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வருடாந்த செயற் திறன் அறிக்கை மற்றும் கணக்குகள்

ANNUAL PERFORMANCE REPORT & ACCOUNTS



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மகாவலி அபிவிருத்தி மற்றும் சுற்றாடல் ரீரதி அமைச்சு
Ministry of Mahaweli Development and Enviroment



Annual Performance Report Accounts 2017

Ministry of Mahaweli Development and Environment
Sri Lanka

MINISTRY OF MAHAWELI DEVELOPMENT AND ENVIRONMENT

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Minister of Mahaweli Development and Environment

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State Minister of Mahaweli Development

Hon. ANURADHA JAYARATHNA M.P.
Deputy Minister of Mahaweli Development and Environment

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Secretary to the Ministry of Mahaweli Development and Environment

Mrs. Shantha Wijayarathne
State Secretary

Mr. R A R R Rupasinghe
Additional Secretary (Administration)

Mr. M.G.W.M.W.T.B. Dissanayake
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Mr.M.P.D.U.K.Mapa Pathirana
Additional secretary (Environment Projects & Educational Training)

Mr.W M A P B Wanninayake
Additional Secretary (Natural Resources)

Mrs. C.H. Devendra
Additional Secretary (Technical)

Mr. D Abesooriya
Chief Finance Officer

Heads of Agencies

Mahaweli Authority of Sri Lanka

Mr. Gotagaya Jayarathna

-Director General

Department of Forest

Mr. Anura Hathurasinghe

- Conservator General

Department of Coast Conservation and Coastal Resource Management

Mr. Prabhath Chandra Keerthi

-Director General

Department of Coast Conservation and Coastal Resource Management

Mr. Prabhath Chandra Keerthi

-Director General

Central Environmental Authority

Prof. Mervin Darmasiri

-Chairman

Mr.P B Hemantha Jayasingha

-Director General

Marine Environment Protection Authority

Rear Admiral (Rtd) Rohana Perera RSP, VSV, USP

-Chairman

Dr. P. B. Terney Pradeep Kumara

-General Manager

National Gem & Jewellery Authority

Dr. D.M.D.O.K. Dissanayaka

-Chairman

Mr.M.L Gammanpila

-Director General

Gem & Jewellery Research & Training Institute

Mr. Nawarathna Bandara Alahakonn

-Chairman

Dr. Prashan Francis

-Director General

State Timber Corporation

Mr. P.Dissanayaka

-Chairman

Mr. K.sirinivasa

-General Manager

Geological Survey & Mines Bureau

Mr. Nimal Bopage

-Chairman

Prof. Roshan Fernando

-Director General

Central Engineering Consultancy Bureau (CECB)

Eng. G. D.A Piyathilake

-Chairman

Mahaweli Consultancy Bureau (MCB)

Dr. Harsha Samaraweera

-Chairman

Project Directors of Multy Purpose Development Projects

Moragahakanda & Kaluganga Development Project

Eng. D.D.Wijayarathne

- Project Director

Uma Oya Multipurpose Development Project

Eng. Dr. Sunil De Silva

- Project Director

Dam Safety & Water Resources Planning Project (DSWRPP)

Eng. S. R. K Arruppola

- Project Director

Mahaweli Water Serurity and Investment Programe

Eng K.R. Neil Bandara

- Project Director

Ecosystem Conservation and Management Project

Mr. Anura De Silva

- Project Director

Strengthening the Resiliennce of Smallholder farmers in the Dry Zone to Climate variability and extreme events through an intergrated approach to Water Management Project

Eng. Yasas Bandaranayake

- Project Director

MAJOR FUNCTIONS OF THE MINISTRY OF MAHAWELI DEVELOPMENT AND ENVIRONMENT

- *Creating an optimal water management and agricultural development in the Mahaweli Development projects.*
- *Improve the livelihood of the people of Mahaweli settlements by improving irrigation and agricultural practices.*
- *Secure the land ownership of the people of Mahaweli settlements*
- *Conservation and Protection of Mahaweli Water sheds.*
- *Implement and Monitoring of Renewable electricity generation encompassing all tribute canals of the Mahaweli River basin.*
- *Introduction of proper water management system that is resilient to the Climate Change under the Mahaweli Water Security and Investment Programme.*
- *Use the excess water of Mahaweli river basin to increase the livelihood of people who lived in dry areas in Wellawaya in Monaragala District by the multipurpose development project of Uma Oya.*
- *Agricultural and Social development in Walawa scheme centering Walawa River basin.*
- *Identification /analysis of problems in environment and natural resources sector through Stakeholder consultation to enable policy formulation.*
- *Development of environment and natural resources policies, policy dissemination and Ensuring Implementation.*
- *Undertake Strategic Impact Assessment of environment and natural resources related Policies.*
- *Take measures to ensure compliance with international commitments arising out of MEAs for which Sri Lanka is a signatory.*
- *Development of strategies, master plans and action plans to implement the environment and natural resources related policies and execute pilot projects related to sector policy initiatives..*
- *Develop and formalize environment and natural resources sector wide monitoring system, Comply with monitoring requirements, reporting and take remedial actions.*
- *Carry out policy research, analysis and dissemination of results of policy implementation and evaluation to the general public.*
- *Create enabling environment for public and political commitment towards sound Environmental Management.*
- *Create environmental education and awareness at national level in relation to the Environment and natural resources policy reforms and other major environmental Initiatives.*

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1. Introduction

As the Ministry of Mahaweli Development and Environment since year 2015 has wide range of responsibilities on developments of mahaweli area among than to conserve the environment. The responsibilities of previous year in relation to policy making the mahaweli development fields and environment management and conservation of natural resources by reporting as “Annual Performance Report Accounts 2017”. This report contains the achieved progress within year 2017 programs and activities have implemented by the ministry as well as the progress archived by themes of various fields in “Haritha Lanka” National Environment Action Plan and “Punarudaya” 2016-2018 National Program of environment conservation developed by the stakeholder participation of line agencies in the ministry.

The era for generally strength the establishment, regulation and technical frame work of government sector including basically line agencies and ministry subject to environment sector due the firmest activities of economic development to change the livelihood of general public and resulting to impact on the environment. In 2017 Ministry of Mahaweli Development and Environment under the governance of His Excellency the President could be improved the livelihood of the general public in sustain and secure by the development projects on environment conservation as well as the infrastructure facilities.

Conservation of environment and natural resources along with the introduction of wise use water management to improve the two sectors on environment protection and mahaweli development increase economic viability and adaptation to climate change by the general public confirms the resources requirements in present and future.

The main institutions under environment sector are Department of Forest Conservation, Coast Conservation and Costal Resources Management Department, Central Environment Authority, National Gem and Jewelry Authority, Marine Environment Protection Authority, State Timber Cooperation, Geological Survey and Mining Bureau, Gem and Jewelry Research and Training Institute and Sri Lanka Mahaweli Authority, Central Engineering Consultancy Bureau, Mahaweli Consultant Bureau under mahaweli development sector.

In this report, it is expected to present detailed performance of the institutions, divisions and projects under the Ministry of Mahaweli Development and Environment. The developments projects such as; Moragahaknada Kaluganga Development Project, Umaoya Multipurpose Development Project, Dam Safety and Water Resources Planning Projects, Mahaweli Water Security Investment Programme and Ecosystem Conservation and Management projects which are at the forefront of the government’s development agenda were also included there.

PART I

Progress of State and Statutory Institutions in the Ministry of Mahaweli Development and Environment



1. MAHAWELI AUTHORITY OF SRI LANKA

Development Activities carried out in year 2017

Cumulative Financial Progress

The total capital budget for the financial year 2017 was SLRM 3,385.40. The financial progress up to end 2017 is given below.

