) Improvements to Handapanagala Tank Feeder Canal and Anicut and
- (8) Rehabilitation of 96 minor tanks.

Construction of Downstream Development component is handled by the Irrigation Department and the work commenced in 2013 with the Environmental approval given on 27th September 2013 after the supplementary EIA conducted for this component.



The detail of the proposed project elements

➤ **Head Works - Progress and Target Dates of Completion**

Cumulative Progress of Head Works as at 31th December 2016 is 70.29% and construction of all works is expected to be completed by 30th June 2018. The details of each activity are given below.

No	Activity	Physical Progress (%)	Target Date of Completion
Overall		70.29	June 2018
1	Puhulpola Roller Compacted Dam – Height 35m	22.79	January 2018
2	Dyraaba Roller Compacted Dam - Height 50m	87.40	Octobers2017
3	Link Tunnel – Length 3718 m	84.58	September 2017
4	Headrace Tunnel – Length – 15.4 km	46.17	April2018
5	Surge Tank – Height 150 m	51.68	December2017
6	Vertical Pressure Shaft – Height 618 m	31.56	December 2017
7	Tail Race Tunnel – Length 3.6 km	Completed	
8	Power House	86.79	December2017
9	Roadworks and Access Tunnel	91.53	December 2017
10	Transmission Line – Length 23 km	40.64	December2017

Puhulpola Dam



Puhulpola Dam Foundation Excavation on going

A section of Welimada – Badulla road will be going under water once this reservoir is impounded. This section of Relocation Road is completed and opened for public. Excavation of the foundation of the dam and construction of the diversion culvert is under way.

Dyraaba Dam



Dyraaba dam nearing to completion

This Roller Compacted Concrete (RCC) dam is completed up to a height of 47 m from the river-bed level with an overall progress as at end of this year was 87.40%.

Link Tunnel



Link Tunnels excavation under way.

The 3,718m long Link Tunnel connecting the two reservoirs of Puhulpola and Dyraaba is excavated by conventional drilling and blasting method from both ends and total excavated length by end of 2016 is 3,601 m equivalent to 99.5% of the total length.

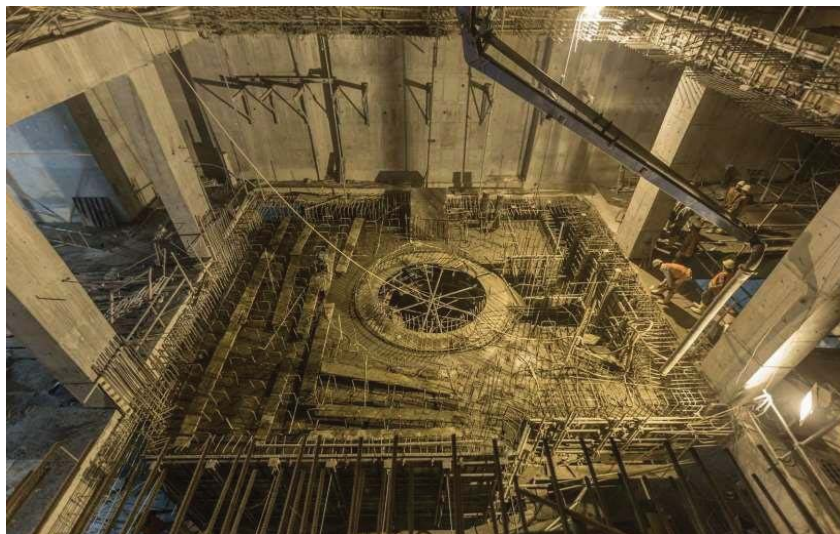
Headrace Tunnel (HRT)



Excavation of Headrace tunnel with use of Tunnel Boring Machine.

The 15,446m long Headrace Tunnel (HRT) is being excavated using Tunnel Boring Machines (TBM). This is the first time in Sri Lanka a TBM is used for the construction of tunnels. Excavation of HRT was commenced from the downstream end with the first TBM and up to end of 2016 a length of 7,783 m, which is 50.39% of total length, has been excavated. The second Tunnel Boring Machine has been assembled at the HRT intake at Dyraaba dam.

Underground Power House Complex



Powerhouse under construction 1 km below ground level

Excavation of Surge Shaft is complete and drilling of pilot hole in Pressure Shaft is underway. Underground power cavern and transformer cavern excavation is completed. Powerhouse concreting and installation of turbine housing and distributor pipe is completed.

Tailrace Tunnel

Tailrace Tunnel (3.6 km) excavation and precast segment lining is completed.

➤ Down Stream Development Works - Progress and Targets Dates of Completion

The Overall Progress of Downstream Development Works as at end of December 2016 was 37%, the details of which and their target dates of completed are given below:

Major Activity	% Progress as at End of 2016	Date of Completion
1. Construction of AlikotaAra Reservoir – Capacity 6.5 MCM	80%	2017
2. Capacity Enhancement of Handapanagala Tank - Capacity 14 MCM	81%	2017
3. Construction of Kuda Oya Reservoir - Capacity 29 MCM	27%	2018
4. Construction of LB Canal in Handapanagala Scheme- 11.3 km	26%	2017
5. Transfer Canals - AlikotaAra - Kuda Oya Transfer Canal -18 km	22%	2017
- KudaOya -Sinhalayagama Transfer Canal- 30 km	21%	2019
Rehabilitation of 96 minor Tanks	24%	2019



Alikota Ara Reservoir Dam under construction



Kuda Oya Reservoir Dam – Core Trench filling

➤ Resettlement

All families affected due to construction of Head Works are resettled at the following resettlement sites with infrastructure facilities such as internal roads, electricity supply and pipe borne water provided:

Resettlement Site	No of Principle Families	No of Sub-families	Total no of families
Mirahawatta	50	14	64
Ketakella(Dyrabaa Estate)	23	10	33
Moragolla	60	14	74
Thelulla	62	03	65
Total	195	41	236



Resettlement Village at Mirahawatte

➤ **Implementation of Permanent Water Supply Schemes**

Three pipe born water supply schemes, namely, Makul Ella, Weheragala thennam Kurudugolla are being implemented at a total cost of Rs 352 Million as a permeant solution for the water problem. It is expected at all families effected and people living in the same vicinity could be provided with permanent pipe borne water supply by end of February 2017. These are implemented through NWSDS and will benefit 2,400 families.

Water Supply Scheme completion		Families	Anticipated Date of
(i)	Makul Ella	1,500	2017.03.31
(ii)	Weheragalathenna	500	2016.03.31
(iii)	Kurudugolla	400	Completed
Total		2,400	

1.2.3 Cabinet Memorandums in 2016

Cabinet Paper No and date forwarded	Title	Cabinet decision
16/0645/704/017/TBR and 19.04.2016	Uma Oya Multipurpose Development Project- Consultancy services to assists the Employer's Representative in implementation of EPC/Turn Key Contract – Approval to award contract to Central Engineering Consultancy Bureau- Contract No. RFP/UOMDP-HW/01	It was decided to grant approval to award the above consultancy services contract to the Central Engineering Consultancy Bureau (CECB), as recommended by the Cabinet Appointed Consultants Procurement Committee (CPCC).
16/1123/704/027 and 21.06.2016	Request for approval of a payment of US\$ 50 million as an Additional Advance, Refund of US\$ 6.6 million deducted as delay damages and extension of contract period of the FARAB Energy and water project, the contractor of Headwork of Uma Oya Multipurpose Development Project.	It was deferred for the next meeting, at the request of the Minister of Finance.
16/1123/704/027 and 05.07.2016	Request for approval of a payment of US\$ 50 million as an Additional Advance, Refund of US\$ 6.6 million deducted as delay damages and extension of contract period of the FARAB Energy and water project, the contractor of Headwork of Uma Oya Multipurpose Development Project until 30 th June 2018.	It was decided to direct the Secretary, Ministry of Mahaweli Development and Environment, to take note of the observations of the Minister of Finance and pursue action accordingly.
16/1679/704/0043/TBR and 30.08.2016	Implementation of three Water Supply Schemes, namely Makulella, Weheragalatenna and Kurundugolla, for the community affected from water ingress to the main tunnel of Uma Oya	It was decided to grant approval to the proposals 2.3(A) and 2.3(B) in paragraph 2.3 of the Memorandum, as recommended by the Standing Cabinet Appointed Procurement committee (SCAPC)

		Multipurpose Development Project.	
16/2077/704/027-I 18.10.2016	and	Refund a part of the US\$ 6.6 million deducted as delay damages from M/s. FARAB Energy Water Projects Company, the contractor of Headwork of Uma Oya Multipurpose Development Project.	<p>It was decided</p> <ul style="list-style-type: none"> i. To grant approval to the proposal in paragraph 3 of the Memorandum; and ii. To direct the Secretary, Ministry of Mahaweli Development and Environment, to take note of the matter highlighted in the observations of the Minister of Finance and pursue action accordingly, in future.

1.3 Dam Safety & Water Resources Planning Project – Additional Financing

1.3.1 Project Background

With the successful completion of major part of implementation of original Dam Safety & Water Resources Planning Project (DSWRPP), GOSL requested additional financing from World Bank for strengthening of another 31 dams and some water management related activities which were not covered under original DSWRPP. The overall objective of DSWRPP-AF remained the same as original DSWRPP i.e.(i.) establishing long term sustainable arrangements for operation and maintenance of large dams and (ii.) Improving water resources planning. Project activities coming under 4 components are implemented through five Implementing Agencies (Mahaweli Authority, Irrigation Department, Ceylon Electricity Board etc.). The project commenced in October 2014 and is scheduled to be closed in May 2018.

➤ Project Financing

The total estimated cost of Additional Financing is USD 83 million and 100% of AF is financed by IDA-WB. In addition, GOSL agreed to provide USD1.5mn. to cover the cost of allowances for the project implementation staff.

➤ Project Progress

By the end of December 2016, the project has achieved overall physical progress of 53 %. The total expenditure of Rs. 5,726.7 million with a financial progress of 51.3% (against the original project cost).

1.3.2 Major Achievements by end 2016

- i. **Financial Progress for 2016-** Achieved a Financial Progress of 99 % (2016 Allocation RS 3,719Mn – Expenditure – Rs 3,678.1Mn). The project management decided to drop some contracts, as the total estimated rupee value of the project has considerably dropped due to currency fluctuations.
- ii. **Dam Rehabilitation is one of the Major activities coming under the Component 1 of the project** -Out of 31 dams, 30 Dam contracts awarded (ID – 15 dams awarded 2 dams construction completed, MASL 10 Dams awarded Kandy Municipal Council 2 dams awarded, North provincial Council 2 dams completed and 1 barrage construction is in progress, CEB preparation of Bidding document is in progress.
- iii. **Physical progress of some of the dams belonging to the main 3 dam owners are as below.**

- **Irrigation Department** - Mahakanadarawa -99 %, Mahavillachchiya -75% , Padaviya -52 %, Angamuwa 95%, Wan-ela – 45%,Thoppur -85%, Kottukachchiya – 25%, Kachchimadu -15%, Nawagiriwewa – 35%, Janaranjanawewa -50%



Work Completed at
Mahakanadarawa Dam

- **Mahaweli Authority of Sri Lanka** -Victoria 79 %, UlhitiyaRathkida - 73%, Henanigala-84%, Bambarawana-82%, Pussalawinna-73%, Pimburaththewa – 25%, Muwagammana - 51%, Udawalawa-32%, Abagahagama -30%, Panakkaniya-60%



Rehabilitation work
at Udawalawe Tank

- **North Provincial Council** –Muthiyankaddu Civil work - 85% and Electro-Mechanical are 82%.Periya pandivirichchan 96%. Contract for Thodamanaru Barrage (Civil &Em work) awarded. Physical Progress is 10%



Civil work at MuthuIyan
Kaddu Dam

- iv. Progress of other major activities coming under Component 1 ;Electrification and Automation of Rajangana&Kaudulla Reservoirs physical progress10% . Replacement of Rajangana30 Spillway Gates – Work in progress, Upgrading the Bulk water allocation model for WMS of MASL- obtained the WB No Objection to upgrade the model with original developer and preparation of bidding document is in progress, Construction of Polgolla Reservoir Control Center - just awarded. 35% work completed in establishment of National Center for Dam Safety. Presently Geodetic Survey in Victoria Dam is in bid evaluation stage.
- v. **LSA Implementation** –Livelihood Support Assistance programme was conducted for three dams; Mahakanadarawa, Mahavillachchiya and Muthuiyankadduwere 100% completed without any major complain.
- vi. **Staff Training & Workshops** :Completed 20 local training programmes for 308 participants and 14 foreign training programmes for 115 participants
- vii. **Hydro Meteorological Information System** - Under Component 2 of the project, it has been identified to set up an additional 44 Hydro Meteorological Information System stations. Out of this, site surveys completed for 44, equipment procured for 20 sites, design completed for 14 sites.
- viii. **Ground Water Monitoring Network improvement** - Expansion of Ground Water Monitoring Network with collaboration of WRP is in progress including Polonnaruwa as new pilot area
- ix. Cabinet approvals were received for the National Water Use Master Plan, Mahaweli Water Development Plan (updated), and the Mundeni Aru River Basin Plan prepared under the original credit. 95% of work completed at Galgamuwa Training Centre and Kotmale construction work just started.

Final Accounts for year 2016

Draft Final Accounts for the year 2016 is stated below.

DAM SAFETY AND WATER RESOURCES PLANNING PROJECT

ADDITIONAL FINANCING
(5445-LK)
STATEMENT OF
EXPENDITURE
FOR THE YEAR ENDED 31ST
DECEMBER 2016

		For the Year 31.12.2016	Cumulative Up To 31.12.2016 (Rs.)	Cumulative Up To 31.12.2015 (Rs.)
Expenditure :	Not			
Dam Safety and Efficiency Improvement	3	3,413,774,143.03	4,858,693,981.24	1,444,919,838.21
Modernization and Upgrading of Hydro- meteorological Stations	4	160,996,581.89	324,955,356.53	163,958,774.64
Multi- Sectorial Water Resources Planning	5	137,600,580.39	137,600,580.39	0.00
Project Management and Monitoring	6	86,278,668.46	139,961,788.93	53,683,120.47
		3,798,649,973.77	5,461,211,707.09	1,662,561,733.32
Total Expenditure				
Financed By :				
Funds Received from International Development Association		3,779,636,634.21	5,437,611,496.40	1,657,974,862.19
Government of Sri Lanka		19,013,339.56	23,600,210.69	4,586,871.13
		3,798,649,973.77	5,461,211,707.09	1,662,561,733.32
Total		7	9	2

	Note	As At 31st December 2016	As At 31st December 2015
Assets :			
Property, Plant and Equipment	7	664,555,866.45	304,684,169.56
Direct other Project Activity cost		4,796,655,840.64	1,357,877,563.76
Receivables from International Development Association	8	0.00	0.00
Advances	9	455,351,696.98	538,612,925.15
Opening Balance Equity/ DSWRP Original		-9,312,662.42	8,980,046.41

Credit			
LC - Margin Account		31,773,569.26	46,983,561.79
Cash and Cash Equivalents	10	8,275,853.06	198,820,471.98

Total Resources **5,947,300,163.97** **2,455,958,738.65**

Liabilities and Funds :

Liabilities			
Advances Received from International Development Association		-65,712,540.27	148,414,095.41
Other Payables	11	233,118,586.25	203,343,744.74
Total Liabilities		167,406,045.98	351,757,840.15

Project Funds

Financed by International Development Association		5,683,402,437.10	2,049,306,876.47
Financed by Government of Sri Lanka		23,487,645.46	4,487,645.46
Total Project Financing		5,706,890,082.56	2,053,794,521.93

Exchange Gain/(Loss) on Translation of Foreign Currency Transactions		73,004,035.43	50,406,376.57
Total Project Funds		5,779,894,117.99	2,104,200,898.50

Total Liabilities and Funds **5,947,300,163.97** **2,455,958,738.65**

1.3.3 Cabinet Memorandums

Cabinet Paper number & date forwarded	Title	Cabinet Decision
16 th November 2016	Utilizing Water Resource Plans Prepared under DSWRP Project for future Development activities	Approved by the Cabinet

1.4 MAHAWELI AUTHORITY OF SRI LANKA

1.4.1 Development Activities carried out in year 2016

Cumulative Financial Progress

Capital budget (Revised) for the financial year 2016 was Rs. 3,775 million. In addition donor funded projects such as MoragahakandaKaluganga Development Project (OPEC, KUWEIT, CHINA), Dam safety and Water Resources Planning Project (World Bank),Umaoya Multipurpose Development Project (IRAN) and Climate Resilient Improvement Project (World Bank) are being implemented covering Mahaweli development area zones. Accordingly, for the financial total capital investment for the financial year 2016 was accounted Rs 46,621 million. Financial progress for the financial year given below.

Rs .Million			
Description	Budget Provision	Amount Released (Up to end of December 2016)	Expenditure (Up to end of December 2016)
Mahaweli Projects	44,621.00	31,335.89	31,308.31
Mahaweli Consolidated Project (CF)	500.00	499.00	494.22
System B Maduruoya RB Development project (CF)	225.00	192.10	182.85
Redemaliyadda Integrated Development Project (CF)	120.00	100.29	99.98
Welioya Integrated Development Project - System L (CF)	605.00	580.50	580.50
Implementing a mechanism to protect river bank of Mahaweli – Gatambe (CF)	125.00	63.00	63.00
Rehabilitation of Major and Medium Irrigation Schemes including emergency infrastructure rehabilitation works (CF)	200.00	191.45	178.21
*MoragahakandaKaluganga Development Project (FL,RF,FF)	22,500.00	19,797.5	19,797.5
*Dam Safety and Water Resources Planning Project (Mahaweli Portion) (FL,FF)	709.00	1,099.00	1,099.00
*Umaoya Multipurpose Development Project (FF)	19,176.00	8,354.05	8,354.05
**Climate Resilience Improvement Project (Mahaweli Portion) (FL,FF)	461.00	459.00	459.00
Administration and Maintenance (CF)	2,000.00	1,053.00	1,663.38
Total	46,621.00	32,388.89	32,971.69

*These projects are being implemented in the Mahaweli development areas and is directly supervised by the Ministry of Mahaweli Development and Environment. At the successful completion, all the projects will be handed over to MASL.

**This project is being implemented directly under the Ministry of Irrigation and Water Resources Management and partially implemented in the Mahaweli areas.

CF –Consolidated Funds, FL – Foreign Loans, RF – Reimbursable Foreign Loans, FF – Foreign Funds

➤ Mahaweli Projects

Mahaweli Consolidated Project

Source of Funds : Domestic Funds

Total Estimated Investment : Rs. 4,910 million (Revised Budget)

Project Period : 2007-2018

Mahaweli Consolidated Project was commenced with the objective of increasing income levels of rural communities settled in the MaduruOya Left Bank area assuring irrigation water supply for their agriculture. Project activities include rehabilitation of irrigation network that was built during 1982- 1986.(a)MaduruOyaLeftBank for improving water management including 52km of main channels, 65km of branch channels, 459km of distributary channels, 1,138km of field channel, 54km of drainage channels, 80km of operation and maintenance of rural roads, and small tanks (b) Improve selected water supply schemes built under the Village Self-Help Project, (c)Supporting agricultural development and strengthening farmer organizations(d) Implementation of appropriate environmental conservation programmes.

Financial allocation (revised) for the financial year 2016 Rs. 500 million out of which Rs.494.21 million (99 %) has been effectively utilized during the year 2016

No	Avtivity	Unit	Physical progress Jan. –Dec. 2016
01	Construction and Rehabilitation of Field Channels	Km	140
02	Construction and Rehabilitation of Distributery Channels	Km	11.1
04	Rehabilitation of Rural Tanks	No	05
05	Construction of Drainage Channels	Km	40.2
06	Rehabilitaion of Village Roads	Km	2.2



- System B MaduruOya RB Development Project (Malwenna and Mahawelithanna)**

Source of Funds : Domestic Funds

Total Estimated Investment : Rs. 935.49 million

Project Period : 2014-2018

The Mahawelithanna and Malwenna Mahaweli system Units within the upper part of the Singapura Block of the Mahaweli system B covering Polonnaruwa and Batticaloa administrative Districts are being developed under the Project. Due to the internal conflict situation during last few decades within this area, most of the settlers were internally displaced. As a result there were approximately 1200 families left for their original native places from the settlement areas.

Once the conflict was over, resettlement & rehabilitation work of the area has once again commenced under this special project in 2014. It is proposed to develop 859 homesteads and 859 irrigated land plots within the area of Mahawelithanna and Malwenna Units in Singhapura Block. Major activities of the project are, (a) Resettle 859 displaced families in Singhapura block and reestablishment of the settlements (b) Develop 521 ha of existing underutilized lands for irrigated agriculture purpose and 174 ha of homesteads (c) Construction of Mahawelithenna tank and related irrigation channels.

Financial allocation (revised) for the year 2016 was Rs. 225 million out of which Rs. 182.85 million (81%) has been effectively utilized during the year 2016.

No	Activity	Unit	Physical progress Jan. -Dec. 2016
01	<i>Jungle Clearing and Rough Levelling</i>	<i>Ha</i>	<i>37.06</i>
02	<i>Construction of Distributery Channels</i>	<i>Km</i>	<i>3.1</i>
03	<i>Construction of Filed Channels</i>	<i>Km</i>	<i>5.85</i>
04	<i>Construction of Drainage Channels</i>	<i>Km</i>	<i>5.7</i>
05	<i>Construction of Village Roads</i>	<i>Km</i>	<i>3.34</i>



D3 Canal Construction



Daycare Center

Redeemaliyadda Integrated Development Project

Source of Funds : Domestic Funds

Total Estimated Investment : Rs.1,100 million

Project Period : 2012-2018

Redeemaliyadda Divisional Secretary's Division in the Badulla Administrative District has been identified as one of the most remote and poorest DS division's in the country as per the House hold Income and Expenditure Survey of the Department and Census and Statistics. Therefore five year investment plan has been prepared to develop this DS area by the Mahaweli Authority. The Main objectives of this project are to develop infrastructure facilities and to open up agriculture based production and sustainable income avenues for the families in the area. Thus this project mainly focuses on (a) Development of commercial crop production (b) Livestock development and (c) Entrepreneurship development.

Allocation (revised) for the year 2016 was Rs.120 million and were able to utilized Rs. 99.97 million (83%) during theyear.

No	Avtivity	Unit	Physical progress Jan. –Dec. 2016
01	Rehabilitation of Rural Roads	Km	10
02	Rehabilitation of Tanks and Bunds	No	3
03	Construction of Agro Wells	No	40
04	Rural Infrastructure Development (Stores, Clinics etc.)	Buildings	18
05	Construction of Latrines	No	300
06	Construction of Drinking Wells	No	90

Further, 82 training programmes in various subject areas were conducted under the project to improve the skills and capacities of people in the project area.



Construction of Dunukewela Road



Dehigama School building

• Welioya Integrated Development Project -System L

Source of Funds : *Domestic Funds*

Total Estimated Investment : *Rs. 3,957 million*

Project Period : *2012-2018*

This project focuses to implement development activities in Mahaweli system “L” extent more than 62,000 ha of land area covering four Administrative Districts, Anuradhapura, Vavuniya, Trincomalee and Mullativu. Project area consist of 9 zones and zone 4 and 5 have been completed with initial infrastructure development activities while completing the settlement of 3,100 families during the year 1981. However, it was unable to continue the development process in the project area due to conflicts situation spread covering entire Northern Province, North Central and Eastern Province since mid 1980s.

Due to conflict situation, infrastructure facilities such as village tanks, irrigation system, road network as well as public buildings were subject to heavy damages. Therefore this project has been introduced for the purpose of (a) Resettlement of approximately 7,000 families and (b) Rehabilitation of infrastructure facilities in the area.

<i>No</i>	<i>Activity</i>	<i>Unit</i>	<i>Physical progress Jan. – Dec. 2016</i>
01	<i>Jungle clearing and Rough Leveling</i>	<i>Land lot</i>	<i>581</i>
02	<i>Rehabilitation of Roads</i>	<i>Km</i>	<i>40.2</i>
03	<i>Construction and Rehabilitation Of Distributary Channels</i>	<i>Km</i>	<i>5.19</i>
04	<i>Construction and Rehabilitation of Field Channels</i>	<i>Km</i>	<i>10.52</i>
05	<i>Construction of Drinking Wells</i>	<i>No</i>	<i>100</i>
06	<i>Construction and Digging of Agro Wells</i>	<i>No</i>	<i>30</i>
07	<i>Distribution of Nursery Trays</i>	<i>No</i>	<i>10,200</i>
08	<i>Construction of latrines</i>	<i>No</i>	<i>857</i>

Financial allocation (revised) for the year 2016 was Rs. 605 million out of which Rs. 580.51 million (96%) utilized during the year 2016.

- **Implementing a mechanism to protect river bank of Mahaweli – Gatambe**

Source of Funds : Domestic Funds

Total Estimated Investment : Rs. 698.97 million (Revised)

Project Period : 2013-2017

This project has been commenced since 2013 for the construction of 499 m long gabion retaining wall with the height of 15 m along the Mahaweli River Bank beginning from the premises near Department of Animal production and Health up to Mahinda Rajapaksha ICT centre premises in Gatambe, Peradeniya in the Administrative District of Kandy due to severe erosion of the river banks in geological section. Up to end of December 2015 176 meters of gabion wall was constructed.



Construction of Kiriibbanwewa road



Construction of Gaiabapura –Nedunkani



Construction of gabion wall

Financial allocation (Revised) for the year 2016 was Rs125 million of which Rs. 63 million (50%) has been utilized during the year 2016

No	Activity	Unit	Physical progress Jan. – Dec. 2016
01	Construction of Gabion Wall (Stage 1)	m	41

➤ Rehabilitation of Major and Medium Irrigation Schemes including emergency Infrastructure Rehabilitation Works

Source of Funds : Domestic Funds

Total Estimated Investment : Rs. 825 million

Project Period : 2015-2018

The project focuses on (a) Repair and maintenance of major head works and reservoirs, (b) Rehabilitation of irrigation infrastructure and (c) Construction and rehabilitation of roads along the irrigation distribution channels in Mahaweli Systems B, C, H, L, Huruluwewa, Udawalawa and EIC units under Head works and Maintenance Division of MASL.

Financial allocation (revised) for the year 2016 is Rs. 200 million of which Rs. 178.21 million (89%) has been effectively utilized during the year.

➤ **Maintenance and Development**

Mahaweli Authority of Sri Lanka is responsible for the Operation and Maintenance of 10,821 km of irrigation channel network, 333 large, medium and minor reservoirs to ensure the efficient irrigation water management and supply for 105,522 ha of agriculture land area in its 10 Systems for the purpose of agriculture enhancement in line with the country's National Food Production Programme. Maintenance and rehabilitation of road network and other infrastructure facilities in the Mahaweli areas coming directly under the purview of MASL for the benefit of approximately 275,000 families.

Further, effective land management, entrepreneurship development, environment conservation and institutional development and facilitation of cultural and sports development activities in Mahaweli settlement areas for the benefit of current and future generations of Settlers are also key activities of MASL. The budget allocation for the year 2016 is Rs. 2, 000 million of which Rs. 1,663.38 million (83%) effectively utilized during the year.

➤ **Irrigation System Maintenance**

Secondary growth clearing, de-silting, repairs and improvement of irrigation systems and structures, graveling roads etc. are coming under Mahaweli irrigation systems maintenance tasks. The allocation in the year 2016 is Rs. 337.09 million of which Rs. 299.31million (89%) effectively utilized to perform above activities successfully during the year.

1,007 registered farmer organizations are operating in the Mahaweli areas and operation and maintenance of distribution channel network has already been handed over among 10 highly efficient farmer organizations during the year 2016 and amounting to total no of 789 farmer organizations up to end of 2016. Further, upgrading 20 farmer organizations to demonstration level and 36 farmer organizations to the commercial level during the year 2016 under the guidance of Institutional development division.

Land Alienation

During this period, 82 new land plots for housing and 06 land plots for commercial purpose were issued under the Crown Land Ordinance (CLO) and 60,574 land grants/permits were issued among the settlers to ensure their land ownership, while issuing 50 no of land grants

among the temples during the year. 13,291 new land plots have been surveyed up to end of December 2016. Rs. 217.2 million of lease income has been collected during the year 2016.

➤ **Agriculture & Livestock Development**

• **Agricultural Productivity Enhancement Programme**

The programme has been initiated to entire enhancement of local food crop cultivation and livestock production which will lead to reduce agricultural imports to the country thus establishing country's food security in line with National Food Production Programme. Series of programmes such as promotion of OFC, introduction of hybrid seed paddy, increasing use of organic fertilizers, establishment of new farms & nurseries, promotion of export quality rice production were launched and cultivation of traditional paddy varieties has been also promoted under the program. Awareness programmes and workshops were held on improved Dairy production, poultry production, inland and ornamental fish production activities were conducted under the livestock development programme.

• **Agricultural Crop Cultivation**

Extent of paddy cultivation in Mahaweli areas recorded as 94,735 ha with approximately production of 541,000 mt of paddy production were recorded in 2015/2016 Maha season. The average yield in terms of paddy was 5.62mt/ha in Mahaweli areas. The extent of paddy cultivation in 2016 Yala season were approximately 63,893 ha with approximately production of paddy were recorded as 343,454 Mt. The total paddy production for 2015/2016 Maha and 2016 Yala were approximately 884,868 Metric Tons.

The extent of other Crop Cultivation (Other Field Crops, Fruits, Vegetables and Perennial crops) were approximately 45,000 ha consist 2,421 ha of Soya Bean, 4,373 ha of Maize, 1,713 ha of Big Onion, 821 ha of Chili, 813 ha of Black Gram, 1,238 ha of Cowpea, 536 ha of Ground Nuts. Cropping intensity was recorded as 178 during the end of the year. Further 13,046 ha of Fruits and 7,111 ha of Perennial Crops were also cultivated.

According to the Department of Agriculture data, MASL plays an active role in local agriculture production and development of the country while it accounts to 20% of Paddy, 55% of Soya bean, 35 % of Big Onion and 8% of Chili production during the year 2016.

- **Dairy Development Programme**

Dairy farming is promoted in Mahaweli areas as an additional income generation source and supported to provide high nutrient level among Mahaweli settler community. Livestock Development Division of MASL is responsible for the implementation and monitoring of dairy development programmes in the Mahaweli systems.

It was recorded as 110,630 Cattle population in the Mahaweli areas while produced approximately 30 million liters of milk during the year 2016.

During the period, 135 new cattle sheds were built and 11 milking machines were distributed among needed farmers. Further, 6 breeding centers were established to upgrade genetic potential of dairy cattle population in the systems.

118 training programmes were conducted for the capacity building of farmers, school children's and field officers. Further, 39 animal clinics were conducted for the improvement of animal health. While 3 milk cooling centers were established, 22 programmes were conducted under the "Milk Week" dairy programme during the 2016.

- **Inland Fisheries and Ornamental Fish Culture**

Inland Fishery Development within Mahaweli reservoirs was a key initiative implemented which helped farmers to increase the income levels and to upgrade the nutrition consumption level among Mahaweli Settlers. 14650 Metric Tons of inland fish production reported within the year 2016. In order to improve the fish production, 632,000 fingerlings were released and 4 breeding centers were established. Further, for the improvement of ornamental fish production 92 mud ponds were constructed and 2 collection centers were established. Furthermore, to strengthen the fishery communities 7 Fisheries Societies were established during the year.

- **Institutional Development**

Upgrading socio – economic conditions of Mahaweli settlers through providing entrepreneurship opportunities, capacity building, institutional strengthening, women empowerment, social and cultural development were major initiatives implemented as post settlement programme of MASL. Accordingly, Institutional Development Division of MASL has organized series of programmes and workshops covering above subject areas for the betterment of second and third generations of Mahaweli settlers.

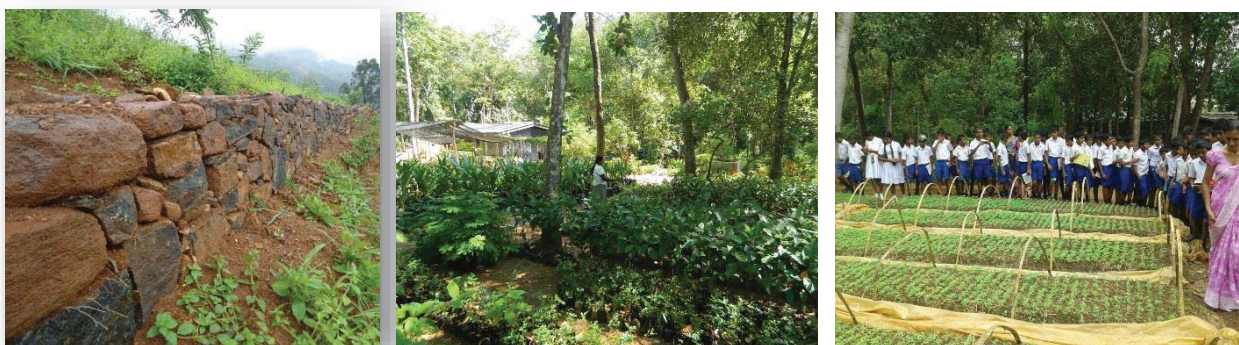
It was able to conduct 3,067 institutional development programmes, 736 community development programmes and 61 programmes related to women development during the year.

➤ **Forest & Environment**

• **Forest & Environment Conservation**

Environment Division continues to manage and co-ordinate all environmental activities within Mahaweli areas. Assigning priorities for the “Punurudhaya(පුනරුදය)” the three year action plan under the national environment programme while conducting a “NeelaHaritha (නීල හරිත)” programme with the of Mahaweli Development and Environment Ministry for the implementation of green concept practically in all Mahaweli areas starting the year 2016.

Annual allocation for the forest & environment conservation activities was Rs. 50 million of which Rs. 48.7 million (97%) utilized during the year 2016. During this period 230 cubic meters and 15,423 meters of soil conservation under the natural resource conservation and construction of 21 Km long of live fence, 6 Km of Electric fence and further maintenance of 75 Km long existing fence were completed. During the period, 88 water quality reports were produced under the water quality monitoring programme to ensure the water quality of the Mahaweli area. 763,632 plants were produced under the nursery management and plant production programme while 133 no of Environmental Education and Awareness programmes were conducted during this period with the participation of school children. To control and manage the invasive alien species, 15 tanks were cleaned in systems, B, Hand C



• **Renewable Energy production Enhancement (Mini Hydro Power Projects)**

Letters of intents have been issued for the construction of 20 mini hydropower stations in Mahaweli areas with a total capacity of 57.3 MW of hydropower. Environmental approval has been given for 16 projects of which 10 projects have been already commenced for commercial operation up to the end of December 2016 with the capacity of 30.1 MW.

- **Business Development**

Renovation of 07 circuit bungalows have already been completed and provision of new furniture purchased from Timber Corporation have been completed for all of the bungalows (07) during the year 2016. It is supposed to complete the renovation work of Pimbureththewa at the end of June 2017.



Kalawewa



Dehiaththakandiya

- **Investments opportunities for Private Sector in Mahaweli Areas**

Approvals were granted to new commercial agriculture and other development projects in Mahaweli lands during theyear 2016.

<i>Agriculture and Livestock</i> 7	<i>Industries (Rice, Quarry ,Garment,Salt)6</i>
<i>Service (Fuel station , other) 4</i>	<i>Environment Projects(Boat , Land) 6</i>
<i>Solar Power plants</i> 2	

- **Promotion of Small and Medium Scale Enterprises (SME's)**

SME programmes organizedwith the support of Regional Development Bank (RDB) were able to assist 78 entrepreneurs in Mahaweli areas amounting to Rs. 13.82 million under the “Mahaweli Saviya (මහවැලි සවිය)”special loan programme under the “Mahaweli Diriya

(මහවැලි දිවිය)” special loan programme it was able to assist 8 farmer organizations for their business development accounted Rs. 10.7 million during the year 2016.

➤ **Facilitate the Convenient Working Environment**

i. Human Resource Development / New Recruitments / Staff Promotions

To provide efficient and effective service the authority was able to complete most of its carder recruitments in line with revised SOR.

Number of Vacancies Fulfilled		Promotions	
Senior Management (HM)	01	Senior Management (HM)	01
Middle Management (MM)	56	Middle Management (MM)	45
Junior Management (JM)	12	Junior Management (JM)	68
Management Staff (MA 3, MA 2-2, MA 1-2)	262	Management Staff (MA 3, MA 2-2, MA 1-2)	62
Total	331	Total	176

ii. Procurement Plan

During the year 2016 following equipment were purchased and supplied to improve the working efficiency.

Office Equipment	Number of Units
Desktop Computers	261
Laptop Computers	68
Printers	106
Photocopy Machine	74

Office Equipment	Number of Units
UPS	252
Media Projectors and Screen	28
Fax Machine	8
Dot Matrix Printers	10

iii. Training

To improve the strengthen of the employee while bringing them to the higher level of skills and knowledge several training programmes were conducted under various subject by the training division of the authority.

Training Programmes Conducted		
	Programmes	Participants
Senior Management (HM)	1	35
Middle Management (MM)	4	128
Junior Management (JM)	11	237
Management Staff	16	827
Total	32	1227

➤ Legal Enforcement

During the year 2016, 116 court cases were followed up by the legal division under the guidance of Attorney General Department while the head works division involved in 11 case

hearings, 04 legal discussions were conducted to solve some of the pending legal cases of MASL.

➤ **Water Management**

The Water Management Secretariat (WMS) ensured the efficient utilization of the water resources of Mahaweli reservoirs. While coordinating with CEB, Water Board, Department of Irrigation, and Metrology Department to meet the countries' Agriculture, Hydro energy, Drinking and water requirements. WMS also provided information and recommendations to the Water Management Panel to assist it in reaching its operational policy decisions.

➤ **Water Storage Capacity of MASL Reservoirs**

Reservoirs	Maximum Capacity Level (MCM) 2016
Kothmale	172.9
Polgolla	4.1
Victoria	721.2
Randenigala	861.4
Rantambe	7.0
Bowatenna	23.5
UdaWalawa	278.2
DambuluOya	11.7
Kandalama	33.8
Kalawewa	123.7
Ulhitiya/ Rathkinda	145.3
MaduruOya	596.6
Total	2979.4

Internal Audit

To ensure the effectiveness of the functions of the authority under the Internal Audit division 11 field visits were conducted for audit in the systems, Issued 14 audit reports and conducted 24 audit inquiries during 2016.

➤ Power Generation Capacity of Mahaweli Reservoirs

Reservoir	Total Capacity (Approximately) (MCM)	Maximum Power Capacity (MW)	Power Generation 2015 (GWh)	Power Generation 2016 Jan. – November (GWh)
Kothmale	174	201	480.44	257.69
Polgolla	4	-		-
Victoria	722	210	795.28	563.12
Randenigala	860	126	434.56	304.94
Rantambe	7	49	213.05	134.79
Ulhitiya/Rathkinda	146	-		-
Maduruoya	596	-		-
Bowathanna	23	40	64.42	39.25
Udawalawa	268	6	21.42	15.54
Ukuwela (Power Station Only)		40	157.51	146.62
Total	2,800	672	2,166.68	1,461.94

1.4.2 Cabinet Memorandums forwarded in 2016

Cabinet Paper no and date forwarded		Title	Cabinet decision
No	Date		
16/0063/704/003	2016.01.20	Combining a private investor to reorganize Mahaweli Livestock and Agri Business (Pvt)Ltd.	Grant approval to the proposal
16/0621/704/015	2016.04.19	Taking a policy decision with regard to the alienation of lands of Mahaweli system "L"	(i) Grant approval for the allocation of blocks of land as proposed (ii)Direct the relevant authorities to allocate the blocks of land as at (i) above , in a manner which does not interrupt the existing elephant corridors in the relevant areas
16/0629/704/016	2016.04.19	Requesting a 100 acre land for the construction of cattle orphanage – Sri Bodhiraja Foundation, BodhirajaDharmayathanaya, Embilipitiya	(i)Grant approval for the proposal (ii) Direct the officers of BodhirajaDarmayathanayato register the proposed cattle orphanage under the Department of Animal Production and Health, Embilipitiya
16/1274/704/034	2016.07.26	Granting tax relief for commercial lands alienated on lease basis in terms of the State Land Ordinance No.08 of 1947	(i)Grant approval for the proposals (ii)Ministry of lands to take action to review paragraph (2) of Regulation 2017 made under the State Land Ordinance, No 08 of 1947 pertaining to annual lease amount of the land leased for commercial purposes and recommended suitable proposals to the cabinet

16/1883/704/053/TBR	2016.09.27	Direct assignment to Road Development Authority for improvement and surfacing of 11.1 km long main road , in Mullativu district that runs from Gajabapura area of Welioya to Nadunkerni town	Decide to grant the approval for the proposals
16/2013/704/055	2016.10.11	Annual Report of the Sri Lanka Mahaweli Authority for the year 2013	<p>(i) Grant approval to present the Annual Report of the Sri Lanka Mahaweli Authority for the year 2013</p> <p>(ii)Rectify the shortcomings and deficiencies pointed out by the Auditor General pertaining to the financial statement of the Sri Lanka Mahaweli Authority for the year 2013</p> <p>(iii)Submit the Annual Report of the Sri Lanka Mahaweli Authority for the year 2014 and 2015 to the cabinet</p>
16/2343/704/011-II	2016.11.15	Request for the proposals (RFPs) for Development of Renewable Energy project in Mahaweli economic zones.	<p>(i)Grant approval in principle to the recommendation</p> <p>(ii)Implement the recommendation in the memorandum and submit to the cabinet as join proposal,</p>

PART 2

PROGRESS OF ENVIRONMENT DEVELOPMENT & CONSERVATION

2.1 Activities Carried out to address the Clean Air –Everywhere

Mission 1 - Clean Air Everywhere

2.1.1 Major Achievements in 2016

Air pollution is one of the most serious problems facing today's world, which has far reaching health, environmental and economic impacts. Unlike in many of its Asian neighbors, Sri Lanka is fortunate that it has not yet experienced acute air quality problems as a result of industrial expansion, increasing vehicular traffic and thermal power generation and rapid urbanization due to its geographical positioning. When considering the Sri Lankan scenario, emissions from motor vehicles contributes around 55-60 percent of total emissions in urban sector and it is the most significant contributor to air pollution. Other emission sources are emissions from industries around 20-25 percent and household emissions which is around 20 percent.

The Western Province in Sri Lanka (area including the districts of Colombo, Kalutara and Gampaha) commonly refers to Colombo Metropolitan Region was identified as an area of higher air pollution and also Kandy town area, Galle, Kurunegala, and Puttalam have also been identified as other relatively higher air pollution areas in Sri Lanka.

Major activities carried out to address the mission of clean air everywhere are given below.

- As Mission 1 of Haritha Lanka Programme – “Clean Air Everywhere” was prepared based on Clean Air 2015 Action Plan (CA2015AP) implemented by AirMAC. There was a strong need to update CA2015AP to suit the national needs of the next decade.

In this regard, Air Resource Management & International Relations Division has drafted Clean Air 2025 Action Plan in 2015. In 2016 action plan was finalized at the AirMAC stakeholders meeting held at Centre for Banking Studies on 8th March 2016.



- The final report on the pilot study on open burning which was carried out to assess the environment and health impact of open burning has been submitted.
- AirMAC stakeholders' consultation meeting was conducted on 11th October 2016.

➤ **“Air that We Breathe - 2016”, the sixth National Symposium on Air Quality Management in Sri Lanka**

The sixth national symposium on air quality management in Sri Lanka was successfully conducted on May 5-6, 2016 at Waters Edge, Battaramulla under the patronage of H.E. Maithripala Sirisena, the President of Sri Lanka.

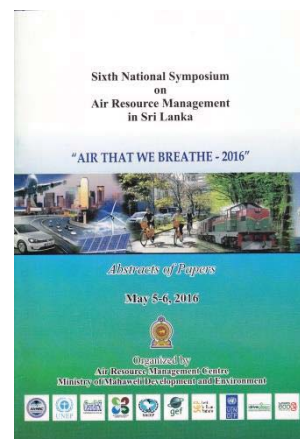
“Air That We Breathe” National Symposium on Air Quality Management in Sri Lanka is a forum to present and discuss the most recent technological, scientific and policy developments associated with air pollution problems.

Based on the success of first five symposiums, the sixth symposium was focused on identification and promotion of the best practices in air resource management and planning scenario and economic analysis of air pollution issues, and integrated the views of engineers, scientists, and other professionals from a number of public and private institutions in the country, involved in air quality research and development activities representatives from United Nations Environment Programme (UNEP) and South Asia Co-operative Environment Programme (SACEP) has also taken part at the symposium and it was a great opportunity to open the forum to discuss Regional perspective in Air Quality Management.



Air Resource Management & International Relations Division of this Ministry organized this event together with Air Resource Management Center (AirMAC) and Clean Air Sri Lanka, SACEP and Sustainable Biomass energy project of UNFAO were granted their unstinting financial support to make this event a success.

Clean Air 2025 Action Plan was presented at the inaugural session of the Symposium to H.E the President.



➤ **Awareness workshop on Air Quality issues and Management in Sri Lanka for media personals**

Air Resource Management Division & National Ozone Unit of this Ministry was organized an awareness program for media personals on Air quality issues, effects and its management needs for Sri Lanka. The overall objective of this workshop was to enhance public awareness on air pollution and associated health and environmental issues, and increase public concern towards the better air quality, green and sustainable environment through their creations and publications.

The workshop was organized on 6th and 7th of December 2016 and 35 media personals representing different agencies actively participated at the workshop.



➤ ***Monitoring Vehicular Emission Testing (VET) Programme***

Air quality is very much influenced by the vehicle emissions as vehicles are the most dominant source of emission of most air pollutants. Considering this, vehicle emission standards were introduced to address the issue of air pollution from vehicular emissions in Sri Lanka. The Government of Sri Lanka gazetted Emission Control Regulations on 30th June 2003 under the National Environmental Act No. 47 of 1980. It was amended by the Gazette No: 1557/14 dated 09.07.2008 and more stringent regulations were implemented with effect from 15th September 2016. Vehicle Emission Testing program which designed to issue the Vehicle Emission Testing (VET) certificates and it plays a key role in controlling air quality in urban areas.

Air resource Management division participated in 4 center inspection programs conducted by VET office to monitor process of VET centers.

2.2 Activities carried out to address the Saving Flora, Fauna and Ecosystems

2.2.1 Major achievements in 2016

- **Project on Mainstreaming Biodiversity Conservation and Sustainable use for Improved Human Nutrition and Well-being (BFN Project)**

* The stakeholder workshop was conducted on the 19th of February 2016 at the “Plant Genetic Resources Centre”, Gannoruwa, Peradeniya with the participation of experts to develop new project proposals to be facilitated and coordinated through the BFN project in the year 2016-2017.

The selected project proposals were analyzed and modified by the Biodiversity experts visited from Rome during 16th February- 27th February 2016 at Plant Genetic Resources Center, Gannoruwa, Peradeniya and Miridiya Hotel Anuradhapura. Further, meetings were conducted within this period to review available information, discuss management and project implementation issues as well as to define work plan among team leaders. A training programme also conducted to train the project partners and stake holders on statistical data analysis. A field visit was carried out to Mahakanadarawa to collect data of field crops and fruits cultivated.

The Introduction Programme on “**Farmers Training on Biodiversity Field Fora – Village tank system Gampola, Giribawa**” was held from 18th May 2016 to 19th May 2016 at Gampola pilot site. The objective of training programme to introduce Diversity Field Fora (DFF) to farmers in pilot project site with management practices of Sesame cultivation in ‘Yala’ season.

The program was conducted in the project site by the PMU staff, Plant Genetic Resources Center (PGRC) staff and a trainer from Seed Certification Service on (SCS), Gannoruwa. About 30 farmers attended the training program from the project site. Discussion was held on cultivation and harvesting of sesame, marketing problems, production of good quality seeds, seed certification and seed registration, importance of Biodiversity Field Fora, and finally discussion of overall problems of farmers in pilot project site

* The Training Programme on “**Participatory Approaches for Managing Agricultural Biodiversity Training for Trainers**” was held from 26th April 2016 to 29th April 2016 at Plant Genetic Resources Centre, Gannoruwa, Peradeniya.

The objective of this training programme was to provide training on participatory approaches for managing agricultural biodiversity for trainers who are engaged with BACC project activities. Training programme was conducted by foreign and local experts on subject.

* The workshop was held from 20th to 22nd June 2016 at Horana. The objective of the workshop was to identify best management practices on agronomy, climate change and soil conservation to prepare a manual on best traditional and improved management practices that suit project sites.

The workshop to finalize the work plan of 2016 and the research and development expert meeting and training programme to train the project partners and stakeholders on statistical data analysis were held at Anuradhapura. The field visit to Mahakanadarawa was scheduled to collect data of field crops and fruits cultivated. The training programme of “R” statistical software was conducted by Mr. MattiaManica.

➤ **Exhibition on “Vasa ViasNethi Ratak: Toxin - free Sri Lanka “at BMICH 06th – 08th March 2016, organized by the Presidential Secretariat.**

Biodiversity Secretariat contributed to this nationally significant event displaying an exhibition stall under the theme of WasaVisenAthmideemata – JaivaVividhathvayaAgayamu” of which the meeting can simply be translated as “Shall Value Biodiversity to escape from toxins. “ Sooryamandala ”was made using seasonally available fruits and vegetables to educate participants on how seasonal biodiversity can be mainstreamed towards a toxin free Sri Lanka.

Preparing “Sooryamandala” is a time-tested Community Biodiversity Management (CBM) practice. Seasonally available fruits and vegetable on different colors and shapes are arranged into a cyclic pattern of a core and the periphery resembles the shape and function of the Sun. More than 20 different varieties used for the Sooryamandala. This is a participatory exercise and a type of a visual art and novel way of biodiversity prospecting. Participants were made aware on how nutritionally rich, toxin free food can be found cheaper with joy revive community spirit. Event was highly attractive and appreciated by the participants. Jackfruit promotion campaign displayed and sold products like ice cream, koskoththu, cutlets etc.



Preparing “Sooryamandala

➤ **Project on Strengthening Capacity to Control Introduction and Spread of Invasive Alien Species (IAS) in Sri Lanka**

* Comprehensive Training Course on Control and Management of Invasive Alien Species (IAS) in Sri Lanka

Comprehensive Residential Training Course on control and management of Invasive Alien Species was conducted at the Sri Lanka Forestry Institute, Moon Plains, NuwaraEliya. This training course was jointly organized by the Biodiversity Secretariat and the Sri Lanka Forestry Institute.

International IAS training expert Dr. John Mauremootoo facilitated the course with the expert inputs from local resource persons in Sri Lanka. Training modules were prepared with technical assistance of the local experts.

* Videos, awareness kits were prepared on IAS management.

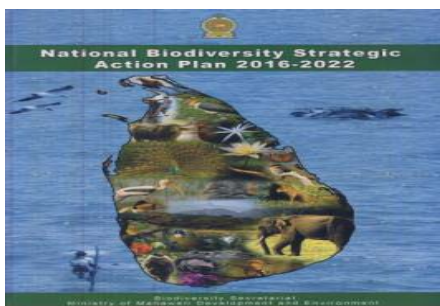
* Workshop to obtain preliminary ideas from stakeholder organization, on – Governmental Organizations and Professionals on preparation of IAS Act.

Biodiversity Secretariat held the above workshop on 04th March 2016 at the Center for Banking Studies Rajagiriya. The participation of relevant government officers, stakeholder agencies, NGOs and other professionals and gave preliminary ideas for the preparation of Invasive Aliens Species Management Act.

* Biodiversity Secretariat has organized three awareness programs on the biodiversity conservation for school children in Matale district (Naulla Mahinda Vidyalaya, Pussalle Maha Vidyalaya and Sujatha Balika Vidyalaya). These awareness programmes were conducted on 03rd, 10th & 14th June 2016, theme under the “Biodiversity, Waste Management and Invasive Alien Species”.

➤ **National Biodiversity Strategic Action Plan**

National Biodiversity Strategic Action Plan project was started in 2013 and completed July 2016. National Biodiversity Clearing House Mechanism was established in collaboration with South Asia Corporate Environment Programme and launch in December 2016. Also, completed National Biodiversity Strategic Action Plan (NBSAP 2016-2022) with the technical support of IUCN Sri Lanka country office. Government, NGOs, Private sector agencies and experts were directly involved in preparation of this NBSAP. Biodiversity Secretariat obtained cabinet approval for implementation of this action plan.



National Biodiversity Strategic Action Plan

➤ Celebrating World Wetland Day – 02nd February 2016

Watala Divisional Secretariat organized a walk for celebrating the world wetland day in 2016 and also conducted awareness program for general public and school children.

➤ Launching of Biodiversity on Protected Areas

Ministry of Mahaweli Development & Environment commemorated World Environment Day and Conference on Sustainable Environment on 5th June 2016. It was held at Edward Stadium in Matale.

Biodiversity Secretariat involved in following activities. Chief Guest was His Excellency the President Maithripala Sirisena. First copy of the publication on “Biodiversity on Protected Areas” was launched by His Excellency the President Maithripala Sirisena. This publication is helpful to aware the general public. Target groups were School children, beginners of researchers and the other who are interested in environmental education. It comprises information on biodiversity of the area, management practices, research on world heritage sites, wetlands and National parks etc. in Sri Lanka.

2.2.2 Legislation & Regulations

Legislation & Regulations	Short Description
Preparation of National Policy Strategy & Action Plan on Invasive Alien Species (IAS) in Sri Lanka	Establish a national policy which leads to formulate an appropriate legal framework and implemented through an effective and efficient institutional coordination mechanism which prevents, detects, responds and manage the risks of IAS to the economy, environment and society.



Launching of National Policy Strategy & Action Plan on Invasive Alien Species

2.3 Activities carried out to address the meeting the challenges of climate change

Introduction

Climate change which is the ultimate outcome of global warming is now universally recognized as the fundamental human development challenge of the 21st century. The Intergovernmental Panel on Climate Change (IPCC) has conclusively established that Climate Change induced by global warming is the direct result of excessive emissions of greenhouse gasses due to human action, particularly due to uncontrolled combustion of fossil fuels. It is a certainty that the present and future generations have to live under the threat of climate change.

For over the past 200 years, the burning of fossil fuels, such as coal and oil, and deforestation has caused the concentrations of heat-trapping "greenhouse gases" to increase significantly in our atmosphere.

Greenhouse gases are required for life, because they keep the planet's surface warmer. But, as the concentrations of these gases continue to increase in the atmosphere, the earth's temperature is climbing above past year's levels. Most of the warming in recent decades is very likely the result of human activities.

Global warming is expected to lead to a rise in sea level, higher temperatures, more frequent and prolonged droughts, high intensity rainfalls and increased thunder activity. These anticipated changes represent a significant threat to the coastal areas, the different sectors of the national economy and human health.

As a developing country and an island nation, Sri Lanka is especially vulnerable to these impacts. Climate change would produce major impacts on Sri Lanka's natural resources, economic activity and people's well-being. The full extent of climate change impacts on Sri Lanka is being studied, but there is a growing recognition that climate change could threaten the significant achievements the country has made in the last 20 years in increasing incomes and reducing poverty. Preliminary research and projection being undertaken has shown that Sri Lanka is highly vulnerable and could be affected in different ways.

The Climate Change Secretariat of the Ministry has undertaken several measures to address the challenges of climate change in the economic development sectors of the country. One of the main objectives of the Climate Change Secretariat is to facilitate climate change related research and distribution of research results to trigger policy reforms and actions. Major Functions to address the challenges induced by climate change is given below.

2.3.1 Major Achievements in 2016

➤ Preparation of National Adaptation Plan for Climate Change in Sri Lanka

National Adaptation Plan is the country's road map to guide the national efforts for confronting challenges posed by global climate change and its impacts. It envisages moderating and coping harmful impacts of climate change while taking the advantage of any opportunities presented in the path. It offers a practical path of action to reduce the vulnerability and enhance the adaptive capacity of the nation as a whole. NAP preparation process was started in 2014. The objective of preparing NAPs is to reduce vulnerability to the impacts of Climate Change by building adaptive capacity and resilience. The consultancy service for preparation of NAP was awarded to the Institute of Policy Studies (IPS). In the preparation of the NAP process ten sectors have been identified as the most vulnerable sectors to adverse effects of climate change in Sri Lanka. Consultations also helped to identify priority areas within each sector that needs specific actions of adaptation. In the identification of sectors and priority areas within them, attention was also given to align them with organizational structure of line agencies responsible for catering needs of respective sectors as far as possible.

Among the key components covered in the NAP are: specific actions/interventions with time lines to fulfill sectoral and cross-cutting adaptation needs; an implementation strategy for selected interventions; institutional mechanisms for coordination of actions of stakeholders; key performance indicators (KPI) for each action; system for monitoring and evaluation KPIs.

The identified sectors are; Food security, Water resources, Coastal and marine sector, Health, Human settlements and infrastructure, Ecosystems and biodiversity, Tourism and recreation, Export, agriculture sector, Industry energy and transportation.

Sectoral workshops have been conducted on Agriculture, Water, Ecosystems and Biodiversity, Tourism and Recreation, Health and Disasters, Human Settlement and Infrastructure, Industry, Energy and Transportation, Export, Agriculture and Plantation sectors and discussed about the cross cutting issues related to preparation of the NAP.

National Expert Committee meeting on adaptation was held and obtained experts inputs for the draft NAPs. Validation and Finalization workshop was conducted and final draft has been prepared according to the inputs. NAP document printed and launched on 18th October 2016 at SRI LANKA NEXT "A Blue - Green Era" programme. The stakeholder consultative workshop was conducted on 7th December 2016.



➤ SRI LANKA NEXT | " A Blue - Green Era " International Conference and Exhibition 2016

“Sri Lanka NEXT – A Blue Green Era” was formally initiated on 6th January 2016 at the BMICH to familiarize all sections of Sri Lankan society on Climate Change and to provide directions on development strategies. Under this event, International Conference on Climate Change was held at the BMICH, Colombo during October 17 - 19, 2016.

The objective of the Sri Lanka NEXT 2016 International Conference on Climate Change is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Climate Change.



Conduct Awareness Programmes on Climate Change Impacts

Preparation of Booklet “Climate Change and Our Future”

The booklet was prepared aiming to improve the awareness of school children’s regarding Climate Change on commemoration of world Environment day 5th June 2016.



➤ Poster on “Climate Change Impacts on Ecosystems”

Printed 1000 Posters on “Climate Change Impacts on Ecosystems” and published in Climate Change Secretariat web site.



➤ **CGE Hands - On Training Workshop on the Preparation of Biennial Update Reports for the Asia-Pacific and Eastern European Regions**

The United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol has offered to host the Consultative Group of Experts (CGE) Training Workshop for Asian Region on Greenhouse Gas (GHG) Inventory through the Ministry of Mahaweli Development and Environment.

The workshop was organized by the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE), in collaboration with the Technical Support Unit for the Intergovernmental Panel on Climate Change Task Force on National Greenhouse Gas Inventories. The CGE provide technical assistance to non-Annex I Parties for the regular development of National GHG Inventories reported in their national communications.

The regional training workshop for the Asia-Pacific and Eastern European Regions on the preparation of Biennial Update Reports from parties not included in Annex I to the convention was held from 4 to 6 April 2016 at the Hilton Hotel, Colombo with 36 international delegates.



➤ **Preparation of Intended Nationally Determined Contributions (INDCs) for Sri Lanka**

The 21st session of the Conference of Parties to the UNFCCC was held in December 2015 in Paris with the participation of 195 world leaders and agreed to a universal Agreement called “Paris Agreement” to control the rise of global temperature well below 2⁰C within the century while making all efforts to maintain at a level below 1.5⁰C. Accordingly, member countries of the UNFCCC have consented to follow the strategies to mitigate the rise of

global temperature by communicating their Indented Nationally Determined Contributions (INDCs).

Being a party to the UNFCCC, Sri Lanka has prepared and submitted the country's INDCs which consists of mitigation, adaptation, means of implementation (finance, technology development and transfer, capacity building) and loss and damage.

Ministry of Mahaweli Development and Environment has been functioning as the national focal point for the UNFCCC and taking climate change related actions and driving agency for coordination of INDCs implementation in the country targeting year 2020-2030 as to meet the commitment of COP 21 Paris Agreement.

According to the Cabinet decision on **“Agreement on Global Climate Change and National Strategic Accord (National Contribution towards minimizing Global Temperature)”** No: 16/0377/704/011, dated 2016-02-26, it has been decided to prepare strategic policies and implementation plans for the INDCs submitted to mitigate the GHG emission of the sectors such as Power & Energy, Transport, Industrial, Waste Management, Forestry and Biodiversity, Health, Disaster management, Water and Irrigation, Agriculture, Livestock, Coastal and Marine, Urban, City Planning and human Settlements, Tourism and Recreation.

As per the above Cabinet decision, 13 “Advisory Boards” have been established consisting of Hon. Ministers and Ministers of Provincial Councils in charge of the subject (sector) related to INDCs. Further, 13 “Planning and Regulatory Committees” were established under the Chairmanship of Secretary of the Ministry incharge of the subject related to INDCs.

Hon. Susil Premajayantha, Minister of Science, Technology and Research signed the Paris Agreement on climate change, on behalf of the Government of Sri Lanka, at the high-level signature ceremony held on 22nd April 2016 at the UN Headquarters in New York. Sri Lanka’s first Nationally Determined Contributions submitted to UNFCCC in September 2016.



➤ **Inter Agency Coordinating Committee meetings on Climate Change (IACCCC)**

IACCCC was established with members of line ministries and agencies in order to integrate climate change adaptation and mitigation aspects into relevant sectoral policies, strategies and action plans. Inter-Agency Coordinating Committee meetings were held on 9th June 2016 and 22nd December 2016. The committee discussed decisions taken at previous expert committee meetings, Preparation and Implementation of INDCs, National Adaptation Plan (NAP) on Climate Change process and outline of the proposed plan and implementation arrangement, COP 21 decisions and Paris agreement.

➤ **National Expert Committee on Climate Change Adaptation (NECCC-Adaptation)**

Considering importance of having a National Expert Committee on Climate Change Adaptation (NECCC- Adaptation) to advice on activities related to climate change adaptation in Sri Lanka, NECCC- Adaptation was established September in 2012.

Objectives of the National Expert Committee on Climate Change Adaptation;

- Sensitize and make aware the communities periodically on the country's vulnerability to climate change.
- Take adaptive measures to avoid/minimize adverse impacts of climate change to the people, their livelihoods and ecosystems.
- Mitigate greenhouse gas emissions in the path of sustainable development.
- Promote sustainable consumption and production.
- Enhance knowledge on the multifaceted issues related to climate change in the society and build their capacity to make prudent choices in decision making.
- Develop the country's capacity to address the impacts of climate change effectively and efficiently.
- Mainstream and integrate climate change issues in the national development process.

National Expert Committee meeting was held on 9th May 2016 and discussed the following areas.

- An overview of Climate Resilience Improvement Project (CRIP) under the Ministry of Irrigation & Water Resource Management
- Present status on Accreditation Process of the National Implementing Entity (NIE) to the Adaptation Fund
- Present Status of Preparation of Third National Communication (TNC)
- Hosting the Asia Pacific Adaptation Forum in 2016
- Adaptation decisions related to Sri Lanka, taken at the COP 21

2nd National Expert Committee - Adaptation was held on 22nd September 2016 and Joint committee meeting with National Expert Committee - Mitigation was held on 29th November 2016.

➤ **National Expert Committee on Climate Change Mitigation (NECCC-Mitigation)**

Climate Change division has established the NECCC for providing guidance on issues pertaining to mitigate Climate Change impact of the country.

Objectives of the NECCC-Mitigation as follows:

Provide guidance;

- On climate change mitigation issues in the context of national development agenda.
- To develop climate change mitigation policies, strategies, legal instruments and action plans.
- To formulate review and update country positions on mitigation for climate change negotiations.
- To implement mitigation activities in Sri Lanka based on the outcome of climate change negotiations.
- To prepare and implement Nationally Appropriate Mitigation Actions (NAMA) in the country.
- To implement the future sustainable mechanisms under Kyoto Protocol and Clean Development Mechanism (CDM).
- To review the foreign funded mitigation projects.

National Expert Committee - Mitigation was held on 25th February 2016. The expert committee reviewed progress of projects and other activities conducted by the CCS. And also discussed steps to be taken regarding mitigation in accordance with Paris Agreement. 2nd National Expert Committee - Mitigation was held on 16th September 2016 and Joint committee meeting with National Expert Committee – Adaptation was held on 29th November 2016.

➤ **Preparation of Nationally Appropriate Mitigation Actions (NAMAs)**

Nationally Appropriate Mitigation Actions (NAMAs) are actions taken by respective countries (developing in Sri Lankan context) to reduce greenhouse gas emission in the country. NAMAs are not defined specifically as it is accepted that developing countries have different and diverse NAMAs. The NAMAs can be from any of the sectors which have GHG emissions ranging from energy to agriculture or forestry. The reduction could be from existing levels or from what is projected from the future.

In the global climate change scenario the developed countries have the responsibility to mitigate greenhouse gas emission. However traditionally the developing countries were

exempted to a certain extent from this responsibility. But with time, developed countries make pressure on developing countries to do mitigation at least voluntarily. In the Climate Change summit held in Bali 2007, under the Bali road map, NAMA's were introduced. It was agreed that Nationally Appropriate Mitigation Actions in the context of sustainable development will be carried out by developing countries in a measurable reportable and verifiable manner and would be supported and enabled by technology, financing and capacity building (from developed countries). In order to that, Initial activities were carried out for preparation of NAMAs for Energy and Transport sectors.

➤ **Preparation of NAMAs for Energy Sector**

Obtained the NPD approval for GEF funded project on appropriate mitigation actions in energy generation and end use sectors in Sri Lanka. Agreement to be signed by Ministry of Power and Energy, since they will be the executing partner. This project has 4 components. Component 1, 2 & 3 are implemented by the Sustainable Energy Authority and Component 4 is implemented by the Climate Change Secretariat of the Ministry of Mahaweli Development and Environment.

➤ **Conducting CDM Dialogue Forum**

United Nations Frame Work Convention on Climate Change (UNFCCC) was established to maintain the concentration of Green House Gases (GHG) in the atmosphere below a harmful level. Kyoto Protocol was formulated under the UNFCCC to give the necessary legal base to reduce greenhouse gases. reduce the amount of greenhouse gases emitted, absorb the green house gases from the environment by afforestation and reforestation and make policies to reduce the emission of greenhouse gases are carried out under the following sectors;energy, Industry, transport, solid waste management, agriculture and forestry.

Third CDM Dialogue Forum was held on 31st May 2016 at the Centre for Banking Studies, Rajagiriya. This event gave the opportunity to share the experience and lessons learnt in handling CDM projects with climate change mitigation committee experts, private sector, CDM project proponents and government officials.

Dissemination of knowledge on present carbon market and voluntary cancellation of certified emission reduction (CER), recent global initiatives for assisting CDM developers is the prime objective of the Dialog Forum.

In this event important presentations were given by Ms. Benita Gurung, Team Leader, RCC Bangkok and Mr. Buddika Hemasantha, CEO, Sri Lanka Climate Fund.



➤ Sri Lanka's Third National Communication (TNC) on Climate Change

The preparation of the TNC report would cost US\$ 500,000 which is to be granted by GEF through UNDP. This project expects to be implemented within three years from 2016-2018 and implementation of the same and has also been approved by the Department of National Planning.

The fundamental objective of this project is to strengthen Sri Lanka's technical and institutional capacity to respond effectively to climate change challenges and meet its obligations under the UNFCCC. While strengthening institutional and technical capacities of the country to prepare effective climate change adaptation and mitigation strategies and the third national communication report will include country's existing technical and human resources capacity.

The project document was signed with UNDP. Paper advertisement for the project management unit was prepared and finalized. Cabinet paper for preparation and implementation of Sri Lanka's Third National Communication (TNC) project was submitted for the approval of the cabinet ministers. The cabinet approval was obtained for implementation of TNC project. The inception workshop was held on 24th November 2016. Approval was obtained from Department of Management Services to establish Project Monitoring Unit.



CONTROLLING THE CONSUMPTION AND IMPORTS OF HCFCs IN SRI LANKA

Hydrochlorofluorocarbons (HCFCs) Phase-out Programme (HPMP) was continued during 2016 with the reduction target of 10% from the baseline consumption and fulfilling the conditions laid by the Gazette Notification No. 1821/4 dated 1st August 2013.

Accordingly, NOU has awarded the 'Certificates of Quota' for 1st Quarter of 2017, to sixteen importers at the ceremony held on 30th December 2016.

➤ **Establishment of Refrigerant Reclaim Centers in Sri Lanka**

With the phase out of HCFCs and with the strict control of quota system, supply of HCFCs is restricted. Therefore, present market is not in position to cater the whole demand of RAC sector. To ease this shortage, NOU in collaboration with United Nations Development Program (UNDP) and with the financial assistance from Multilateral Fund of the Montreal Protocol, has established eight Refrigerant Reclaim Centres in following Training Centres covering all nine provinces in 2015 and 2016 to cover all provinces in Sri Lanka

Through these 8 centres, recovery of refrigerant to minimize the emission of refrigerant to atmosphere while servicing and maintaining of RAC systems is promoted and provided the capability of re-charging the purified refrigerant back to the systems from where the refrigerant has been recovered. This process further avoids the purchase of new refrigerant and reduces the demand for new (virgin) refrigerant.

During 2016, several Training Programme for Training Instructors attached to Established Refrigerant Reclaim Centers were conducted in order to train instructors on this new technology. Following are the Training Programmes conducted.

- First Training Program for Instructors was held on 28th -29th January 2016 at the *Technical college of Batticaloa in Eastern Province*
- Second Training Program was held on 18th -19th March 2016 at the *Bravokarakara Hotel in Kurunegala.*
- Third Training Program was held on 19th -20th May 2016 at the *Vocational Training center in Vauniya.*
- Fourth Training program was held on 23rd May 2016 at the *Ceylon German Training Technical Institute.*
- Fifth Training program was held on 29th July 2016 at the *Vocational Training Authority in Bandarawela.*

➤ **Ministry of Mahaweli Development & Environment started formulating of Green Building Guidelines**

Present day construction of building utilize unlimited natural resource such as timber, sand, metal, clay and it has exceeded the national capacity. Consumption of energy, water and other excessive utilities and increasing and cause severe irreversible impact that harmful to the environment, especially emission of large amount of greenhouse gases (GHG), pollution of water and air to name a few. Therefore, concept of Green Building has been nurtured world-wide to incorporate environment friendly and resource efficient processes at every possible stage of construction.

Understanding the necessity of moving towards adopting all new buildings to green concept, Ministry of Mahaweli Development & Environment, which is the focal point for Multi

Environment Agreements including Montreal Protocol on Ozone Depleting Substances and Kyoto Protocol on Climate Change pioneered to develop Green Building Guidelines and Rating System. As a preliminary step, proposal has been formulated to introduce guidelines for construction and maintenance of State and Semi-State institutions buildings in environment friendly matter broadly. National Ozone Unit participated proactively for this effort which has a national importance and mainly focus on installing of Air Conditioners containing 0 ODP and low GWP refrigerant as one of the main component for greening the buildings.

➤ **Implementation of the programme to develop 10,000 Blue Green Beautiful Lanka Villages.**

The 21st session of the United Nations Framework Convention on Climate change was held in Paris, France from 30th November to 11th December, 2015 and the Paris Agreement was declared by the nations of the world. Accordingly, the Member countries of the United Nations have agreed to declare an Intended Nationally Determined Contribution, strategies followed by these countries to control global warming on the aforesaid agreement, and act in line with that.

Through the summits and workshops of experts in the sector held before and after the Paris Summit, necessary arrangements are being made to determine the Intended Nationally Determined Contribution to Control global warming. A programme to make the people aware of climatic changes and future development strategies called Sri Lanka NEXT - A Blue Green Era was presented through that effort as a guide for the direction of future development of Sri Lanka and to initiate a dialogue on that.

In accordance with that programme, with the aim of creating people sensitive to climate change and environment friendly Green Smart villages, to implement the 'Blue Green Beautiful Lanka villages in 10,000 villages of Sri Lanka within the period from 2016-2020 in collaboration with community

organizations such as the SANASA movement of Sri Lanka, and the Sarvodaya movement and the organizational network of Divi Neguma Department, approval has been received as per the Cabinet decision bearing No. CM/16/0377/704/011 dated 24th March, 2016.

Following activities were done under the 10,000 Blue Green Beautiful Lanka Villages.

Participatory rural appraisal programme was held in Siyabalagamuwa.



Two TOT workshops were held to train 100 social mobilizers at the Sanasa Campus



Lassana Lanka 10,000 Green villages programme was launched under the patronage of his Excellency the president.



➤ **Three Days Residential Programme on Environmental sensitive subject Area for In-service Advisor**

Sri Lanka is blessed with natural resources that are rich in biological diversity. A country's diverse ecosystem has a significant contribution on society's health, livelihoods and long term sustainable development. It also provides critical environmental services such as water, energy, air, nutrient as well as protection from natural disasters like droughts, floods and landslides. However, highly preserved biodiversity and ecological system became vulnerable for degradation. In order to arrest this situation and educate future generation of this environment threat, the Ministry of Mahaweli Development & Environment conducted several seminars and awareness workshops last year to include Environmentally Sensitive educational subject matters to the school curriculum. As a result of this activity, a new chapter was introduced to Grade 9 curriculum widening the environmental subject. Further, Ministry of Mahaweli Development & Environment has been entrusted to make aware of Teaching Advisors in provincial basis in respect of environment subjects included from Grade 6 to 11.

Ministry of Education and National Institute of Education were the key stakeholders in achieving this important task of environment education.

First seminar as a pilot programme was conducted in Sabaragamuwa Province under the supervision of the Ministry of Education. Seminars for the other 8 provinces were completed

in 3rd term of 2016 and accomplished this task by the National Ozone Unit. Three days Residential workshop was conducted covering all nine provinces.

2.3.2 Cabinet Memorandums 2016

Cabinet Paper No. & Date Forwarded	Title	Cabinet Decision
(1). Cabinet Paper No: 16/0377/704/011 Date: 2016-02-26	“Agreement on Global Climate Change and National Strategic Accord (National Contribution towards minimizing Global Temperature)”	(i). to grant approval to implement the recommendations in paragraph 04 of the Memorandum; (ii). to direct the Secretary, Ministry of Mahaweli Development and Environment to take action - (a). to integrate all the existing agencies of the Ministry which are currently functioning for similar purposes mentioned in the Memorandum, in to the proposed Institutions; (b). to work in collaboration with the Ministry of Sustainable Development and Wildlife which is the agency responsible for overall coordination of activities pertaining to Sustainable Development Goals (SDG), in this regard; and (c). to manage the expenditure involved for the purpose, within the Budgetary allocation provided to the Ministry for the year 2016.
(2). Cabinet Paper No: 16/0638/704/011-I Date: 2016-04-06	“High Level Signing Ceremony of the Paris Agreement on Climate Change”	to grant approval to the proposals (I) and (II) in paragraph 2 of the note.
(2). Cabinet Paper No: 16/1803/701/026 Date: 2016-09-06	“Ratification of Paris Agreement by Sri Lanka”	(i). to grant approval to implement the recommendations (a), (b), (d), (e) and (f) in paragraph 09 of the Memorandum; (ii). to revoke the cabinet decision dated 2016-08-30 on CP No. 16/1728/704/049, a Memorandum dated 2016-08-23 by the Minister of Mahaweli Development and Environment on the same subject; (iii). to instruct the Legal Draftsman to draft legislation to provide necessary provisions for the establishment of a Climate Change Commission, as indicated in the proposal (f) in paragraph 09 of the Memorandum; (iv). to inform the Secretary, Ministry of Mahaweli

		Development and Environment - (a). to submit the draft Bill prepared as per (iii) above, together with the clearance of the Attorney General for same, through the Minister, to the Cabinet, for consideration; and (b). to inform the relevant Secretaries to Ministers and other authorities concerned, to pursue action on matters in this regard, falling within their purview.
(3). Cabinet Paper No: 16/2054/704/056 Date: 2016-09-30	“Project on Preparation of Sri Lanka’s Third National Communication (TNC) Report on Climate Change”	(i). to grant approval to the proposals in paragraph 3.0 of the Memorandum; and (ii). to direct the Secretary, Ministry of Mahaweli Development and Environment, to take action to establish a database with real time data, pertaining to Green House Gas (GHG) emissions, as indicated in the observations of the Minister of Finance.

2.4 Activities carried out to address the Wise Use of Coastal Belt & Sea Around

The Land Resources Division (LRD) of the Ministry of Mahaweli Development and Environment also works in the field of Coastal and Marine Conservation sector. Hence it works with the following two main institutions comes under the purview of the Ministry:

- Marine Environment Protection Authority (MEPA)
- Coast Conservation and Coastal Resource Management Department (CC&CRMD)

The LRD Coordinated with Marine Environment Protection Authority in bringing in several policies related matters to manage and conserve the coastal and marine sector and following are some of the activities carried out during the year 2017.

2.4.1 Major Achievements in 2016

➤ Waste Management in the Coastal and Marine Sector

- a. Being an island nation, Sri Lanka has a great responsibility and duty to safeguard and protect its Sea and Coast. Hence, LRD joined hands with MEPA in many ways to prevent and control.

Marin Pollution. In here, a very special attention was given to take swift actions to minimize Marine Pollution caused by Oil Pollution. The LRD assisted to review and update the National Oil Spill Contingency Plan (NOSCOP) of MEPA with timely needed improvements.

According to the NOSCOP, the LRD also assisted the MEPA in organizing National level Capacity Building Programs for the Incident Management Team (IMT) and for

all First Respondents (FS). Also, this has been enriched by conducting a special National Level Oil Spill Response Exercise for the IMT and FS in order to provide them with hands on experience to build their skills on how to take Rapid Response against sudden spills of oil and chemicals.