Description	Budget Provision	Amount Released (Up to end of December 2017)	Expenditure (Up to end of December 2017)
Mahaweli Projects	1,810.00	1,422.85	1,422.85
Mahaweli Consolidated Project (CF)	500.00	433.00	433.00
System B Maduru oya RB Development project (CF)	150.00	109.00	109.00
Redeemaliyadda Integrated Development Project (CF)	110.00	79.90	79.90
Rambakenoya Integrated Development Project (CF)	115.00	92.68	92.68
Welioya Integrated Development Project -System L (CF)	400.00	316.42	316.42
Implementing a mechanism to protect river bank of Mahaweli – Gatambe (CF)	16.50	15.50	15.50
Rehabilitation of Major and Medium Irrigation Schemes including emergency infrastructure rehabilitation works (CF)	273.50	180.67	180.67
Agriculture & Livestock Development Project (CF)	220.00	179.55	179.55
Kiuloya Development Project (CF)	25.00	16.13	16.13
Administration and Maintenance (CF)	1,575.40	1,560.77	1,339.00
Total	3,385.40	2,983.62	2,761.85

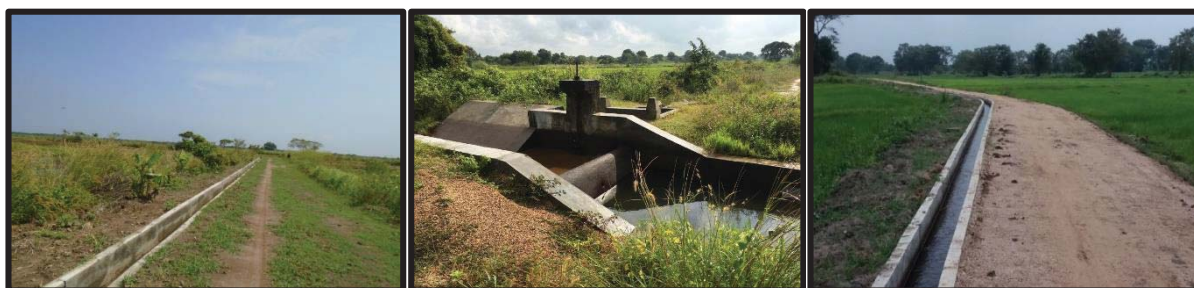
Mahaweli Projects

Mahaweli Consolidated Project

Source of Funds : Domestic Funds
 Total Estimated Investment : SLRM 4,910 (Revised Budget)
 Project Period : 2007-2018

Mahaweli Consolidated Project has been commenced with the objective of increasing income levels of rural communities settled in the Maduru Oya Left Bank area assuring irrigation water supply for their agriculture. Project activities include rehabilitation of irrigation network that was built during 1982- 1986. (a) Maduru Oya Left Bank 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 for the year 2017 SLRM 500 out of which only SLRM 433 has been released by the treasury and its fully utilized during January – December 2017. Further SLRM 61.57 remained as liabilities.



No.	Description	Physical Progress as at 31.12.2017
01	Construction/Rehabilitation of Distrubutory Canal	13 km
02	Construction/Rehabilitation of Field Canal	103 km
03	Improvement of Village Tanks	05 Nos.
04	Rehabilitation of Branch Canal Road (LBR1)	2.5 km
05	Construction/Improvement of Drainage canal	42 km
06	Laying of interlocking Paving at Aralaganwila new Hospital ward complex Road	0.14 km
07	Renovation of buildings	10 Nos.
08	Repairing of Fish Pond at Aralaganwila Seed Farm	01 Nos.

System B Maduru Oya RB Development Project (Malwenna and Mahawelithanna)

Source of Funds : Domestic Funds
Total Estimated Investment : SLRM 935.49
Project Period : 2014-2018

The Mahawelithanna and Malwenna Mahaweli system Units are falls within the upper part of the Singhapura 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 being 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 underutilize lands for irrigated agriculture purpose and 174 ha of homesteads (c) Construction of MahawelithennaTank and related irrigation channels.

Financial allocation for the year 2017 (Revised) was SLRM 150 out of which only SLRM 109 has been released by treasury and its fully during the year. Further SLRM 28.04 remain as liabilities



No.	Description	Physical Progress as at 31.12.2017
01	Construction/Rehabilitation of Distributary Canal	1.5 km
02	Construction/Rehabilitation of Field Canal	7.7 km
03	Construction of Market & Hamlet Road	2.62 km
04	Laying of interlocking Paving for Village Roads	1.16 km
05	Rehabilitation of access road to Causeway	111 m
06	Improvement/Excavation of Drainage canal	7.5 km
07	Construction of Culvert for Village Road	12 Nos.

Redeemaliyadda Integrated Development Project

Source of Funds : Domestic Funds

Total Estimated Investment : SLRM 1,100

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 Household Income and Expenditure Survey of the Department and Census and Statistics. Therefore, five-year investment plan has been prepared to development this DS area by the Mahaweli Authority. 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 for the year 2017 was SLRM 110 and SLRM 79.90 released by the treasury and its fully utilized during the year 2017. Further SLRM 14.48 remain as liabilities.



No.	Description	Physical Progresses as at 31.12.2017
01	Rehabilitation of Roads	2.7 km
02	Rehabilitation of irrigation system	3 km
03	Construction of Agro wells	19 Nos
04	Construction of drinking wells	65 Nos
05	Training Programmes	11 Nos

Rambakenoya Integrated Development Project

Source of Funds : Domestic Funds
 Total Estimated Investment : SLRM 1,086
 Project Period : 2012-2019

Rambaken Oya integrated Development Project is implemented within the Ampara District covering Mahaoya and Padiyathalawa DS Division focusing of reservoir and irrigation development in the area. Main objectives of the project are (a) Rehabilitation of small and medium tanks and anicut (b) Rehabilitation of 70 km of village roads (c) Increased agriculture production of the project area by 50% (d) Provision of Drinking water through construction of wells and (e) Sanitary healthcare improvement programme (Construction of toilets)

Allocation for the year 2017 was SLRM 115 and out of which SLRM 92.68 released by the treasury and its fully utilized during January to December – 2017. Further SLRM 22.32 remain as liabilities.



No.	Description	Physical Progresses as at 31.12.2017
01	Rehabilitation of Roads	1.65 km
02	Rehabilitation of bund and tanks	3 Nos
03	Construction of Agro wells	5 Nos
04	Construction of drinking wells	33 Nos
05	Provision of sanitary facilities	121 Nos
06	Construction of elephant fence	2 Km

Welioya Integrated Development Project -System L

Source of Funds : Domestic Funds
 Total Estimated Investment : SLRM 3,957
 Project Period : 2012-2018

This project is implemented focusing the development in Mahaweli system “L” covering administrative districts of Anuradhapura, Vavunia, Mullative and Tricomalee. This project is aimed to provide homestead, irrigated lands and necessary physical and social economic infrastructure for 6,788 displaced families.

Major project activities are (a) Resettle 6,788 farmer families within 11 villagers (b) Development of 4,187 ha. of agriculture lands (c) Construction and improvement of market and hamlet road network and (d) Improvement of social infrastructure facilities.

Financial allocation for the year 2017 was SLRM 400 out of which SLRM 316.42 released by the treasury and its utilized by 100% during January – December 2017. Further SLRM 28.50 remain as liabilities.



Welioya Integrated Development Project -System L

No.	Description	Physical Progresses as at 31.12.2017
01	Land Marking and survey	2040 lots
01	Rehabilitation of irrigation canals	3.5 km
02	Construction of toilet	300 Nos
03	Construction of roads	25 Km
04	Construction of tube wells	41 Nos
05	Ornament fish production	15 tanks
06	Construction of building	8 Nos

Implementing a mechanism to protect river bank of Mahaweli – Gatambe

Source of Funds : Domestic Funds
 Total Estimated Investment : SLRM 698.97 (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 Center premises in Gatambe, Peradeniya in the Administrative District of Kandy due to severe erosion of the river banks in geological section.

Financial allocation for the year 2017 (Revised) was SLRM 16.5 of which SLRM 15.50 released by the treasury and it's all fully utilized by end of the year 2017. Further SLRM 1.00 remain as liabilities. Construction works in temporary hold due to the environment issue occurred the project and currently IEE in progress.

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

Source of Funds : Domestic Funds
 Total Estimated Investment : SLRM 825
 Project Period : 2015-2018

The project focuses for (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 for the year 2017 (Revised) is SLRM 273.5 of which SLRM 181 released by the treasury and all the funds were fully utilized during this year. Further SLRM 80.09 remain as liabilities.

No.	Description	Physical Progresses as at 31.12.2017
01	Rehabilitation works of major reservoirs related infrastructure works	95% of 8 major reservoirs
01	Rehabilitation of downstream irrigation related infrastructure for the year 2017	90%

Agriculture & Livestock Development Project

Source of Funds : Domestic Funds
 Total Estimated Investment : SLRM 220
 Project Period : Annual (01.01.2017 – 31.12.2017)

The project 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.

Agriculture priorities in 2017 are, Crop diversification, Identification of chili varieties suitable for the Mahaweli L Zone, Programs for producing quality seeds, Rehabilitation programs for fruit trees, increasing use of organic fertilizers, Construction and renovation of agricultural wells in face of drought weather, Programme for domestic economic development and Program to increase water efficiency. 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.

Financial allocation for the year 2017 was SLRM 220 out of which SLRM 179.55 released by the treasury and its 100% utilized during the end of year 2017. Further SLRM 33.52 remain as liabilities.

Agricultural Crop Cultivation

Extent of paddy cultivation in Mahaweli areas recorded 56,310 ha with production of 290,597 mt of paddy production were recorded in 2016/2017 Maha season. The average yield in terms of paddy was 5.13 mt/ha in Mahaweli areas (According to the crop cutting survey results by departments of census and statistic). The extent of paddy cultivation in 2017 Yala season were 42,621 ha with the production of paddy were recorded as 217,011 Mt. The total paddy production for 2016/2017 Maha and 2017 Yala were 507,608 Metric Tons.

The extent of Other Crop Cultivation (Other Field Crops, Fruits, Vegetables and Perennial crops) were approximately 43,414 ha consist 5,960 ha of Soya Bean, 3,369 ha of Maize, 1,204 ha of Big Onion, 588 ha of Chili, 1,572 ha of Black Gram, 593 ha of Cowpea, 629 ha of Ground Nuts. Further 13,130 ha of Fruits and 6,322 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, 78 % of Soya bean, 51 % of Big Onion and 24% of Black gram production during this period.

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 110,950 Cattle population in the Mahaweli areas while produced 28.4 million liters of milk during the year 2017.

During the period, 157 cattle sheds were built and upgrade while 23 breeding centers were established to upgrade genetic potential of dairy cattle population in the systems., 22 mobile milking machines were distributed for the demonstrate farms and further 66 animal clinics and vaccination programs were held.

To promote the fresh milk consumption 21 “Milk Week “ programmes were held during this year and under the capacity building programme 82 training programmes were held among school children, farmers and officers to uplift their capacity.

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. 158,000 Metric Tons of inland fish production reported during the year 2017. In order to improve the fish production, 657,000 of fingerlings were stockinged, 4 breeding centers were constructed further 75 fishing gears were established.

In order to improve the ornamental fish production 82 mud ponds and 18 cement tanks were constructed during the period. Furthermore, to strengthen the fishery communities 7 Fisheries Societies were established during January – December 2017.

Maintenance and Development

Mahaweli Authority of Sri Lanka responsible for the Operation and Maintenance of approximately 10,925 km. of irrigation channel network, 449 large, medium and minor tanks and reservoirs to ensure the efficient irrigation water management and supply for 106,876 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 300,000 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 areas also key activities of MASL. The budget allocation for the year 2017 is SLRM 1,575.40 of which SLRM 1,339 (85%) effectively utilized during this 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 2017 is SLRM 370.81, of which SLRM 285.054 (77%) effectively utilized to perform above activities successfully during January – December.

1,014 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 2017. Further, upgrading 10 farmer organizations to the commercial level during the year 2017 under the guidance of Institutional development division.

Land Alienation

Progress of 1,000,000 land deed programme

System	Target	Progress up to 2017.12.31 Grants/Permit/Long term lease
B	25,600	25,533
C	17,700	26,360
D	2,800	444
H	12,500	8,729
L	8,600	7,816
Moragahakanda	3,600	3,522
Victoria	2,800	3,299
Huruluwew	4,100	2,119
Walawa	18,500	19,683
Rambakenoya	3,800	2,568
Total	100,000	100,073

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 4,406 institutional development programmes, 572 Community development programmes and 82 programmes related to women development during January – December 2017.

Forest & Environment

Forest & Environment Conservation

Environment Division continues to manage and coordinate all environmental activities within Mahaweli areas. Assigning priorities for the “Punurudhaya (පුනරුද්ධය)” the three-year action plan under the national environment programme with the Environment Ministry for the implementation of green concepts practically in all Mahaweli areas.

Annual allocation for the forest & environment conservation activities was SLRM 30.12 of which SLRM 30.2 (100%) utilized during January to December - 2017.

Under the natural resource conservation for the soil conservation 1400 m of on farm soil conservation were completed. During the period, 485,765 plants were produced under the nursery management and plant production programme while 106,736 of trees were plants to increase the tree density of the area. In order to measure and improve the quality of water 19 water quality measurement points and 7 sedimentary measurement points were established during this year.

Furthermore 87 nos of Environmental Education and Awareness programmes were conducted with the participation of school children and to control and manage the intensive alien species

programme was in carried out in 22 tanks in Mahaweli areas. To control the human elephant conflicts of the Mahaweli areas 31Km of elephant fence were constructed and 75Km of elephant fence were maintained during the year 2017.

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 53.93 MW of hydropower. Environmental approval has been given for 16 projects of which 11 projects have been already commenced for commercial operation up to end of 2017 with the capacity of 33.4 MW.

Business Development

Renovation of 07 circuit bungalows with modern furniture has already been completed and 14 bungalows were already available on online booking.



Kothmale



Ruhunuketha



Polgolla

Investments opportunities for Private Sector in Mahaweli Areas

Approvals were granted to 20 new Investment and other development projects in Mahaweli lands during January - June 2017.

<i>Investment Projects</i>	13
<i>Renewable Energy Projects (Solar/ Dendro)</i>	7

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

SME programmes organized with the support of Regional Development Bank (RDB) were able to assist 181 entrepreneurs in Mahaweli areas amounting to SLRM 35.65 under the “Mahaweli Saviya (මහවැලි සවිය)” special loan programme. Under the “Mahaweli Diriya (මහවැලි දිරිය)” special loan programme it was able to assist 11 farmer organizations for their business development accounted SLRM 15.4 during the year 2017.

Facilitate the Convenient Working Environment

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

Approved Carder	4,624
No of vacancies up to 31.12.2017	434
New recruitments in 2017	268
Internal promotion in 2017	212

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 varies subject by the training division of the authority.

	No of participants
Training Programmes relevant to various subjects (21)	87

Legal Enforcement

During the year 2017, 93 court cases were follow up by the legal division under the guidance of Attorney General Department while the head works division involved in 14 case hearings, 03 legal discussions were conducted to solve some of the pending legal cases of MASL. Furthermore 04 new cases have been filed and 2 cases have been completed.

Water Management

The Water Management Secretariat (WMS) ensured the efficient utilization of the water resources of Mahaweli reservoirs. While coordinating with CEB, Water Board, Dept. Irrigation, and Metrology Dept. 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) 31.12 2017
Kothmale	139
Polgolla	
Victoria	551.3
Randenigala	680.9
Rantambe	5.2
Bowatenna	11
Uda Walawa	233.3
Dambulu Oya	10.3
Kandalama	23.2
Kalawewa	78.6
Ulhitiya/ Rathkinda	130.3
Maduru Oya	371.7
Total	2,234.8

Internal Audit

To ensure the effectiveness of the functions of the authority under the Internal Audit division issued 17 audit reports and 21 investigation reports during this year.

Power Generation Capacity of Mahaweli Reservoirs

Reservoir	Total Capacity (Approximately) (MCM)	Maximum Power Capacity (MW)	Power Generation 2016 (GWh)	Power Generation 2017 Jan. – June (GWh)
Kothmale	174	201	280.45	300.48
Polgolla	4	-	-	-
Victoria	722	210	589.37	287.952
Randenigala	860	126	324.15	141.713
Rantambe	7	49	142.80	84.20189
Ulhitiya/Rathkinda	146	-	-	-
Maduruoya	596	-	-	-
Bowathanna	23	40	42.39	66.093
Udawalawa	268	6	15.54	3.23712
Ukuwela (Power Station Only)		40	158.17	154.782
Total	2,800	672	1,552.87	1,038.46

2. FOREST DEPARTMENT

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

Social Forestry and Forestry Extension Division

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 and Extension

Description of the activities	Major achievements
Awareness and extension programs for school children, Community, Government and non government officers	Awareness program-532, Seminars & workshops -77, Exhibitions - 04, Competitions and other program -234 nos were completed.

Description of the activities	Major achievements
Tree planting activities Programmes prepared to direct people in to active participation in tree planting programmes.	203 nos. of programs were carried out. Road side planting-06 nos, Catchment planting & River bank planting-10 nos, Tree planting in schools-104 nos, Tree planting in other Government Institutions -83 nos were completed.
Establish New Farmers' Woodlots. The community adjacent to the selected forest areas were provided with state owned lands upon agreements with providing planting materials and technical knowledge to develop farmers' woodlots with planting timber tree species.	125 ha of Farmers' Woodlots were established during the period under review. Anuradhapura - 22ha, Ampara-10ha, Badulla-15ha, Trincomalee -15ha, Batticaloa-10ha, Monaragala-20ha, Mannar-10ha,Vavuniya 10 ha and Kandy -13ha. 269 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.	400,000 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 programs were carried out by providing seedling and technical assistance for households.	6000 nos. of home gardens were developed & 100 nos. of tree management programs were implemented.(Anuradapura – 240 HG, 04 T.M.; Polonnaruwa-300 HG, 05 T.M.; Ampara -300 HG, 06 T.M; Kurunegala – 300 HG, 05 T.M; Mathale – 325 HG,10 T.M; Nuwara Eliya - 175 HG, 04 T.M.; Badulla - 275 HG, 04 T.M; Kandy - 285 HG, 08 T.M; Gampaha - 300 HG, 03 T.M.; Puttlam - 300 HG, 05 T.M; Rathnapura – 230 HG, 06 T.M; Galle – 280 HG, 02 T.M; Kegalle – 235 HG, 05 T.M; Monaragala -220 HG, 05 T.M ; Batticaloa- 300 HG, 04 T.M ; Vavuniya - 200 HG,02 T.M; Trincomalee – 280 HG, 06 T.M; Hambanthota - 275 HG, 05 T.M; Matara - 280 HG; Kaluthara - 300 HG, 05 T.M; Mannar – 300 HG, 04 T.M; Kilinochchi – 150 HG, 02 T.M; Mulathivu – 150 HG, 02 T.M)





Silviculture and Forest Management Division

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 Corporation (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 2017.