- b. LRD also assisted MEPA in planning to provide full time waste reception facilities for ship-generated waste in order to minimize Marine Pollution. This facility covered proper disposal of burnt oil, solid waste and fuel waste generated in ships through a new online system introduced to ensure effective and efficient functioning of the facility.
- c. Waste management associated with fishery harbors is vital in reducing marine pollution and in order to ensure a sustainable fishery industry. Waste generated in Fishery harbors such as fish offal, burnt oil from fishing vessels and on-site solid waste accumulation has been identified as a very significant environmental issue. Therefore, the LRD assisted the MEPA to prepare a National Strategy on Pollution Prevention from Waste in fishery harbors. The draft strategies are, currently, in their finalizing stage.

The LRD assisted MEPA to develop the Mirissa Fishery harbor as a Green Fishery Harbor as a pilot program with its financial, technical and technological support. The following facilities were established at the site :

- A fish auction hall with Waste Management Facilities,
 - A Waste Water Treatment Plant.
- d. Collection of data and generation of information on the same is very important in Coastal and Marine related decision making. Hence, management of Data and Information on pollution caused by land and Ocean based activities with frequent updating process is very essential in the sector. Therefore, LRD assisted MEPA in the following activities to ensure minimized pollution in coastal districts around Sri Lanka.in the year 2016.
 - Mapping of coral reef communities.
 - Conducting sea-grass surveys and establishing a sea-grass nursery.
 - Measurement of Radioactivity data on seawater and sediments in Puttalam, Mannar and Hambantota areas.
 - Conducting of debris surveys at Trincomalee and Kirinda coastal areas.
 - Continuous water quality monitoring was carried out at sea bathing sites and sea outfalls.
 - Grading of water quality of Bathing Sites in Sri Lanka.

➤ **Marine Debris Management Plan and the YEOSU Project**

Sri Lanka has been ranked fifth in the world in ocean debris pollution. Therefore, it is high time to pay attention and take necessary action to overcome this situation. Under the YEOSU Project – a Technical and Financial Assistance program from Republic of Korea which meant

to build capacity in Managing Marine Debris in Sri Lanka to identify pollutant sources and quantities of lagoon areas, and to study their adverse effects in order to prepare a Marine Debris Management Plan that will help to reduce marine debris in Sri Lanka.

➤ **Coastal and Marine related National and International events**

The LRD joined hands with MEPA and CC&CRM in planning and execution of several Coastal and Marine related National and International events such as National Coastal and Marine Resources Conservation Week National Beach Cleaning Program 2016 such as :

- 8th National Coastal Cleanup main program on 17th September, 2016 at "Crow Island Beach Park" at Mattakkuliya.
- “National Coastal and Marine Resources Conservation Week starting from 17th September, 2016” as Sri Lanka marks the "International Coastal Cleanup Day" with a series of beach cleaning programs covering all 14 coastal districts during this week (about 1100 participants representing Tri-forces, Department of Coast Guard, Civil Defense Force, Sri Lanka Police Department, School and University students, persons of various government and non- government institutions participated in this program).

➤ **Celebration of the World Ocean Day**

- The LRD assisted the MEPA in organizing the above event to commemorate the World Oceans Day under the theme "Healthy Oceans, Healthy Planet" to raise awareness of the people about the importance of protecting the marine environment. A special walk was organized on 08th June, 2016 in which His Excellency the President Maithripala Sirisena took part to mark the event. About 1,500 members representing schools, universities, ministries, security forces, public institutes and NGO's participated to the program.

➤ **Coastal Zone Management Program**

The LRD assisted the CC&CRM Department in order to carryout sustainable land management practices in the coastal zone and to control environmental pollution due to various development activities. Hence, activities such as implementing coastal zone management programs including implementation of green coastal belt, beach access program, demolition of unauthorized structures, permit procedure with environmental impact assessment process, identification of conservation and affected areas and identification of special management areas were carried out under this program.

Implementation of green coastal belt, identification of areas to be conserved and rehabilitation, restoration of affected areas and Identification of special management areas have been carried out through the comes Punarudaya program.

➤ **Sand Nourishment as a Soft Solution to prevent Coastal Protection.**

While working with CC&CRMD, the LRD learnt that, beach nourishment by offshore sand is considered as the best environmentally sound, economically viable and socially accepted

solution for the coastal erosion. As per instructions from the Cabinet of Ministers, proposal has been made by the appointed expert committee for sustainable coastal protection solution. Cabinet approval has been received to nourish 400,000 cubic meters quantity of off shore sand at Marawilla beach (phase II). This quantity of sand nourishment had been completed. Subsequently, additional 400,000 cubic meters quantity of sand has been approved for nourishment due to the allocated funds could not be utilized fully in phase 2. Therefore, sand nourishment of this additional sand quantity was being in progress.

➤ **Construction of Hard Coastal Protective Structures to prevent Coastal Erosion**

Projects under this program come under Punarudaya program. Implementation of coastal protection infrastructure schemes using hard construction materials such as rock / boulders is considered as an alternative solution for the sustainable land management in the coastal zone. The CC&CRMD completed several such structures in order to prevent Sea erosion and to stabilize the shoreline.

Also, the LRD assisted the CC&CRMD to improve the nature and aesthetic value of suitable shore front landscapes by constructing of beach parks and effect further improvements in existing beach parks.

Even though hard coastal protective structures are cheaper than sand nourishment schemes, the LRD had observed that, in most cases erosion of adjacent area due to reflected or diffracted waves by constructed hard protection structures has the tendency to bring about excess erosion problems in neighboring coastal stretches which is disadvantageous for the ecosystem in a broader-sense.

➤ **Detail of the Cabinet Memorandums submitted to The Cabinet of Ministers' Office in 2016**

Forwarded by CC&CRMD

- Sand Nourishment Project in Marawila Beach (phase ii) (24/11/201645/2016)
- Sand Nourishment at Marawila through off- Shore Sand Mining Phase ii (28/09/201631/2016)
- Marawila – Thalvila Sand Nourishment Project(phase ii) (24/05/201615/2016)

Forwarded by MEPA

- International convention on civil liability for bunker oil pollution damages (200116/2224/704/059)
- Signing of Memorandum of Understanding (Mou) Between Expo 2012 YEOSU Korea Foundation and Marine Environment Protection Authority of Sri Lanka for Building Capacity to Manage Marine Debris in Sri Lanka. (16/0663/704/018; 2016.05.04)
- Establishment of Southern Province Office and Gall District Office of the Marine Environment Protection Authority with a Laboratory (16/1726/704/047; 2016.09.14)
- International Coastal Cleanup Day and Declaration of the National Marine Resources Conservation Week (16/1723/704/046; 2016.09.14)

2.5 Activities carried out to address the Responsible use of the Land Resources

2.5.1 Major Achievements in 2016

Commemoration of World Day to Combat Desertification -2016

The World day to Combat Desertification of United Nations has been celebrated on 17th June in every year. This day was declared after forming the convention on United Nations Convention to Combat Desertification (UNCCD). Although there are no deserts found in the country, considering its land degradation and loss of productivity due to Soil erosion, Sri Lanka became a party to the UNCCD in 1998. Since then Sri Lanka is commemorating this International event with the collaboration of Governmental Institutions, Non- Governmental Institutions and the School children as well. The Ministry of Mahaweli Development and Environment has been the National Focal Point to the UNCCD & Closely working with them.

The theme of the World Day to Combat Desertification of this year is “Inclusive Cooperation achieving Land degradation Neutrality”. Considering the occurrence of landslides and land degradation in several areas of the country, Land Resources Division of this Ministry decided to conduct an awareness programme on such aspects for general public including school children as well. Kegalle district was selected on its bad experience in land slide disaster occur in year 2016. Hettimulla Bandaranayake Vidyalaya was selected for conducting awareness programme, since some of the affected children due to the land slide disaster were among the students. Lectures were delivered by the experts from the relevant field, representing different Government Institutions and 150 students with 35 teachers were participated in that event. In addition to that, sticker (which was displaying the theme of the world day to combat desertification in year 2016) pasting campaign was held. Stickers were paste on the vehicles passing the school premises. This was done by the participation of the Environment Pioneers of these schools.





Commemoration of World Soil Day -2016

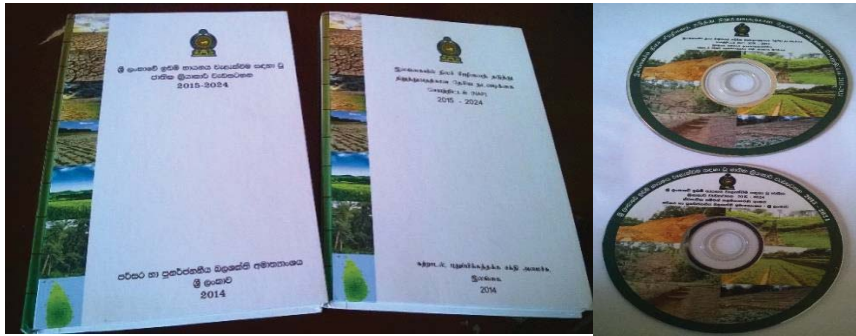
United Nations General Assembly in New York declared the 5th December of every year as the “World Soil Day” and the year 2015/2024 as the “International decade of Soils”. The theme of the Soil Day of year 2015 was “ Healthy Soil for a Healthy Life”. Soil can be considered as a major component of the natural ecosystem and it is also a part of food security for all organisms to survival. The aim to fulfil that target, the celebration of the World Soil Day in this year mainly focus on the creation of awareness among global community on sustainable agricultural management through the correct measures of soil conservation activities. Awareness creation workshop and mini exhibition was held at the “Pulathisi Vidya Peetaya” in Pollonnaruwa to commemorate the world soil day 2016, based on the theme” healthy soil for healthy life”. This programme was organized by the Soil Science Department of the Faculty of Agriculture, University of Peradeniya in collaboration with the Land Resources Division of the Ministry of Mahaweli Development and Environment. Nearly seven hundred (700) participants, including school children, teachers & general public participated in this event. Participants were made aware about the soil generation, soil conservation and different aspects of physical and chemical properties of soil. In addition to that, the book on “Soil properties, Plant nutrition and Sustainable Management” prepared upon the request of Advanced Level teachers and it was distributed among school children at this event.

Awareness creation in every layer of the society on Sustainable Land Management is one of the main responsibilities of the Land Resources Division of this Ministry. In order to fulfil this aspect, another awareness programme was conducted in Wadduwa Maha Vidyalaya”, Kalutara. For that event 200 school children and 20 teachers participated and awareness materials on Soil Conservation and Biodiversity were distributed among the participants at this event.



Translating and Printing of Revised and Aligned National Action Programme for combating Land Degradation in Sri Lanka into Tamil and Sinhala language.

Land Degradation can be defined as reduce the productivity of land economically and biologically by the effect of natural causes or anthropogenic activities. Considering facts and trends on Land Degradation, Sri Lanka signed and ratified the United Nations Convention to Combat Desertification and Land Degradation (UNCCD) in 1998 and became a party to the convention. According to the requirement of the United Nations Convention to Combat Desertification (UNCCD), Sri Lanka prepared its first National Action Programme (NAP) in the year 2002 with the objective of combating Land Degradation and mitigating impacts of droughts in the country. This has been revised and aligned with the UNCCD 10- year strategy (2008-2018) and guidelines in the year 2010 by the Ministry of Mahaweli Development and Environment according to the UNCCD Decision 2/ COP 9 and this will be implemented during the period from 2015-2024. Large Expert group representing the government, non-government and private sector organizations were involved in the process of preparing National Action programme for combating land degradation in Sri Lanka (NAP). Cabinet approval was granted for this document on 24th July 2014 and it was launched on 09th December 2014. This ministry has planed the implementation of NAP within the relevant time period through the identified activities under 25 programmes with relevant main and supportive agencies. For easy reference this document was translated into Sinhala and Tamil languages as well.



Ensuring global environmental concerns and best practices mainstreamed in the rapid development process of Sri Lanka through improved information Management (Data Project)

The Right to information Act No 12 of 2016 already published and prepared a draft data/information sharing policy. This Act provides the attention for sharing on existing data from stakeholder institutes, gap identification and identification of sharable data. To the aim of fulfilling these aspects, Ministry of Disaster Management initiated a special project of Ensuring global environmental concerns and best practices mainstreamed in the rapid development process of Sri Lanka through improved information Management (Data/ Information Project) in collaboration with the Ministry of Mahaweli Development and Environment.

Being the National Focal point for the United Nations Convention to Combat Desertification (UNCCD), Ministry of Mahaweli Development and Environment (MoMD&E) with the participation of all stakeholder agencies has developed the National Action Programme (NAP) to implement during the 10 year period from 2015 to 2025. Land Resources division of MoMD&E is responsible to coordinate the implementation of Action Plan and report to the UN the progress of implementation on regular basis. MoMD&E has encountered difficulties in collecting data from related state sector institution due to the reluctance of some agencies to share data, gaps in collecting the required data and the non-compatibility of some of the collected data.

Ministry of Disaster Management (MDM) in close collaboration with the Ministry of Mahaweli Development and Environment is implementing a project (Data Project) for strengthening data and information management and other support systems that contribute to the development of data sharing policy, facilitate the risk base decision making process and improve the capacity of agencies to report the progress of implementation of the three Rio Conventions. Land degradation, desertification and drought is one of the components of the convention. Further the MoMD&E as the focal point for implementation of Rio Convention has instituted a number of mechanism to ensure implementation of NAP and report the progress.

MDM has appointed an expert on Land Degradation to assist Project Team to conduct consultation with relevant stakeholders to identify data required for reporting to Rio Convention on agencies generating data, where it is available, what form it is generated,

whether data is sharable or restricted and facilitate a process to understand the prevailing gaps in data collection, storage and dissemination.

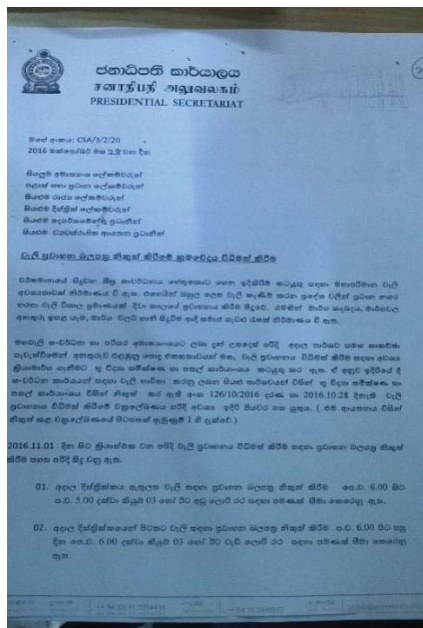
In addition to that this project will provide the facility to sustainable development by taking evidence based decisions and provide the data/information to the framework of Disaster Risk Reduction. Ministry of Disaster Management acts as the focal point to the Sendai Framework and collection of data/information relevant for the reporting purposes of framework through this data project. Sendai framework for Disaster Risk Reduction 2015 -2020 was adopted at the third United Nations Conference on Disaster Risk Reduction held on 14th to 15th March 2015 in Sendai, Japan and it paid attention on the way of disaster risk reduction further.

This project facilitates the identification of data/information, ability to share data, sustainable way of using the existing data and data used for preparing Rio reports.

Regularization of the system on issuance of sand transportation permits and the circular.

Currently, sand is used in a large scale for speedy development and constructional purposes. Because of that transportation of sand starting from large mining sites and usually carried out at day times through the main cities and some social problems such as road blocks, accidents and road damages are caused.

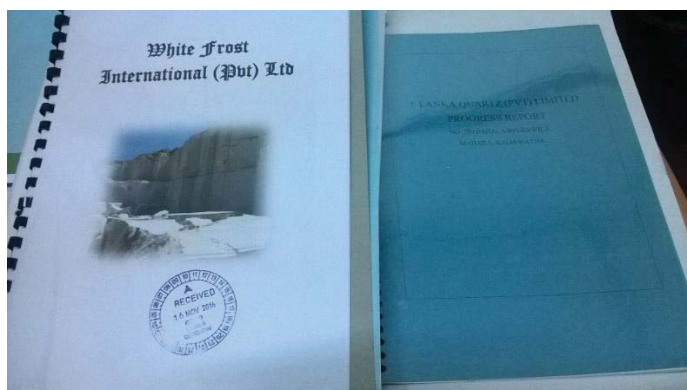
The Ministry of Mahaweli Development and Environment in collaboration with the Geological Survey and Mines Bureau actively participated to regularize the transportation of sand. In order to regularize sand transport, the circular for sand no 12/10/2016, dated 2016.10.28 has been issued. Therefore, traffic blocks could be minimized for certain extent in day times. The Geological Survey and Mines Bureau has taken every action to issue sand permits from 01.11.2016 onwards. In addition to that, GPS Tracking System has been introduced to supervise the activities of every vehicle transporting sand at night times. The Geological Survey and Mines Bureau scheduled to commence this new system on 01st of January 2017.



Signing of Mineral Investment Agreement

At present, Sri Lanka earns sum of foreign exchange through the value added minerals. And also Sri Lanka got good priority to export value added minerals to the international markets throughout the world. For example, Ilmanait, mineral sand, graphite, granite and Quartz can be considered as most valuable mineral found in Sri Lanka. These minerals got the highest value in the International Markets due to their lack of 90% of impurities.

Quartz got the best priority in the exportation of minerals at local level. And also Quartz can be considered as a limited natural resource and it involves to top up the national economy for applying scientific mining methods with the minimal damage to the environment. Accordingly eight local and foreign investors (B.T.C. Italia (pvt)ltd., J Lanka Quartz (pvt)ltd., Sun Ray (pvt)ltd., Blue Bay Minerals (pvt)ltd., Alchemy Bolders (pvt)ltd., Sun Creation (pvt)ltd., Lanka Stonex (pvt)ltd. And Songhyan Mining Company (pvt)ltd. were involved to invest Rupees million 5000 in year 2016 by adding the value for minerals and started the exportation activities.



2.6 Activities carried out to address the Doing Away with Dumps

2.6.1 Introduction:

Environmental Pollution Control & Chemical Management division deals with the formulation of policies, strategies, action plans and guidelines on pollution control and chemical management.

In addition training and awareness programmes are conducted for different categories of the community to enhance good practices on chemical management and minimize environmental pollution.

As the National focal point for International Conventions on Basel, Stockholm, Minamata and Rotterdam (Industrial Chemicals) , the National Steering Committees are conducted in order to take collective decisions on trans-boundary movement of hazardous waste, Persistent Organic Pollutants (POPs), mercury and chemical management.

1. Completion of Updating the National Implementation Plan (NIP) for the Stockholm Convention on Persistent Organic Pollutants (POPs): The National Implementation Plan was updated under, Persistent Organic Pollutant pesticides, Poly chlorinated biphenyls, Unintentionally produced POPs (uPOPs), Perfluorooctane Sulfonic Acid and its Salts (PFOS), Listed polybrominated diphenyle ethers (POPs- PBDEs)
2. Initiation of a project on “Environmentally Sound Management and Disposal of Polychlorinated Biphenyls (PCBs) Waste & PCB contaminated equipment” and Mercury Management as per the Minamata Convention
3. Initiatives were taken on Air quality Management to minimize air pollution due to vehicular emissions.
4. Created awareness on “ Electronic Waste management and its Health Impacts” and a policy was drafted.
5. Conducted Stakeholder meetings on “ Pavithra Ganga Programme ‘ in order to take action to minimize water pollution in Kelani River.

2.6.2 Major Achievements in 2016



Training Programmes on PCB



**Stall on Chemical Management at the
Exhibition conducted by Institute of Chemistry**



**Distribution of exercise books with messages of “PCB”
Elpitiya Maha Vidyalaya**



Deniyaya Zonal Education Office



Udu Dumbura Maya Vidyalaya





Wattegama Kuringie Tamil School



Baddegama Kanishta Vidyalaya

Sri Rathanapala Navodya Maha Vidyalaya -Mahauswewa

The above initiatives are in line with Waste Management, Clean Air and Greening the Industry under Haritha Lanka Programme

2.6.3 Cabinet papers submitted in 2016

Cabinet paper No and date forwarded	Title	Cabinet Decision
16/2236/704/061	Implementation of principles of Extended Producer/ Trader and Consumers Responsibility in order to manage waste of consumer products.	2016.10.11 To appoint a committee to develop/ amend the mechanism and regulatory framework on EPR. Based on the recommendations of the above committee to select 02 items from each category within 06 months and implement a pilot project and based on the out come to implement this systems to other items identified and implement within an year.
16/1727/704/048	Implement an integrated Municipal Solid Waste Management System in Kandy district.	Cabinet Committee has been appointed to provide recommendations.
16/0013/704/001	Programme for the Management of Hazardous waste & Chemicals emitted to the Environment of Sri Lanka	1. To develop and appropriate mechanism, in association with the relevant authorities, to identify all hazardous chemicals that

		<p>are being imported to Sri Lanka and to impose strict restrictions/total ban on such imports .</p> <ol style="list-style-type: none"> 2. To take action to carry out an environmentally sound management of all the hazardous chemicals available in the country. 3. To manage the project activities within the existing staff.
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2.7 Activities carried out to address the Green Cities for Health and Prosperity

2.7.1 Major Achievement in 2016

➤ .Parisara Mawatha Programme

The Ministry of Mahaweli Development and Environment has planned to construct environment lanes for all cities as one of the main steps under the sustainable city development programme for sustainable management of urban and semi urban environment. Under this environment lane programme it is expected to create an arch shape tree canopy layer within a short period of time, by planting suitable plants in an area not less than 500m in one road in an urban area. And it is assumed to minimize the cost incurred for constructing jogging tracks and exercising areas as this tree cover facilitates for those activities as well. It has been planned to enhance the environmental conditions of these roads according to the area and by securing the uniqueness of the location

➤ Following activities were carried out under this programme in the year 2016

- 1.Parisara Mawath were established in Mathale, Gampola, Kahatagasdigiliya, Hakmana, Ja Ela and Trincomale
- 2.Samandarawa road in the Matale Divisional Secretariat division was developed as a Parisara Mawatha in accordance with the commemoration of the World Environment Day 2016.



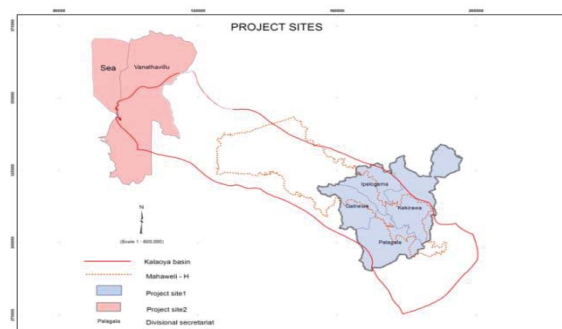
➤ Enhancing Biodiversity Conservation and Sustenance of Ecosystem services in Environmentally Sensitive Areas Project

This project will assist the Government of Sri Lanka to safeguard biodiversity in multiple land use areas of special ecological significance (high biodiversity values) through the operationalization of a new land use governance framework called “Environmentally Sensitive Areas” (ESAs), which will be primarily outside protected areas. The primary objective of this project is “To operationalize Environment Sensitive Areas (ESA)—as a mechanism for mainstreaming biodiversity management into development in areas of high conservation significance”. In order to achieve this Objective, the project plans on achieving the two major outcomes, and four Outputs under these. The two outcomes are:

- Outcome 1: National Enabling Framework Strengthened to Designate and Manage Environmentally Sensitive Areas (ESA)
- Outcome 2: Biodiversity-friendly ESA management for long term integrity and resilience ensured at two sites in the Kala Oya Region

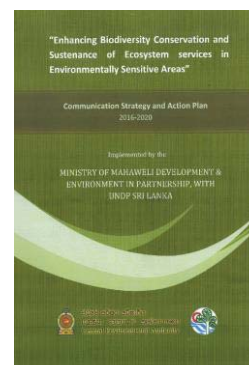
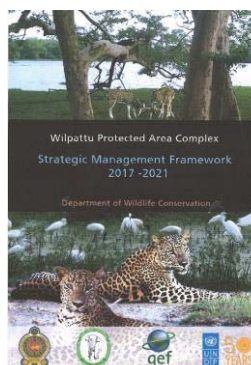
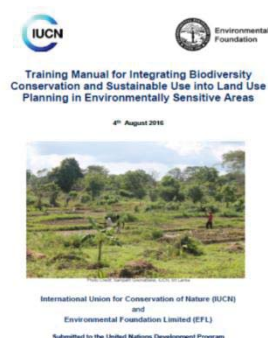
Project Sites

Within the Kala Oya Region, two sites have been identified as proposed ESAs. The first site – Kala Wewa falls towards upper reaches of the river basin and encompasses a large water body (reservoir or tank) called Kala Wewa. The second site – Wilpattu is located in lower part of the basin and encompasses marine area including the Bar Reef and the estuary of the Kala Oya River.



Following activities are done under the project in Year 2016

1. Established Kala Oya River Basin based 6 Management Committees at Divisional Secretariat level and 02 District Facilitation Committees at Anuradhapura and Puttalam Districts, the establishment of the National Committee on sensitive environmental land zones at the national level.
2. Land use planning process was updated and the training manual was tailored to include a biodiversity component, training and capacity building of relevant stakeholders
3. Strategic Management framework was prepared for the Wilpattu National Park Complex
4. reviewed the national policy on the conservation and management of elephants
5. A survey was initiated around Kala Oya River Basin on Biodiversity.
6. Awareness programmes on the project was conducted at the district and provincial levels
7. Preparation of communication strategy for awareness of environmental sensitive zones
8. The identification and conservation of the ecosystems which are rich in biodiversity and outside the protected habitat areas.



Publications done under the Project

2.8 Activities carried out to address the Greening the Industries

2.8.1 Major Achievements in 2016

➤ Formulation of Public Green Procurement Policy and Guidelines

The conventional public procurement guidelines set forth in Sri Lanka in 2006 have not addressed the environmental performances regarding the utilization of goods, works and services however, inclusion of environmental considerations in to public Procurement is a timely requirement.

Green Public Procurement means that the public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle compared to goods, services and works with the same primary function that would otherwise be procured.

Green Procurement is one of the initiatives implemented by the government which could encourage the economy and society towards environmentally friendly consumption and production patterns, being an example and delivering key policy objectives using its procurement opportunity by including environment criteria into the procurement process. In long terms it could create a green economy converting the supply chain into green.

The approval of the Cabinet of Ministers obtained in 2012 (අමප/12/1081/527/020) to formulate the Green Procurement Policy and Guidelines by taking action by Ministry of Finance and Ministry of Mahaweli Development and Environment. Inclusion of provisions to encourage local producers to produce eco-friendly goods and services and to give high priority to the locally made goods is a major consideration which needs the special attention in preparing the Green Procurement Policy and Guidelines.

The National Green Procurement Policy was validated with the stakeholders in two meetings held on 29.03.2016 at the Conference Room, Sri Lanka Institute of Development Administration (SLIDA) and on 12.05.2016 at the “SapthaParisaraMandapaya” of State Timber Corporation. The validated Policy was submitted to National Procurement Commission for their concurrences.

➤ Promotion of Resource Efficiency and Cleaner Production Concept

Unsustainable consumption patterns continue to result in increasing demand on natural resources threatening to ecosystem stability globally and locally. It is globally accepted that application of cleaner production practices facilitates the improvement of productivity. This in turn will facilitate industrial and service sectors to be competitive in the international market.

➤ **Third meeting of the National Steering Committee for Cleaner Production**

Third meeting of the National Steering Committee for Cleaner Production was convened on 22.12.2016 at the Center for Banking Studies, Rajagiriya. The meeting was chaired by Mr. M.G.W.M.W.T.B. Dissanayake, Additional Secretary (Environment Planning and Planning) of the Ministry of Mahaweli Development and Environment. Progress reviewing of sectoral Cleaner Production Policies and Strategies for Health, Tourism, Fisheries and Agriculture and progress of formulation of National Cleaner Production Policy and Strategy for Plantation sector was presented at the meeting. The draft Action Plan on Cleaner Production also presented and obtained the comments from the members.

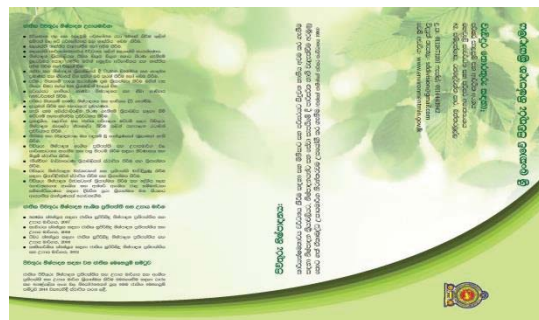


Third meeting of the National Steering Committee for Cleaner Production

➤ **Broachers for Cleaner Production initiatives in Sri Lanka**

The brochare for Cleaner Production initiatives in Sri Lanka was developed in 2015 to distribute among industrial community, public institutes and other interesting groups in order to make them aware of Cleaner production Concept. O

bjectives, benefits and Strategies of the National Policy and Strategy for Cleaner Production was translated into Sinhala and Tamil Languages and printed.



Broachers for Cleaner Production initiatives in Sri Lanka

➤ **National Cleaner Production Policy and Strategy for Plantation sector**

The validated draft of the National Cleaner Production Policy and Strategy for Plantation sector was presented and improved in a meeting with the senior officials from the Ministry of Plantation Industries on 06.06.2016. Policy was translated into Tamil and Sinhala languages and submitted to the Ministry of Plantation Industries for their concurrence. It was presented in the third National Steering Committee for Cleaner Production.

➤ **Awareness programme**

An awareness programme was conducted to raise the awareness on Cleaner Production of the members of National Steering Committee for Cleaner Production and working groups established to develop the National Action plan on cleaner Production on 20.06.2016 at the Auditorium of the Central Environment Authority (CEA).



Awareness programme conducted on 20.06.2016

➤ **National Action Plan for Cleaner Production**

The National Action Plan was initiated by conducting a mini workshop on 06.09.2016 and identified some activities. Second workshop was held on 30.09.2016 and drafted the Sectoral Action Plans for Health, Agriculture, Tourism, Plantation and Fisheries sectors. Based on the sectoral plans and strategies of the National Policy and Strategy Cleaner Production Plan was developed. Both sectoral and National Action plans were presented at the third meeting of the National Steering Committee for Cleaner Production.



Working group activities to develop National Action Plan for Cleaner Production

➤ **Implementation of the National Green Reporting System of Sri Lanka**

The Ministry of Mahaweli Development and Environment established a National Green Reporting System (NGRS) with a view to promote reporting of sustainability performance in manufacturing and services sectors in 2011. Green Reporting is an effective communication tool for transmission of the information on the sustainability performances of the manufacturing and services sector.

The overall objective of this programme is to recognize, appreciate and reward based on their sectors to quantify and report on sustainability performance. Nearly 120 manufacturing and services sector organizations have been associated with the reporting system and green reports have been submitted annually.

Following activities were carried out under the implementation of the National Green Reporting System of Sri Lanka.

➤ **Capacity Building of Green Reporters under the National Green Reporting System (NGRS) of Sri Lanka – Two capacity building programmes were held**

Awards were presented to best green reporters at the Sri Lanka Next Blue Green Era Programme.



➤ **SWITCH-Asia Sustainable Consumption and Production National Policy Support Component for Sri Lanka**

A SWITCH-Asia Sustainable Consumption and Production (SCP) National Policy Support Component (NPSC) for Sri Lanka was granted through a tender to AETS (French Consultancy Firm) led consortium in January 2015 by the European Union Delegation (EUD) following the request from the Sustainable Development Division (SD) of the Ministry of Environment (MoE). The objectives of this joint EU-Government of Sri Lanka 4-year comprehensive programme are to enhance capacity, skills, knowledge and understanding of key policy makers, stakeholders and the public.

To support MoE, a Project Expert Team (PET) comprising of a Team Leader, Key Expert and a Focal Point was established in the Sustainable Development Division of the MoE and is operational from 26 January 2015. The project is governed by the PSC consisting of key Ministries and other State sector agencies, which is co-chaired by the Secretary to the State Ministry of Environment and the Head of the Delegation of European Union to Sri Lanka & Maldives. Project Steering Committee meets once in 6 months to provide guidance and direction to the project expert team while monitoring the project progress..

Following activities are done under the project in Year 2016

- Some 80 existing policies and policy related documents identified and collected
- 46 national SCP related policies reviewed
- 3 sub-sectors (Rice, Tea, Dairy) F&B industry selected for project's deeper intervention
- Baseline study commenced in the 3 sectors and among consumers
- Sectoral and national SPC indicators being developed
- Raising awareness on SCP to continue
- Policy formulation process standardization final draft sent to MoMDE & MoNPEA – Policy Format, Policy Protocol and Policy Screening Tool.
- Project Expert Team (PET) contributes at the Steering Committee to Sri Lanka NEXT: Blue Green Era programme.
- PET is arranging a full day Switch Asia Networking Event in Colombo to share Asian experience on SCP for the Sri Lanka NEXT: Blue Green event on 18 Oct. 2016.
- PET participates and contributes at various committees of MoMDE projects .
- Awareness workshop on SCP for key government officials of the North Western Province.
- Technical and financial support extended to MoMDE's 10,000 Green Village (GV) programme by way of capacity building of key officials of SANASA and training of 100 change agents for implementing the GV programme.
- Stakeholder consultations for SCP Policy Formulation carried out.
- Draft SCP Policy being prepared.



2.9 Activities carried out to address the Knowledge for Right Use

2.9.1 Major Achievements in 2016

➤ The Commemoration of World Environment Day

The Commemoration of World Environment Day is one of the major responsibilities of Education, Training and Research Division. Last year World Environment Day national ceremony was commemorated under the theme of “Fight against the illegal trade of Wildlife in Matale District with the patronage of His Excellency the President Maithreepala Sirisena. Tree planting programmes, Environment Education and Training programmes/workshops have been conducted to create awareness on Environment among general public parallel to World Environment Day Programme.”Environment week” has been declared by president started from 2016 onwards.

➤ “Soba Chalana Sithuwam”Short film competition

“Soba Chalana Sithuwam” short film competition has been conducted to build better social dialogue on Environment Conservation among young film producers. This short film competition was conducted in line with World Environment Day national programme. The creations were judged by expert panel and Cash prize awards, certificates issued.

➤ Preparation of documentary / Press Conferences

“Lassana Lanka Haritha Suhuru Gammana” documentary film was produced under Haritha Gammana Programme. Media Coordination was carried out for “Sri Lanka Next” programme, “Wanaropa” National Tree Planting Programme, National Ozone day celebration. Press conferences were organized to cover the programmes which were organized by Ministry and line agencies.

➤ Reporting Environmental issues Telecast in Television

Institutional coordination activities and immediate remedial actions have been taken for environmental issues which was telecast in Television. Database on Environmental issues was created to publish recent environmental issues.

➤ Awareness creation

Islandwide awareness creation programmes were conducted to create awareness on Environment Conservation among school children, government officials and general public. Small and Medium Entrepreneurs those who already engaged in green jobs and government officials were given practical training on green jobs in selected districts under the project on Environmental Education for Sustainable Regional Development. 412 personnels were trained in this programme. 05 awareness creation workshops on Environment were conducted for School Children and officials of the forces.

➤ **Publications**

Two volumes of Soba magazine which is one of the major bi-annual publications of this Ministry have been published. 4 News letters have been published for four quarters of the year.

During this period, the National Ozone Unit (NOU) of the Ministry of Mahaweli Development & Environment continued its awareness activities for further strengthening the victories achieved through phasing out remaining Ozone Depleting Substances, i.e. Hydrochlorofluorocarbons (HCFCs).

NOU focused to introduce new alternative zero ODP technologies for the industries and technical support was given whenever required by the industrialists. In this endeavour, special attention was paid to enhance the skills of Refrigeration & Air Conditioning (RAC) professions which cater major portion of using HCFC. ‘ Good Practices in Refrigeration’ – RAC technicians training workshop module which was developed by the United Nations Environment Programme (UNEP) was further used as the guideline.

Awareness activities were performed from the grass root level to the professionals as ‘knowledge for Right Choice’

➤ **Capacity Building Workshop for Customs Officers**

Customs plays a major role to prevent the entrance of illegal items into the country and has been empowered through the Customs Ordinance to take appropriate action against illegal imports. 96 Ozone Depleting Substances (ODS) are categorized as controlled items and out of that 56 chemicals have already been banned for import or export. Rest of the 40 chemicals (HCFCs) are controlled by the Import Quota system which was implemented from 01.01.2013. Because of strict control measures for the import of HCFCs, there are possibilities to smuggle them into the country to meet the demand in the market. Since Customs Officers are in forefront to detect such illegal trade, special training programme is conducted annually for these key officers.

This year Capacity Building Workshop for Customs Officers was held on 28th June 2016 at the Custom House, Colombo. The training was comprised of both theoretical and practical sessions and special attention was paid on Harmonized System (HS) classification of refrigeration and Identifying ODSs which is hands-on Practical to familiarize the use of Refrigerant Identifiers

➤ Technician Training Workshop on Good Practices in Refrigeration & Air Conditioning (RAC) Service Sector

As Refrigeration & Air Conditioning (RAC) sector is the major consumer of ODSs it is important to train RAC service sector professionals on correct use of these chemicals that are harmful to the Ozone Layer when released in the atmosphere. Therefore, maintaining a RAC system as leak free is so important. Training programmes on ‘Good Practices in Refrigeration’ is designed to fulfil this service personals’ obligation. Apart from that RAC systems are large users of electrical energy and represent huge capital investments. Good maintenance of these systems ensure the lower energy consumption and minimize the impact to the environment through the chance of increasing Global Warming effect.

‘Good Practices in Refrigeration’ is a module of training and NOU gives preference from all the other activities for this training programme which is conducted in collaboration with the UNEP and UNDP. ‘Good Practices in Refrigeration’ help to improve quality, safety and the health aspects of professionals in the RAC field.



Practical demonstrations for technicians

- ✓ First technicians training workshop on Good Practices of the 2016 was held for AC/ Refrigeration technicians from 10–12 March 2016 at the College of Technology, Matara. 55 technicians participated at this training.
- ✓ Second technicians training workshop of the 2016 was held for AC/ Refrigeration technicians from 13 – 14 May 2016 at the College of Technology, Kandy.
- ✓ Training workshop for Engineers attached to the Sri Lanka Army was held at Saliyapura Army Camp, Anuradhapura from 10-12 November 2016
- ✓ Third Technician training workshop on Good practices of the 2016 was held for AC/ Refrigeration technician from 7-9 December 2016 at the Vocational Training Authority, Gampaha.
- ✓ Fourth technicians training workshop of the 2016 was held for AC/Ref. technicians from 26-28 December 2016 at the Vocational Training Authority, Ampara.