Maintenance of reforested areas

The area which had been restored in 2016, 2015 and 2014 were maintained during this year. Under this activity 9341ha of restored area were maintained.

Maintenance of rehabilitated forests

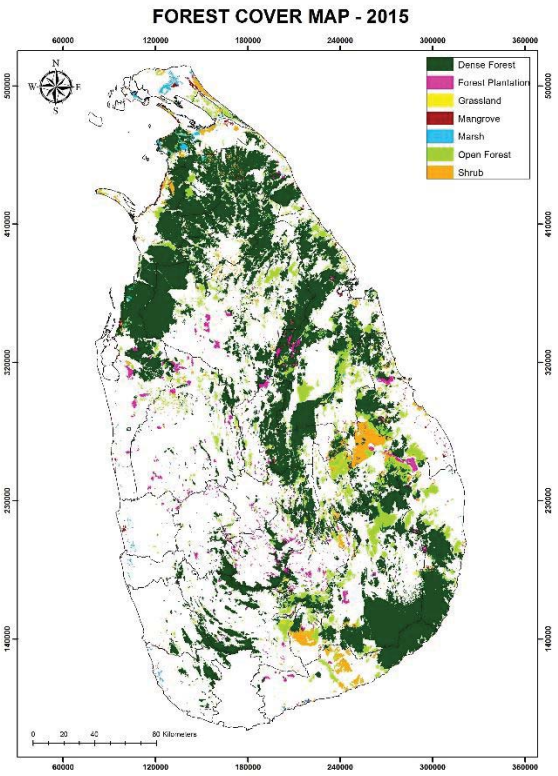
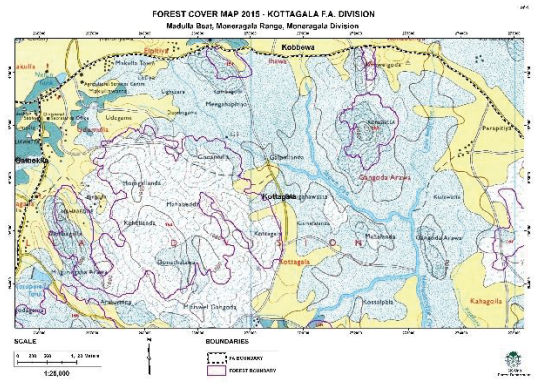
The area which had been rehabilitated using mixture of indigenous species in year 2015 and 2014 were maintained during this year. Under this activity 420 ha of forest plantations were maintained.

Description of the Activity	Major Achievements
Reforestation. Following components are included under the reforestation programme.	
Reforestation of clear - felled plantation sites	Under this activity, Forest Department was able to establish 851.34 ha of plantations during the period under review, in the clear felled plantations. 1,603,414 numbers of seedlings were produced for the above reforestation programme.
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 2017.
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- Weeding, application of fertilizer, fire	657.3, 613.5, and 884.6 ha of forest plantations established during 2014, 2015 and 2016

Description of the Activity	Major Achievements
prevention and vacancy planting were the main activities carried out under the forest plantation maintenance programme.	respectively were maintained in the year 2017.
Pre-commercial thinning	Young forest plantations of 526 ha generally less than 10 years old, were thinned out during 2017.
commercial thinning	676 ha of young forest plantations were thinned under thinning operation in the year 2017.
Post felling inventory	Post felling inventory is done after pre commercial and commercial thinning operations in the forest plantations. 850 ha of plantations were inventorized during 2017.
Coppice Maintenance	92 ha of Eucalyptus plantations were maintained this activity.
Cleaning	Cleaning Operations in 152 ha of forest plantations were carried out in the year 2017.
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.	The area of 9341 ha which had been restored in 2016, 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. 1721 ha of pine plantations are tapped for resin in 2017.	Rs.9,645,387.91 was collected as rental by the forest department from the private sector companies.
Establishment Hilltop Plantations. In Highland areas Some plantations were established in degraded central highlands for the purpose of catchment area protection.	61.4 ha of plantations established in Kandy, Matale, and Badulla district 75 and 42.5 ha of forest plantations established during the years of 2014 and 2015 respectively were maintained under this activity.
Conversion of Pine Plantations in to broad leaves plantations. Selected mature pine plantations established in the past are being converted to broad leaf species. Maintenance of Pine plantations converted in to broad leaves	43.5 ha of pine plantations were converted in to broad leaf plantations in 2017. 147.2 ha and 27.0 ha and 20.4 ha and of broad leaves plantations converted during 2014, 2015 respectively were carried out during the year 2017

Forest Inventory and Geographic Information Systems Division

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, managing database of forest plantation. Forest cover mapping, preparation of digital maps other divisions, Preparation & 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, 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 meter resolution of imagery pixels which quite enhancing the quality and the accuracy of forest cover details.</p>  <p>The map shows the forest cover of Sri Lanka in 2015, categorized into Dense Forest (dark green), Forest Plantation (light green), Grassland (yellow), Mangrove (blue), Marsh (light blue), Open Forest (light green), and Shrub (orange). The map includes a scale bar (0 to 80 Kilometers) and a north arrow.</p>	<p>The identification of the satellite images was done by using 10.5 version of 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 cover of the forests. After the verification process 2,304,799.99 ha of area was estimated as 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. After the final level verification and updating process rearranging of the prepared maps was completed in 2017. Distribution of these maps to Forest Field Assistants, Beat Forest Officers, Range Forest Officers and Divisional Forest Officers will be done in the first half of 2018.</p>  <p>This is a detailed map of the Kottagala Forest Area Division, showing various forest types and boundaries. It includes a scale bar (0 to 20 Kilometers) and a north arrow.</p>

Forest Inventory Activities Full enumeration of plantations released to State Timber Corporation in 2017 were undertaken.	Enumeration of 725 ha of plantations were completed for 636 ha of targeted extent.
Management of FORDATA Database Updating and management of FORDATA database was not undertaken much as it has in-built problems.	Data collected until the last update were stored securely in the database.
National Forest Inventory (NFI) database This was started with the help of UN – REDD programme and the data collected will be stored and processed in a dedicated computer server.	Sample data belongs to 2017 (1 st year of 1 st cycle) were feeded and stored in the database and this will be done continuously with the collection of data.
Survey and Boundary Demarcation Target for the year for Boundary Demarcation was 1,000 Km and Surveying was 400 Km.	1345 Km were completed with the boundary demarcation and 337.67 Km were successfully surveyed.
Management of Geographic Information System Esri ArcGIS software was updated and installed to the computers in the GIS Unit.	Forest cover maps are produced by using the latest version of ArcGIS version, 10.5.

Environment Conservation & Management Division

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 as well as historical cultural, religious and aesthetic values are conserved based on the objectives of the National Forestry Policy.

Main activities performed by this division are listed as follows;

- Management of Sinharaja and Knuckles World Heritage sites ensuring the Conservation of their global values.
- Management of International and National Man and Biosphere Reserves.
- Sustainable management of Reserved and Conservation Forests declared by the Forest Department.
- Grant environmental clearance for essential development activities which are to be implemented within the sites that are under the control of the Forest Department in accordance with the National Environmental Act, by imposing suitable conditions to minimize environmental damage by acting as the project approving agency during environmental assessment process.
- Provide recommendations during environmental assessment process by acting as a member of the Technical Evaluation Committee to minimize the environmental damage.
- Contribute to national economy by improving ecotourism in locations where there is a potential for ecotourism.
- Management and conservation of Mangrove eco-systems.
- Grant permission for video filming in locations under the control of Forest Department.
- Conservation and Management of major eco-systems identified by the National Conservation Review.
- Acquisition of private lands that are located adjoining and amidst forest eco-systems ensuring the protection and sustainability of those forest eco-systems.

- Providing required training to Forest Department staff to improve their capacity to address environment related issues.

Institutional arrangement

This division was headed by a Conservator of Forests. He was assisted by an Assistant Conservator Forests. Both the conservator and Assistant conservator are supported with one Development Assistant and one Development Officer.