These training workshop programmes are mainly based on the new technological information and products that serve the technical aspects of preserving of the Ozone layer through good practice and update

➤ **Awareness Creation Programs**

Implementation of Montreal Protocol contribute towards the sustainable reduction of the use of ODS and to reduce greenhouse gas emissions and thereby to mitigate global warming and to conserve the most precious ozone Layer. Therefore, effective awareness, education and disseminating information are the main criteria for the success of the Protocol of its 30 years journey. It is evident that documentaries, seminars and publications are more effective tools for awareness creation purposes. Similarity to previous years, NOU allocated more awareness workshops into 2016 Annual Work Plan.

Awareness workshops for different target groups were held during 2016 and details are given as follows:

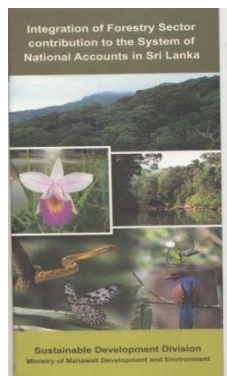
- ✓ Awareness Creation Program for School Teachers (Science), Teaching Instructors and Education Directors was held on 22nd January 2016 *at the Zonal Education office, Anuradhapura*
- ✓ Awareness workshop for Security Force Officers was held on 25th February 2016 *at the Security Force Headquarters, Mulative.*
- ✓ Awareness Creation Program for Government officers was held on 26th February 2016 *at the District Secretariat, Jaffna.*
- ✓ Awareness Creation Program for School Teachers (Science), Teaching Instructors and Education Directors was held on 27th May 2016 *at the Monaragala Royal college in Monaragala Zonal Education area.*
- ✓ Awareness Creation Program for School Teachers (Science), Teaching Instructors and Education Directors was held on 20th May 2016 *at the District Secretariat, Dankotuwa.*
- ✓ Awareness Creation Program for School Teachers (Science), Teaching Instructors and Education Directors was held on 02nd-03rd June 2016 *at the Mathale District.*
- ✓ Awareness Creation Program for School Children was held on 17th June 2016 *at the Buddha Balika Vidyalaya in Dankotuwa.*
- ✓ Awareness Creation Program for Government officers was held on 02nd September 2016 *at the Chief Minister office, Galle.*
- ✓ Awareness Creation Program for Government was held on 20th December 2016 *at the Department Coast Conservation and Management, Chilaw.*

➤ **Establishment of Green Accounting Mechanism in Sri Lanka- EC**

The Ministry of Mahaweli Development and Environment is developing a Green Accounting Mechanism to integrate the real contribution of natural resources to the System of National Accounts of the country. The present system of National Accounts neglects the contribution of the environment as well as the damages, losses and benefit inflicted by economic activities on the environment. Failure to incorporate the role of natural capital in SNA has led to neglect contribution of environmental resources by policy makers, thereby, resulting in further degradation of environment and natural resources. It is, therefore proposed to incorporate environmental benefits under the concept of Total Economic Value (TEV) into the UN sponsored System of Economic Accounting. (UN-SEEA)

Following activities were carried out under the Green Accounting Mechanism

1. Printed 3000Nos of Leaflet on Integration of Forestry Sector contribution to the system of national accounts in Sri Lanka



Leaflet valuation of contribution of the
Forestry Sector

2. Policy brief was prepared based on the study of the contribution of the forestry sector.



Policy Brief on Green Accounting

3. Concept papers for the valuation of Mineral, Fisheries and Water sectors were prepared

2.10 INTERNATIONAL COOPERATION

2.10.1 Major Achievement in 2016

➤ International Ozone Day Celebration 2016

Theme: Ozone and climate: Restored by a world united

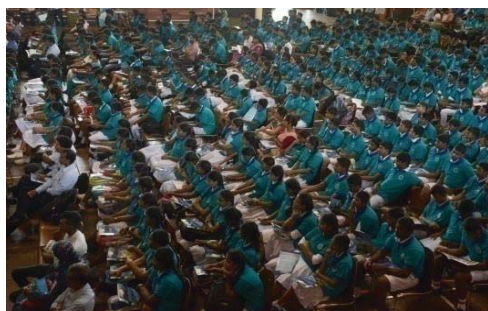
September 16th of every year has been declared by the United Nations as International Day for the Preservation of the Ozone Layer. Purpose of declaring of this special day is to get together to conserve the most important lifesaving natural protection. Main activity of this day is awareness creation among the public and pursue their commitment in preserving Ozone Layer as well as entire environment.

2016 celebration was held at the Sri Lanka Youth Council, Maharagama on 15th September 2016 under the patronage of Hon. Anuradha Jayarathne, Deputy Minister of the Ministry of Mahaweli Development and Environment. Many distinguished guests including officials from UN Agencies, government and non-government institutions, seven hundred schools and Technical College students were among the participants.

➤ Main Activities of the event:

- ✓ All island Art competition was held parallel to the International Ozone Day ceremony and an Art Exhibition was held displaying winning and selected drawings.
- ✓ Distributed Wheel Chairs to Eye Hospital in Colombo and Cancer Hospital.
- ✓ The book written on Ozone Layer Depletion and Loss of Biodiversity was launched at the International Ozone Day celebration and distributed the same among participants.
- ✓ Awarding incentives under the programme of providing incentives for purchasing Air conditioning machines which contain ozone and environment friendly refrigerant.
- ✓ Award presented for the winners of the competitions of Art, Oratory and Essay which were conducted among Schools Island wide.
- ✓ Played the stage drama emphasizing the importance of the Ozone Layer. This was performed by the recognized Drama Artists of the Sri Lanka Broad casting Corporation (SLBC)
- ✓ Played the Ozzy Ozone Cartoon which was translated to the Sinhala language with the Tamil subtitles.

Photo Gallery of the Event of International Ozone Day-2016



➤ **Participating to the International Events:**

It is an obligation for all parties to the Montreal Protocol to take part in International meetings, discussions that are organized by the UNEP or UNDP. Accordingly following events were represented by Sri Lanka delegates.

- ❖ The Asia and the Pacific Regional Workshop on Flammable Refrigerants in the Room Air Conditioner(RAC) and field Trip to RAC and compressor Manufacture plant

29thFebruary to 3rd March 2016, Guangdong Province, China.

Since NOU Sri Lanka is engaged with phasing out of HCFC under the Montreal Protocol and is introducing climate friendly alternative technologies that are having Zero ODP and Low GWP values, this workshop immensely benefited to Sri Lanka to develop policies, strategies

and standards in using such alternative technologies, especially for flammable refrigerant. Apart from that this workshop was an ideal forum to exchange ideas and views on policies to be introduced to phase down HFCs with other Asian and Pacific Regional countries.

The events were jointly organized by foreign Economic Cooperation office (FECO), Ministry of Environmental Protection (MEP) of the Government of P.R. China, and UNEP.

Ozone Officer and another representative from manufacturing and service sector were invited to participate for this occasion.

**❖ The 37th Meeting of the Open Ended Working Group,
4th -8th April 2016, Bangkok, Thailand**

This meeting was mainly focused on all issues related to HFC management, including high-ambient temperature conditions in India, Pakistan and Middle East Countries. Introducing policies and safety standards when using hydrocarbons, energy efficiency of equipment were also discussed at this meeting.

37th OEWG focused on the Dubai Pathway on hydrofluorocarbons (HFCs), which is intended to lead to adoption of an HFC amendment to the Protocol at the 28th Meeting of the Parties (MOP 28) in October 2016 in Kigali, Rwanda.

**❖ The Network Meeting and Thematic Workshop for Asia and the Pacific
National Ozone Officers
14 – 20 June 2016, Suva, Fiji**

This Joint Thematic Network Meeting was provided a forum for the Ozone Officers to update latest policy & technology developments as HCFC alternative at the global and regional levels and discussed the approved 2015 CAP work plan for each network. There were three events organized as part of the meeting. The objective of the Procurement workshop was to enhance the understanding of Ozone Officers & national stakeholders on Green Procurement policies and tools for promoting low-GWP alternative technologies to HCFCs.

The Ozone2Climate Industry Round table is aimed to engage industry decision makers in a discussion on the availability, affordability & need for zero-ODP, low-GWP & more energy efficient alternatives in the Refrigeration & Air-conditioning sector.

❖ Resumed OEWG 37 and 38th of the OEWG and the 3rd Extra Ordinary Meeting of the Parties to the Montreal Protocol

15-23 July 2016, Vienna, Austria

The resumed session of the thirty-seventh meeting of the Open-ended Working Group (resumed OEWG 37) of the Parties to the Montreal Protocol was held from 15-16 July 2016 in Vienna, Austria. The Thirty eighth meeting of the Open Ended Working Group (OEWG 38) was followed from 18-21 July 2016. The Third Extraordinary Meeting of the Parties had met thereafter, from 22-23 July 2016. The Austria Government generously hosted all three meetings.

❖ Resumed OEWG 38th and 28th of the Meeting of the Parties to the Montreal Protocol

08-14 October 2016, Kigali, Rwanda.

Thirty-eighth meeting of the Open-ended Working Group, Vienna, 18–21 July 2016, which was suspended, resumed in the margins of the Third Extraordinary Meeting of the Parties solely to allow the continuation of the work on the Dubai pathway by the contact group. The resumed session of this thirty-eight meeting of the Open-ended Working Group (Resumed OEWG 38) of the Parties to the Montreal Protocol was held from 08th -09th October 2016 in Kigali, Rwanda.

At this meeting, endorsed the solutions to the challenges identified in the Dubai pathway and reproduced the agenda for Twenty-eighth Meeting of the Parties.

The 197 parties to the Montreal Protocol on Substances that Deplete the Ozone Layer met in Kigali, Rwanda for the 28th Meeting of Parties. At this important meeting all countries agreed to reach an important agreement that could prevent a global temperature rise of up to 0.5°C by the end of this century through phasing down of HFCs, while continuing to protect the ozone layer. They worked towards an amendment to the Montreal Protocol to phase down hydrofluorocarbons (HFCs) - powerful greenhouse gases used as substitutes for ozone-depleting substances

2.11 Financial Analysis and Summary of Accounts 2016

Summary

Ministry of Mahaweli Development & Environment – 160

Programme & Project	Capital Expenditure			Recurrent Expenditure		
	Revised Provision	Expenditure (Rs)	%	Revised Provision	Expenditure (Rs)	%
Programme 01						
Operational Activities						
Project 01						
Minister's Office	50,000,000	4,928,008		44,842,000	42,135,366	
Project 02						
Ministry Administration	776,000,000	623,170,712		327,805,000	319,881,989	
Programme 02						
Project 03						
Environment Protection	1,238,642,842	851,125,196				
Project 04						
Public Institutions	2,220,000,000	1,248,303,400		3,403,000,000	3,395,898,607	
Project 05						
Mahaweli Development	57,486,645,466	35,829,548,163		-	-	
Total	61,771,288,308	38,557,075,479		3,775,647,000	3,757,915,962	

Capital Expenditure-2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 1 - Operational Activities

Project 01- Minister's Office

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2001	11	Building & Structures	500,000	0	
2002	11	Plant, Machinery	200,000	56,299	
2003	11	Vehicles	4,300,000	3,691,196	
2101	11	Vehicles	43,000,000	0	
2102	11	Furniture	850,000	0	
2103	11	Plant, Machinery	1,150,000	1,077,613	
		Total	50,000,000	4,825,108	

Capital Expenditure – 2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 1-Operational Activities

Project 02- Administration& Establishment Services

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2001	11	Building & Structures	1,600,000	37,966	
2002	11	Plant,Machinery	1,000,000	136,323	
2003	11	Vehicles	6,600,000	6,523,616	
2102	11	Furniture	170,800,000	170,223,771	
2103	11	Plant,Machinery	1,600,000	1,313,616	
2104	11	Building & Structures	591,000,000	441,538,474	
2401	11	Training	3,400,000	3,396,947	
		Total	776,000,000	623,170,713	

Recurrent Expenditure-2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 1 - Operational Activities Project 01- Minister's Office

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
		Recurrent Expenditure			
		Personal Emoluments			
1001			9,660,000	9,423,484	
1002			1,550,000	1,549,765	
1003			9,900,000	9,712,658	
		Travelling Expenditure			
1101			600,000	462,652	
1102			1,880,000	1,855,481	

		Supplies			
1201			1,650,000	1,622,603	
1202			6,795,000	5,234,155	
1203			2,000	0	
		Maintenance Expenditure			
1301			6,060,000	6,055,345	
1302			500,000	458,670	
1303			40,000	4,035	
		Service			
1402			2,250,000	2,235,303	
1403			2,700,000	2,489,377	
1404			5,000	0	
1405			1,250,000	1,031,838	
		Total	44,842,000	42,135,366	

Recurrent Expenditure-2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 1 - Operational Activities

Project 02: Administration and Establishment Service

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
		Recurrent Expenditure			
		Personal Emoluments			
1001			82,602,000	81,968,552	
1002			5,000,000	4,959,696	
1003			81,800,000	79,847,057	
		Travelling Expenditure			
1101			1,222,000	1,106,100	
1102			1,820,000	1,794,697	
		Supplies			
1201			7,800,000	7,673,465	
1202			11,100,000	10,077,164	
1203			335,000	329,745	

		Maintenance Expenditure			
1301			11,025,000	11,020,150	
1302			3,200,000	3,191,009	
1303			98,000	42,223	
		Service			
1402			5,500,000	5,497,071	
1403			12,300,000	12,284,052	
1404			22,000,000	21,974,945	
1405			11,250,000	11,070,877	
		Transfers			
1505			68,000,000	64,296,173	
1506			2,750,000	2,746,014	
1701			3,000	3,000	
		Total	327,805,000	319,881,990	

Capital Expenditure - 2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 2

Project 03 - Environment Protection

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2502	11	1. Formulation, Review & Gap Analysis of Environmental Policies	2,000,000	440,015	
2502	11	2.Adaptation & Mitigation of Climate Change Impacts	1,500,000	1,439,212	
2502	11	3. Commemoration of Major Environment Events	20,000,000	19,733,283	
2502	11	4. Education & Awareness Creation on Environment	2,000,000	1,414,980	
2502	11	5.Environmental Protection & Conservation	15,000,000	14,897,460	
2502	11	6 . School Environmental Pioneer Programme(HarithaNiyamu)	20,000,000	20,000,000	

2502	13	7. Implementation of the Montreal Protocol (GOSL/UNDP)	23,020,000	19,512,764	
2502	17		30,000	29,659	
2502	13	9. National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants	4,000,000	3,681,458	
		10. Strengthen the National Coordination Activities of the Global Environment Facility			
		12. E-Waste Management Project			
2401	13	13. Effective Management of Invasive Alien Species (GOSL/UNDP)	80,000,000	61,527,660	
2502	11	18. PilisarProgramme	190,000,000	189,765,917	
		21. Plastic Waste Management Programme			
2502	17	31. Waste Management System at Dompe, Gampaha District (GOSL/Korea)	6,390,308	2,833,600	
2502	13	58. Mainstreaming biodiversity Conservation and Sustainable use for Improved Human Nutrition & Wellbeing	31,000,000	31,000,000	
2502	13	60. Mainstreaming Agrobiodiversity Conservation and use in Sri Lankan agroecosystem for Livelihood and adaptation to Climate Change	35,000,000	16,224,351	
2502	11	63. Strengthening of the laboratory of the CEA	30,000,000	26,879,398	
2502	12	69. Construction of Solid Waste Disposal Facility -Anuradapura, Hikkaduwa,Udunuwara&Panadura	160,000,000	59,833,983	
2502	17	(GOSL/Korea)	26,027,134	26,027,134	
2502	13	71. Community Forestry Programme	30,000,000	29,987,669	
2502	13	74. Mechanism for Reducing Emission from Deforestation and Degradation(GOSL/UNDP)	17,880,000	15,037,436	
2401	13	75. Preparation of National Biodiversity Strategic Action Plan to Support the Implementation of the Convention on Biological Diversity(GOSL/UNDP)	6,500,000	6,499,153	

2502	11	92. Management of Invasive Alien Species Which Comes Waters Through Ship's Ballast Water	2,000,000	2,000,000	
2502	13	97. Addressing Climate Change Impacts on Marginalized Agricultural Communities at Mahaweli River Basin of Sri Lanka (GOSL/WFP)	388,290,000	171,546,734	
2502	11	98. Green Fishery Harbour Project at MirissaHarbour	29,311,000	26,420,382	
		100. Waste Management Project in Kotikawatta/ Mulleriyawa(GOSL/KOIKA)			
2502	13	101.Monitoring Of the Water Quality of Major Water Bodies (GOSL/JAPAN)	61,500,000	60,890,000	
2502	17		5,000,000	4,000,000	
		102. Skills Sector Development Programme			
2502	11	104. Sustainable Management of Biodiversity & Natural Resources	10,000,000	9,852,297	
2502	11	105.Popularization of Environment lanes/ParisaraMawatha	15,000,000	11,022,298	
2502	13	106. Enhancing Biodiversity and Sustenance of Ecosystem Seervices in Environmentaly Sensitive Areas (GEF)	12,608,000	10,737,163	
2502	13	107. YEOSU Project Building Capacity to Manage Marine Debris in Sri Lanka	1,000,000	719,089	
2502	13	108. Project on Environmentally Sound Management and Disposal of Polychlorinated Biphenyls (PCBs) Wastes and PCB Contaminated Equipment in Sri Lanka	6,000,000	2,245,761	
2502	13	111. APFNet Collaborative International Training Workshop on Forestry &Livelihood Development	5,800,000	4,516,624	
2502	17	112. Ecosystem Conservation and Management Project	1,786,400	409,717	
		Total	73,251,534	59,707,445	

Capital Expenditure – 2015

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 2

Project 05 - Mahaweli Development

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2502	11	1. Moragahakanda and Kaluganga Reservoir Project (GOSL/China, Kuwait & Saudi)	7,050,000,000	6,419,947,239	
2502	12		10,650,000,000	9,024,920,381	
2502	14		1,900,000,000	1,001,071,881	
2502	17		2,900,000,000	2,899,950,438	
		2. Dam Safety and Water Resources Planning Project (GOSL/WB)			
2001	11	3. Mahaweli Consolidation Project B (System Rehabilitation)	500,000,000	494,216,936	
2105	11	4. Uma Oya Diversion Project (GOSL-Iran)	19,176,000,000	9,560,082,108	
2502	11	5. Rehabilitation of Major and Medium Irrigation Schemes Including Emergency Infrastructure Rehabilitation Works	200,000,000	178,206,907	
2105	11	6. Redeemaliyadda Integrated Development Project	120,000,000	99,974,440	
2105	11	7. Welioya Integrated Development Project	605,000,000	580,508,000	
2105	11	8. System B Maduru Oya RB Development	225,000,000	182,852,485	
2502	11	9. Feasibility Studies	41,489,000	31,587,124	

2502	11	10.Implementing a mechanism to protect river bank of Mahaweli - Gatambe	125,000,000	63,000,000	
2502	12	11.Water Resources Development Investment Programe(GOSL/ADB)-Upper EleheraCanel, Moragahakanda, Kalugaga Transfer canel, Minipeancicut raising & LB Rehabilitation, North Western Province Canal	2,490,000,000	1,331,781,563	
2502	17		560,942,866	244,879,370	
2502	12	12.Kalinganuwara-Angamadilla Minneriya Pumping Complex	7,185,000,000	0	
2502	17		25,000,000	18,430,825	
2502	12	13.Additional Financing for Damsafety and Water Resources Planning Project(GOSL/W.B)	3,700,000,000	3,679,138,465	
2502	17		33,213,600	19,000,000	
		Total	16,269,156,466	13,386,459,802	

Capital Expenditure-2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 2 - Development Activities

Project 04 - Public Institutions

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2201	11	Central Environmental Authority	75,000,000	62,500,000	
2201	11	Marine Environment Protection Authority	90,000,000	89,998,400	
2201	11	Gem & Jewellery Research & Training Institute	55,000,000	42,805,000	
2201	11	Mahaweli Authority of Sri Lanka	2,000,000,000	1,053,000,000	
		Total	2,220,000,000	1,248,303,400	

Recurrent Expenditure – 2016

Head -160-Ministry of Mahaweli Development & Environment

Programme No: 1 - Development Activities

Project 04 - Public Institution

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
1503	11	Central Environmental Authority	550,000,000	544,271,613	
1503	11	Marine Environment Protection Authority	113,000,000	112,999,994	
1503	11	Gem & Jewellery Research & Training Institute	60,000,000	58,627,000	
1503	11	Mahaweli Authority of Sri Lanka	2,680,000,000	2,680,000,000	
		Total	3,403,000,000	3395898607	

Head -160-Ministry of Mahaweli Development & Environment

Recurrent Expenditure & Capital Expenditure

Financial Progress – 2016

Rs. Mn.

Agency	Recurrent Expenditure		Capital Expenditure	
	Allocation	Expenditure	Allocation	Expenditure
Ministry of Environment	372,647,000	362,017,355	59,551,288,308	37,308,772,079
Central Environment Authority	550,000,000	544,271,613	75,000,000	62,500,000
Marine Environment Protection Authority	113,000,000	112,999,994	90,000,000	89,998,400
Gem & Jewellery Research & Training Institute	60,000,000	58,627,000	55,000,000	42,805,000
Mahaweli Authority of Sri Lanka	2,680,000,000	2,680,000,000	2,000,000,000	1,053,000,000
Department of Forest				
Department of coast Conservation				
Moragahakanda / Kaluganga Development Project			22,500,000,000	19,345,889,940
Uma Oya Multipurpose Development Project			19,176,000,000	9,560,082,108
Total	3,775,647,000	3,757,915,962	103,447,288,308	67,463,047,527

Revenue Collection from the Agencies of the Ministry of Environment

Agency	2014	2015	2016
State Timber Corporation	3756.00	3986.00	4522.00
Central Environment Authority	220.66	198.80	239.30
Geological Survey & Mines Bureau	1510.00	1716.00	2284.00
Department of Forest	790.00	1406.00	2282.00
Department of Coast Conservation	5.347	16.96	6.18
Marine Environment Protection Authority	14.6	15.8	22.4
Gem & Jewellery Research & Training Institute	7.55	6.70	10.67
National Gem & Jewellery Authority	679.00	716.00	698.15
Mahaweli Authority of Sri Lanka	470.60	549.40	655.93
Central Engineering Consultancy Bureau	13259	11016	11675
Total	20712.16	19626.86	22395.6

PART 3

PROGRESS OF GOVERNMENT AND STATUTORY INSTITUTION UNDER THE MINISTRY IN 2016

3.1 FOREST DEPARTMENT

3.1.1 Introduction

Forest Department (FD) was established in 1887 under the provisions of the Forest Ordinance with a view to effectively and efficiently manages the forest resources for the benefit of the present and future generations. Functions of the FD has been organized under seven technical divisions viz., Silviculture and Forest Management, Forestry Research Education and Development, Social Forestry and Forestry Extension, Forest Inventory & Geographic Information System, Planning and Monitoring, Protection and Law Enforcement and Environment Conservation & Management. FD has been vested with the following responsibilities.

Major Responsibilities

- Conserve and maintain adequate forest cover for the amelioration of climatic conditions, conservation of flora and fauna, conservation of soil and water resources, for aesthetic, historical, recreational social and economic purposes.
- Ensure optimum use of forest lands through integrated and multiple land use approaches, taking into account the diversity of potential uses.
- Ensure the scientific management and sustainable development of forest resources so as to supplement the wood requirements of the country.
- Ensure that environmental safeguards are included in all forestry development and utilization activities, so as to protect water resources, pedagogic resources and biological diversity.
- Establish close links among institutions concerned in promoting conservation and forestry development, so as to enhance the effectiveness of their individual efforts.
- Promote community participation in development, management and conservation of forest resources through community based forestry programs.
- Conduct forestry research, education and extension programs in order to promote awareness of forest conservation and development.

Major Challenges

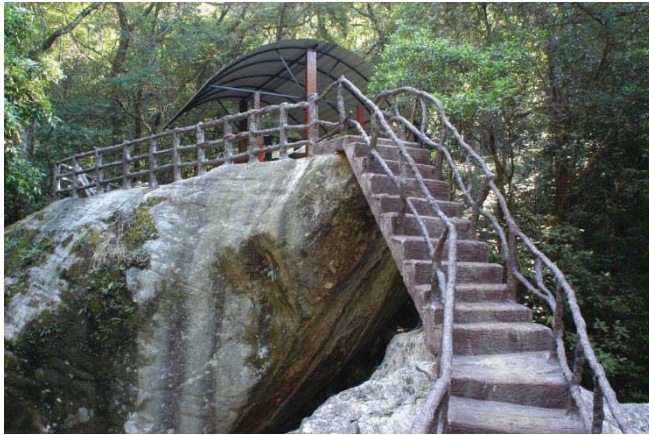
- Maintain national forest cover at present level and to enhance it to 32% of the total land area.
- Enforcement of law against violators of forest law under the Forest ordinance.
- Conservation of biodiversity.
- Prevent conversion of forest lands in to other land uses.
- Ensure participation of local communities in the protection and management of forest resources.

3.1.2 Major Achievements in 2016

ENVIRONMENTAL CONSERVATION AND MANAGEMENT DIVISION

Safeguarding the environmental interests of the forestry sector is achieved by implementing specific activities. Management of all forests classified in the protected area network falling to the categories of Conservation Forests reserved forest, Man and Biosphere Reserves, International Biosphere Reserves, other state forest, forests declared under the National Heritage and Wilderness Act *etc.* and contiguous monitoring of their bio diversity are essential. A database (EIMS), which reflects the degree of biodiversity of selected forests was established in early nineteen and has been updated periodically. Implementation of obligations stipulated under the international conventions, agreements and protocols are being regularly undertaken.

Preparation and implementation of EIA reports needed for forestry and other related operations contribute to the overall development of the forestry sector. Preparation and implementation of management plans prepared for the protected areas given alone and the management of the mangrove vegetation are considered on other vital tasks. Development of strategies for eco-tourism and their implementation is also obligatory in the context of managing all these type of protected forests. The main responsibility of this Division is to ensure the sustainable management of all ecological systems that are under the purview of the Forest Department and to make sure that their biological diversity, soil, water resources as well as historical cultural, religious and aesthetic values are conserved based on the objectives of the National Forestry Policy



Description of the Activities	Major Achievements																																							
Maintenance and management of world heritage sites Maintenance of all visitor facilities including nature trails and lodging facilities in Sinharaja, and Knuckles world heritage sites is included.	<u>Sinharaja World Heritage Site</u> Actions are being taken to demarcate boundaries afresh by surveying all the private lands and lands that are belong to the Land Reforming Commission (LRC) boarding Sinharaja World Heritage Site. Maps have been prepared based on the topographical coordinate’s talon using G.P.S. technology for Sinharaja Forest including all pheriphard forest lands. Actions are being taken to acquire private lands and also the lands belong to Land Reforming Commission that lies within the forest boundary. <u>Knuckles World Heritage Site</u> Approximately 60.4 km of the forest boundary perimeter was surveyed and demarcated. Lands belong to the private sector and LRC which lie within the demarcated boundary are being processed for acquisition. Constructions of Pitawala Pathana Information Center was completed																																							
Management of Conservation Center Maintenance and improvement of necessary facilities in Kanneliya, Kottawa, Udawattakele, Oliygankele and Kurulukele conservation centres and Haputale arboretum were planned.	Details of visitors and revenue collected are followed from these as entry fees. Details of visitors and revenue collected as entry fees in year 2016 are given in the following table <table><tr><th><u>Location</u></th><th><u>No. Of Visitors</u></th><th><u>Revenue (RS.)</u></th></tr><tr><td>Udawattakele</td><td>25,171</td><td>5,127,624.13</td></tr><tr><td>Knuckles–</td><td></td><td></td></tr><tr><td>Deenston</td><td>6,839</td><td>847,207.00</td></tr><tr><td>Knuckles-</td><td></td><td></td></tr><tr><td>Pitwala</td><td>52,874</td><td>1,682,535.11</td></tr><tr><td>Sinharaja</td><td></td><td></td></tr><tr><td>Pitadeniya</td><td>26,419</td><td>5,128,531.90</td></tr><tr><td>Sinharaja –</td><td></td><td></td></tr><tr><td>Kudawa</td><td>39,217</td><td>6,645,241.92</td></tr><tr><td>Kottawa</td><td>806</td><td>290,884.75</td></tr><tr><td>Kanneliya</td><td>59,463</td><td>1,945,248.50</td></tr><tr><td>Makandawa</td><td>266</td><td>660,799.53</td></tr></table> Altogether, an income of Rs. 79,133,135.25 was earned during the year 2016.	<u>Location</u>	<u>No. Of Visitors</u>	<u>Revenue (RS.)</u>	Udawattakele	25,171	5,127,624.13	Knuckles–			Deenston	6,839	847,207.00	Knuckles-			Pitwala	52,874	1,682,535.11	Sinharaja			Pitadeniya	26,419	5,128,531.90	Sinharaja –			Kudawa	39,217	6,645,241.92	Kottawa	806	290,884.75	Kanneliya	59,463	1,945,248.50	Makandawa	266	660,799.53
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Hurulu Eco-Park Improvement and maintenances of facilities at the Hurulu Eco-Park was planned.	Hurulu Eco- Park – Revenue Number of Visitors was 89,591 and the revenue collected was. Rs - 57,644,991.94 Ten minutes mini documentary on Hurulu Eco park was produced in order to attract the tourists worldwide and was published through social media.																																							

<p>Environmental Impact Assessment (EIA)</p> <p>National level development project proposal conducted by various government and non-government bodies in a close to the Forests are being evaluated for providing environmental clearance.</p> 	<p>Out of those proposals, the Forest Department has been appointed as the Project Approving Agency for the proposed Kolellawatta Reservoir project in 2016. Forest Department was appointed as the Project Approving Agency since 2004 to assess environmental impacts and suggest mitigation measure for various development projects that were being implemented in state forest lands. Accordingly, 136 sub project proposals were submitted to the Forest Department for environmental clearance.</p> <p>Supervision activities of various projects approved by the Forest Department during previous years were carried out. Other project proposals that are submitted requesting environmental clearance are currently under various levels of environmental scrutinizing.</p> <p>In addition, the Forest Department represented various of technical evaluation committee with respect to 36 to be implemented within various institution projects</p>
<p>Granting approvals for filming</p> <p>Films, Tele Dramas social function and Documentaries, which to be filmed inside the forests were to be approved charging fees.</p>	<p>Revenue from filming inside forests</p> <p>Revenue earned from video filming inside the Forest Reserves managed by the department was Rs 517,100.00 during the year.</p> 

SOCIAL FORESTRY & FOREST EXTENSION DIVISION

Introduction

Social Forestry and Forest Extension Division is responsible for the national level forestry extension and awareness programs development and supervision of all participatory and social forestry programs, planning and production of seedlings for extension programs, preparation of extension and training materials and planning and implementation of pilot

level income generation projects for the forest adjacent communities. Preparation of guidelines for participatory forest management is also assigned to this division. Social Forestry and Forest Extension Division is also responsible for the activities related to community management of natural forests.



Education, Extension	
Description of the activities	Major achievements
Tree planting activities Programmes prepared to direct people in to active participation in tree planting programmes.	392 nos. of programs were carried out. Road side planting-04 nos, Catchment planting & River bank planting-08 nos, Tree planting in schools-136 nos, Tree planting in other Government Institutions -244 nos were completed.
Establish New Farmers' Woodlots. The community adjacent to the selected forest areas was provided with state owned lands upon agreements with providing planting materials and technical knowledge to development farmers' woodlots with planting timber tree species.	100 ha of Farmers' Woodlots were established during the period under review. Anuradhapura -19ha, Ampara-10ha, Badulla-10ha, Trincomalee -05ha, Batticaloa-10ha, Monaragala-21ha, Mannar-20ha, and Hambantota -20ha. 126 numbers of familiar farmer participated.

Production of planting materials	
Maintenance of nurseries and production of seedlings. continuous supply of healthy and well maintained stock of seedlings for replanting programs to be ensured.	500,000 nos. of seedlings were produced in nurseries of the Department. Continuous supply of healthy and well maintained stock of seedlings for replanting programs had been ensured.
Home garden development & tree management programs. Tree management and home garden development programmes were carried out by providing seedling and technical assistance for households.	6215 nos. of home gardens were developed & 100 nos. of tree management programs were implemented.
Maintenance of Old Farmers' Wood lots Farmers' woodlots that were established in 2014 & 2015 were scientifically managed during the year	Cleaning operation and patch weeding was carried out in 299.3 ha of farmers' woodlots./ Badulla-50ha,/ Hambantota-10ha,/ Anuradhapura 60.8-ha,/ Polonnaruwa-55ha,/ Vavunia15ha,/ Amparaha-17.5ha,/ Trincomalee 5ha,/ Mannar-10ha,/ Batticaloa-15ha/ Mullathive-45ha/ Puttallam-16ha

SILVICULTURE & FOREST MANAGEMENT DIVISION

Introduction

The Silviculture and Forest Management (S&FM) Division is mainly responsible for management of natural forests and forest plantations in sustainable manner to ensure provisioning of forest products and services. The main tasks of the division include establishment and management of forest plantations and enhancement of forest cover. This division is responsible for releasing forest plantations to State Timber Corporation for harvesting and supervision of timber extraction activities.





Reforestation.

Following components are included under the reforestation programme.

- Establishment of block plantations for industrial uses
- Establishment of plantations to serve protective functions
- Reforestation of clear - felled plantation sites
- Conversion of pine monoculture plantations into, mixed broad leaved species
- Establishment and management of forest nurseries
- Forest Fire Management
- Silvicultural management of young plantations
- Implementation of Private Sector Reforestation Program
- Conservation of Hilltops in the Central Highlands

Planning, Implementation and Monitoring of Silvicultural Treatments and Harvesting of Forest Plantations.

The type of silvicultural treatments to be carried out in forest plantations is identified by processing of data through the FORDATA database. These treatments are included into the annual work plan of this branch. The silvicultural treatments include regeneration cutting, commercial thinning, pre commercial thinning, cleanings , post felling inventory and coppice management with the assistance of State Timber Cooperation (STC).

Co-ordination with the State Timber Corporation (STC)

As the STC is empowered for the extraction of timber from the plantations of Forest Department an effective liaison between these two organizations was maintained throughout the year. The Stumpage to be paid by STC was systematically calculated and actions taken to charge for the amount of timber extracted from the state forest plantations.

Implementation of Pine Oleo – Resin extraction activities.

This division is also responsible for the lease of mature Caribbean Pine plantations to the selected private sector organizations for the extraction of pine Oleo-Resins and subsequent monitoring.

Forest Enhancement Programme

In order to increase percentage of forest cover of Sri Lanka up to 32% of the land area from 29.7 % Forest Department started forest enhancement programme in 2014. Silviculture and forest management division has the responsibility to achieve the above aim by implementing various activities.

Three main strategies have been recognized under this programme to enhance the forest cover. They are protection and conservation of existing forests, expansion of forests in to new areas and improvement of tree cover on private lands. Under above strategies, following activities were implemented during year 2016.

Ecological Restoration

Ecological Restoration aims to re-establish the forest which were originally in existing. This includes promotion of natural regeneration (Assisted Natural Regeneration), seed sowing, scattered tree planting and enrichment planting. The removal of disturbing and unwanted vegetation that hinder the growth of the immature seedlings creates favorable condition for seed germination and natural regeneration. Prevention of occurrence of forest fire, cattle trespassing and protection of forests from other human interventions are recommended activities. These techniques have been practiced and proved successful in many other countries in the region. Forest Department implemented ecological restoration in 600 ha of degraded forest lands in 2016.

Maintenance of reforested areas

The area which had been restored in 2015 and 2014 were maintained during this year. Under this activity 8741ha of restored area were maintained.

Maintenance of rehabilitated forests

The area which had been rehabilitated using mixture of indigenous species in year 2015 and 2014 were maintained during this year. Under this activity 420 ha of forest plantations were maintained.

Description of the Activity	Major Achievements
Reforestation. Following components are included under the reforestation programme.	
<ul style="list-style-type: none">• Reforestation of clear - felled plantation sites	Under this activity, Forest Department was able to establish 884.6 ha of plantations during the period under review, in the clear felled plantations.
<ul style="list-style-type: none">• Implementation of Private Sector Reforestation Program	Private sector reforestation programme has been designed to harness the resources of the private sector in forest plantation development. Two Phases of this program were launched in year 2000 and 2002. 413 ha of forest plantations which were given to private sector under the agreement were maintained during 2016. 3,901,943 numbers of seedlings were produced for the above reforestation programme. This includes production of 2 million seedlings under Punarudaya National Conservation programme
Silviculture Operations. Silvicultural practices are carried out to improve the quality of the forest plantations. Young plantation maintenance, Pre commercial thinning, Commercial thinning, Post felling Inventory, Coppice maintenance and cleaning operations are the main silvicultural activities carried out in the forest plantations.	
Young plantation maintenance-2016 Weeding, application of fertilizer, fire prevention and vacancy planting were the main activities carried out under the forest plantation maintenance programme.	909.4, 657.3, and 613.5 ha of forest plantations established during 2013, 2014 and 2015 respectively were maintained in the year 2016.
Pre-commercial thinning	Young forest plantations of 592 ha generally less than 10 years old, were thinned out during 2016.

commercial thinning	619 ha of young forest plantations were thinned under thinning operation in the year 2016.
Post felling inventory	Post felling inventory is done after pre commercial and commercial thinning operations in the forest plantations. 540 ha of plantations were inventorized during 2016.
Coppice Maintenance	40 ha of Eucalyptus plantations were maintained thin activity.
Cleaning	Cleaning Operations in 420.1 ha of forest plantations were carried out in the year 2016.
Forest Enhancement Programme. In order to increase percentage of forest cover of Sri Lanka up to 32% of the land area from 29.7 % Forest Department started forest enhancement programme in 2014. This includes promotion of natural regeneration (Assisted Natural Regeneration), seed sowing, scattered tree planting and enrichment planting. The removal of disturbing and unwanted vegetation that hinder the growth of the immature seedlings creates favorable condition for seed germination and natural regeneration. Prevention of occurrence of forest fire, cattle trespassing and protection of forests from other human interventions are recommended activities.	600 ha of degraded forest lands were restored in 2016. The area of 8741 ha which had been restored in 2015 and 2014 were maintained during this year. Under this activity 420ha of forest plantations were maintained.
Pine Oleo Resin Extraction Programme. Selected pine plantations was given private sector organizations under agreements for resin extraction. 2312 ha of pine plantations are tapped for resin in 2016.	Rs.11,494,185.00 was collected as rental by the forest department from the private sector companies.
Maintenance of Hilltop Plantations. Some plantations were established in degraded central highlands for the purpose of catchment area protection.	244.3, 75 and 42.5 ha of forest plantations established during the years of 2013, 2014 and 2015 respectively were maintained under thin activity.
Conversion of Pine Plantations in to broad leaves plantations. Selected mature pine plantations established in the past are being converted to broad leave species. Maintenance of Pine plantations converted in to broad leaves	20.4 ha of pine plantations were converted in to Broad leave plantations in 2016. 147.2 ha and 27.0 ha of broad leaves plantations converted during 2014 and 2015 respectively were carried out during the year 2016

FOREST PROTECTION AND LAW ENFORCEMENT DIVISION

Introduction

The objective of the Protection and Law Enforcement Division is to ensure the legal protection to forest resources. The valuable natural forests, forest plantations, wildlife and other biodiversity resources, are protected and conserved and there by forests continue to provide environmental services while supplying forest products. The enforcement of the forest law is carried out by implementing Forest Ordinance through the head office, study of territorial offices, flying squad units and timber checking stations.