All field activities were carried out by relevant Regional Deputy Conservators, Divisional Forest officers and other field staff of the Department.

Annual activities

According to the above 3.2, the following activities were carried out during year 2017.

Maintenance and management of world heritage sites

- Maintenances of all the visitor facilities including nature trails and lodging facilities in Sinharaja, and Knuckles world heritage sites.

Sinharaja World Heritage Site

Actions are being taken to demarcate boundaries afresh by surveying all the private lands and lands that belong to land belongs to Land Reforming Commission (LRC) that are bordered to the Sinharaja World Heritage Site. Maps have been prepared based on the topographical coordinates recorded using G.P.S. technology for Sinharaja Forest including all the closer by forest lands. Actions are being taken to acquire private lands and lands belong to Land Reforming Commission that lies within these boundaries.

Knuckles World Heritage Site

Lands belong to the private sector and LRC which are lies within the demarcated boundary is processing for acquisition.

Conduct awareness programmes and provide guidance to all groups of visitors including school children who visit to world heritage sites.

Management of Conservation Centers

Maintenances and improvement of necessary facilities in Kanneliya, Kottawa, Udawattakele, Oliygankele and Kurulukele conservation centers and Haputale arboretum.

Hurulu Eco-Park

Improvement and maintenances of all the facilities at the Hurulu Eco-Park.

Details of visitors and revenue collected as entry fees.

Details of visitors and revenue collected as entry fees are given in the following table

Udawattakele Forest (Kandy)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
School children	162	1408.69
Local children	654	8530.42
Local adults	18263	476426.10
Foreign children	317	91930.00
Foreign adults	10693	6,148,475.00
Total	30,089	6,726,770.21

Knuckles Forest – (Deenston, Kandy)

Type of visitors	No of visitors	Revenue from entrance fee (Rs)
Local adults	830	10,375.00
Local children	4432	110,800.00
Foreign children	96	91920.00
Foreign adults	1707	917,445.00
Total	7065	1,130,540.00

Knuckles Forest (Pitwalapatana, Matale)

Type of visitors	No of visitors	Revenue from entrance fee (Rs)
School children (Free of Charge)	153	-
School children (Charge)	1460	8760.00
Teachers (Free of Charge)	4	-
Local adults	58790	1,448,600.00
Local children	421	9437.50
Foreign children	14	4060.00
Foreign adults	633	363,975.00
Total	61,475	1,834,832.50

Sinharaja Forest (Pitadeniya, Matara)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
School children (Free of Charged)	1,022	-
Teachers (Free of Charged)	101	-
Local children	785	9812.50
Local adults	10,869	271,725.00
Foreign children	292	73,000.00
Foreign adults	7,046	3,522,500.00
Total	20,115	3,877,037.50

Sinharaja Forest (Kudawa,Ratnapura)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
School children (free of charge)	3,588	-
School children (Charged)	6,205	36,622.00
Teachers (free of charge)	1,078	-
Teachers (Charged)	930	23,250.00
Local children	1,892	23,650.00
Local adults	16,322	397,530.00
Foreign children	238	69,020.00
Foreign adults	7,890	4,536,750.00
Total	38,143	5,086,822.00

Hurulu Eco- Park (Habarana, Polonnaruwa)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
Local children	44	1721.74
Local adults	1721	134,686.94
Foreign children	151	98,478.26
Foreign adults	5493	7,164,782.62
Total	7409	7,399,669.56

Kottawa Forest (Galle)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
School children (Free)	282	-
School children (Charge)	112	672.00
Local children	49	612.50
Local adults	1197	29,925.00
Foreign children	21	6,090.00
Foreign adults	516	296,687.00
Total	2177	333,986.50

Kanneliya Forest (Galle)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
School children (free of charge)	8412	-
School children	4493	26,958.00
Local children	798	8,312.50
Local adults	47,967	1,199,175.00
Foreign children	150	43,500.00
Foreign adults	1821	1,123,550.00
Total	63,641	2,401,495.50

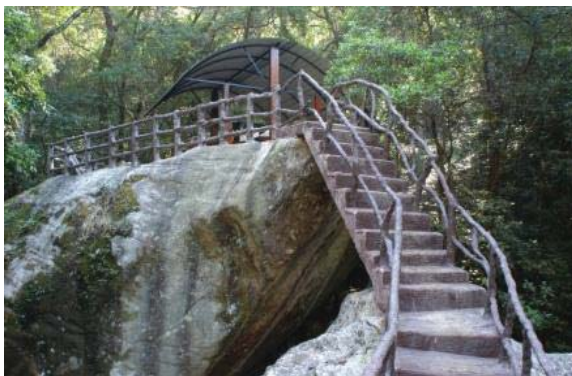
Makandawa Forest (Kegalle)

Type of visitors	No of visitors	Revenue from entrance fee(Rs)
School children (Free of Charge)	244	-
Local children	5	71.89
Local adults	1,893	54,452.20
Foreign children	37	12,338.50
Foreign adults	973	864,593.50
Total	3,152	931,456.09

Altogether, an income of Rs. 28,791,162.77 was earned during the year 2017.

Revenue from filming inside forests

Revenue earned from video filming inside the Forest Reserves managed by the department was amounted to Rs. 710,350.00 in 2017.



Environmental Impact Assessment (EIA)

Forest Department was appointed as the Project Approving Agency (PAA) since 2004 to assess environmental impacts of various development projects that were implemented in state forest lands. Accordingly, 136 project proposals were submitted to the Forest Department up to 2017 to obtain environmental clearance. Out of those proposals, the Forest Department has been appointed as the Project Approving Sub Agency for the Proposed 7 various projects.

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.

In addition, the Forest Department also act as a representative of technical evolution committee with respect to 15 various recommended projects.

Environmental Information Management System (EIMS)

Using data in the National Conservation Review which was carried out by collecting information on biodiversity, soil, water etc of the natural forests, information was provided to the students, researchers and individuals of various private and state sectors.

Forestry Research, Education and Development Division

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 the 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 31,417 books, 587 reports and 25 titles of journals.

Description of the Activity	Major Achievement
Establishment of pilot scale fuel wood plantations	27 ha of fuel wood plantations along with 3 ha of Research experiments were established.
Maintenance of research trials	Local species domestication Plantation establishment and Management Tree improvement research program Non-timber forest products Natural Forest management Seed orchard maintenance
Seed collection programme	Eucalyptus – 15.25 kg of seeds of <i>Eucalyptus grandis</i> and <i>Eucalyptus microcorys</i> were collected in Badulla and were distributed for the Department and plantation companies. Sandalwood and Khaya– 5 kg of Sandalwood seeds and 1.3 kg of Khaya seeds were collected.
National Forestry Sector Research Committee	Four meetings were held during the year. 23 new research proposals were appraised and permission was granted to carry out research. In addition, extensions were granted for 21 ongoing research projects.

Performance of the Forestry Education Divison

Sri Lanka Forestry Institute (SLFI)

Following Training Programs were conducted in Sri Lanka Forestry Institute

No	Name of the Course	Target group	Participants	Dates
01	Examination relevant to the training Course Conducted for the officers who followed Forest Diploma Course before 2012 on 06 employability modules.	Officers who followed the Forest Diploma Course before 2012	154	28.01.2017
02	Leadership training programme	Trainee Rang Forest Officers of the Forest Diploma Course – 2017 and officers of the S.L.F.I.	60	05.04.2017
03	First aid training Programme	do -	50	03.05.2017 04.05.2017
04	Training Course for Departmental Dendrology Test (Initial stage)	Forest Field Assistants	275	19.07.2017
05	Awareness Programme for the National Programme on Forest Survey.	Trainee Range Forest Officers of Forest Diploma Course – 2017 and officers of the SLFI	50	30.11.2017
06	Written test relevant to Departmental Dendrology Test (Initial Stage)	Forest Field Assistants	265	09.12.2017

Short term Training Programs for other Institutions

01.	Initial Training Programme on Silviculture	Cadet officers of Sri Lanka Administrative Service - 2015	38	06.04.2017 08.04.2017	03
02.	- do -	- do -	34	20.04.2017 22.04.2017	03
03.	- do -	- do -	44	27.04.2017 29.04.2017	03
04.	- do -	Cadet officers of Sri Lanka Administrative Service (Limited Exam)	28	24.05.2017 26.05.2017	03
05.	- do -	Cadet officers of Sri Lanka Administrative Service - 2016	36	17.07.2017 21.07.2017	05
06.	- do -	- do -	35	24.07.2017 28.07.2017	05
07.	- do -	- do -	44	08.08.2017 12.08.2017	05
08.	Awareness Programme on Silviculture	Diploma on Plantation Management and Agriculture Engineering Science Aquinas Institute	70	21.06.2017	01
09.	Training Programme on Forest Conservation and Management	Officers of Mahaweli " C " - Zone	23	06.11.2017 08.11.2017	03

NVQ training programmes

National Vocational qualification (NVQ) activities of SLFI.	Validation of lesson plans relevant to NVQ 5 & 6 courses
	Lesson plans are being developed for NVQ 3& 4 courses according to NVQ
	3&4 National qualification Standards with the participation of SLFI & UNIVOTEC
	Accreditation of NVQ 05 course by TVEC.

Other activities of the division

Publications	<ul style="list-style-type: none"> Leaflet on impact of Acacia species on pollinators. Leaflet on Invasive alien Species.
Training programmes	<ul style="list-style-type: none"> A training workshop on tissue culture was conducted for A/L teachers of Kurunegala education zone was conducted at the request relevant authorities.
Library	<ul style="list-style-type: none"> Books, Journals of the value Rs. 434,056.00 were purchased for the library. 10 titles of books and 08 titles of journals were purchased during this year. 125 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.38 was published

Forest Protection and Law Enforcement Division

The following are the main activities of Forest Protection and Law Enforcement Division.

- i. Enforcement of the forest ordinance.
- ii. Enforcement of the National Heritage Wilderness Area Act.
- iii. Declaration of forest areas under the forest ordinance.
- iv. Regulation of functioning of timber based industries and timber transport.
- v. Physical protection and regulation of state forest resources.
- vi. Administration of forest department fund.
- vii. Purchase of uniform items for forest officers.
- viii. Regulate the export of wood and non-wood forest products.

A total of **3887** forest offences were reported in year 2017 which includes illicit felling, forest clearings, illicit timber transports, gem mining, illicit possession of state timber and non registered private timber enterprises.

In 2017, one Extra Ordinary Gazette was issued for declaring forests. One Conservation forest was declared.

Out of this, **232** illicit possession offences were inquired by the Department and the rest of **3655** offences were taken to courts which involve **4360** individuals. In **36** cases the offenders were imprisoned while on **20** cases they were severely warned and in **2138** cases the offenders were fined for **Rs.44,947,517.36**. The value of the confiscated, **24** Lorries, **01** Dozer, **01** Car, **01** Cab, **01** Excavator, **42** Two wheel tractors, **18** Tractors, **02** Three wheeler, **07** Motor Bicycle and **30** Foot cycles were **Rs.65,384,050.00**.

Performance of the Flying Squad

Name of the Unit	Number of Detections	Volume of Timber (m ³)	Value of Timber (Rs.)	Amount of Fined (Rs.)
Head office Flying Squad	01	Wallapatta – 11.257kg & Kokun bark – 6.348kg	562,914.60	80,000.00

Timber Checking Stations

Timber Checking Stations at Dambulla, and Pasyala were in operation during the year 2017.

Private Timber Based Industries

298 Saw mills, **494** Timber sales depots, **644** carpentry workshops, **597** furniture shops, **15** Timber seasoning and processing factories, **687** Mobile timber saw mills and **170** Firewood sale outlets were newly registered during the year 2017

Total number of registered private timber enterprises is increased to **25909** at the end of 2017.

Training Programs

The following awareness and training programs were carried out during the year.

- i. **22** awareness programs conducted for **658** Police Officers.
- ii. **53** awareness programs conducted for **1991** officials attached to the Divisional Secretaries.
- iii. **31** awareness programs conducted for **672** Forest Officers.
- iv. **441** awareness programs conducted for **19160** persons in other external groups.
- v. **43** Fire Arm trainings were conducted for **1235** forest officers.

Reward Payments

In 2017 rewards of **Rs 5,790,114.50** were paid among **1510** officers and **04** informers for the detection and provision of information against forest offences, where the offenders were convicted by the courts.

Financial Performance of the activities.

In 2017, total allocation for the activities carried out under Forest Department fund was

Rs. 29,500,000.00 and Expenditure of the Diets and Uniforms was **Rs.4,198,626.52.00** from the allocation **Rs. 4,400,000.** During year 2017, financial progress of the Forest Department fund was **85.51 %** and the financial progress of the Diets and Uniforms was **95.42 %**

Planning and Monitoring Division

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, construction and maintenance of buildings and acquisition of furniture, office equipments machinery plants, machineries and equipments. In addition, forest land use matters related to permanent releasing or issuing on temporary basis are conducted including overall handling of vehicle fleet in terms of funding repairing and maintenance.

Main Activities	Brief Description	Performance 01.01.2017 – 31.12.2017
Construction of new buildings island wide.	Site identification Calling for tenders Constructions	DFO office - 01 RFO office - 03 RFO quarters - 04 BFO office & quarters - 07 Circuit Bungalow - 02 Nursery building - 01
Repairing and maintenance of forest buildings island wide.	Building identification Calling for tenders Repairing	RDCF office - 01 RDCF quarters - 01 DFO office - 13 DFO quarters - 06 Forester quarters - 04 RFO office - 27 RFO quarters - 22 BFO quarters - 64 Circuit Bungalow - 11 Research centers - 01 Timber checking station – 01
Purchase of office equipment	Office equipment identification Calling for tenders Purchasing	Laser Printers - 06 Laptops - 04 UPS - 12 32 GB Pen drives - 22 Air conditions – 08
Purchase of office equipment (ESCAMP)	office equipment identification Calling for tenders Purchasing	Purchase of office equipment for offices.

Performance of the Department Budget

Object Code	Description	Provisions (Rs.) 2017	Expenditure (Rs.) 2017	Savings (Rs.)
	Recurrent Expenditure	1,339,784,000.00	1,293,639,704.13	46,144,295.87
	Personal Emoluments	1,207,900,000.00	1,165,325,497.99	42,574,502.01
	Other Recurrent	131,884,000.00	128,314,206.14	3,569,793.86
	Capital Expenditure	885,700,000.00	883,997,675.67	1,702,324.33
	Rehabilitation and Improvement Capital Assets	62,000,000.00	61,720,017.40	279,982.60
2001	Buildings and structures	50,000,000.00	49,999,226.50	773.50
2002	Plant, Machinery and Equipment	3,000,000.00	2,722,658.05	277,341.95
2003	Vehicles	9,000,000.00	8,998,132.85	1867.15
	Acquisition of Capital Assets	130,700,000.00	129,678,924.86	1,021,075.14
2102	Furniture and Office Equipment	8,000,000.00	7,939,394.13	60,605.87
2103	Plant Machinery and Equipment	2,500,000.00	2,477,144.00	22,856.00
2104	Buildings and Structures	80,000,000.00	79,994,854.06	5,145.94
2105	Land and Land Improvements	38,200,000.00	38,064,952.67	135,047.33
2106	Software Development	2,000,000.00	1,202,580.00	797,420.00
	Capacity Building	5,000,000.00	4,999,045.99	954.01
2401	Staff Training	5,000,000.00	4,999,045.99	954.01
	Other Capital Expenditure	688,000,000.00	687,599,687.42	400,312.58
2502	Investments	688,000,000.00	687,599,687.42	400,312.58
	Total Project 01 Expenditure	2,225,484,000.00	2,177,637,379.80	47,846,620.20

3. COAST CONSERVATION AND COASTAL RESOURCE MANAGEMENT DEPARTMENT

The economic importance of the coastal area has increased further with the human settlement and the development of coastal structures in 1920s. It emphasis to control coastal erosion mainly focussed on seeking engineering solutions. As a result of that Coast Protection Unit was established in 1963 under the Colombo Port Commission and it was transferred to the Ministry of Fisheries in 1978. 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. Further coastal stabilization projects are being allocated the highest expenditure out of the department’s annual budget to conserve the coastal zone of the island. Management of shoreline by effective coastal stabilization schemes contribute to the sustainable developments. In 1981, parliament enacted the Coast Conservation Act No. 57 of 1981, which is "an act to make provision for a survey of the coastal zone and the preparation of a Coastal Zone Management Plan; to regulate and control development activities within the coastal zone; to make provision for the formulation and execution of schemes of work for coast conservation within the coastal zone; to make consequential amendments to certain written laws; and to provide for matters connected therewith or incidental thereto". Accordingly the Coast Conservation Division was upgraded to Coast Conservation Department (CCD), in 1984 and the administration, control, custody and management of the coastal zone have been vested with Director, Coast Conservation. Amendment to the Act was passed in 1988 as the Coast Conservation (Amendment) Act No. 64 of 1988. As the requirement of the Coast Conservation Act, first Coastal Zone Management Plan (CZMP) prepared by the CCD, was adopted by the Government and implemented as the Coastal Zone Management Plan 1990. After that two revised CZMP were implemented since 1997 and 2004.