Activities	Performance
Protection activities which were carried out by the territorial staff attached to the 23 divisions and flying squad unit.	Total of 3717 forest offences were detected by these staff during the year 2016 which includes illicit fellings, forest clearings, illicit timber transports, gem mining, illicit possession of state timber and non-registered private timber enterprises. Out of this, 146 illicit timber possession offences were inquired by the Department and the rest of 3,571 offences were taken to courts which involve 4,445 individuals. In 33 cases the offenders were imprisoned while on 21 cases they were severely warned and in 2,144 cases the offenders were fined for Rs. 47,951,113.13. The 12 Lorries, 01 Van, 23 Two Wheel Tractors, 04 Tractors, 02 Motor Bicycles, 19 Foot cycles, 01 Three Wheeler and 03 Tippers were confiscated.
Permanent timber checking stations were operated 24 hours to detect the illicit transport of timber and forests products	Timber Checking Stations at Hanwella, Dambulla, and Pasyala were in operation during the year 2016.
Registration of saw mills, timber sales outlets, carpentry workshops, timber seasoning and processing factories, and fuel wood sales outlets were carried out at 23 divisions.	532 saw mills, 704 timber sales depots, 1,292 carpentry workshops, 1188 furniture shops, 20 Timber seasoning and processing factories, 103 Mobile timber saw mills and 276 Firewood sale outlets were newly registered during the year 2016.
Declaration of Conservation Forests or Reserved Forests.	In 2016, one Extra Ordinary Gazette was issued for declaring a reserved forest and a conservation forest.
Export of Forest Products	Granting of permission for export of plants, seeds and other forest products were carried out. The

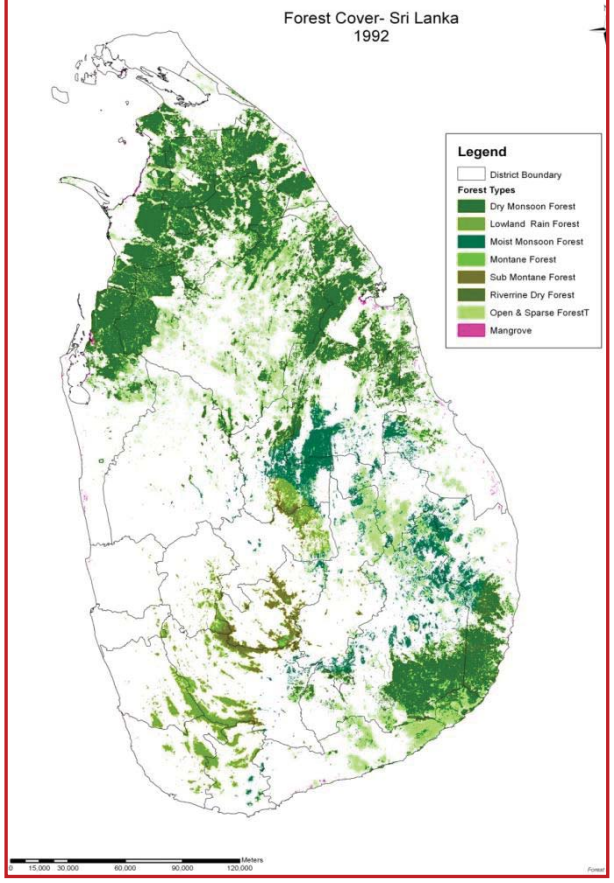

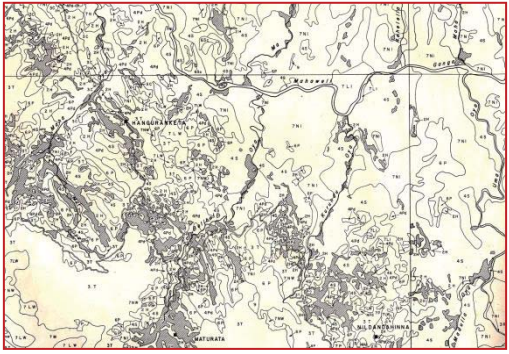
	total of Rs. 210,372.44 has earned from the normal service and Rs. 1, 521,570.75 has earned from the express service for the issue of export permits for plants/ plants materials and seeds an amount of It has earned Rs. 4,006,571.25 from express service and Rs. 569,270.21 from normal service for the issue of export permits for Furniture, Handicrafts, Toys and value added timber product was earned. A total of Rs. 3, 380,015.39 has been earned from one day service. The total revenue from all above services was Rs.9, 687,800.04
Training & Awareness Programs	<ol style="list-style-type: none"> 1. 17 awareness programs were conducted for 510 Police Officers. 2. 52 awareness programs were conducted for 2460 officials attached to the Divisional Secretariats. 3. 55 awareness programs were conducted for 667 Forest Officers. 4. 200 awareness programs were conducted for 8426 persons in other external groups.
Fire Arm training for the field officers	08 Fire Arm training programs were conducted for 375 forest officers at Kalutara Police Training School.
Reward Payments	In 2016 rewards of Rs 2,984,132.70 were paid among 839 officers and 08 informers.
Uniforms for the field officers	Uniforms were handed over to 1,477 field officers.

FOREST INVENTORY AND GEOGRAPHICAL INFORMATION SYSTEMS DIVISION

Introduction

Forest Inventory and Geographical Information Systems Division (FI & GIS Division) is mainly bearing the responsibility of supplying the information which is required for protection and management of forest resources of the country. Surveying and mapping, Boundary demarcation of forests, inventorying of natural & manmade forests, and managing database of forest plantation. Forest cover mapping, preparation of digital maps for other divisions, Preparation and checking the schedules for declaration of forest reserves are the main activities of the division. Furthermore, Division is involving in stumpage calculation, storage of old aerial photographs, digital data management topographic maps, topographic maps depicting flight lines of aerial photographs.

Description of the Activity	Major Achievements
<p>Remote Sensing for Forest Cover Mapping</p> <p>One of the main activities of the division is updating of forest cover map of the country. In 2015 the division started to update the forest cover map using Google Earth Pro and thereby downloading 2015 satellite imageries. This new technology was acquired with the assistance of REDD+ office and the Survey Department of Sri Lanka. With this facility it is able to get nearly 2 metre resolutions of imagery pixels which quite enhancing the quality and the accuracy of forest cover details</p>	<p>The identification of the satellite images was done by using 10.3.1 & 10.4.1 ESRI ArcGIS software which was the latest version. The maps were updated by field verification. Up to now forest cover map & the database of Sri Lanka are finalized based on the canopy of the forests. After the first level verification there is 2,304,799.99 ha of area was estimated at the total forest cover of Sri Lanka (according to FAO definition excluding Rubber plantations). Total area of Natural Forests were estimated as 2,210,507.93 ha and 94,292.06 ha of forest plantations were also identified during the process. When considering the forest cover 1,811,748.06 ha of dense forests, 380,209.02 of open forests and 18,550.85 ha of Mangroves were interpreted. Other than that 155,971.02 ha of shrubs and grasslands and 19,234.33 ha of Marsh lands were mapped. (There figures might be slightly change in the final verification step). After the final level verification and updating process rearranging of the prepared maps (According to the field levels) printing and issuing those to the field officers will be done on 2017.</p>

	
<p>Forest Inventory Activities</p> <p>Full enumeration of plantations released to State Timber Corporation in 2016 were undertaken.</p>	<p>893.4 ha of plantations out of targeted 976ha was enumerated. However Enumeration was not done in Mullativu Division.</p>
<p>Management of FORDATA Database</p> <p>Updating and management of FORDATA database was not undertaken much as it has in-built problems. Therefore, new database developing is in progress for the future.</p>	
<p>Survey and Boundary Demarcation</p> <p>Target for the year for Boundary Demarcation was 1,000Km and Surveying was 300 Km.</p>	<p>Performance of both were 100% reported for the year.</p>

Management of Geographic Information System	ArcGIS software was updated and installed to new computers. Forest cover map will be produced by using New ArcGIS version is 10.4.1. In 2017, it will be updated to 10.5 versions.
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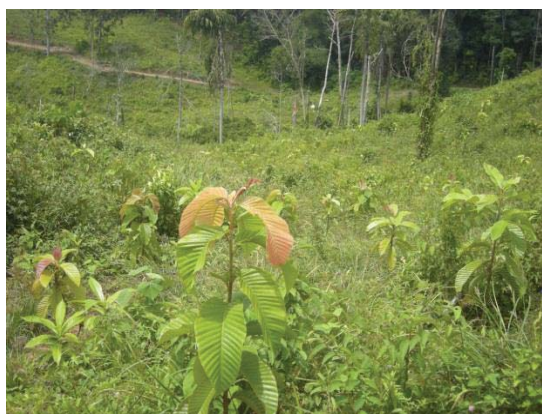
RESEARCH, EDUCATION AND DEVELOPMENT DIVISION

Introduction

The research and education division of the Forest Department originated as the Silvicultural research unit which denoted the inception of formal forestry research sector in Sri Lanka in 1937. The division is responsible for administration of forestry research and planning and implementation of educational aspects of forestry sector within departmental jurisdiction.

The division comprises of two regional research centers at Kurunegala and Badulla, the Sri Lanka Forestry Institute, and the Forestry Information unit (FIU). Forest Department library also operates under this division. Annual research programme of the Forest Department, implemented through research centers directly caters to the research problems of the Forest Department, State Timber Corporation and to the private sector engaged in plantation forestry. Both applied and adaptive research in conservation and production forestry is conducted by these centers.

Sri Lanka Forestry Institute (SLFI) situated at Nuwara Eliya conducts training programs in forestry and environment allied subjects mainly to strengthen the capabilities of the technical staff of the department. Forestry Information Unit (FIU) is aimed at communicating forestry research results to intended beneficiaries effectively. The Library serves the forestry sector with an up-to-date holding of around 31,313 books, 505 reports and 21 titles of journals.



Performance of Research Division	
Description of the Activity	Major Achievements
Establishment of pilot scale fuel wood plantations	<ul style="list-style-type: none"> • 50 ha of fuelwood plantations were established • 21 ha of community plantations were established
Maintenance of research trials	<ul style="list-style-type: none"> • Local species domestication • Plantation establishment and management • Tree improvement research program • Non-timber forest products • Natural Forest management • Seed Orchard maintenance
Seed collection programme	<ul style="list-style-type: none"> • Eucalyptus - 16 kg of seeds of <i>Eucalyptus grandis</i> and <i>Eucalyptus microcorys</i> were collected in Badulla and were distributed among the Department and plantation companies. • Teak – 721 kg of seeds collected in the previous year were distributed for DFOs for 2016 plantations. 700 kg teak seeds were collected from selected trees and stored in Kurunegala during 2016 to be distributed for planting in 2017.
National Forestry Sector Research Committee	<ul style="list-style-type: none"> • Four meetings were held during the year. 33 new research proposals were appraised and permission was granted to carry out research. In addition, extensions were granted for 09 ongoing research projects.

Performance of the Forestry Education Division

Following training programmes were conducted at the Sri Lanka Forestry Institute

Regular Courses for Departmental officers

Thirty BFOs were trained in Forest Certificate Course for year 2016

In-Service short term training programmes for the Forest Department Officers and Others

Short term training programs for Departmental officers

Name of course	Target Group	No of participant	Dates	Days
Induction training program for newly recruited Forest Filed Assistant	Forest Filed Assistants	45	15-02-2016 04-03-2016	16
Restoration of degraded lands in upper & Lower montane forests	Employee of Forest Department	34	09-02-2016 12-02-2016	04
Leadership Training Program for employee of SLFI	Employees of SLFI	30	22-03-2016 23-03-2016	02
Comprehensive Residential Training Course on “Control and Management of Invasive Alien Species in Sri Lanka”	Executive officers of Forest Department and other government institutes	34	28-03-2016 02-04-2016	06
Law Enforcement in service training program	Employee of Forest Department	55	08-08-2016 12-08-2016	05
Awareness program on Commission to investigate of bribery or corruption	Forest Officers of Forest Department (Central/Uva province and Trainees of forest Institute in 2016	70	29-09-2016	01
Comprehensive Residential Training Course on “Control and Management of Invasive Alien Species in Sri Lanka”	Employees of Forest Department and other Institutes.	30	21-11-2016 25-11-2016	05

Short term training programs for other Institutes

	Target Group	No of participant	Dates	Days
Legal aspect and plantation establishment in Forestry	Employees of Sri Lanka Mahaweli Authority - Zone B	20	16-11-2016 18-11-2016	03
Induction training on forestry	Officers of Sri Lanka Administrative Service Cadets -2015	34	01-12-2016 03-12-2016	03

NVQ training programmes

National Vocational Qualification (NVQ) activities at SLFI	<ul style="list-style-type: none"> • Lesson plan development
	<ul style="list-style-type: none"> • Accreditation of SLFI Courses
	<ul style="list-style-type: none"> • Quality Management System (QMS) at SLFI
	<ul style="list-style-type: none"> • Quality Management System (QMS) at SLFI
	<ul style="list-style-type: none"> • NVQ 6 equal certificate for diploma holders of SLFI

Other activities of the division

Publications	Forest Research Newsletter 2015 (Issue 12) was printed
Training programmes	<ul style="list-style-type: none"> • Training program for advanced level school teachers of Giriulla Education zone on tissue culture • Training program on forest restoration in the upcountry area for Department and other government officers • Training on invasive species for Forest Department and other government Officers

Library	<ul style="list-style-type: none"> Books, Journals of the value Rs. 523,881.00 were purchased for the library. 05 titles of books and 07 titles of journals were purchased during this year. 150 titles of books were received as donations. The library catalogue was continued to be computerized using CDS-ISIS library package.
Forestry information service	<ul style="list-style-type: none"> Sri Lanka Forester Vol.36 & 37 were published

PLANNING & MONITORING DIVISION

Introduction

Planning and Monitoring division is mainly responsible for the preparation of annual plans pertaining to different activities implemented by the Forest Department. Other major activities include, preparation of annual budget, progress monitoring and progress reporting of all the projects handled by the Forest Department, preparation of proposals for new projects, as well as construction and maintenance of buildings, and acquisition of furniture, office equipment plants, machinery and equipments.





Description of the Activity	Major Achievements
Preparation of annual action plan and capital budget	Annual work programme and Annual budget for year 2017 were prepared considering needs of the Department.
Progress reporting	Quarterly Progress Reports were sent to Ministry of Mahaweli Development and Environment on progress of implementation of activities under the Capital Budget. Occasional progress reports were submitted to various other institutions, as and when required. Quarterly Progress Reports were sent to Ministry of Mahaweli Development and Environment on progress of implementation of activities under the Capital Budget. Occasional progress reports were submitted to various other institutions, as and when required.
Buildings construction	25 new BFO, RFO, DFO Quarters Including some tube wells.
Buildings renovation	121 nos. of existing buildings and some fences were repaired.
Acquisition of furniture & office equipments.	Required procurement completed
Acquisition of plants, machinery and equipments.	Required procurement completed

3.1.3. Performance of the Department Budget

Object Code	Description	Provisions (Rs.) 2016	Expenditure (Rs.) 2016	Savings (Rs.)
	Recurrent Expenditure	1,351,050,000.00	1,304,155,778.94	46,894,221.06
	Personal Emoluments	1221,800,000.00	1,179,330,624.67	42,469,375.33
	Other Recurrent	129,250,000.00	124,825,154.27	4,424,845.73
	Capital Expenditure	831,800,000.00	830,861,036.69	938,963.91
	Rehabilitation and Improvement Capital Assets	52,250,000.00	51,912,905.64	337,094.36
2001	Buildings and structures	40,000,000.00	39,973,418.90	26,581.10
2002	Plant, Machinery and Equipment	3,250,000.00	3,004,697.45	245,302.55
2003	Vehicles	9,000,000.00	8,934,789.29	65,210.71
	Acquisition of Capital Assets	143,300,000.00	143,211,313.03	88,686.97
2102	Furniture and Office Equipment	13,300,000.00	13,283,736.61	16,263.39
2103	Plant Machinery and Equipment3	3,500,000.00	3,478,227.89	21,772.11
2104	Buildings and Structures	79,300,000.00	79,299,795.53	204.47
2105	Land and Land Improvements	47,200,000.00	47,149,553.00	50,447.00
	Capacity Building	6,000,000.00	5,842,194.58	157,805.42
2401	Staff Training	6,000,000.00	5,842,194.58	157,805.42
	Other Capital Expenditure	630,250,000.00	629,894,622.84	355,377.16
2502	Investments	630,250,000.00	629,894,622.84	355,377.16
	Total Project 01 Expenditure	2,182,850,000.00	2,135,016,815.03	47,833,184.97

Revenue Collection

Forest Department Collects Revenue under two Revenue Heads as Follows.

1003:07:03 Permit Fees for Transport of Timber from Private Lands.

2002:01:02 Rents from Crown Forests.

Year	Revenue Code	Revised Estimate (Rs)	Actual Collection (Rs)
2014	1003:07:03	60,000,000.00	50,101,112.48
	2002:01:02	2,000,000,000.00	739,449,271.47
2015	1003:07:03	80,000,000.00	87,687,148.83
	2002:01:02	1,100,000,000.00	1,318,518,534.10
2016	1003:07:03	90,000,000.00	111,567,175.06
	2002:01:02	1,800,000,000.00	2,170,576,942.04

Cabinet Memorandums

No new Cabinet Memorandums were made in relation to the subject area during year 2016.

3.1.4. Legislations and regulations

Title of the legislation/Regulation	Brief description to the legislation/Regulation
Increase of debit limit of Advanced accounts - 2016	Required action was taken to increase of debit limit of advanced accounts around up to RS. 67 million.

3.2 DEPARTMENT OF COAST CONSERVATION AND COASTAL RESOURCE

3.2.1 Introduction

Coast Protection Unit was established in 1963 under the Colombo Port Commission and in 1978 Coast Conservation Division was set up under the Ministry of Fisheries. With the aim of conserving the coast and creating safe and sustainable development opportunities base on the high valued economical resources that exist in the coast of Sri Lanka thus the Coast Conservation Division was upgraded to an “*A Grade Department*” on 1st of January 1984. As such coastal stabilization projects are being allocated the highest expense out of the department’s annual budget to conserve the coastal zone of the island. Management of shoreline by effective coastal stabilization schemes contribute for the sustainable developments while management of coastal resources and developments maintain the standards of the coastal environment which are equally important and subsequently Coast Conservation and Coastal Zone Management Act No. 57 of 1981 was implemented and administration, control, custody and management of the coastal zone is vested to the Democratic Socialist Republic of Sri Lanka. Further Act No : 57 of 1981 was amended by Acts No: 64 of 1988 and No : 49 of 2011 and administration and implementation of the provisions in Act, formulation and execution of schemes for Coast Conservation and Coastal Zone Management and preparation of Coastal Zone Management Plan and other duties and functions including in Section 4 of the Act are vested to the Director General of Coast Conservation and Coastal Resource Management.

➤ Objectives

1. To improve status of the costal environment.
2. To develop and manage the coastal zone
3. Safeguard coastal infrastructure & risks reduction of coastal communities.
4. To improve the living standards of costal communities and coastal resource users.
5. To promote and facilitate economic development based upon coastal resources.

➤ Main Responsibilities

1. Mitigating immediate impacts of coastal erosion.
2. Providing long term coast protection solutions.
3. Preparation of shoreline management strategies.
4. Carry out coastal investigation.
5. Carry out costal wave measurement studies.
6. Implementation of coastal research program.
7. Monitoring of near-shore bathymetry changes.
8. Updating Coastal Design Guidelines.
9. Coastal monitoring and evaluation.
10. Promoting sustainable coastal user friendly coastal construction.
11. Providing guidance in construction of marine structure within the coastal zone.
12. Preparation of costal Hazard Maps (Tsunami, sea level rise, storm surge & coastal erosion).
13. Providing coast protection design review for external parties.
14. Providing design assistance for river outlet management structures.
15. Conducting coastal water quality monitoring program.


16. Updating Coastal Zone Management Plan.
17. Controlling coral mining and beach sand mining.
18. Conducting environmental impact assessment for coastal development.
19. Ensuring permit compliance.
20. Enhancing awareness of coastal issues, including Curriculum development for schools.
21. Promoting community participation in coastal resource management.
22. Implementing special area management sites to improve the livelihoods of the communities through participatory coastal management.
23. Declaration of the Affected Areas, Conservation Areas and Special Management Areas and proper management of such areas.
24. Establish Beach parks.
25. Preparation of the Coastal Access Plan and facilitating Coastal access.
26. Control the illegal construction and illegal filling of land or water bodies within the coastal zone

➤ **Main Challenges:**



1. Execution of immediate actions for coastal erosion due to weather changes.
2. Environment impacts in the Coastal Zone due to development activities.

3.2.2 Major Achievements in 2016


Description of the activity	Major achievements
<p>Construction of hard coastal protective structures</p> <p>Projects under this program also comes under Punarudaya programme.</p> <p>For the sustainable land management in the coastal zone, one alternative solution is implementation of coast protective schemes using hard construction materials such as rock.</p> <p>Also department attend to improve the nature and aesthetic value of protective and suitable shore front land pieces by construction of beach parks and improvements in existing beach parks.</p>	<ul style="list-style-type: none"> • Construction of 440m Revetment at Thalwila, 100m Revetment at Patabadimulla , 140m Revetment at Koggala , 280 m Revetment at Dickwella, 200m Revetment at Dharmanwella and 200m Revetment at Welipatanvila, have been completed. Total length of construction is 1260m. • Total construction cost for Revetments in 2016 is Rs. 71,446,849.77


Description of the activity	Major achievements
<p>Although hard coastal protective structures are cheaper than sand nourishment schemes, in most cases erosion of adjacent area due to reflected or defracted waves by constructed hard protective structures and retaining of sand which is provided by the long shore process by the existing structure are reason to carry out the erosion problem to neighbouring coastal stretches is the disadvantage.</p>  <p>Payagala – 160 m Breakwater</p>	<ul style="list-style-type: none"> • Construction of 06 numbers 40m Groynes at Thalawila south, 04 numbers 45m Groynes at Ambakandawilla and 03 numbers of 20 m Groynes at Muthupanthiya have been completed. • 02 numbers of 30 m Groynes at Kappaladi are in progress. Total effective beach length is about 1500 m. • Total construction cost for Groynes in 2016 is Rs. 46,686,275.30 <ul style="list-style-type: none"> • Constructions of Breakwaters at Mudukatuwa North, Payagala and Egodaunya (BW3) were completed. Total effective length of breakwaters is about 320m. • Construction of 50 m two Submerge Breakwaters at Kappaladiya was completed. • Breakwater height reduced upto -3m level for 100m length & other part of breakwater height reduced up to MSL so that to spread the accumulated sand towards southward, which had accumulated after breakwater construction. • Construction of 80 m Breakwater at Mudukatuwa North , 80m Breakwater at Thalavila South, 80m Breakwater at Egodaunya(BW4) and 125m” T” Breakwater at Mandathive ,Jaffna are in progress.

Description of the activity	Major achievements
	<p>Total expenditure for Bakwater construction in 2016 is Rs. 134,825,994.30</p>
	<ul style="list-style-type: none"> Gabion Revetments at Induruwa, Matara, Weligama, Matara - Polhena and Kapparatota were completed. Total completed length is 525 m. <p>Total cost for Gabion Revetments in 2016 is Rs. 21,430,063.10</p>
	<ul style="list-style-type: none"> Constructions in Weligama Beach Park – Stage 2 & Stage 3, Wellamadama Beach Park & 850m walk way and 1200m Walkway at Akurala are in progress. <p>Total expenditure for 2016 for Beach Parks is Rs. 36,450,372.12</p>
	<ul style="list-style-type: none"> Madu Ganga Outlet management at Balapitiya completed. <p>Total expenditure for 2016 is Rs. 1,309,062.27</p>
<p><i>Total expenses under this program was Rs. 312,148,616.84</i></p>	
<p>Sand nourishment as soft solution for coastal protection.</p> <p>Projects under this program also comes under Punarudaya programme</p> <p>As per coastal engineering concept beach nourishment by offshore sand is considered as the best environmental friendly solution for the coastal erosion. When it is considered properties related to economical activities such as fisheries, tourism, ports, power generation , other infrastructure developments and land values at the coastal</p>	<p>As per instructions from the Cabinet, proposal has been made by the appointed expert committee for sustainable coastal protection solution. Cabinet approval has been received to nourish 400,000 m3 quantity of off shore sand at Marawilla beach (phase II). This quantity of sand nourishment had been completed .</p> <p>subsequently, additional 400,000m3 quantity of sand has been approved for nourishment due to the allocated funds could not be utilized fully in phase 2. Therefore, sand nourishment of this additional sand quantity was being in</p>

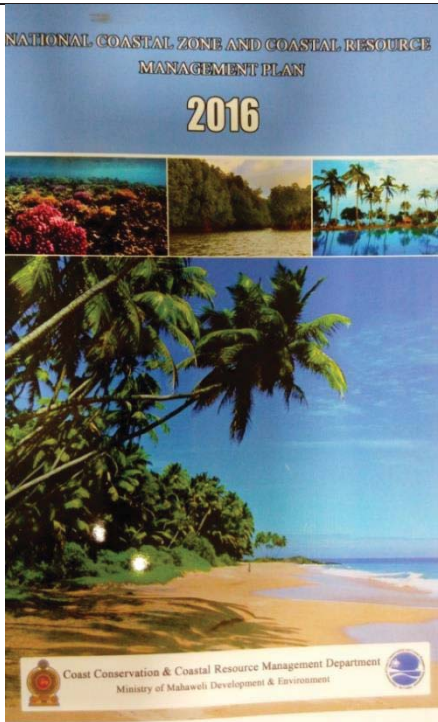
Description of the activity	Major achievements
<p>zone in Sri Lanka, expenses for the sand nourishment (at one time or repeated nourishments) is feasible to compare the values of protecting lands and properties. As such sand nourishment is the best solution for coastal erosion not only in environmental aspects and also in economical and social aspects.</p>	<p>progress.</p> 
<p><i>Total expenses under this program in 2016, was Rs.351,178,061.20</i></p>	
<p>Emergency coastal protections.</p> <p>Protections to cope up with emergency coastal erosion due to rough waves and storm surges with weather changes and in extreme situations.</p>  <p>Oluvil-Emergency Protection at northward of harbor</p>	<ul style="list-style-type: none"> Protected 12 coastal stretches at Panama, Marawila-Thalawila, Oluvil, Kolinjadiya – Ulhititiya, Muthupanthiya-Naguleliya, Illanthandiya, Thangalle-Madilla Patabandimulla –Ambalangoda, Paraliya, Hikkaduwa, Ambakandawilla and Habaraduwa. <p>Sand bar removal at Nilwala river mouth & Unawatuna and Madu ganga out let were also been carried out.</p> <p>Total expenses under this program was Rs. 44,111,077.80</p>
<p>Maintenance of Coastal Protective Structures</p> <p>Projects under this program comes under Punarudaya programme.</p> <p>For sustainable land management in the</p>	<p>Maintanace of 1km Revetment at Akurala, 860m revetment at Beruwala and 180m Revetment at Lansiyawatta have been completed. Total maintanace revetment length was 2040m.</p>

Description of the activity	Major achievements
<p>coastal zone function and condition of existing coastal protective structures are being monitored and rehabilitation and necessary improvements are being carried out by the department.</p>	<div data-bbox="807 253 1323 622" data-label="Image"> </div> <p>Maintanace of 1km Revetment at Akurala</p> <p>Total expenses under this programme was Rs. 74,236,483.54</p>
<p>Coastal Engineering Investigations</p> <p>Relevant studies and investigations, specially forcoastal structural designs of coastal engineering projects and coastal protective schemes, monitoring programs for environmental pollution control in sea water and sea connected inland water bodies, updating of coastal data and web, Organising seminars, workshops for updating, refreshing and sharing knowledge and experience in coastal engineering and environmental field are carried out under this programme .</p>	<p>Coastal Engineering Investigations</p> <p>Bathymetry study at Marawilla-Thalwila, Baticaloa-Trincomalee coastline and Koggala coastal stretch were completed.</p> <p>Total expenses under this program was Rs. 8,077,763.90</p> <hr/> <p>Coastal Designs</p> <p>Coast protective designs, 10 coastal protective schemes at Maravila,Thalvila North, Ambakandawila, Moderawella, Kappalady, Rathmalana, Gintota Koggala and Mandathive were completed.</p> <p>Shoreline investigations for Coastal Risk assesement project for East coast is being carried out.</p> <p>Sri Lanka Environment Sensitivity Index research project (phase II) completed.</p> <p>Wind and Wave Data collection of East coast sand sample test in Batticaloa – Trincomalee coast were done.</p> <p>Department web site was updated.</p>

Description of the activity	Major achievements
 <p>Coastal water quality monitoring</p>	<p>Total expenses under this programme was Rs. 1,177,869.92</p>
	<p>Coastal water quality monitoring program</p> <p>This comes under Punarudaya programme.</p> <p>Water quality monitoring are being conducted at 06 locations at Mount Lavinia, Nilaweli, Arugambay, Polhena, Unawatuna and Hikkaduwa coastal stretches.</p> <p>Total expenses under this programme was Rs. 1,321,059.40</p>
	<p>Coastal Engineering Symposium</p> <p>Coastal Engineering Symposium -2016 was held at Marawila in 16 December, 2016.</p> <p>A guest lecture on “Coastal Engineering Application” was conducted with the collaboration of University of East London.</p> <p>Total expenses under this was Rs. 566,435.00</p>
	<p><i>Total expenses under this programme was Rs. 11,143,128.22</i></p>
<p>Coastal Zone Management Program</p> <p>For sustainable land management of the coastal zone and to control environmental pollution due to development projects, coastal zone management program including implementation of green coastal belt, beach access program, demolition of unauthorised structures, permit procedure with environmental impact assessment process, identification of conservation and affected areas and identification of special management areas are being carried out under this programme.</p>	<p>Implementation of Green Belt Coastal Belt</p> <p>Completion of 12 km green coastal belt by planting 3058 numbers of trees (plant species used for tree planting are coconut, mudilla, kadolana, watekeiya, kottamba, Kumbuk and kasa) at Weligama, Matara beach park, Wellamadama, Dadalla, Koggala, Boosa, Kalutara Kalida beach, Beuwala, Moratuwa, Crow Island, Kapungoda, Sindathriya, Kalpitiya, Katuneriya, Kytes, Jaffna, Batticloa, Ampara and Hambantota districts.</p> <p>(Total expenses were Rs. 564,002.00)</p> <p>Implementation of Beach Access</p> <p>Initial investigation and identification of beach</p>

Description of the activity	Major achievements
<p>Implementation of green coastal belt, Identification of conservation and affected areas and Identification of special management areas comes under Punarudaya programme.</p>  <p>Demolition of unauthorized structures</p>	<p>access roads were done. (Total expenses were Rs. 130,180.00)</p> <p>Demolition of Unauthorise Structures</p> <p>308 demolition orders issued. 19 permanent & temporary unauthorised structures in Colombo, Kalutara and Hambantota districts were demolished. Implementation of this program is difficult due to social factors. (Expenses under this program was Rs. 280,812.50)</p> <p>Permit Procedure</p> <p>2108 permits were issued for development projects in coastal zone. 13 Environmental Impact Assessment (EIA/IEE) has been completed. Expenses under this was Rs. 798,376.22</p>
<p><i>Total expenses under this programme was Rs. 16,344,401.55</i></p>	
<p>Environmental Education Program</p> <p>To improve awarenesss of school children, government officers and public.</p> <p>Main aim of this programme is to improve the awareness of the coatal zone management and its regulations to the stakeholders.</p>	<p>16 public awarness boards installed.</p> <p>Participated Exhibision at Pigeon Island, Trincomalee. Preperations to print booklets and organize media programmes for public awareness. Art and debate competitions among school children and 03 beach cleaning programs with participation of beach users with big media coverage were being held during 1st week of June targeting World Environmental day.</p>
<p><i>Total expenses under this programme was Rs. 1,494,436.21</i></p>	
<p>Total expenses from 1st January 2016 to 31st December 2016 under above major achievements was Rs. 795,240,646.13. Constructions of coastal protective structures and several investigation works were frequently affected by bad whether conditions during the monsoon periods. In addition to that, quarry operations were been suspended due to environmental problems in many districts has also been affected to the construction of coast protective structures.</p>	

Description of the activity	Major achievements
<p>Participatory Coastal Zone Restoration and Sustainable Management in the Eastern Province</p> <p>This project is funded by Global Environmental Fund (GEF) and International Fund for Agriculture Development (IFAD). Project Management Unit (PMU) is established at Coast Conservation & Coastal Resource Management Department head office. Implementation of projects in Trincomalee, Ampara and Batticaloa districts was carried out under supervision of District Project Coordinating Officers (DPC officers) in three districts.</p> <p>After 30 years war, establishment of setbacks based on actual data by the monitoring programme in coastal zone at North and Eastern Province was very vital requirement for Coast Conservation and Coastal Resource Management Department (CC&CRMD). Therefore funds and facilities during data collection and preparation of National Coastal Zone and Coastal Resource Management Plan – Year 2016 for CC&CRMD provided by GEF/IFAD project.</p>	<p>Trincomalee District</p> <p>During that period,</p> <ul style="list-style-type: none"> • Constructions in emergency evacuation center for Tennamaravaady community completed and handed over to Divisional Secretary, Kuchchaveli with necessary equipments for the center. • Two compost yards to Kuchchaveli Pradesiya Saba, Kinnya Municipal Council and 26 Nos. fibre boats to “Nilaweli Tourist Boat Society” were handed over. • Exhibition and art competition among school children in Trincomalee district was conducted for World Environmental Day. • Reservation of Upparu, Sampalhive and Irakkandy lagoons were surveyed and demarcated with concrete pillars. • 1 ha green belt at Irakkandi lagoon was established. • About 1000 ha of mangroves in association with Upparu, Irakkandy, Sampalhive lagoons have been protected. • Co-management mechanism for Pigeon Island Marine Park has been established. • Revolving fund of Rs. Mn. 5 has been established to assist community groups involved in Pigeon Island coral reef. <p>Ampara District</p> <ul style="list-style-type: none"> • 2.5 km bio fence at Komari was established. • 15 km sand dune by concrete pillars were demarcated. • 50 ha green belt at Panama-Komari was established. • Constructions in urani resting hall and floating jetty for ecotourism were completed.

	<p>Batticaloa Districts</p> <ul style="list-style-type: none"> • Constructions in 120 nos. toilets for families around Vakaraï lagoon were completed. • Constructions in mangrove learning center was completed and handed over to Forest Department. • Demarcation of boundary at 300 km Batticaloa lagoon using 10,000 pillars was completed. • Boat landing facilities for Panichchankerny Vakaraï were developed. <p>Project Management Unit</p> <ul style="list-style-type: none"> • Ecotourism development plan for Pottuvil was developed. <p>National Coastal Zone and Coastal Resource Management Plan (NCZ&CRMP)</p> <p>For the preparation of 5 Chapters in NCZ&CRMP - 2016, Five expert committees under the leadership of five staff officers in the Coast Conservation & Coastal Resource Management Department were appointed. During that period,</p> <ul style="list-style-type: none"> • Draft report of NCZ&CRMP-2016 was reviewed by each teams and printed. Paper advertisement prepared for the circulation of draft report to obtain public comments.
<p><i>Total expenses under this programme was Rs. 222,886,318.17</i></p>	

Vote details	Allocation	Expenditure in Rs.	Financial progress %	Savings
<u>Rehabilitation & Improvement of Capital Assets</u>				
2001.Building	14,000,000	9,690,375.44	69.22	4,309,624.56
2002.Plant Machinery & Equipment	1,500,000	1,496,670.60	99.78	3,329.40
2003.Vehicles	9,000,000	8,550,742.14	95.01	449,257.86
Sub Total	24,500,000	19,737,788.18	80.56	4,762,211.82
<u>Acquisition of Capital Assets</u>				
2102.Furniture & Office Equipment	1,000,000	995,901.00	99.59	4,099.00
2103.Plant,Machinery & Equipment	70,574,010	70,574,010.00	100.00	-
2104.buliding	4,000,000	3,999,730.44	99.99	269.56
Sub Total	75,574,010	75,569,641.44	99.99	4,368.56
<u>Other Capital Expenditure</u>				
<u>Other Investments</u>				
2502.1.Coastal Engineering Investigation	12,000,000	11,143,128.22	92.86	856,871.78
2502.2.Implementation of Coastal Zone Mgt prog.	17,000,000	16,344,401.55	96.14	655,598.45
2502.3.Environmental Education Programme	1,500,000	1,494,436.21	99.63	5,563.79
2502.4.Coastal Protective Structures	471,421,990	312,148,616.84	66.21	159,273,373.16
2502.5.Emergency Coast Protection	45,000,000	44,111,077.80	98.02	888,922.20
2502.6.Beach Nourishment Projects	850,000,000	351,178,061.20	41.32	498,821,938.80
2502.7.Maintanance of Coastal Structures	60,000,000	58,820,924.31	98.03	1,179,075.69
Sub Total	149	795,240,646.13	54.58	

	1,456,921,990			661,681,343.87
2401.Training & Capacity Building	504,000	503,822.20	99.96	177.80
Grand Total Voted	1,557,500,000	891,051,897.95	57.21	666,448,102.05

Vote Details	Allocations	Expenditure	%	Savings
<u>Personal EmolUments</u>				
1001.Salaries & Wages	90,724,000	90,647,125.53	99.92	76,874.47
1002.Over Time & Holiday Payment	2,600,000	1,768,928.01	68.04	831,071.99
1003.Other Allowances	89,276,000	89,274,444.21	100.00	1,555.79
Sub Total	182,600,000	181,690,497.75	99.50	909,502.25
<u>Travelling Expences</u>				
1101.Domestic	1,205,800	764,942.75	63.44	440,857.25
1102.Foreign	1,800,000	704,727.47	39.15	1,095,272.53
Sub Total	3,005,800	1,469,670.22	48.89	1,536,129.78
<u>Suppliers</u>				
1201.Stationery & Office Requisites	2,000,000	1,983,727.85	99.19	16,272.15
1202.Fuel(After Savings)	1,580,200	1,553,993.03	98.34	26,206.97
1203.Diets & Uniforms	300,000	253,380.00	84.46	46,620.00
1205.Others	500,000	496,601.00	99.32	3,399.00
Sub Total	4,380,200	4,287,701.88	97.89	92,498.12
<u>Maintanance of Expenditure</u>	150			
1301.Vehicles	3,500,000	3,498,028.75	99.94	1,971.25

1302.Plant & Machinery	550,000	508,358.21	92.43	41,641.79
1303.Building & Structures	100,000	7,753.00	7.75	92,247.00
Sub Total	4,150,000	4,014,139.96	96.73	135,860.04
<u>Services</u>				
1402.Postal & Communication	2,301,100	2,273,285.05	98.79	27,814.95
1403.Electricity & Water	4,498,900	3,522,665.87	78.30	976,234.13
1404.Rents & Local Tax	500,000	20,253.00	4.05	479,747.00
1409.Others	8,500,000	6,209,374.70	73.05	2,290,625.30
Sub Total	15,800,000	12,025,578.62	76.11	3,774,421.38
<u>Transfers</u>				
1505.Subscriptions & Contribution Fees	4,000,000	29,137.50	0.73	3,970,862.50
1506.Property Loan Interest to Public Servants	5,000,000	4,063,828.41	81.28	936,171.59
Sub Total	9,000,000	4,092,965.91	45.48	4,907,034.09
Grand Total Voted	218,936,000	207,580,554.34	94.81	11,355,445.66

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GEF /IFARD Project				
Vote Details	Allocations	Expenditure	%	Savings
2502(13)	250,000,000	222,913,566.17	89.17	27,086,433.83
2502(17)	20,000,000	8,747,077.88	43.74	11,252,922.12
Grand Total Voted	270,000,000.00	231,660,644.05	85.80	38,339,355.95
Total Capital Voted	1,827,500,000.00	1,122,712,542.00	61.43	704,787,458.00

3.2.3 Cabinet memorandum submitted to The Cabinet office in 2016

Cabinet paper no & date forwarded	Title	Cabinet decision
45/2016 24/11/2016	Sand Nourishment Project in Marawila Beach (phase ii)	අමප/ 16/2514/704/024-ii 07/12/2016
31/2016 28/09/2016	Sand Nourishment at Marawila through off- Shore Sand Mining Phase ii	අමප/16/2006/704/024-i 12-10-2016
15/2016 24/05/2016	Marawila – Thalvila Sand Nourishment Project(phase ii)	අමප/16/0993/704/024 08/06/2016

3.3 CENTRAL ENVIRONMENTAL AUTHORITY

3.3.1 INTRODUCTION

The Central Environmental Authority (CEA) having established in 1981 under the National Environmental Act (NEA) No. 47 of 1980, completes thirty five years' service by 2016. The CEA operating under the purview of the Ministry of Mahaweli Development and Environment is one of the main implementing arms of the national environmental policy. CEA has 09 Provincial Offices and 14 District Offices. All these offices are directly linked to the Head Office.