Department was further upgraded in July, 2009, appointing the first Director General, Coast Conservation. It was enacted and the department name changed to the *Department of Coast Conservation and Coastal Resource Management* by the amendment of act No. 49 of 2011. As the requirement of amendment of act in 2011, a new CZMP was prepared and it is currently being in the process of approval to implement. Department is administrated under the Ministry of Mahaweli Development and Environment now.

Specifically CC&CRMD’s objectives are to;

- Improve status of the costal environment.
- Develop and manage the coastal zone
- Safeguard coastal infrastructure & risks reduction of coastal communities.
- Improve the living standards of coastal communities and coastal resource users.
- Promote and facilitate economic development based upon coastal resources.

Major Activities performed in 2017

Shoreline Management

Construction of coast protective structures

Sri Lanka is an island situated in the Indian Ocean is greatly influence by island location. In addition, development within coastal areas has increased interest in erosion problems. It has led to major efforts to manage coastal erosion problems and to restore coastal capacity to accommodate short-term and long-term changes. South west coast of Sri Lanka is the most erosive coast as the experience in last three decades, mainly due to the capacity of littoral drift is higher than the

sediment supply rate from rivers to beaches and the straightness of the coastline and anthropogenic effects. Therefore CC&CRMD still give priority to control erosion in southwest coast. Address to the coastal erosion, hard solution and soft solution are used. But hard coast protective structures such as revetments, groynes and breakwaters were only introduced in Sri Lanka until recent past due to financial viability. At present, sand nourishment schemes and other soft solution methods are also being introduced for suitable places. With these coast protection schemes, developments of adjacent shore front lands are constructed as beach parks and path ways.

Details of constructed hard coast protective structures are as below.

Revetments:

250m Revetment at Hadiwatta, Habaraduwa in Galle.

Total Cost: Rs. 7,021,274.42

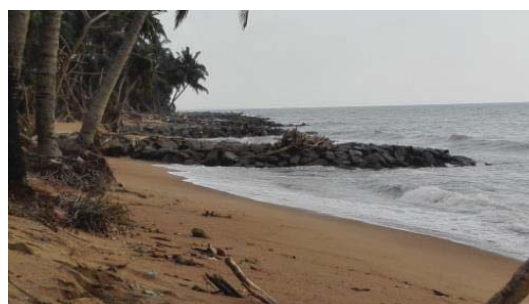


Revetment at Hadiwatta, Habaraduwa after completion.

Groyne Series:

02 Nos. of 40m groynes at Kalutara, 11 Nos. of 40 m Groyne series at Thalawila North, 12 Nos of 20 m Groynes at Muthupanthiya and 02 nos of 50m Groynes at Kappaladiya.

Total Cost is Rs. 98,766,551.65



02 Nos. of 40m groynes at Kalutara

Breakwaters:

Two numbers of 80m long breakwaters in Mandathive Jaffna and one number of 80m long breakwater in each of coastal stretch of Modarawella, DuwaWtta - Marawila, Mudukatuwa and Egodaunya - Moratuwa

Total Cost :Rs. 91,428,066.94



80m long breakwater in Mandathive Jaffna

**Projects, construction continued to 2018,
are as follows.**

Breakwaters at Kolinjadiya (100m), Marawila –
Duwawatta (80m), Kappaladiya (50m), Marawila
(80m)

Total expenditure in 2017 –Rs.60,322,052.68



breakwaters at Kolinjadiya

Other Constructions

Constructions of Weligama Beach Park - Stage 2 & Stage 3 & Wellamadama Beach Park and
1200m Walkway at Akurala completed in 2017.

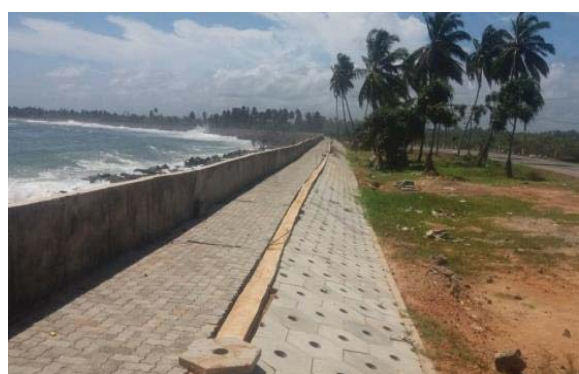
Total Cost is Rs. 80,368,382.30



Weligama Stage 3



Wellamadama Beach Park in Construction stage



Walk way Akurala



Weligama Stage 2

Total expenses for Construction of coast protective structures in 2017 - Rs. 337,906,328.68

Emergency coast protection

This short term solution against coastal erosion may be adopted to curtail the emergency situation where as the need to protect life and property from emergency situation. Coast Conservation & Coastal resource Management department handle emergency coastal protection depending on the site specific problems. In that sense, public properties are prioritized.

Coastal stretches at Modarawella- Marawila, Chilaw, Muthupanthiya, Illanthandiya, Barudalpola, Norochchulai and emergency due to opening of Kalu ganga river mouth at kalutara were protected under emergency situation and sand bar removal at Madu ganga out let have also been carried out in 2017.



Emergency protection – Illanthadiya



Norochchulai

Total expenses for emergency coast protection work in 2017 is Rs. 28,107,120.66

Maintenance of Coastal Protective Structures and Buildings

Existing coast protective structures are monitored and rehabilitated with necessary improvements as per the requirement of the department annually. In addition to that, annual rehabilitation work of office buildings is also carried out under this programme.

Maintenance of 20m existing gabion wall in Madilla, Tangalle and 5 Nos. of groyne series at Kalido beach, Kalutara have been completed. Repair works in Information and Dissemination Center at Godawaya, Coastal Environmental centers at Kalpitiya and Maduganga, Regional offices Matara, Galle & Moratuwa have been completed.

Total Cost is Rs. 13,383,031.55



gabion wall in Madilla, Tangalle



5 Nos. of groyne series at Kalido beach, Kalutara

Strengthen of on 400m emergency revetment at Marawila is continued to 2018 year.

Total expenditure in 2017 –Rs.4,084,519.95

Total expenses under Maintenance of Coastal Protective Structures and Buildings programme in 2017 - Rs. 17,467,551.50

Sand nourishment as soft solution for coastal protection.

Beach nourishment is an adaptation technology primarily used in response to shoreline erosion; It is a soft engineering approach to coastal protection which involves the artificial addition of sediment of suitable quality to a beach area that has a sediment deficit. As per coastal engineering concept, it is 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 zone in Sri Lanka, expenses for the sand nourishment (at one time or repeated nourishments) is feasible compare to the values of protecting lands and properties with other coast protective solutions.

According to the cabinet decision, sand nourishment at Marawila beach has been completed in two stages with 800,000 m3 of offshore sand. Total estimated cost for two stages was 800 million.

Stage 1 was completed in 2016 and stage 2, was completed with 400,000 m3 of sand with the *cost of Rs. 341, 223,393.35 in 2017*



Sand nourishment at Marawila

Coastal Engineering Investigations

Main objective of this programme is to initiate solutions and support where coastal problems take place. Relevant studies and investigations, especially for coastal 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 are the major activities. In addition, refreshing, sharing knowledge and experience in coastal engineering programmes are also conducted under this programme.

Work performed in Coastal Engineering Investigations

Field work was completed in two bathymetric surveys in Mount Levinia to Bentota and Bentota to Galle coastal stretches. Final report and data yet to be submitted.

Sediment transport study in East coast for Data collection report has been submitted. Stage 1 of the study was completed.

Marawila - Thalavila , Duwawatta, Muthupanthiya, Kappaladiya, Mandathive, Hadiwatta, Alankaduwa & Kalido beach coastal protective designs were completed and department web site was updated.

Knowledge sharing and updating programme of Coastal Engineering Symposium -2017 under the topic of “Save Our Coast” in August and Total Station/ RTK – DGPS (Real Time Kinematic-Digital Global Positioning System) training programme in June for Engineers and field officers were held.

Total expenses was Rs. 15,457,904.00

Coastal water quality monitoring program

5 year water quality monitoring programme field work for 06 locations, where Mount Lavinia, Nilaweli, Arugambay, Polhena, Unawatuna and Hikkaduwa coastal stretches and processing of data were completed final report yet to be submitted.

New locations, Wattala, Morawala and Eththukala were identified and collection of field data is now in process.

Total expenses was Rs. 1,280,312.98



water quality monitoring programme

Total expenses during the period for Coastal Engineering Investigations programme was Rs. 16,738,217.28

Coastal Resource Management Coastal Zone Management Programme

Increasing the economic value and demand for development activities of the coastal zone are also being rapidly getting higher. As a result of that, Environmental pollution, habitat degradation etc. are under threat in the coastal zone. Therefore Coastal zone management program is implemented annually to balance the environment and the development activities within the zone.