OBJECTIVES

- 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.
- 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 center of information on environment related data and information, providing its services to wider cliental needs.

3.3.2 MAJOR ACHEIVEMENTS IN 2016

FOLLOWING SECTIONS BRIEFS THE PROGRESS OF THE CEA AND ITS PROJECTS IMPLEMENTED DURING THE YEAR 2016

➤ IMPLEMENTATION OF EIA/IEE PROCEDURE

This is in line with the objective number 06 of the “Punarudaya” Environmental Protection National Program. CEA continued its major regulatory function of administering the Environmental Impact Assessment Process for all prescribed projects with a view to mitigating the significant impacts on the environment of these projects.

➤ **Main Functions of the Unit**

- Implement IEE process
- Implement EIA process and ensuring compliance
- Implement awareness programmes on the EIA/IEE procedures
- Formulate guidelines on EIA/IEE procedures
- Introduce and implement of SEA procedure

During the year, nine (09) EIA approvals and 272 IEE approvals have been granted. Technical assistance was given to other project approving agencies of nineteen projects.

➤ **NATURAL RESOURCE MANAGEMENT**

The CEA holds the responsibility of management of country's natural resources, in coordination with other relevant agencies, Provincial and District offices of the Authority. Formulation of regulations, preparation of guidelines on Natural Resources Management, implementation of project approval procedure for permitted activities within the areas declared as Environmental Protection Areas, implementation of Wetland Action Plan of the National Wetland Policy and preparation of information material on Natural Resources Management, Environmental Protection Areas, and Wetlands Activities are the other functions carried out by the CEA with respect to the Natural Resources Management.

➤ **DECLARATION OF ENVIRONMENTAL PROTECTION AREAS UNDER THE NATIONAL ENVIRONMENTAL ACT (NEA)**

This is in line with the objective number 06 of the “Punarudaya” Environmental Protection National Program.

In lined with the objective of “Punarudaya” program to protect the areas having unique environmental features and ecological importance, the CEA took actions to declare such areas as Environmental Protection Areas (EPAs) in order to manage the areas in sustainable manner under the provisions given in the National Environmental Act. Having declared those areas as EPAs, the CEA would be responsible for physical planning and development within the declared EPAs.

During the year 2016, 06 declared EPAs were monitored and several activities were carried out to declare as EPAs on 05 proposed EPAs. Following table illustrates the details of declared EPAs and proposed EPAs.

- **DECLARED EPAS AND PROPOSED EPAS**

Declared EPAs	Proposed EPAs
<ul style="list-style-type: none"> • Bolgoda EPA - (Gazette No.-1634/23, Date- 2009/12/30) • Muthurajawela EPA - (Gazette No:1466/26, Date - 2006/10/13) • Thalangama Tank EPA - (Gazette No: -1487/10, Date -2007/03/05) • Gregory Lake EPA (Gazette no:1487/10, Date - 2007/03/05) • Maragala Mountain Range (Monaragala) - Gazette no:-1560/26, Date:-2008/8/01) • Walawewaththa –Wathurana 	<ul style="list-style-type: none"> • Pansalthenna, Ukuwela (Matale) • Warathenna- Hakkinda (Kandy) • Gin Oya • Kebithigollewa water spring &Gonumariyawa water bubble • Korakulam

➤ **WETLAND MANAGEMENT AND WORLD WETLAND DAY CELEBRATION**

Ensuring a sound management of the wetland ecosystems in the country, CEA takes actions for implementation of National Wetland Policy and Strategies.

World Wetlands Day is commemorated annually, on a theme selected for the year. “Wetlands for our Future: Sustainable Livelihoods” was the theme of the year 2016. In parallel to the wetland day celebration, CEA held “Thethbim Sithuwam-2016” art competition and quiz competition. In addition to that, six postage stamps indicating four RAMSAR Wetlands declared in Sri Lanka were issued with the partnership of Department of Wildlife Conservation and Postal Department

➤ **CONSERVATION OF WATERFALLS IN SRI LANKA**

As per the policy decision taken, not to grant approvals for mini hydro power generation projects on waterfall considering the direct and indirect threats and impacts on waterfalls, a list of waterfalls, consisting 547 waterfalls was prepared and board decision was taken to declare them as Environmental Protection Areas (EPAs) under Section 24C of the NEA. Further this list is being updated categorizing the waterfalls into two lists, they are Waterfalls with Mini Hydro Power Plants (MHPP), and Waterfalls without MHPP to include in the gazette as two lists.

➤ **KELANI RIVER BASIN CONSERVATION AND MANAGEMENT PROJECT**

The Master Plan for Management & Conservation of Kelani River basin along with a natural resource profile of the basin, a map compendium, A & D containing four technical papers and three newspaper articles were submitted by the Consultant. A web page which was available at www.iucnsrilanka.org/wp was under construction.

➤ **CATCHMENT PROTECTION IN BADULLA DISTRICT**

The catchment area which has extent of 1,148 ha, within the tea estates of Badulla district have been proposed to be declared as environmental protection areas. Boundaries of these areas were mapped with the GPS points with technical assistance of the Land Use Policy Planning Department and draft final of the gazette notification prepared.

➤ **IDENTIFICATION OF DEGRADED LANDS IN THE CENTRAL PROVINCE USING REMOTE SENSING (RS) TECHNIQUES**

Degraded lands in the Nuwara- Eliya and Kandy Districts have been identified using field sampling and remotes sensing techniques. Landsat OLI satellite images were used to calculate degraded land areas in each divisional secretariat divisions of both districts.

➤ **DEVELOPMENT OF GIS BASED ENVIRONMENTAL INFORMATION SYSTEM**

This is a central environmental database of the country and assists in environmental planning, and management, monitoring, analysis, identification of suitable sites for development projects, preparation of disaster preparedness plans and awareness activities in Sri Lanka. The R&D unit is continuously updating this database.

➤ **UPDATING OF SPATIALLY REFERENCED DATABASE ON PRESCRIBED INDUSTRIES**

Geo-spatial database on prescribed industries is being updated monthly by the R&D unit. Accordingly total number of high (*A category*), medium (*B category*) and low (*C category*)polluting industries in the country at the end of year 2016 were about 11,427 , 10,706 & 23904 respectively.

➤ **PREPARATION AND PRINTING DIGITALDISTRICT RESOURCE PROFILES**

In line with the objective number 05 of the “Punarudaya” National Environmental protection programme, CEA has been maintaining and updating a centralized spatial data base on natural resources, administrative boundaries, socio economic, demographic, archaeological data and other information. Digital District Resources Profile contains environmental related information and socio economic data of a district at divisional secretariat level. Digital District

Resources Profile CDs are produced to disseminate the information and data of the environmental resources of Sri Lanka which are being maintained and upgraded by the Research & Development unit of the CEA. Production of Digital District Resources Profile CDs for 15 Districts (Kegalle, Kalutara, Kandy, Nuwara Eliya, Galle, Monaragala, Gampaha, Hambanthota, Kurunegala, Puththalam, Badulla, Polonnaruwa, Rathnapura, Jaffna and Matara) have been completed.

➤ **ENVIRONMENT NEWS LETTER**

Environmental Newsletter is published at national level twice a year and distributed among relevant institutes. In 2016, two volumes had been released by CEA.

➤ **CONDUCT EDUCATION AND AWARENESS PROGRAMS ON CONTEMPORARY ISSUES AND CURRENT ISSUES SUCH AS DENGUE EPIDEMIC.**

Education and Awareness Programs on Contemporary Issues for school children and various stakeholders were conducted to improve the consciousness on the Environment among various target groups. The topics of the lectures are directly related to the environment and the subjects are in line with the school curriculum. In 2016, 11 such programs were conducted on relevant environmental issues. In addition, few Dengue prevention programs were carried out during the year 2016

➤ **THE WORLD ENVIRONMENT DAY**

Various activities are organized in accordance with the theme of the World Environment Day of the respective year. This time it was held on 05th June in Matale district under the distinguished patronage of His Excellency the President Maithripala Sirisena. 2016 world environmental day was organized by the Ministry of Mahaweli Development & Environment with the support of CEA under the theme of “***FIGHT AGAINST THE ILLEGAL TRADE IN WILD LIFE***”.

➤ **NATIONAL TREE PLANTING PROGRAM**

Tree planting is highly promoted towards building a Clean and Green Environment. In the year 2016 national tree planting program was conducted in a new way, taking one month with several activities based on the different themes. That month was named as “VanaRopa” tree planting month.

Accordingly, under the “Wanaropa” Tree Planting programme, CEA conducted “Wana Aranata-Sisu Sarana” school tree planting program under the theme of “Thuru Kapakaru – Api Niraturu”

Following three programs were implemented under above theme

1. 10,000 school planted 3 plants throughout the country
2. Planted 1150 plants in three selected districts with 50 plants per school
3. Planted 16000 plants within Sankuhar state, Pussellawa

➤ **ESTABLISHMENT OF SCHOOL LIBRARIES**

National Environmental Information Center has selected five school libraries that continue the EPP under limited resources. Development of environmental section of selected school libraries were established at Vellaveli Kaleimangal Vidyalaya- Batticola, Ambagahahena MahaVidyalaya – Hambantota, Sumana Saman MahaVidyalaya – Ratnapura, Dippitiya Secondary School-Kandy, Madhurankuliya Maha Vidyalaya – Puttlam. Under this program, library materials such as books, magazines, posters, leaflets, and other materials worth of 1.5 million were distributed.

➤ **ISSUANCE OF ENVIRONMENTAL RECOMMENDATIONS (ER) 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. During the year 2016, 2,291 new industries requested recommendation for their venture whereas 1,558 applicants were granted approvals and 112 applications were rejected because they have not fulfilled the requirements to obtain the recommendation.

➤ **IMPLEMENTATION OF ENVIRONMENTAL PROTECTION LICENSE (EPL) SCHEME UNDER THE NATIONAL ENVIRONMENTAL ACT (NEA)**

CEA implemented EPL scheme for prescribed activities as per the Gazette Notification No:1533/16 published on 25.01.2008. All prescribed activities are divided into three lists in the gazette according to their magnitude of the pollution level to the environment. Part “A” of the list consist higher level polluting activities, part “B” consists medium level polluting activities and part “C” consists of low level polluting activities. Implementation of the EPL process for A and B category industries are conducted by the Provincial Offices of the CEA and the list “C” has been delegated to the Local Authorities (LA) for implementation. Updating the database on “A” and “B” category

industries is the responsibility of the Provincial Offices, while Environmental Pollution Control (EPC) unit maintains the database on EPL files and licenses issued for high and medium polluting industries.

During the year 2016, 1240 EPLs for “A” category industries and 969 EPLs for “B” category industries have been issued while 5975 and 1180 were renewed for “A” & “B” industries respectively.

➤ **GRANTING ENVIRONMENTAL CLEARANCE FOR NON-PRESCRIBED ACTIVITIES**

As per the objective number 06 of the “Punarudaya” National Environmental programme, Environmental Clearance are issued for projects which are not prescribed under the National Environmental Act and therefore do not require IEE/EIA. As requested by the Developers, environmental clearances are issued with conditions to mitigate adverse environmental impacts for various none prescribed projects. Accordingly, 6,291 site clearances have been issued during the year for projects such as land blocking outs, hotel projects, sand mining, tree fellingetc.

NATIONAL GREEN AWARDS PROGRAM

This is the only award scheme implemented by the CEA 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. This 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.

Applications for programme were entertained under 23 major categories including 10 industrial sectors

The awarding ceremony was successfully held at the Bandaranaike Memorial International Conference Hall on 18th October 2016 under the patronage of His Excellency the President and Honorable Minister of Mahaweli Development and Environment and other distinguished guests. 03 “Harithabhimani” Awards, 03 Gold Awards, 13 Silver Awards, 16 Bronze Awards and 18 Merit Awards were awarded for the performance of categories under this programme.

➤ **HAZARDOUS WASTE MANAGEMENT**

As part of implementing the Hazardous Waste Management regulations (No.01 of 2008 by the extra ordinary gazette notification No 1534/18 dated 01.02.2008), 153 Schedule Waste Management Licenses (SWMLs) were issued during year 2016.

➤ **ELECTRONIC AND ELECTRICAL WASTE MANAGEMENT IN SRI LANKA**

At present, Sri Lanka does not have a comprehensive updated database for the generation and lifecycle management of electronic and electrical waste (e-waste) except the national implementation plan prepared in 2008

That is a major drawback that could negatively affect the planning processes of e-waste management systems and for the setting up of electronic and electrical waste management facilities. Therefore, CEA conducted a study with the help of outside consultant.

As per the study annual E- Waste release is expected to increase by more than 4-fold from 10,000MT per year in 2010 to 43,000 MT per year in 2030 and computer e- waste releases show a gradual increase and eventually becoming the dominant waste component (6067 MT) in 2030 on the other hand TV shows a decreasing growth due to already saturated Sri Lankan market generating 5732 MT in 2030. In order to cater the issue, 18000 copies of Brochures on Waste Management were prepared in English and Sinhala media as awareness material.

➤ **IMPLEMENTATION OF THIN POLYTHENE REGULATION**

As per the Gazette Extra Ordinary No. 1466/5 of 10th October 2006 published by the Honorable Minister of Environment and Natural Resources under the provisions of National Environmental Act, Manufacturing, trading and usage of any kind of polythene or any polythene related product having the thickness of 20microns or less has been banned.

During this year, Waste Management Unit and the regional offices conducted 946 raiding thorough out the country and legal actions were taken against 80 numbers of polythene sellers who violated the regulation.

• **SOURCE EMISSION CONTROL STANDARDS**

In managing ambient air quality in Sri Lanka, it is mandatory to control emissions from stationary sources and the Central Environmental Authority has finalized a set of regulations for controlling source emissions and publishing of the gazette is being carried out.

➤ **AMENDING THE NATIONAL ENVIRONMENTAL (NOISE CONTROL) REGULATIONS NO 01 OF 1996**

As noise pollution containing multidimensional aspect, the CEA decided to amend the existing noise regulations addressing modern requirement of noise pollution control, and in the CEA, determine the scope of new regulation. The process of amending regulations is planned to complete in 2017.

Following actions have been taken to control the sound pollution in various places

- Preparation of High Way Noise Control Regulations
- Preparation of Guideline Noise Levels for Proposed Elevated Highway along the Baseline Road
- Survey was conducted to gather information for Addressing noise inside public buses
- Implementation of Vehicle Horn Noise Regulations

➤ **ENVIRONMENTAL QUALITY DATA COLLECTION - AMBIENT AIR QUALITY MONITORING**

Air quality monitoring is carried out at Colombo Fort monitoring station for Sulphur Dioxide (SO₂) and Nitrogen Dioxide (NO₂) gaseous pollutants using wet chemical methods.

During 2016 the Air resource Management and Monitoring (ARM&M) unit could be able to collect and analyze 63 samples of SO₂ and NO₂. In addition, monitoring site located at the Fort Railway was renovated and two air quality analyzers were supplied, and infrastructure for commissioning two analyzers and recommencing automated monitoring has been planned to complete in February 2017.

➤ **MONITORING AND MANAGEMENT OF INDUSTRIAL POLLUTION**

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 for the management and conservation of the water environment throughout the country by providing the analytical reports on industrial effluent as well as the surface water.

During 2016 the laboratory was able to collect 1,363 waste water samples and performed analysis for different parameters and the purposes are as follows

Purpose of sampling	No. of samples
EPL	66
Legal	20
Complain	83
Monitoring	239
other	210
Commercial Industrial effluent	745
Total	1363

TABLE : SAMPLING DONE DURING 2016

➤ **LABORATORY ACCREDITATION PROGRAM**

During 2016 the laboratory was able to prepare all document related ISO 17025 Accreditation program. Finalizing of the quality manual and preparation of the fifteen numbers of procedure manual for fifteen tasks were documented. Some implementation activities were started. This include quality control and quality assurance work related to the test to be get accredited were started. Several training programs were conducted for the laboratory staff on ISO17025 during 2016.

➤ **SURFACE WATER QUALITY MONITORING**

Several water quality monitoring programmes have been carried out by the Central laboratory of Central Environmental Authority. The surface water quality monitoring of Kelani River, Maha Oya, Bentota River and Dandugam Oya have been carried out monthly.

➤ **WATER QUALITY MONITORING UNDER JAPANESE INTERNATIONAL CORPORATION AGENCY (JICA) PROJECT**

WATER BODY CATEGORIZATION IN LINE WITH THE AMBIENT WATER QUALITY STANDARDS.

The proposed water quality standards were subject to review and modification with specific focuses on pesticides, Chemical Oxygen Demand, Nickel, Zinc, and Aluminium in the first half of the year 2016 most notably at the occasions of the two expert committee meetings convened taking advantage of the working group meetings. A board meeting was convened on 21st July 2016 as a step of finalization to obtain approval by the Director General and the Chairman of CEA. It was further brought forward to the Department of the Legal Draftsman under the Ministry of Justice to facilitate the implementation of the regulations. It is now pending for approval from the Ministry.

➤ **COMPLAIN HANDLING**

A complain is an expression of dissatisfaction by member/members of the community on action, or the standards of service provided by the Central Environmental authority, actions were taken to complain handling process of the authority.

In the year 2016, CEA had received 2,579 complaints and 602 complains were solved while 148 complaints were referred to the relevant agencies.

➤ **“PILISARU” NATIONAL SOLID WASTE MANAGEMENT PROJECT**

During the year 2016, following activities were carried out by the project, in order to achieve its objectives.

- Considering all requirements including land, environmental clearance and commitment of LA management and availability of funds under the 2016 year action plan, 06 numbers of new compost sites, 03 numbers of bio gas plants, 01 number of Sanitary Landfills and 01 number of Low Cost Incinerator, 03 numbers of Plastic Recycling Centers, 02 numbers of Plastic /Polythene Waste Storage Centers were funded to establish on LAs requests. Previously started 21 numbers of compost sites, 05 numbers of Bio gas plants were funded to complete.
- By considering several requests made to obtain equipment and machines, the Pilisaru Project procured and distributed 04 Plastic Crushers, 04 Polythene Compactors, 03 Tractors, 03 Trailers, 02 Skied steer Loaders, 02 Garbage Compactors among local authorities

- Construction works of 125 Nos of Mobile Waste Collecting Centers named “SampathPiyasa” at MOH offices in the Western Province were completed
- Feasibility study for the project of Hybrid Fertilizer has been completed and the Compost sale center was opened at Diyatha Garden, Battaramulla
- 1200 compost bins were distributed among CGR stations and 600 numbers of compost bins were distributed among government institutions

➤ **GREEN PARK WASTE MANAGEMENT CENTER**

Green park sanitary land fill site was constructed by Korean International Corporation Agency (KOICA) at Maligawatta, Kirindiwela. This landfill is planned to serve as the final disposalsite for Dompe PS, in a capacity of managing 5-90 tons of waste per day. In addition to the sanitary landfill a composting plant has been constructed within the same site with the financial and technical support from Pilisaru Project.

In 2016 the service of Green Park has been given for some special disaster situations such as flooding and the incident at Salawa army camp. In the months of June, July and August 2016 more than 1400 tons of waste transported by Kaduwela Municipal Council was accepted to the Green Park. As well as in the Salawa incident, nearly 250 tons of waste accepted to Green Park.

In addition to the sanitary landfill facility there is a composting facility within the same site for compost of the biodegradable part of the municipal waste. In 2016 nearly 23 tons of compost was produced in the facility. At the same time, many groups from Universities and some school students visited and gained the knowledge on waste management.

➤ **NATIONAL ENVIRONMENTAL PIONEER PROGRAMME (EPP)**

This is in line with the objective number 05 of the “Punarudaya” National Environmental Protection Programme.

CEA is organizing several special environmental programs which are introduced to school children. EPP is a key programme in this regard. It helps the school children to appreciate the value of the environment, improve their environmental knowledge and bring about changes in their attitudes towards the environment. It is very important to have the participation of children for the environmental conservation programmes practically.

Under the environmental pioneer programme, various training programs, workshops were held out targeting Students, teachers as well as principals.

“National Camp” is the event that gathers the environment pioneers in the entire country to a single location. It’s full with fabulous, adorable and remarkable activities which environment pioneers can rarely experience. National Camp 2016 conducted with 350 participants including students, teachers and officers at National College of Education, Peradeniya on 21st to 24th September.

In 2016, President’s Medal Awarding Ceremony was held under the distinguished patronage of His Excellency the President Maithripala Sirisena at Bandaranayake Memorial International Conference Hall (BMICH) on 18th October 2016. 41 Environmental Pioneers who were successfully completed all activities and interviews, were awarded by the presidential Medal and three best performed teachers in EPP were also evaluated.

➤ **STRENGTHENING OF LABORATORIES OF CEA**

In 2016, Gampha laboratory was established providing the needs for testing basic water quality parameters achieving the task on setting of the laboratory network of the CEA. The Gampaha laboratory staff was given a comprehensive hand on training through the central laboratory, CEA. The CEA was smart to allocate Rs 1.5 million for purchasing chemicals and glassware for water quality section and Rs 28.5 million for purchasing equipment for air quality section under the laboratory strengthening programme. All chemicals & glassware worth of Rs 1.7 million were procured and distributed among central laboratory and provincial laboratories.

➤ **“PUNARUDAYA” NATIONAL PROGRAMME**

A national level environment conservation programme, “Punarudaya” for 2016-2018 have been initiated on five main themes and Central Environmental Authority (CEA) has been given the responsibility to initiate projects on Environmental Pollution Control. CEA has successfully initiated new projects namely Integrated Polythene and Plastic Management, Electronic Waste Management, Improvement of Indoor Air Quality, Preparation of Land Use Zoning Map for Welioya, Awareness Programme for Lunugamwehera divisional secretariat area and other four programmes of Pilisaru Project under “Punarudaya” National Programme with the Rs. 60.822 million of financial progress.

Following are the activities cried out under the “Punarudaya” National Programme,

Under Integrated Polythene/Plastic Management and Electronic Waste Management programs, the CEA had declared a Polythene/Plastic and Electronic Waste prevention week from 24th to 30th October 2016, under the guidance of His Excellency the President Maithreepala Sirisena. During the waste prevention week, all districts and provincial offices gave their helping hands to collect relevant materials. New website “Polythene and plastic management unit” was launched and developed & maintain a comprehensive database on Polythene/Plastic collectors and recyclers.

- CEA conducted district wise polythene raiding training programs and initiated 1,362 of thin polythene raiding for the implementation of thin Polythene Regulation. CEA also facilitate the Collectors and Recyclers by providing logistic support & trainings and introducing environmental friendly alternatives for polythene/Plastic.
- Furthermore, under the proposed initiative, with the introduction of new regulations, it will be proposed to ban lunch sheets and polythene bags (silisili bags) at the first phase and consecutively ban the use of polythene in the use of decorations at public events and to ban the usage of polystyrene Lunch Boxes etc. Awareness programs were conducted to educate the public by using both printed & electronic media.
- A workshop was held to obtain the expert opinion to determine a registration methodology of informal e-waste collectors. Another work shop was held for 27 informal e-waste collectors to make them aware about the appropriate management of e-waste.



➤ **polythene/plastic and electronic waste prevention week**

- Under improvement of indoor air quality project, technical instruments for measuring indoor air quality were purchased and development of questionnaire is in progress to collect data related to indoor air pollution in different levels of the society in Sri Lanka.

- Preparation of Land Use Zoning Map for Welioya Project identifies the categories of land uses and vulnerable areas that need to be conserved in the WeliOya sub watershed by preparing of maps. During the reporting time CEA prepared base maps, Social structure vulnerability maps & hazard zoning maps and update field level land use maps for WeliOya watershed.
- To enhance attitudes, Knowledge and skills on environment of Environmental Pioneers in Lunugamwehera Divisional Secretariat area, three awareness programmes were conducted on 18th October 2016 with the 114 participants and field visit at Kudawa - Sinharaja Forest Conservation Center was conducted on 3rd and 4th November 2016 with 106 participants.



Awareness programs for lunugamwehera divisional secretariat area

- Pilisaru project of CEA conducted following four activities under PunarudayaProgramme. These activities are;
 - a. Construction of recyclable waste storage center at Rathnapura,
 - b. Preparation of technical feasibility study and conceptual design for the sanitary landfill facility at Matale municipal council was initiated,
 - c. Implementation of school waste Management Programme
 - d. Construction of plastic recycle center & two compost yards for integrated solid waste management project at Kanadola (Rathnapura).



implementations of school waste management program



Constructions of integrated solid waste management project at kanadola

FINANCIAL ALLOCATION AND EXPENDITURE – 2016

Budget	Allocated Amount for 2016 (Rs. Mn.)	Financial Progress as at Dec. 31 st 2016 (Rs. Mn.)	Financial Progress as a %
Progress of the Recurrent expenditure	842.56	727.1	86.29%
Progress of the Capital expenditure	75	61.45	81.29%

Name of the Project	Allocated Amount for 2016 (Rs. Mn.)	Financial Progress as at Dec. 31 st 2016 (Rs. Mn.)	Financial Progress as a %
“Pilisar” Project	190.00	189.76	99.98%
School Pioneer Programme	20.00	20	100%
Strengthening of the Laboratory of CEA	30.00	26.88	89.6%
Water Quality Monitoring Project (JICA)	42.17	42.22	100%
EDCF Sanitary Landfill Facility Construction Project	186.03	145.98	78.47%
Total	468.2	424.84	90.7%

Financial progress of the “Punurudaya” programme

#	Name of the Project	Allocated Amount for 2016 (Rs. Mn.)	Financial Progress as at Dec. 31 st 2016 (Rs. Mn.)	Financial Progress as a %
01	Integrated Polythene & Plastic Management Programme	37.05	39.34	100%
02	E- Waste Management Programme	4.0	1.857	46.4%
03	Improvement of Indoor Air Quality	7.59	6.923	91.2%

04	Preparation of Land Use Zoning Plan for Weli Oya-Sub watershed	1.83	1.554	85%
05	Awareness Programme for divisional secretariat area of Lunugamwehera	0.30	0.23	76.2%
06	Implementation of school waste Management Programme	4.2	4.198	99.9%
07	Technical feasibility study and conceptual design for the sanitary landfill facility at Matale municipal council	0.8	0.4	50%
08	Construction of recyclable waste storage centre at Rathnapura	2.58	2.32	90%
09	Integrated solid waste management project at Kanadola (Rathnapura)	4.0	4.0	100%
	Total	62.357	60.822	97.5%

3.3.3 Cabinet Memorandums –2016

Details of the Cabinet Memorandums forwarded by the CEA during - 2016

Cabinet Paper No. and date forwarded	Title	Cabinet Decision
16/1301/704/035	CEA Annual Report 2013	Approval has been granted to submit the annual report 2013 to the parliament Annual report 2014 -2015 are already delayed and instruct to submit them to the parliament
16/1702/704/045	Regulate the using of polithine to minimize the adverse effect on the environment due to polithine usage	Decision has obtained
16/1701/704/044	Control the importation and the usage of Asbestos which are not environmental friendly	Decision has obtained
16/2384/704/062	Professional payment for Professionals who are working in the CEA	Forwarded the matter to the salary and carder commission, to obtain detailed report on the recommendation of the cabinet paper.
Forwarded to the Ministry on 07.09.2016 and it was re-submitted to the CEA for further corrections on 07.12.2016	Draft Cabinet Memo on NEA Amendments	Decision yet to be received.

3.3.4 REGULATIONS PENDING FOR THE YEAR 2016 (NOT YET FINALIZED AND PUBLISHED)

Details of the draft Regulations and Amendments

Title of the Legislation/Regulation		Brief Description to the Legislation/Regulation
1.	Proposed Amendment to EIA Regulations	Introducing new regulations for EIA procedure under Part IV C of the National Environmental Act (NEA)
2.	Proposed Amendment to EIA Regulations (Prescribed Projects)	New set of prescribed projects for which EIA approval to be obtained under Part IV C of the NEA
3.	Proposed Amendment to EIA Regulations (Project Approving Agencies)	New set of Agencies under which approval is granted for prescribed projects under Part IV C of the NEA
4.	Proposed draft Regulations on Dedigamuwa Kanda Environmental Protection Area (EPA)	Dedigamuwa Kanda in Kaduwela Municipal Council area to be declared as an EPA under Section 24C of the NEA
5.	Proposed draft Regulations on Pansalathenna EPA	Pansalathenna situated in Matale District to be declared as an EPA under Section 24C of the NEA
6.	Proposed draft Regulations on Source Emission Standards	Draft Regulations on Stack Emission Standards to be published under Section 23K of the NEA
7.	Proposed draft Regulations on Visual Pollution Regulations	Regulations to be published to control the display of Billboards and Hoardings those erected in a manner which damages the natural beauty of the environment.
8.	Proposed draft Regulations on EPL Prescribed Activities	Introducing new prescribed activities for which EPL should obtain
9.	Proposed draft Regulations on National Environmental (Protection & Quality)	New Regulation on environmental protection and quality
10.	Proposed draft Regulations on Regulations on Highway Noise	Regulations to control noise emission of highway vehicles
11.	Proposed draft Regulations on Ambient Water Quality	To regulate the ambient quality of water in rivers etc.

3.4 MARINE ENVIRONMENT PROTECTION AUTHORITY

3.4.1 Introduction

Overview

Marine Environment Protection Authority has been established under Marine Pollution Prevention Act No.35 of 2008 with the mandate of prevention, reduction and control of marine pollution in Sri Lankan waters. The jurisdiction of MEPA spreads up to the limit of EEZ in addition to the coastal zone.

Vision

“A pollution free marine environment around Sri Lanka for the sustainable national development and the well-being of its people and the economy by the year 2020”

Mission

To prevent, control and manage marine pollution in the maritime zones of Sri Lanka through effective enforcement of regulations, implementation of concerned International conventions, coordination and mobilization of stakeholders and other resources, for sustainable management of marine environment for present and future generations.

3.4.2 Major Achievements in 2016

- **Projects in line with “Punarudaya” National Environmental Conservation Program - 2016**
- **Controlling and prevention of marine pollution**
 - **Minimizing the marine pollution caused by oil spills.**

In the year 2016, Marine Environment Protection Authority has conducted 33 no of awareness programs at district levels while updating and improving National Oil Spill Contingency Plan (NOSCOP). According to the NOSCOP, 4 training programs for Incident Management Team and a two day national level training program for all first respondents and a National level oil spill response exercise have been conducted for enhancing their capacity and immediate response against a sudden oil and chemical spill, ensuring a minimized damage to the marine and coastal environment in such situation.

In 2016, two sudden oil spill events occurred in Matara and Uswetakeiyawa areas were managed and necessary actions have been taken to minimize the environmental damage.



NOSCOP exercise 2016



Controlling the oil spill event at Akuressa Controlling the oil spill event at Uswetakeiyawa

- **Providing reception facilities for waste generated in ships**

This service is 24X7 operated in order to prevent marine pollution by waste generated from ships. Facilities are provided for the proper disposal of burnt oil, solid waste and fuel waste generated in ships. A new online system was introduced to ensure proper and efficient functioning of this service.

Progress on providing reception services

	2015	2016
Income Rs. Mn.	6.54	13.24
No of Permits	1336	1420

Issue of bunker license bunker service providers

Licenses were mainly issued for supplying bunker fuel to ships that arrive in the Colombo port and Hambantota Port.

Progress on issuing permits for disposal in the sea

	2014	2015	2016
Income Rs. Mn.	0.3	0.4	1.75
No of Permits	10	10	11

- **Reducing adverse environmental effects due to ship ballast water.**

Ballast water is the water filled in ship ballast tanks for maintaining the ship stability. Invasive alien species will be introduced to the native environments when releasing ballast water to the sea. Hence it is a main environmental issue with severe environmental, economic and health effects.

Authority has conducted Port Biological Baseline Surveys at Sri Lankan commercial harbours in order to study the distribution of invasive alien species. According to that 4 baseline surveys and particular survey reports associated to Colombo, Galle, Hambantota and Trincomalee harbours have been completed.

The cost-benefit analysis was carried out on adopting the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) in Sri Lanka. It will mainly affect to determine Sri Lanka being a stakeholder for the convention.

Management of Invasive Alien Species through Ballast Water – Port biological survey



- **Controlling and preventing coastal pollution.**

Issuing of permits for disposal in the sea

The Regulations issued in accordance with the Marine Pollution Prevention Act No. 35 of 2008 with a aim of minimizing disposal of waste in the ocean and encouraging the disposal of waste only after treating were proclaimed as Marine Environment Protection (Issue of

Permits for Disposal in the Sea) Regulation No. 01/2013 and implemented with effect from the year 2013.

As such, all regional offices of MEPA are carrying out regional inspections within coastal zone in Colombo, Gampaha, Kalutara, Puttalam, Galle, Matara, Hambantota, Trincomalee, Ampara and Jaffna for issuing dumping permits under this.

By the year 2016, there was a high improvement of this program which was started in 2015. Making awareness among hotelier's and industrial stakeholders is continued and necessary actions are being preceded for an integrated program with the collaboration of government bodies such as Central Environmental Authority, Department of Coast Conservation and Coastal Resource Management.

Progress on issuing of permits for disposal in the sea

	2015	2016
Income Rs. Mn.	0.71	2.4
No of permits	39	95

- **Waste management associated with fishery harbours**

Waste management associated with fishery harbours is a main step for reducing marine pollution and further it leads to a sustainable fishery industry. Hence, MEPA with the collaboration of Ceylon Fishery Harbours Corporation has conducted awareness programs for Fishery communities and other fishery harbor stakeholders throughout the year.

24 No of programs have been conducted in Sri Lankan fishery harbours from 2016. Workshop on Preparation of National Strategy on Pollution Prevention from Fisheries Sector has been conducted and the drafted strategies are being finalizing.

- **Water quality monitoring**

Maintaining a proper database on marine pollution caused by land based & sea based activities and continuously updating it, is very important for making decisions on marine pollution prevention. Hence, mapping of coral reef communities, Conducting seagrass surveys and establishing seagrass nursery have been undertaken. Furthermore radioactivity data on seawater and sediments in Puttalam, Mannar and Hambantota areas were collected and the debris surveys were conducted at Trincomalee and Kirinda coastal areas.



Mapping coral reefs

Continuous water quality monitoring was carried out at sea bathing sites and sea outfalls. Based on data, pollution minimizing measures are taken in coastal districts around Sri Lanka.

Grading of water quality of Bathing Sites in Sri Lanka

District	Value
Colombo	69
Kaluthara	81
Gampaha	62
Chilaw	79
Galle	85
Matara	85
Hambantota	100
Tricomalee	100
Ampara	100

BSWQI Designation and the classification scheme

Designation	Index Value	Class
Very Poor	<45	VI
Poor	45 – 60	V
Fair	61 -69	IV
Good	70 – 79	III
Very Good	80 – 90	II
Excellent	91 - 100	I

Organizing and conducting National Events

- **National Coastal and Marine Resources Conservation Week National Beach Cleaning Programme 2016**

Marine Environmental Protection Authority (MEPA) and Department of Coast Conservation and Coastal Resources Management (CC&CRM) jointly organised the 8th National Coastal Cleanup main programme on Saturday (17th September) at "crow Island beach park", at Mattakkuliya. This year government declared a week from 17th September as a “National Coastal and Marine Resources Conservation Week”. Sri Lanka marks the "International Coastal Cleanup Day" with series of beach cleaning programs covering 14 coastal districts during this week.

Deputy Minister Mahaweli Development and Environment Hon. Anuradha Jayarathne participated as the chief guest at the main programme and Total of 1100 participants representing Sri Lanka Navy, Army, Air Force, Department of Coast Guard, Civil Defence Forces, Department of Police, School and University students, and various other government and non-government institutions participated at the programme.



In addition to that total of 16,000 participants in 14 coastal districts participated in island wide coastal cleanup programs and awareness programs have also been conducted. The district level summary of the program is listed below.

District	Main Event	Participation
Colombo	17 th Sep	329
Gampaha	17 th Sep	824
Puttalam	18 th Sep	620
Mannar	19 th Sep	442
Kilinochchi	20 th Sep	500
Jaffna	20 th Sep	1344
Mulativu	20 th Sep	504
Trincomalee	21 st Sep	1250
Batticaloa	21 st Sep	1305
Ampara	22 nd Sep	2337
Hambantota	22 nd Sep	872
Matara	22 nd Sep	1626
Galle	23 rd Sep	1651
Kalutara	23 rd Sep	1100



Waste collected at Kalutara coastal cleanup



School children walk at Matara district parallel to the ICC main event

➤ Walk to celebrate World Ocean Day

June 08, His Excellency the President Maithripala Sirisena took part in a special walk organized to celebrate the World Oceans Day. Marine Environment Protection Authority organized the walk, under the theme "Healthy Oceans, Healthy Planet" to raise awareness of the people about the importance of protecting the marine environment. About 1,500 members representing schools, universities, ministries, security forces, public institutions and NGO's participated at the programme. Deputy Minister of Mahaweli Development Anuradha Jayarathne, Secretary to the Ministry of Mahaweli Development and Environment, Udaya R. Senevirathne, Secretary to the Ministry of the Defence, Karunasena Hettiarachchi and the Chairman of the Marine Environment Protection Authority, Rohana Perera also participated in this event.



➤ **Green Fishery Harbour Project**

For Minimizing pollution associated with fishery harbours in Sri Lanka, MEPA has contributed economically and technologically to develop Mirissa fishery harbor as a Green Fishery Harbour as a pilot project. According to that a fish auction hall applicable to manage waste and a waste water treatment plant, treating waste water have been established. Furthermore a proper reception facility for solid waste generated in harbor premise is formed. It will be a model harbour for other fishery harbours also.

➤ **YEOSU Project- Building Capacity to Manage marine Debris in Sri Lanka**

Under the YEOSU project, identifying pollutant sources of lagoon areas, their quantities and their adverse effects are studied and Marine Debris Management Plan will be prepared for reducing marine debris in Sri Lanka.



Data collecting during the survey

Financial Allocation and Progress -2016

Description	Financial Allocation – 2016	Actual Expenditure	Percentage
Recurrent	142.45	131.21	92%
Capital	90.00	80.73	90%
Projects			
Green Fishery Harbour Project - Mirissa	29.31	26.42	90%
Ballast Water Project	2.00	2.00	100%
Capacity Building Marine Debris Management (YEOSU Project)	1.00	0.72	72%

3.4.3 Cabinet Papers in 2016

Cabinet paper no and date forwarded	Title	Cabinet decision
16/2224/704/059	International convention on civil liability for bunker oil pollution damages-2001	It was decided to grant approval to implement the recommendations in paragraphs 8, 9 and 10 of the memorandum.
16/0663/704/018 2016.05.04	Signing Of Memorandum Of Understanding (Mou) Between Expo 2012 YEOSU Korea Foundation And Marine Environment Protection Authority of Sri Lanka For Building Capacity to Manage Marine Debris In Sri Lanka.	to Grand Approval to the Proposals 3.1, 3.2 And 3.3 In Paragraph 3 of the Memorandum; And to Include The Secretary, Ministry of Fisheries And Aquatic Resources Development In the Proposed Consultation Committee Referred to in the Memorandum, in addition To The Representative of the National Aquatic Resources Research and Development Agency (NARA), As Indicated in the Observations of the Ministry Of Fisheries And Aquatic Resources Development.
16/1726/704/047 2016.09.14	Establishment of Southern Province Office and Gall District Office of the Marine Environment Protection Authority with a Laboratory	To grand approval to implement the recommendations (3.1) and (3.3) in the third paragraph of the Memorandum; and That, with regard to the recommendation (3.2) therein, to direct the Secretary, Ministry of Mahaweli Development and Environment, to take note of the observations of the Minister of Finance and pursue action accordingly.
16/1723/704/046 2016.09.14	International Coastal Cleanup Day and Declaration of the National Marine Resources Conservation Week.	I. To grand approval – To declare the third week of September every year as the National Marine Resources Conservation Week To implement the programmes and activities referred to in paragraphs (3.2) to (3.9) of paragraph 3 of the Memorandum, from 17 th to 23 rd September ,2016;

		<p>II. To inform the Secretary to the President, to issue Circular Instructions to all Government Institutions, conveying (i) (a) and (b) above, and on matters to be dealt with by them ,falling under their purview; and</p> <p>III. To direct the Secretary to the Ministry of Tourism Development and Christian Religious Affairs ,to create awareness among the private sector entrepreneurs engaged in the tourism related business in the coastal belt ,of the programmes referred to in the Memorandum and encourage them to sponsor this annual event ,in future.</p>
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3.4.4. Legislations/ regulations by the gazette 2016

Legislations/ regulations	Information on Legislations/ regulations
<p>1.Marine environmental protection (Waste Reception facilities) regulations</p> <p>No. 1996/27 06.12.2016</p>	<p>This regulation has been prepared enabling the authority or service providers to render waste reception service to the ships reaching any port, harbor or harbor jetty in Sri Lanka without illogical delay.</p>

3.5 NATIONAL GEM AND JEWELLARY AUTHORITY

3.5.1 Major Achievements during the year 2016

Aligning with the “PUNARUDAYA” programme, steps have been taken to fill abandoned gem pits in:

Katuwa Gem pit in Rathnapura

Thibottawa Gem Pit in Rathnapura

➤ Maintaining environmental friendly gemming methods

Following Lands have been auctioned for Green mining.

Shantha Jokimwatta auction, Pelmadullawatta Land Auction, Naula-Kiri-OyaDigannawa tender, Eheliygodatender, Naulatender, Bagawanthalawa Land tender,Laggalapallegama Land Tender, Bagawanthalawa Land Auction,Nakkala 27/3 new bridge tender, 33 rakwana bridge,NapawalaKelegama road Tender,rakwana Gaga Haddagedara gem land tender, Haraniyawaka gem gravel auction

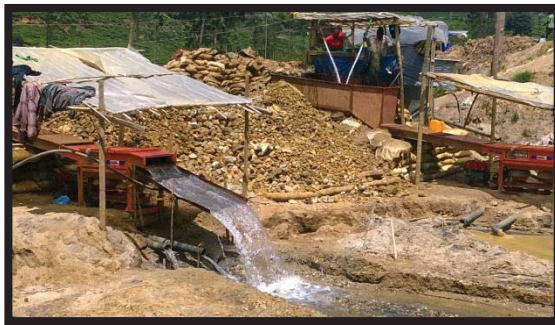
Under the implementation of special gem mining projects in order to give an economic value to the gem resources that are deposited in extremely environmentally sensitive places, the following activities have been carried out.

Project	Auction Date	Income by Total Auction (RS)	Authority Income (RS)
Bagawanthalawa Pilot project. Rough gemstone Auction	2016/3/24	30,556,788.00	9,167,036.00
	2016/08/11	34,165,289.95	9,479,625.56
	2016/10/07	32,589,805.00	8,378,532.84
Seethawaka Gaga Pilot project (IIIStage)Rough gemstone Auction	2016.05.10	29,888,712.97	18,691,176.77
	2016/07/26	33,833,146.10	21,759,381.20
	2016/12/08	16,277,632.54	5,760,903.87

Photographs of Bagawanthalawa and Seethawaka pilot projects conducted by NGJA.



Seethawaka Pilot Project



Bagawanthalawa Pilot Project

Steps were taken to provide consultancy service for gem mining community at local as well as global level.

Conducted rehabilitation activities in below stated destructed areas.

- ★ Tree planting campaign at KatharagamaThammannawa area
- ★ Planting Campaign at Dambulla Mailaththewa area
- ★ Tree Planting in Moragahakanda rehabilitated Land –Eheliyagoda Matara

Special Entomological survey was carried out in gem mines at Ratnapura District to identify the relationship between spreading of mosquito related diseases.

Conducted awareness programmes on environmental friendly gem mining.

➤ **HarithaLanka: Securing Market Opportunities in Sri Lanka and Overseas for Gems & Jewellery**

Awareness Programme and Exhibitions

Conciliate in existing markets & entering new markets, steps were taken to participate in the National as well as International Gem & Jewellery exhibitions and organized “Sri Lankan Pavilion” in below stated exhibitions. Hence, NGJA has facilitated to entering new markets and introducing jewellery item produced by SME manufacturers.

Sponsored and organized “Sri Lanka Pavilion” at the selected International Trade Fairs & Exhibitions.

- I. International Jewellery Tokyo (IJT) – 20th to 23rd January 2016
- II. Signature Fair – 5th to 8th February 2016
- III. HKTDC Hong Kong International Diamond, Pearl and Gem Show – 1st to 5th March 2106
- IV. Europe Jewellery Fair – Germany 19th to 22nd March 2016
- V. Jewellery Shanghai Show – 5th to 9th May 2016
- VI. The JCK Las Vegas Show – 3rd to 6th June 2016
- VII. China Kunming Exhibition – 12th to 17th June 2016
- VIII. 13th China – Asian Expo 2016 –Nanning, Guangxi Zhuang Autonomous Province in China 11th to 14th September 2016
- IX. International Jewellery London (IJL)- 6th to 8th Sep 2016
- X. Single Country Exhibition(Sri Lanka Gem Fiest) –Japan 24-26th of October
- XI. China International Jewellery Fair Beijing – 10th to 14th Nov 2016
- XII. China International Gold,Jewellery & Gem Fair –Shanghai 18th -21st Nov 2016
- XIII. Vietnam International Gem and Jewellery Fair -9th to 13th November 2016
- XIV. Hong Kong International Gem and Jewellery Show -15th to 19th September 2016

Sponsored and organized NGJA Pavilion at the Local Trade Fairs and Exhibitions

- I. ENCO 2016 – Eheliyagoda National College 13th – 17th January 2016
- II. Golden Jubilee Celebrations of Sri Lanka Tourism Event 27th to 29th May 2016
- III. Uwa Wellassa University Educational Exhibition 8th to 10th September 2016
- IV. Future Green 2016 – Royal Collage Polonnaruwa- 23th to 24th Sep 2016
- V. Future Green 2016 – Chenkaladi central Collage, Chenkaladi 27th to 28th September 2016
- VI. Sri Lanka Next BMICH 17th to 19th October 2016
- VII. Facets Sri Lanka 1st to 4th September 2016
- VIII. “Jewels 2016” organized by Gemmologists Association of Sri Lanka 16th to 18th 2016
- IX. Exhibition in Hali Ela Central Collage 8th to 09th December 2016



Foreign Delegation with Russia

➤ Haritha Lanka: Small and Medium Scale Entrepreneurs and Small Industries

Organized and Conducted Awareness Programmes for Small and Medium Entrepreneurs on New Trends and Standards in Jewellery industry.

- I. 3 Day Workshop on Gem Identification, Jewellery Designing and Jewellery Manufacturing held from 2nd to 4th March 2016
- II. Jewellery Designing Awareness programme – Gampola 02nd October 2016



Offered Jewellery Manufacturing tools and equipment for Small and Medium Scale Jewellery Manufacturers based rural areas

- I. Distribution of Tools and Equipment for Jewellery manufactures of Pubudu Jewellery Manufacturing Association based in Kaudupitiya, Gampola 3rd October 2016

Management and operation of “Rathnadeepa” Showroom and sales outlet to promote and market Jewellery articles produced by SME Jewellery Manufacturers in Sri Lanka.

➤ A Gem testing Center of International Standard

A new branch Laboratory of National Gem & Jewellery Authority Gem testing and Certification Laboratory and Assaying & Hallmarking office was opened in Galle District.



It was planned to establish High Technological Advanced Gem testing Laboratory. In 2016, procurement works were done.

Carrying out the purchasing of items and the training of staff necessary for starting an international level gem testing and certification laboratory.

It has been planned to establish a Mobile Gem & Jewellery testing laboratory. In 2016, and initial actions were completed.

Financial Performance

Description	2016 Rs.Mn	2015 Rs.Mn	2014 Rs.Mn
INCOME	698.155	716	679
EXPENDITURE	510.950	372	364
SURPLUS BEFORE TAXES	187.205	344	315

3.5.2 Cabinet Memorandums forwarded in 2016

Cabinet paper No. and date forwarded	Title	Cabinet decision
No.16/2728/704/08 0/TBR 2016-12-19	Awarding of Contract to construct the Eheliyagoda Regional Office Building	1. To direct the authorities of the National Gem & Jewellery Authority, to identify in association with the relevant authorities the most suitable location to establish the above regional office.
No:16/1589/704/04 0 28/06/2016	Reimbursement to the National Gem & Jewellery Authority of funds transferred to the Lanka Gemmological Laboratory Private Company in terms of cabinet paper No.09/0014/334/003 dated 16.12.2008.	1. Approved the proposals(3.1),(3.2) and (3.3) in para 307 memorandum subject to not imposing and additional export service charge of 0.1%

3.5.3 Legislation and Regulations made in relation to the subject area in 2016.

Title of the Legislation /Regulation	Brief description to the legislation/Regulation
Assaying and Hallmarking Regulations	Introducing a compulsory hallmarking System – Draft of Gazette notification was sent to the Department of Legal Draftsman.
Chargers Gazette	The Gazette Notification of License fee amendment was sent to the Department of Legal Draftsman.

3.6 STATE TIMBER CORPORATION

3.6.1 Major Achievements in 2016

❖ Annual Progress – 2016 (Rs.)

	Target	Actual	%
Net Income	4,351,428,463	4,522,237,989	4%
Expenditure	4,098,528,023	4,490,054,387	10%

❖ Physical Progress

	Unit	Target	Actual	%
Logs	M ³	124,269	156,987	26%
Sawn Timber	M ³	5,544	4,294	-23%
Imported Timber	M ³	2,000	343	-83%
Transmission Poles	Nos.	28,000	33,026	18%
Sleepers	Nos.	52,550	26,924	-49%
Round Poles	Nos.	53,000	193,610	265%
Fence Posts	Nos.	57,050	103,700	82%
Firewood	M ³	58,130	125,225	115%
Elephant Poles	Nos.	48,500	34,625	-29%
Furniture	Rs.Million	315	256.5	-19%
Finger joints	Rs.Million	20	18.3	-9%

❖ Financial Progress (Rs.)

	Target	Actual	%
Logs – crown land	2,105,351,071	2,550,704,232	21%
Longs – private land	-	85,609,989	
Sawn timber	271,734,731	195,877,602	-28%
Imported sawn timber	240,059,000	26,226,922	-89%
Sleepers – private land	-	136,725,089	
Sleepers – crown land	425,673,656	150,758,501	-65%
Sleepers – export	438,311,201	3,871,012	-99%
Transmission poles – crown land	251,786,786	258,375,810	3%

Transmission poles – private land	-	67,386,081	
Elephant poles	110,562,187	124,695,886	13%
Others	15,238,916	27,581,917	81%
Forest offence received timber	-	60,377,654	
Donation of timber	-	293,864,091	
Furniture	402,418,036	304,349,267	-24%

➤ **“Haritha Lanka” Programme and “Punarudaya” three years action plan**

• **Re-forestation programs**

- I. “Thuru Jana Sisu Banku Ruk Ropana Program - තුරුජනසිසුබැංකුරුක්රෝපණ”- initiated by the STC in parallel to the World Environment Day (June 05th 2015). Identified schools were given with material (Agricultural equipment, tree seedlings, Forestry and Bio Diversity related books and teaching aid) and monetary aids to build up interest of the future generation on tree planting and it tends to give a clear idea of timber species and correct utilization of timber trees.
- In 2016, selected schools in Polonnaruwa and Monaragala received tree plants and aids under the project.
- II. Under the “wanaropa” tree plants distribution programs, more than 160,000 plants were distributed to schools, government organizations and other organizations with the special intension to promote endangered trees like (Ebony) Kaluwara, Nadun, Sadun, etc. which attempts to promote endangered plants in Sri Lanka.
- III. Under the Reforestation program, 50 acres of Teak plantation was established in Polonnaruwa – Sewanapitiya (II Phase) in 2016. Furthermore teak plants were used for the vacancy filling in 170 acres of existing Re-forestation plantation in Puliyankulama and Madawachchiya.
- IV. Maintenance of 61 acres of Bio Diversity Park at Minneriya, which conduct In-situ & Ex-situ environmental conservation. By these activities, STC is actively involving to promote forest coverage and environmental bio diversity balance though the main operation is timber extraction.

➤ **Enhance timber technological knowledge and productive timber utilization**

- 1 STC had the leadership role in preparing the guidance of “Green Building Rules and System of Assessment for government and Semi-government organizations.

- 2 Deputy General Manager (Research, Training and Development), Dr. N. Ruwanpathirana launched a genius book titled “Sri Lankan Timber Trees, Timber Properties & Uses–Timber Manual” which contains wide range of information for professionals, academicians, researchers, students and all other stakeholders in the industry.
- 3 Conducted the ‘Dawa Niwahana” radio program series to enhance the knowledge pertaining to timber preservation and effective usage of interested parties.
- 4 With the tenacity of upgrading the technical and practical knowledge of interested parties in the timber industry, STC actively participated in publishing magazines, visiting lectures, conducting training programs and field visits, participating in TV Programmes, Book Donation to Schools Libraries, actively participating in local and international exhibitions (Sri Lanka Next – International conference & exhibition), etc.
- 5 Issuing timber identification certificate which highly supportive to people to select quality timber for their personal requirements. People can have the comprehensive timber identification facility (specific gravity, moisture content, shrinkage and treatability test for Boron timber preservation treatment) under considerably lower price, which covers only the cost for testing, from the Laboratory located in STC-Head Office- Battaramulla. This also heavily supportive for people to utilize timber productively.
- 6 Coupe Classification – Environmental Friendly Pre Timber Harvesting Check List:
Technical Evaluation Committee is appointed to investigate forest areas received from Forest Department (coupes) in series of different attributes in terms of environmentally, financially and classify a coupe either “Normal”, “Difficult”, “More Difficult” or “The most Difficult”.
Coupe Classification – This programme was introduced to make this classification more effective. By having such classification, both STC and contractors are strictly bound to concern the environmental impacts.

➤ **CSR Projects:**

- I. By allocating considerable portion of revenue gained from sales of exotic timber, financial aid is provided to needy schools in Badulla District to fulfill their basic requirements at their schools. And also financial aid and equipment were given for the same schools to promote endemic tree plantation in their school premises. STC allocate considerable portion of revenue gained from sales of exotic timber.
- II. STC played active role in the construction of house with full facilities to a low income earning family at Kalulale in Polonnaruwa District.
- III. Physical aid was given to a school at Akbopura which was a needy school in many aspects.
- IV. Under the program of “ Saddhantha Sathkaraya”, STC collaborated with ITN to eliminate wild elephant attacks by providing elephant poles for construction of elephant fence in needy areas. It was initiated from Seruwila in 2016.

3.6.2 Cabinet Memorandum - 2016

Cabinet MemorandumNo & Forwarded date	Title	Cabinet Decisions
16/1346/704/036 – 2016.06.27	Annual report of the State Timber Corporation - 2014	<ol style="list-style-type: none"> 1. To grant approval to present the Annual report of the State Timber Corporation for the year 2014. 2. (a) To rectify the shortcomings and deficiencies pointed out by the Auditor General pertaining to the Financial Statement of the State Timber Corporation for the year 2014 & take necessary action to ensure that they do not occur in future. (b) to give due considerations to the matters highlighted in the observations of the Minister of Finance & pursue action accordingly.
16/1138/704/029 – 2016.04.25	Annual report of the State Timber Corporation - 2013	<ol style="list-style-type: none"> 1. To grant approval to present the Annual report of the State Timber Corporation for the year 2013 2.(a) to give due considerations to the matters highlighted in the observations of the Minister of Finance & pursue action accordingly. (b) To rectify the shortcomings

		<p>and deficiencies pointed out by the Auditor General pertaining to the Financial Statement of the State Timber Corporation for the year 2013& take necessary action to ensure that they do not occur in future.</p> <p>(c) To submit the Annual Reports of the State Timber Corporation for the year 2014 and 2015 to the Cabinet, to consider presenting them in parliament, since the presentation of the above reports in parliament is already delayed.</p>
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3.7 GEOLOGICAL SURVEY AND MINES BUREAU (GSMB)

3.7.1 MAJOR ACHEIVEMENTS IN 2016

➤ GEOLOGICAL SURVEY DIVISION

Geological Survey Division staff includes professional Geologists, Geophysicists and Chemists who possess extensive experience in handling geology related projects and services. The activities of the Division are supported by Technical Officers, Research Assistants and Cartographers. Its major functions are preparation and publishing of Geology, Geochemical and Quaternary geology maps, monitoring seismic activities, providing assistance to issue tsunami warnings and provide various geo-consultancies in mineral exploration, engineering geology, and environmental geology and to mineral based industries.

➤ Action Plan Activities (GSMB Funds)

- **Printing of Geological Maps:**

Publishing of the geological maps covering entire Sri Lanka is one of the major functions of the Bureau. The geological maps which contain the geo-information of the terrain are used in a wide range of activities including mineral and ground water exploration, major construction and civil engineering works and preparation of landslide hazard maps etc. The GSMB completed the printing of all 21 geological maps (1: 100,000 scale) covering the entire country in the year 2014 and it was planned to compile another 1:500,000 scale and 1:250,000 scale geological maps of Sri Lanka based on the already published 1:100,000 scale maps. The preparation of 04 no. of 1: 250,000 scale geological maps were compiled within year 2016 and published in December 2016.

- **Quaternary Mapping (Coastal Zone) Program**

The ‘Quaternary’ period of the geological time scale span from about two million years ago to the present. The quaternary formations of Sri Lanka are mainly restricted to coastal sediments, alluvial sediments in the flood plains and include soil formations. Yet, these formations are highly significant as they include economically important clay and sand deposits, coral deposits, the fertile soil cover and ground water bodies, The Geological Survey and Mines Bureau launched a project entitled “Quaternary Geological Mapping” in 2008.

Printing of Quaternary Mapping Programe: Field work and Compilation work of 1: 50 000 scale quaternary maps including Matara, Kalutara and Ambalangoda-Balapitiya sheets have

been completed during the previous years and printing of those 03 maps was completed by end of year 2016 and now available for public.

Office work of Quaternary Mapping Program: Compilation of data on Puttalam, Kalpitiya, Hambantota-Tangalle and Tissamaharama sheets were almost completed. Lay out preparation will be continued in first half of year 2017.

*Field work of Quaternary Mapping Program:*Drilling of few bore holes to obtain additional data on the sedimentary sequences was newly introduced to the quaternary programme in year 2016. Eight locations were selected to carry-out drilling, covering the area from Puttalam to Silawatturai. Two drill holes were completed in Attavilluwa and Sirambiadiya areas around Puttalam. Field work was carried out from **30th June 2016 to 26th August 2016**. and Field work was terminated as the drilling machine was requested for another project.

- **Soil Geochemical Mapping Programme**

The soil geochemical mapping programme was initiated in year the 2008 to study the geochemical characteristics of soil. These maps are useful in mineral exploration, environmental monitoring, and agricultural research and in geo-health hazard studies. Geochemical mapping work is being carried out on 1:50,000 scale base maps. Two soil samples are collected from the surface and 2m depth, for each 1 km² grid area at each 4km². The chemical properties are analyzed using the Atomic Absorption Spectrophotometer (AAS) and the Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

*Compilation and Printing of Soil Geochemical Mapping Programme:*Compilation of Geochemical Atlas of Sheet No 20 (Rakwana- Tangalle) using analytical data of six 1,50,000 sheets Thimbolketiya, Matara, Rakwana, Tangalle, Morawaka and Hambantota was completed and handed over to the printer for printing.

Field work of Soil Geochemical Mapping Programme: The field work of sheet no. : Kakirawa (1:500000) scale was completed by second quarter of the year 2016.

- **The “Minerals Year Books -2015” and “Minerals Year Books -2016”**

Data collection for the “Minerals Year Book 2015” has been carried out during year 2015 and compilation was almost completed by the end of year 2016. Data collection and analyzing for Mineral Year Book 2016 have been also carried out during second half of the year 2016.

- **Provincial Mineral Surveys and Provincial Mineral Maps**

*Printing of Provincial Mineral Maps:*The compilation of Mineral maps using available data of Central and Uva provinces were almost completed during year 2015 and remaining was completed in 2016. Finally, the Provincial Mineral Map of Central Province was printed by the end of year 2016.

Field work and the compilation of Provincial Mineral Maps: The mineral survey in Sabaragamuwa Province was started in the third quarter of the year 2015 and completed in first quarter of the year 2016. Data base preparation and the report writing have been completed and the map preparation is still in progress.

- **The IAEA Assisted Nuclear Raw Material Survey and Allied Activities**

The field work work of Matale, Dambulla, Elahera , Pallegama, Kandy, Gampola, Mahiyanganaya and Hanguranketha 1:50 000 topographic sheets were completed by the third quarter of year 2016. The interim reports have been submitted while the samples are being analyzed at laboratories. The initial field visit was carried out to investigate the thorium and uranium occurrences in Bamabarakotuwa, Rathnapura area. The detailed geological investigation of Thorium anomaly at Naula area which was identified during the carbon gamma ray survey was commenced in third quarter.

The nuclear raw material survey from coastal stretch from Talaimnnar to Galle which was started at the end of 2016 will be continued in year 2017. The field work upto Wilpattuboundry from Talaimnnanar has been completed.

- **Improvements to the Seismic Data and Tsunami Alert Centre and Maintenance of the three seismic stations**

Although, there were some minor troubles, three seismic stations installed by the GSMB together with other donor agencies are functioning smoothly and data from these stations were transmitted to the Data Center at the Head Office, GSMB. The data availability of the three seismic station was nearly 98% which is in satisfactory level. The Data Center has successfully responded to public complaints on earth tremors, earth vibrations and Indian Ocean earthquake events.

Although there are a lightning protection system was available at PALK site currently, still PALK is badly effected by lightning. Therefore CTBTO and the UCSD with the assistance of the GSMB have planned to upgrade the available lightning protection system at the PALK. A site visit was made by chief engineer of the Project IDA, UCSD and a consultant engineer from CTBTO together with GSMB officers to prepare a project proposal in October 2016. The upgrading will be done in early 2017. The trouble shooting activities at GFZ (MALK and HALK) seismic stations included (1) problem with the power system at MALK seismic station (2) VSAT problem at both GFZ stations and BGAN communication problem with MALK seismic station. The communication problems were solved with the assistance (instruments and technical assistance) of GFZ in early 2016.

In addition to the earthquake monitoring, the Seismic Data and Tsunami Alert Centre act as the receiving point of the public complaints on GSMB related mining activities. New hotline

(011 2 862 862) was introduced and duty officers of the data center recorded the complaints and forwarded to Mines Division.

- **Recovery and Storing the Dilapidated Core Boxes**

It was planned to recover rock cores stored in decayed wooden boxes stored at Yakkala premises. Core boxes were in dilapidated conditions and only about 60% of the material could be recovered with proper information. Recovered cores were stored in more than 900 galvanized core boxes during year 2013, 2014 and 2015. This project was almost completed by the end of year 2015 and final arrangements and finishing work was completed within first half of year 2016.

- **Brick and Tile Survey in North Western Area**

Survey was carried out along the Ma Oya and Deduru Oya and the field work was completed. The samples collected were stored in Yakkala area for further analysis.

- **Upgrading the GSMB-Library**

(a) *Journal Subscription:* Library Committee gave an approval to buy the 11 journals title. Also, submitted the journal lists for Director General Approval. Geological Magazine, Gems and Gemology, Bulletin of Seismological Society of America, Journal of the Geological Society of India, Geophysical Prospecting, Journal of Metamorphic Geology, Geophysics, The Leading Edge, National Geographic, New Scientist and Economic Geology

(b) *Purchasing Library Textbook 2016:* The Library Committee has selected the 33 textbooks purchase for the year 2015. (21.10.2015) 08 (Eight) request from GSMB staff were considered and were selected to be purchased. The estimated total cost is LKR 561118.00/=. These textbooks received in 2016.

(c) *Museum Development :* The proposal of the Museum development was submitted to the Director General through Deputy Director (Geology). Requested and submitted to the documents related to create display cabinets and display holders to Purchasing division. It's still proceeding.

(d) *Other Work:* Geological Survey and Mines Bureau Library was started of the Digital Library Project Phase 2 collaborations with National Science Foundation in end of the year 2016.

(e) *Library Income :* Library has earned Rs. 400, 014 /= by selling maps, publications, Unpublished Reports and Mineral Boxes and others for the period January to December 2016.

➤ **Geophysical Surveys carried out in year 2016**

- Ambilipitiya, Hambantota, Polonnaruwa and Somawathiya sand survey
- Beliatta - MAGA proposed Quarry site Rock Volume Calculation
- 2nd step of BeliattaMaga Proposed Quarry site Rock Volume Calculation
- 3rd step of BeliattaMaga Proposed Quarry site Rock Volume Calculation
- Resistivity Surveying of Anuradhapura DhammaChetiyaVihara Proposed Building (Mahamewnawa)
- Sand Survey - Wasgamuwa, Dehiattakandiya
- Geophysical Survey regarding Hot Water Springs &Dolorite Dykes
- Geophysical works for CEB proposed sub grid stations at Deraniyagala
- Padiyathalawa, Mahawa - Geophysical works for Hot Water Springs & Dolerite Dykes
- Geophysical works for proposed CEB sub grid station at Wewalwatte
- Geophysical works for proposed CEB sub grid station at Nawalapitiya
- Geophysical works at MaduruOya, Mahawa, Kaurella for Hot water Springs & Dolerite dykes
- Geophysical works for proposed CEB sub grid station at Rikillagaskale
- Special GPR Survey at Nawala and Wellawatta locations by the request of CID

➤ **Client Responsive Projects and Activities (Income Generating)**

Summary of the income generated from various projects during the year 2016

• Koslanda, Gatamanna&Beliatta Geophysical Investigation of Metal Quarry
Maga Engineering (Pvt) Ltd

- Cement Raw Material Survey Poonerine - 2015

Tokyo Cement Company Lanka PLC

- Drilling Project at Jaffna / Sengupitiya

Ceylon Electricity Board

- Resistivity Survey at Ragala, Maliboda&Nawalapitiya

Ceylon Electricity Board

- Kalugaga - Moragahakanda Drilling, Rock Testing Survey

Mahaweli Water Security Investment Program -(Mahaweli Con. Bureau)

- Drilling Investigation at Poonerine - Vallaipadu

Tokyo Cement Company Lanka PLC

- Soil Investigation at Deniyaya

Department of Health Services - Southern Province

- Silica Sand Exploration Vallipuram&Champi. - Jaffna

M.G.M. Mines & Mineral

- Drilling Investigation - Colombo Expressway at Mirigama

Neat Solutions (Pvt) Ltd

- Padukka Drilling Project
- Access Engineering PLC**

➤ **MINES DIVISION**

- **Major Functions of the Mining Division**

The Mines Division is presently functioning with fourteen Regional Offices. These offices have been established to provide our services for the customers engaged in various mining industries. With the recent amendments to the Mines and Minerals Act # 33 of 1992 wider powers have been given to the Bureau to control illegal mining activities. The main work includes site inspection, test blasts, inquiring public complaints, issuing of licenses for mining, trading, exploration and transport and minimizing illegal mining activities. Major functions of the Mines Division include;

- Evaluate commercial viability of mining for processing and export of minerals under the Mines & Minerals Act No.33 of 1992
- Regulate the exploration and mining for minerals and the processing, trading in and export of such minerals by the issuance of licenses
- Advise the minister on measures to be adopted for the promotion of the extraction and production of minerals on a commercial basis

- **Services available**

- Mine inspection (mobile service – issuing licenses, technical advices)
- Expert services (blasting techniques, license upgrading, safety methods, test blasts, crack surveys)
- Awareness programs (Awareness programmes for public officers & license holders, Workshop for people engage in mining activities, Exhibitions)
- Rehabilitation Programmes (motivating mines to safeguard the environment and supervising the environment protection and rehabilitation activities carried out by mines).

- **Income Generated through Issuing Licenses**

Under the Mines & Minerals Act No. 33 of 1992, the GSMB issues following types of licenses.

- Exploration licenses
- Mining licenses (Artisanal, Industrial, Reserved Minerals)
- Trading licenses
- Export licenses
- Transport licenses

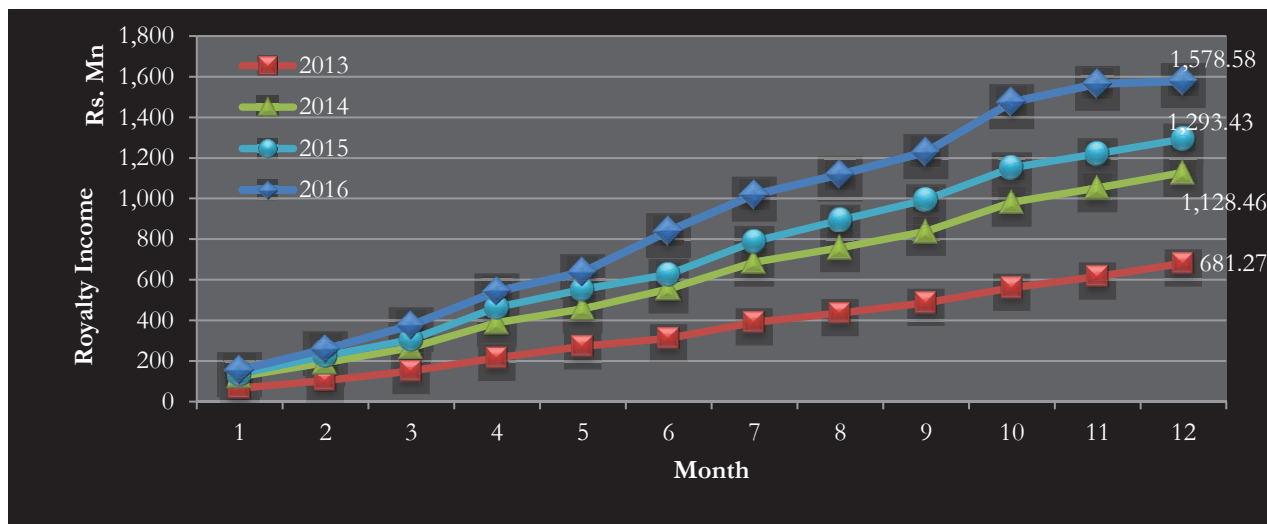


Fig.1: Royalty income during the period of 2013 to 2016

Income generated by Mines Inspection

Rapid increase of Income generated by Mines Inspection shows in following graph tells the rapid development of the Mineral Industry of the country.

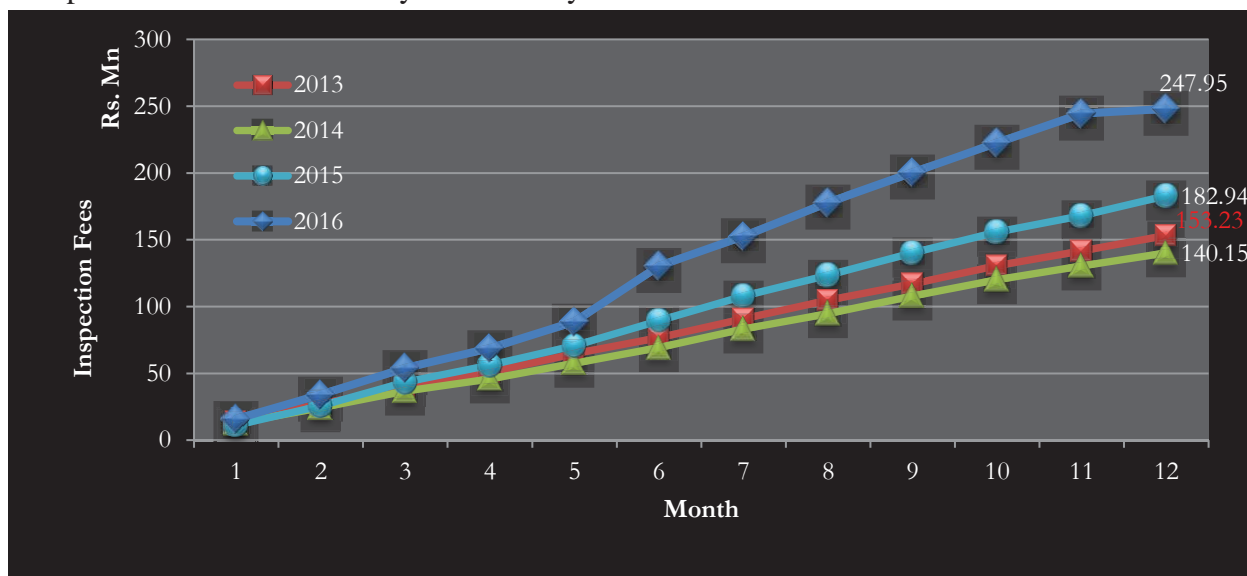


Fig. 2: Income generated by mines inspection during the period of 2013 to 2016

Income generated by Issuing Licenses

Following chart shows the income generated by issuing licenses for exploration, mining, trading, transportation and export of minerals.

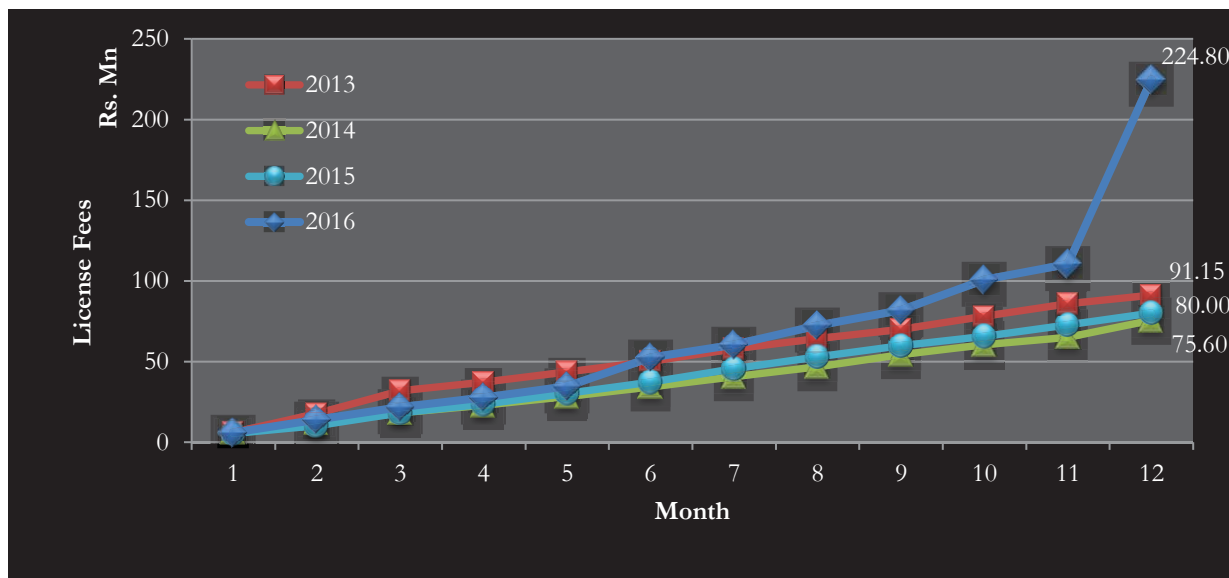


Fig.3: Income generated by issuing licenses during the period of 2013 to 2016

Summary Performance (Financial and Physical) Year 2016

Rs. Million					
Components/Activity	* F P	Type of Funds	Unit	Annual Allocation & Target	Financial and Physical Progress
Issuing licences as per the Mines & Minerals Act No.33 of 1992					
Artisanal Mining Licences(AML)					
AML - A	F P	Income	Rs. Mn. No.	3.120 1040	5.445 1820
AML - B	F P	Income	Rs. Mn. No.	3.759 3007	2.756 2217
Industrial Mining Licences (IML)					
IML - A	F P	Income	Rs. Mn. No.	3.160 158	125.745 142
IML - B	F P	Income	Rs. Mn. No.	12.600 1575	13.600 1885

IML - C	F	Income	Rs. Mn.	6.092	3.036
	P		No.	1523	730
Trading Licences (TDL)					
TDL - A	F P	Income	Rs. Mn. No.	0.112 15	0.090 12
TDL - B	F P	Income	Rs. Mn. No.	4.830 966	9.690 1938
TDL - C	F P	Income	Rs. Mn. No.	0.000 0	0.006 5
Transport Licences (TPL)	F P	Income	Rs. Mn. No.	41.108 456,750	48.879 543,105
Hardware TPL	F	Income		0.000	5.206

Rs.Million

Components/Activity	* F P	Type of Funds	Unit	Annual Allocation & Target	Financial and Physical Progress
Export Permits	F P	Incom e	Rs. Mn. No.	2.965 593	2.455 491
Exploration Licences (EL)	F	Incom e	Rs. Mn.	2.541	7.889
Minimizing illegal mining activities and environmental damage by monitoring mineral transport	F P			20.000 500	0.000 0
Telecasting awareness programme on environment friendly mining and rehabilitation	F P			9.000 40	0.000 0
Collection of Royalty	F	Incom e	Rs. Mn.	1431.889	1578.58 4
Inspection Charges of Mining	F	Incom e	Rs. Mn.	154.324	247.954

Conducting of Test Blast	F	Incom e	Rs. Mn.	4.725	4.737
Refund and Bank Guarantee	F	Incom e	Rs. Mn.	0.586	0.146
Sundry Income - Mining	F	Incom e	Rs. Mn.	0.400	0.407
TPL issued from DS office	F	Incom e	Rs. Mn.	1.975	Included in 1.4
Export of Samples	F	Incom e	Rs. Mn.	0.105	0.080
Conduct Educational Programmes on Blasting	F P	GSMB	Rs. Mn.	0.347 2	0.454 1
Conduct Awareness Programmes	F	GSMB	Rs. Mn.	(8.420)	(0.241)
Intensifying of Rehabilitation	F	GSMB	Rs. Mn.	(3.600)	(0.023)
Intensifying Monitoring Activities	P			12	0
Total				1691.618	2051.69 0

Special activities carried out by Mines Division and contribution to the national economy

As an effective movement of capacity building and awareness of particularly blasting foramens & blasting responsible individuals the mines division of GSMB was able to continue the Blasting and blast related training course, successfully. In addition to the above, awareness programs were conducted under regional level to educate the mining license holders in order to enhance the knowledge and understanding in blasting, mine safety, mine management, environment and sociological aspects .In the exercise of eradication of illicit mining activities, series of raids were conducted all over the country by the mines division with the direct involvement of Special Task Force and respective police stations. Periodic field monitoring has been further strengthened in order to facilitate the mining activities to be operated in more regulated, sustainable and organized manner. Gravel mining was able to direct into more effective and well organized avenue with the introduction of district committee mechanism into the mining license issuing system. In the exercise of strengthening the regularities in the mineral transport issuing mechanism the mines division is planning to introduce effective automated transport licensing system with the collaboration of department of police .Steps were successfully taken in order proceed the mining coupling with effective site rehabilitation activities and post mining investigations.

STATEMENT OF FINANCIAL POSITION AS AT 31ST DEC. 2016

	2016 ACTUAL	2015 ACTUAL	2016 BUDGET
ASSETS			
Non Current Assets	528,026,895.13	545,679,181.25	834,375,000.00
Investment	4,000,000.00	4,000,000.00	9,780,000.00
Current Assets	1,948,484,004.73	1,237,734,508.85	1,427,146,000.00
Total Assets	2,480,510,899.86	1,787,413,690.10	2,271,391,000.00
EQUITY & LIABILITIES			
Equity	1,902,670,291.06	1,342,504,794.46	1,859,293,000.00
Non Current Liabilities	131,042,055.66	125,128,193.32	140,288,000.00
Current Liabilities	446,798,553.14	319,780,702.32	271,810,000.00
Total Equity & Liabilities	2,480,510,899.86	1,787,413,690.10	2,271,391,000.00

STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED
31 DEC. 2016

	2016 ACTUAL	2015 ACTUAL	2016 BUDGET
Income	2,087,912,668.07	1,590,377,799.45	1,700,000,000.00
Other Income	79,632,423.60	56,841,607.51	57,500,000.00
Operating Expenses	(306,977,448.55)	(287,560,815.22)	(312,505,500.00)
Administration Expenses	(385,188,483.01)	(372,653,632.52)	(416,934,100.00)
Operating Profit	1,475,379,160.11	987,004,959.22	1,028,060,400.00
Net Finance Income	115,963,666.35	68,585,384.20	101,000,000.00
Profit Before Tax	1,591,342,826.46	1,055,590,343.20	1,129,060,400.00
Income Tax Expenses	27,315,639.00	18,496,473.00	6,931,000.00
Profit for the Year	1,564,027,187.46	1,037,093,870.42	1,122,129,400.00

REVENUE COLLECTION OF LAST THREE YEARS

YEAR	REVENUE (Rs.)
2014	1,510,409,378.29
2015	1,715,804,791.16
2016	2,283,508,758.02

Total	5,509,722,927.47
	=====

➤ CORPORATE SOCIAL RESPONSIBILITIES

- **Educational programmers**

(a) Certificate Course on Industrial Rock Blasting:

Major objective of this blasting course is to provide better theoretical and practical knowledge about blasting materials, methodologies and social & environmental impacts related to quarry blasting activities. The programme planned to be conducted annually will result in raising the safety standards and blasting productivity. One programme has been conducted for the year 2016 successfully.

(b) Workshops and Seminars organized by the mines division

The Mines Division has carried-out several Seminars at various districts in order to sort out major industrial problems related to mining activities and make aware state organizations, license holders and school children about Bureau's regulatory functions according to Mines and Mineral Act. The major objective of these workshops was to improve coordination between GSMB and other state organizations such as Divisional Secretaries during the implementation of Mines and Mineral Act and aware school children regarding the laws & functions related to the environment in Sri Lanka

- **National Environmental Day programmes**

a. National Environmental Day programme– Matale District

There are several activities have been conducted parallel to the National Environmental Day of year 2016 in Matale District.

- (i) Conducted awareness programmes and art competitions in selected schools, regarding the environment
- (ii) Fulfilled primary requirements of selected schools
- (iii) Tree planting programme at Aban Ganga

b. “WanaRopa” tree planting programme – Badulla District

A tree plantation programme has been conducted at a quarry site in Badulla district on 29.11.2016 with the participation of government officers, mining license holders and villagers.

c. Minimizing Illegal Activities

The number of raiding of illegal mining activities were successfully conducted and completed by GSMB with the collaboration of Central Anti-Corruption Unit in Panadura-Walana Police station and Special Task Force Unit attached to the GSMB.

d. Opening of Colombo Regional Office

A new regional office was opened at the basement of GSMB head office building for the Colombo District to carry out the activities related to mining licenses in Colombo District in a proper manner.

3.8 GEM AND JEWELLERY RESEARCH AND TRAINING INSTITUTE

3.8.1 Major Achievements in 2016

Many gem and jewellery sector based training programmes were conducted by the institute during the year meeting various industry demands for skills & technology. These programs were received a higher appreciation from the students, participated. Accordingly, it was able to record the ever-highest student participation for the courses.

➤ **Progress of training activities**

The institute conducted many courses covering specialized subject areas of the gem and jewellery industry. The scientifically trained students passed out from the courses were very successful at the plant operations and capable to serve versatile customers.

➤ **Outline of these activities are as follows;**

In the year, nine training centers were successfully functioned with supplying skilled craftsman to industry. These centers operated in Ratnapura, Colombo, Kandy, Galle, Bingiriya, Pollonnaruwa, Jaffna, Moragahakanda, Awissawella

To overcome severe skilled labor shortage faced by the gem and jewellery industry, a special training project was implemented with the collaboration of National Gem and Jewellery Authority (NGJA) and Gem and Jewellery Association of Sri Lanka (GJASL) to train youth and place them into carriers in the gem cutting industry.

Another Skill Development Training project was implemented with treasury funds for the purpose of training students from low income families. This project has been implemented by centres in Colombo, Ratnapura, Kandy, Galle, Bingiriya, Moragahakanda and Polonnaruwa and trained 65 students for courses of several subjects.

The institute started work for developing curriculums of diploma programmes, of Jewellery Design and Manufacturing Technology meeting National Vocational Qualifications (NVQ) Level 5 standards stipulated by Tertiary and Vocational Education Commission (TVEC). Gem Cutting and Polishing training programme was accredited to the NVQ Level standards. These programmes will enable students to receive internationally recognized NVQ certificates following our courses.

The training workshops and laboratories of the institute were added with some art – of-technology applications used by the industry today. Some of them included equipment that can be aided in advanced gem testing & precision cutting of gems.

Progress of students training activities are follow listed

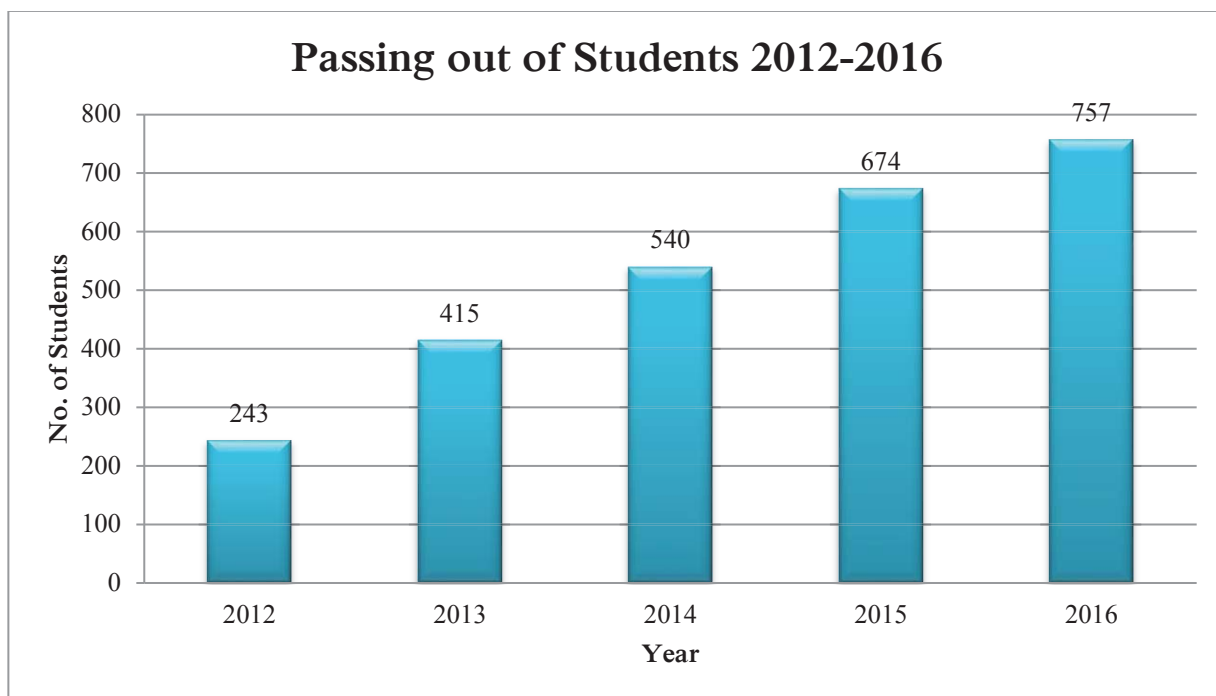
Students intake in the year 2016 to the courses

	Training Programme	No of Students
01	Gemmology	97
02	Basic Gemmology	31
04	Geuda Heat Treatment	96
05	Gem Cutting & Polishing	213
06	Colour Grading & Marketing	73
07	Gem Carving	12
08	Jewellery Designing	30
09	Jewellery Manufacturing	63
10	Costume Jewel Manufacturing	48
11	Stone setting	26
12	CAD	20
13	Rough Gem Identification	27
14	Short Course in Basic Lapidary Techniques	21
Grand Total		757

Record of student progress achieved in last consecutive 5 years.

	Training Programme	Year & Student Passed out					
		2011	2012	2013	2014	2015	2016
01	Gemmology	13	30	43	105	134	97
02	Basic Gemmology	-	-	-	-	-	31
04	Geuda heat treatment	25	51	64	84	96	96
05	Gem cutting and polishing	43	61	76	109	190	213

06	Gem colour grading and marketing	72	48	118	175	157	73
07	Gem Carving	-	-	-	-	-	12
08	Jewellery Designing	30	16	44	18	37	30
09	Jewellery Manufacturing	21	37	40	49	42	63
10	Costume Jewellery Marking	-	-	21	-	18	48
11	Jewellery Stone Setting	8	-	9	-	-	26
12	CAD	-	-	-	-	-	20
13	Rough Gem Identification	-	-	-	-	-	27
14	Short Course in Basic Lapidary Techniques	-	-	-	-	-	21
Total		212	243	415	540	674	757



➤ Research Projects

• Exploration and Assessment of Gem Deposits in Sri Lanka (EAGSDL)

The project is being conducted Divisional Secretary areas in Monaragala District in Uva Province (Figure 1).

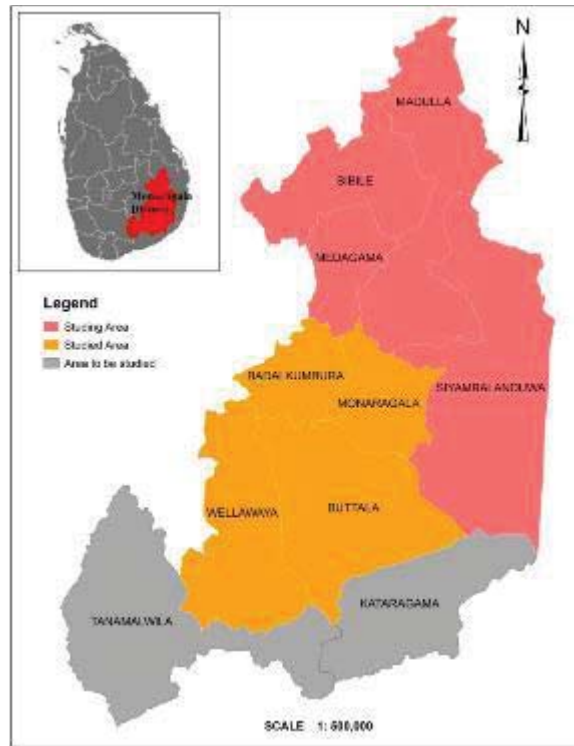


Figure 1. Study of DS Divisions in Moneragala District

Field investigations of Siyabalanduwa DS, Madagama DS, Bibila DS and Madulla DS were carried out in 2016. Afterwards, laboratory investigations, GIS and remote sensing works, data interpretation and estimation, verification of data, preparation of gem potential maps and detail reports are carried out. A summary of progress in each division can be given as follows.

• Siyambalanduwa DS and Madulla DS

By the end of year 2016, field investigations, laboratory investigations, GIS and remote sensing works, data interpretation, estimation and verification of data were undertaken in Siyambalanduwa and Madulla Divisions. No sizeable evidences are found from laboratory analysis in favour of any gem occurrences in the area. It could be concluded that no gem potential or least potential areas are present within the whole division with respect to the

study that suitable for economic gem mining. Finally, preparation of the 1st draft of final report was completed.

- **Madagama DS**

Madagama DS division consists of 35 Grama Niladari divisions and 121 villages covering an area of 245.14 km². Information gathered from all the investigations was inserted into the basic gem potential map which is used to identify gem potential areas clearly. As of 2016, gem potential map of 10 GN Divisions out of 35 the Madagama DS have been completed (Figure 2).

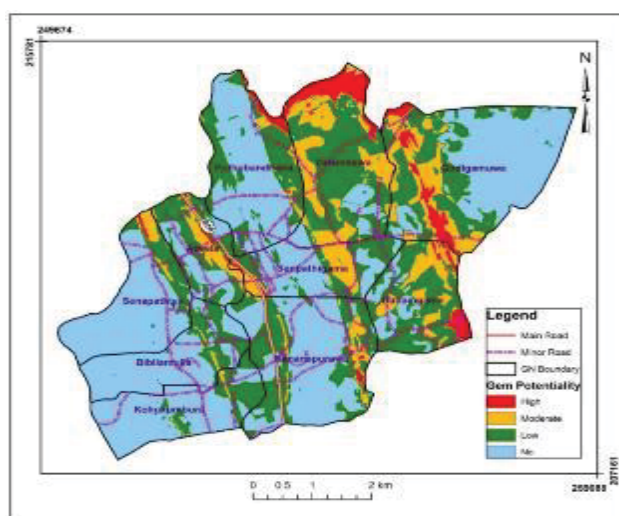


Figure 2. Final gem potential areas in 10 GNDs at Medagama DSD

- **Bibila DS**

The project is completed up to detailed gem potential mapping and confirmatory augering in which 374 locations were studied (Figure 3). The samples are under analysis and the report is under compilation.

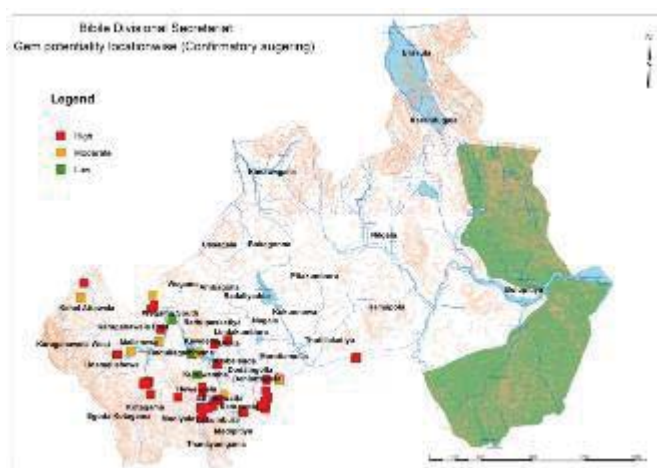


Figure 3. Auger sample locations of the Bibile DSD according to the gem potentiality

➤ Value Enhancement of low quality gemstones

- **Geuda heat treatment**

Under the “value addition of Sri Lankan geuda project”, development of a method to enhance colour and clarity of Sri Lankan thik-geuda was started as the 1st stage of the project. 1st batch of thik-geuda samples were purchased and pre-heat treatment chemical analysis of those samples were completed.

- **Gemmological perspective of ancient Sri Lankan intaglios, cameos and beads**

The artefacts were analysed using gem identification tests ranging from specific gravity, Refractive Index measurement (RI), Fourier Transform Infrared spectroscopy (FTIR) to x-ray fluorescence spectroscopy (XRF). The numerical and graphical data acquired are undergoing interpretation to reveal gem material from which the said artefacts were crafted (Figure 4). These findings will be published as a booklet.

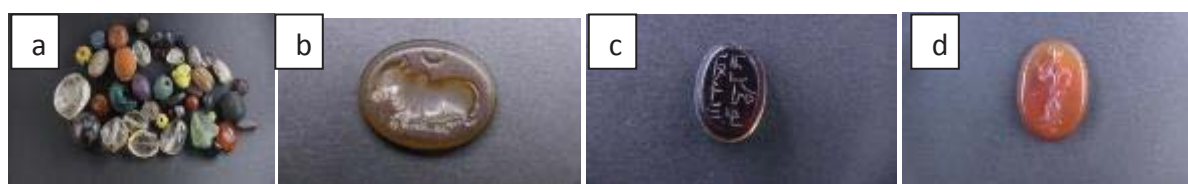


Figure 4. (a) Beads (b) (c) and (d) Intaglios depicting an ox, Brahmi letters and a female dancer.

- **Value Enhancement of low quality Moonstones**



Value added raw materials for carving industry

In this project, critical conditions such as temperature and reducing conditions required to produce high quality raw materials for carving moonstones were identified. The objective was to promote home based caving industry by introducing value addition methods for low quality raw materials to produce high quality products (Figure 5)

- **Value Enhancement of low gem quality Zircon in Sri Lanka**

Rough samples were cut into three slices along crystallographic c-axis as thin platelets and both side of the cut pieces were polished (Figure 6). The color change of the zircon samples after heat treatment in the reducing atmosphere are shown in Figure 26. Yellowish green to green color was observed in the samples subjected to heat treatment at reducing conditions. Moreover, heat treatment at 900 °C at reducing atmospheric condition showed the optimum color improvement with better clarity.



Figure 6. Image is showing left- unheated low value zircon samples, middle- heated samples in reducing atmospheric condition and right- heated cut and polished samples.

A manuscript based on these findings is ready to submit for journal of Gems and Gemmology.

- **Value Addition towards Sri Lankan Gem Zircon via Heat Treatment**

Reddish brown zircon turned into pale blue colour when treated at 1100°C within strong reducing atmospheric condition incorporating Lakmini gas furnace (Figure 7) whereas clarity remained unchanged.

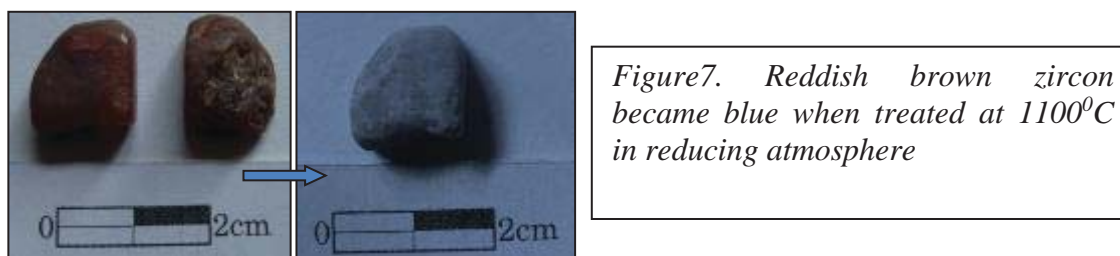


Figure7. Reddish brown zircon became blue when treated at 1100°C in reducing atmosphere

Greenish zircon turned into pale blue colour when treated at 1750°C in reducing atmosphere incorporating Lakmini gas furnace (Figure 8) whereas clarity remained unchanged.



Figure 8. Greenish zircon became pale blue when treated at 1750⁰C in reducing atmosphere

➤ **Project 03: Private Lands Investigation for Gem Potential**

Under this project, providing comprehensive, scientific analytical reports and relevant maps on new gem deposits in lands owned by government plantation companies and private individuals are being carried out. There are three investigations carried out in the areas of Kapugoda, Waga and Godakawela within concerned time period according to the requests made by the private land owners;

- W.G. Permarathana, 180, Giridara, Kapugoda
- W.D. Persi Daysiri, 134, Neluwaththudywa, Waga
- G.N.P Perera, No 03, Isthambu palce,Colombo 03

➤ **High Tec analytical services**

- Dr. Jagath Pitawala, Senior Lecturer, Department of Science and Technology, Uwa Wellassa University -16 Samples, XRF analysis and Laser Diffraction Particle Size Analysis.
- Prof. H.M.T.G.A Pitawala, Department of Geology, University of Peradeniya – 13 Samples, XRF analysis

➤ **Workshops**

- Rathnapura Geuda Heat treatment Workshop – NGJA Auditorium

➤ **Exhibitions**

- **Exhibition Stalls at BMICH**
 - ✓ FACET – 2016.09.01, 02,03,04
 - ✓ NEXT – 2016.10. 17,18,19
 - ✓ JEWELLES- 2016.12. 16,17,18

➤ **Joint programme with other institute**

- පරිසර අධ්‍යයනය පිළිබඳව නව විෂය නිර්දේශයට අනුකූලව පාසල් ගුරුවරුන් දැනුවත් කිරීමේ ව්‍යාපෘතිය.
- NSF Technical Grant No TG/2016/Tech-D/05 Received. (Agreement signed)
- CECB Agreement for drilling
- Steering committee member of MINAMATA convention activities

➤ Other activities

- High Temperature Electric Furnace feasibility studies overnight. (Over 24 Hrs)
- Geuda Heat treatment course conducted at Rathnapura and Malabe.
- Opening of geuda heat treatment service center in Ratnapura
 - ❖ To provide geuda heat treatment service to the people who are involved in the geuda industry, a geuda heat treatment service center was opened in Ratnapura National Gem and jewellery Authority premises. Through that service center, several geuda heat treatment services were provided and the center is currently operating well.

➤ Publications

Based on the projects of Exploration and Assessment of Gem Deposits in Sri Lanka and value addition to low quality gemstones, number of research articles was published in local and international journals as well as magazines. And also, two books were published in the end of the year 2016.

1. R.M.N.P.K. Jayasinghe, M.K.C. Jayamali, S. Wijewardane, G.G.M.S.Wickramasinghe and R.M.S. Dharmasiri, 'Value addition of Sri Lankan Gemstones.', ISBN 978-955-8382-02-8.
2. ආර්.එම්.එන්.පී.කේ. ජයසිංහ,එම්.කේ.සී ජයමාලි, එස්. විජේවර්ධන,පී.ඒ.එම්.එස්. වික්‍රමසිංහ සහ ආර්.එම්.එස්. ධර්මසිරි. “215th ලංකාවේ මැණික්වල අගය ඉහළ නැංවීමේ තාක්ෂණය” ISBN 978-955-8382-03-5.

3. W.M.M.P.E. Bandara, M.K.C. Jayamali, J. Gunatilaka and P. Francis, 'Applications of Spatial and Statistical Methods for Gem Potential Mapping- A case study from Moneragala District- Sri Lanka(Abs.). ', Proceedings of the PGIS Research Congress Symposium 2016 of the Post Graduate Institute of Science, University of Peradeniya, Sri Lanka, 2016, Paper ID 132.
4. M.K.C. Jayamali, W.M.M.P.E. Bandara, J. Gunatilaka, P. Francis, R.M.N.P.K. Jayasinghe and R.M.S. Dharmasiri, 'Gem potential mapping based on Geographical Information Systems (GIS): A case study from Medagama, Moneragala district, Sri Lanka'. Journal of Geological Society of Sri Lanka Vol. 18 (2016- manuscript accepted).
5. S.V.T.D. Raveendrasinghe, 'Occurrence of Andalusite and Chiastolite In Balanthota – Ginigathena Sri Lanka (Abs.). Proceedings of the 32nd Technical Session of Geological Society of Sri Lanka (GSSL): 8.
6. W.G.C.N.Wewegedara, Prashan Francis 'Value addition of Sri Lankan gem zircon via heat treatment' (Abs.). Proceedings of the Sri Lanka NEXT – A Blue – Green Era Conference and Exhibition, 2016: 7,8.
7. ශ්‍රීකලා ධර්මසිරි, මැණික් පතල් කැණීම් කර්මාන්තය හා බැඳුණු පාරිසරික බලපෑම්, හෙළමිණි වරුණ, 3 වන කලාපය(2016 ඔක්තෝබර්), මැණික් හා ස්වර්ණාභරණ පර්යේෂණ හා අභ්‍යාස ආයතනය.
8. එස්.විජේවර්ධන, නුවරඑළිය අභිගමුව කෝරළයට අනවසර මැණික් කැණීමෙන් සිදුව ඇති පාරිසරික හානිය, හෙළමිණි වරුණ, 3 වන කලාපය(2016 ඔක්තෝබර්), මැණික් හා ස්වර්ණාභරණ පර්යේෂණ හා අභ්‍යාස ආයතනය.
9. ඩබ්.පී.සී.එන්.වැවේගෙදර, මැණික් පාෂාණ හඳුනා ගනිමු, හෙළමිණි වරුණ, 3 වන කලාපය (2016 ඔක්තෝබර්), මැණික් හා ස්වර්ණාභරණ පර්යේෂණ හා අභ්‍යාස ආයතනය.
10. එම්.කේ.සී.ජයමාලි, මැණික් කර්මාන්තය හා බැඳුණු පතල්කරුවන්ගේ ජීවිකාව, හෙළමිණි වරුණ, 3 වන කලාපය(2016 ඔක්තෝබර්), මැණික් හා ස්වර්ණාභරණ පර්යේෂණ හා අභ්‍යාස ආයතනය.
11. R.M.T.D.Madusanka, D.T. Jayawardana and R.M.N.P.K. Jayasinghe, Fourier Transformation Infrared (FTIR) Spectroscopy Analysis of Soil Organic Matter in an alluvial Type Gem Deposits in Pelmadulla, Sri Lanka. (Abs.), Proceedings of the 21st International Forestry and Environment Symposium 2016, Paper ID 236.

It is noteworthy that the research division plays a major role regarding the overall institutional progress as its members involve in a vast range of institutional activities despite research activities. For instance;

- **Procurement works:**
 - ✓ Preparation of Specification document to purchase research and office equipment
 - ✓ Bid opening activities and documentation works
 - ✓ Technical evaluation report preparation

- **Fixed assets and stock verification activities followed by selling and disposal of the verified items.**

- **Exhibition duties:**
 - ✓ Research division members almost always hold the major responsibilities in exhibition
(Ex. Exhibition duties at the Haliela central college, Vauniyawa central college ect.)

- **Recruitment such as preparation of exam question papers and exam duties.**

3.9 CENTRAL ENGINEERING CONSULTANCY BUREAU (CECB)

3.9.1 Major Achievements in 2016

Financial And Operational Performances 2016

Central Engineering Consultancy Bureau

			2015	2016 (Draft)
Total Revenue		Rs.Mn	10,710	11,838
Operating Profit		Rs.Mn	454	600
Total Expenditure		Rs.Mn	10,256	11,238
Net Profit before Interest & Taxes		Rs.Mn	345	499
Non Current Assets		Rs.Mn	2,731	2,735
Current Assets		Rs.Mn	13,876	14,458
Non Current Liabilities		Rs.Mn	176	178
Current Liabilities		Rs.Mn	11,683	11,768
Equity		Rs.Mn	4,747	5,247
Total Assets		Rs.Mn	16,607	17,193

Current Ratio			1.19	1.23
ROA			2%	3%
ROCE			26%	37%

**➤ SUMMARY OF PERFORMANCE OF THE CENTRAL ENGINEERING
CONSULTANCY BUREAU IN THE YEAR 2016**

A. CONSULTANCY PROJECTS

- **Number of new consultancy projects undertaken in the year 2016 – 80**
Total value of consultancy services – LKR 2,140 Million

- **Numbers of consultancy projects completed in the year 2016 - 195**
Total value of consultancy services – LKR 2,138 Million

CONSTRUCTION PROJECTS

- **Number of new construction (on the basis of design and construction) projects undertaken in the year 2016 - 145**
Total contract value of the projects – LKR 10,794 Million

- **Number of construction (on the basis of design and construction) projects completed in the year 2016 - 145**
Total contract value of the projects – LKR 10, 707 Million

CENTRAL ENGINEERING CONSULTANCY BUREAU

Achievements up to the end of December 2016

- **Details of Few Completed and Ongoing Major Projects**

Consultancy Division

Extension of Southern Expressway Project (ESEP)

Package/Description	Total Value of the Project - LKR	Physical Progress- %	Remarks
Matara to Beliatta and Mattala to Hambantota	255,280,000,000.00	26.48	Project in progress

Construction of AVIC Residential Project, Colombo 3

- CECB is responsible for technical support from the design office for review of the documents and resident supervision of this Rs.25 Billion project. Progress achieved is 49%. The client is Avic Hotels Lanka Ltd.

Defence Headquarters Complex (DHQC) at Akuregoda

- Central Engineering Consultancy Bureau is responsible for the provision of engineering, quantity surveying and construction management services for this massive project, the total cost of which is Rs.43 billion. The Progress achieved at the end of 2016 is 77.5%.

Matara – Katharagama Railway Extension Project

- Matara – Beliatta Sector: 66% completed. The total cost of works is Rs.40 Billion.

Design of a Jetty at Naval Dockyard, Trincomalee

- 40% progress achieved at the end of 2016 of this Rs.3000 Million project.

Broadland Hydropower Project

- CECB is responsible for the review of design and supervision of construction of this project. The total cost of this project is Rs. 11,480 Million. The progress achieved is 23.9%.

Kaluganga Head Works Development Project

- The total cost of this project is Rs. 12,000 Million. The progress achieved is 50% at the end of 2016.

Colombo District Secretariat Building Complex

- The total cost of this project is Rs. 2,515 Million. The progress achieved is 22% at the end of 2016.

National Stroke Center Building Complex at Base Hospital, Mulleriyawa

- 40% progress achieved at the end of 2016 of this Rs.1,220 Million project.

Moragahakanda Development Project – Elahera

- The total cost of this project is Rs. 33,000 Million. The progress achieved is 75% at the end of 2016.

Local Bank Funded Roads Rehabilitation Project (LBFP)

Package/Description		Total Value of the Project - LKR	Physical Progress-%	Remarks
C1	Nagoda-Neboda & Awithtawa-Lewanduva Roads	12,784,173,027.90	100	Completed in 2016
C2	Naula-Elahera-Pallegama-Hettipola & Hasalaka - Handungamuwa Roads			
C3	Haputhale – Boralanda – Keppetipola Road			
C4	Bodagama-Hambegamuwa-Kalthota Road			

Uma Oya Development Project

- 30% progress achieved at the end of 2016 of this Rs.71,400 Million project.

Shifting of Manning Market to Paliyagoda

- The total cost of this project is Rs. 4,000 Million. The progress achieved is 70% at the end of 2016.

Construction of Proposed Prison Complex at Angunakolapelassa

- 93% progress achieved at the end of 2016 of this Rs.3,000 Million project.

Reconstruction of Northern Railway Lines

Package/Description	Total Cost of the Works LKR Billions	% Physical Progress
Medawachchiya to Madhu Road	10.6	100
Omanthai to Pallai	24.0	100
Madhu Road to Thalaimannar	22.5	99
Pallai to Kankasanthurai	22.4	99
Signalling and Telecommunication Project	13	99

Construction of New Building for Attorney General's Department

- The total cost of this project is Rs. 900 Million. The progress achieved is 25% at the end of 2016.

Central Expressway Project – Stage 2

- The Consultancy fee of this project is Rs. 200 Million. The project is still at initial stage at the end of 2016.

Balance Works of Proposed 704 Bed Teaching Hospital –Kotelawala Defence University

The Consultancy fee of this project is Rs. 220 Million. The progress achieved is 100% at the end of 2016.

Construction of National School in Polonnaruwa

- The Consultancy fee of this project is Rs. 15 Million. The progress achieved is 50% at the end of 2016.

Construction Division

Construction of Morana Reservoir

- Progress achieved is 54%. The total cost of this project is Rs. 1,210 Million.

Construction of Proposed Building Complex for Accident Services, Theatre Complex, ICU and Wards - Stage III (Finishing) at North Colombo Teaching Hospital, Ragama.

- Progress achieved is 21%. The total cost of this project is Rs. 1,005 Million.

National Environment Secretariat Building at Battaramulla

- Progress achieved is 95%. The total cost of this project is Rs. 1,126 Million.

Construction of Head Office Building for Ministry of Health,Colombo

- Progress achieved is 2%. The total cost of this project is Rs. 3,355 Million.

Construction of proposed Nephrology, Dialysis & Transplant Unit at Teaching Hospital, Karapitiya

- Progress achieved is 35%. The total cost of this project is Rs. 790 Million.

Construction of Jaffna Police Station

- Progress achieved is 99%. The total cost of this project is Rs. 360 Million.

Construction of Accident & Emergency Treatment Unit, Teaching Hospital , Jaffna

- Progress achieved is 39%. The total cost of this project is Rs. 531 Million.

Establishment of Emergency & Accident Center at Teaching hospital , Batticaloa

- Progress achieved is 15%. The total cost of this project is Rs. 683 Million.

Kandy District Road Projects

- Progress achieved is 82%. The total cost of this project is Rs. 10 Billion.

Construction of Vincent Dias Ground at Badulla

- Progress achieved is 95% . The total cost of this project is Rs. 309 Million.

Construction of Maternity Ward Complex at General Hospital,Kurunegala (Stage - 111)

- Progress achieved is 22%. The total cost of this project is Rs. 915 Million.

Construction of Proposed Cancer Treatment Center - Stage II, General Hospital (Teaching) – Kandy

- The total cost of this project is Rs. 1,279 Million. This project is at initial stage.

Construction of General Hospital, Hambantota

- Construction of this Rs.1, 654 million 850 bed hospital was successfully completed in 2016.

Design and Construction of Ten Storied Dental Hospital Building, Colombo

- This project was successfully completed in 2016. The total cost is Rs. 624 Million.

Construction of Four Storied Building for Polonnaruwa Hospital

- Progress achieved is 48%. The total cost is Rs. 142 Million.

Construction of Proposed Museum at Polonnaruwa

- Progress achieved is 60%. The total cost is Rs. 167 Million.

Roads Improvement and Development Project in Anuradhapura District

- The total cost is Rs. 1,105 Million. This project is at initial stage.

Proposed Prison Complex in Jaffna – 2nd Stage

- Progress achieved is 4%. The total cost is Rs. 435 Million.

Roads Improvement and Development Project in Polonnaruwa District

- Progress achieved is 33%. The total cost is Rs. 2,123 Million.

International Division

1. Renovation of Official Residence of Sri Lanka High Commissioner in Kuala Lumpur, Malaysia.

- The total cost of this work is Rs. 63 Million. Progress achieved at the end of 2016 is 75%. The work is in progress.

Renovation/Refurbishment of Chancery and Official Residence of Sri Lanka High Commissioner in Myanmar.

- The total cost of this work is Rs. 42 Million. This project was successfully completed at the end of the year 2016.

Consultancy projects

PHOTOGRAPHS OF SOME COMPLETED AND ONGOING PROJECTS



MATARA – BELIATTA RAILWAY EXTENSION PROJECT



LOCAL BANK FUNDED ROAD PROJECT

RECONSTRUCTION OF NORTHERN RAILWAY LINES



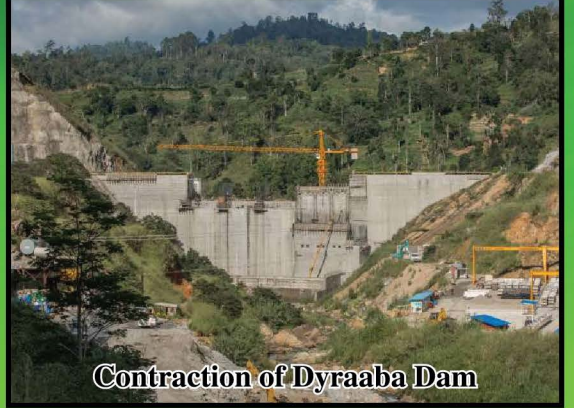
KALUGANGA RESERVOIR



මහවැලි සංවර්ධන හා පරිසර අමාත්‍යාංශය
Ministry of Mahaweli Development and Enviroment
மகாவலி அபிவிருத்தி மற்றும் சுற்றாடல் அமைச்சு



Social Forestry Project



Contraction of Dyraaba Dam



Uma Oya Tunnel



Moragahakanda reservoir