Implementation of green coastal belt, beach access program, demolition of unauthorised structures, permit procedure with environmental impact assessment, identification of conservation and affected areas and identification of special management areas are being carried out to cater the sustainable management of the zone under this programme.

Implementation of Coastal Green Belt

Green coastal belt has been implemented by planting coconut, Pandunas, Mudilla, mangrove and other plants suitable for coastal environment in Hambantota/Kirinda, Matara/Dickwella, Thalalla, Dondra, Weligama, Galle, Gin oya mouth, Kudawa, Wattala and Akurala coastal stretches. Total no of plants 18,395.

Total expenditure was Rs. 7,719,896.57



Implementation of Beach Access

Field survey of identification of beach access has been completed in Hambantota and Matara & now it is being continued in Galle district. Construction of beach access roads in Kandakuliya and Wadduwa completed



Total expenditures was Rs. 1,430,623.49

Demolition of unauthorized Structures and beach cleaning programmes

Implementation of this program is difficult due to social factors.

203 demolition orders issued for unauthorised constructions in different coastal stretches. 71 permanent & temporary unauthorised structures in tangalle/ Amanwella, Matara/weligama, Galle/Unawatuna & Ahungalle, and Colombo/MountLevinia districts were demolished.

Expenses under this programme was Rs. 423,200.00



Demolition of unauthorized Structures

16 Nos. of Beach cleaning programmes implemented during the year 2017. In addition to that special beach cleaning programme in all coastal districts were implemented for the world environmental day.

Expenses under this programme was Rs. 2,533,955.70



Beach cleaning programme- Galle

Permit Procedure

1766 permits have been issued for development projects in the coastal zone. 12 Environmental Impact Assessment (EIA/IEE) has been completed. Development of Software for the permit procedure is now in process.

Expenses under this programme was Rs1,831,802.08

Total expenses during the period for Coastal Zone Management programme is Rs. 22,749,044.86

Environmental Education Programme

Main aim of this programme is to improve the awareness of the coastal zone management and its regulations to the stakeholders such as school children, government officers and public in the coastal zone in Sri Lanka. In addition to that, education programmes about coastal zone management are conducted in country wide schools of Sri Lanka.

Art and debate completions were done among school children in Negambo, Southern province, Kalutara and Chilaw for World Environmental day.

8 awareness programmes conducted for government officers, school teachers & children in Puttalam, Kinnaya, Kalutara, Ambalantota Wattala, Kalpitiya, Weligama, Kalutara, Mulathive, Jaffna and Naththandiya. Public awareness boards were installed in Rakawa & Negambo in 2017.

Total expenses under Environmental Education programme was Rs. 1,993,945.75

Participatory Coastal Zone Restoration and Sustainable Management in the Eastern Province

The donor agency of this project is Global Environmental Fund (GEF) and International Fund for Agriculture Development (IFAD). Project started in 2009 and Project Management Unit (PMU) is established at Coast Conservation & Coastal Resource Management Department aim of this project is to restore globally important ecosystem affected by Tsunami disaster in 2004. Considering the high vulnerability due to Tsunami project implementation was done in the eastern province. To achieve the goal, project activities were done in five theme,

- Ecosystem restoration, conservation & management
- Climate change adaptation & disaster risk reduction
- Livelihood & ecotourism development and awareness
- Education & community coordination.
- In addition preparation of CZ& CRM plan and capacity development of staff was also done by this project

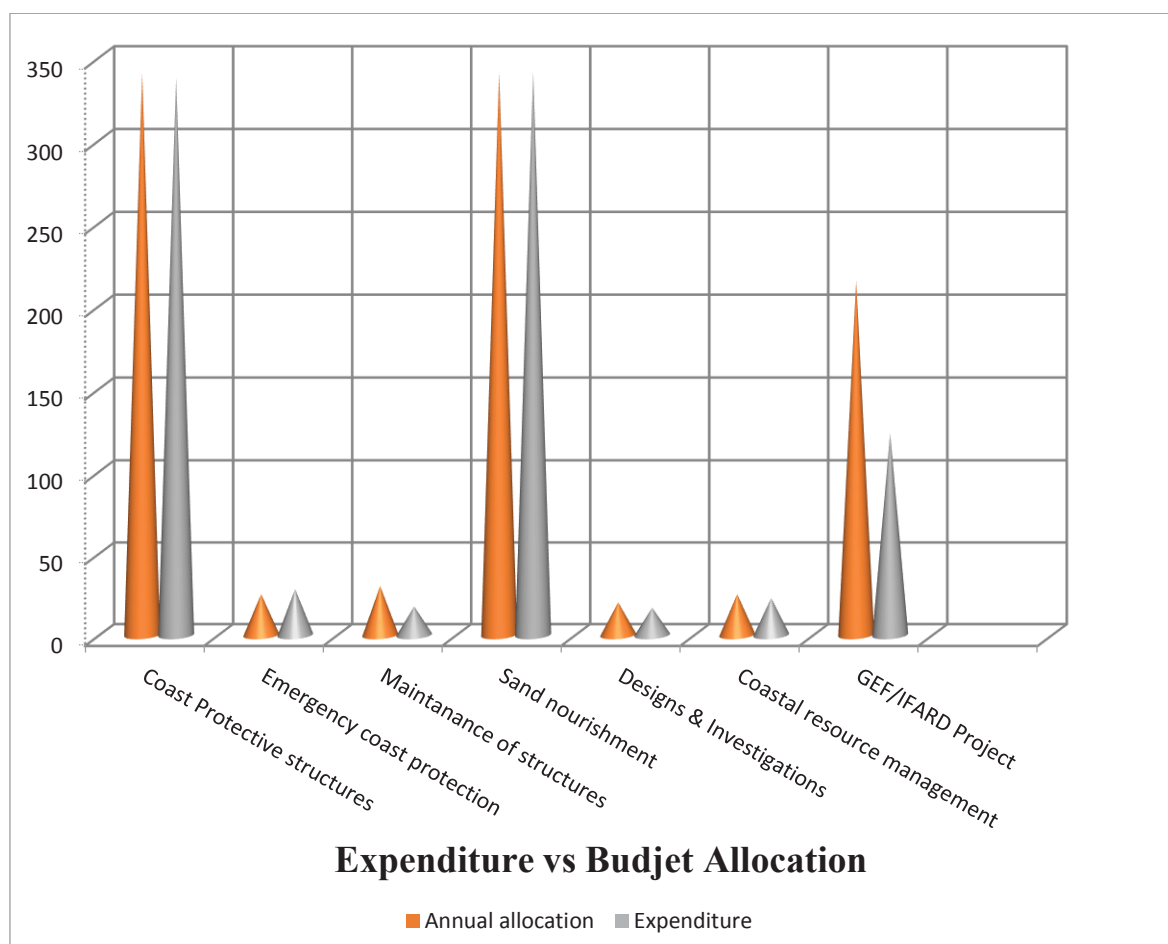
Since the project has to be completed in this year, completion of the previous activities and construction of Coastal Resource Management Centre were done. the project has completed in September,2017



Coastal Resource Management Centre -Trincomalee

Total expenses under this programme was Rs. 123,215,572.12 in 2017.12

Financial performance of Major activities vs the budget allocation January 01, to December 31, 2017



Activity	Annual allocation (Rs. Mn)	Expenditure (Rs. Mn)
Coast Protective structures	340.67	337.9
Emergency coast protection	25	28.1
Maintenance of structures	30	17.5
Sand nourishment	341.2	341.2
Designs & Investigations	20	16.7
Coastal resource management	25	22.7
GEF/IFARD Project	215.3	123.2

4. CENTRAL ENVIRONMENT AUTHORITY

The Central Environmental Authority (CEA) is one of the main implementing arm of the national environmental policy, operating under the purview of the Ministry of Mahaweli Development and Environment. The CEA was established in 1981 under the National Environmental Act (NEA) No. 47 of 1980 and on the recommendation of the CEA, the NEA No 47 of 1980 has been amended in 1988 and 2000. The CEA has completed its' thirty six years' service by 2017.

This performance report contains the performance of the CEA including 09 Provincial Offices, 14 District Offices and special Projects implemented by the CEA during 2017. This report provides a better view of the works carried out by the Authority during the corresponding year.

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

Vision

A Clean &Green Environment

Mission

Flagship of the Nation in Protecting and Managing the Environment by Coordination, Public Participation, Enforcement, Appropriate Technological Interventions, Education and Awareness

Summary of the Financial and Physical progress

Capital and Recurrent budgets

Budget	Allocation for 2017 (Rs. Mn.)	Progress as at 31.12.2017 (Rs. Mn.)	Financial Progress as a %
Capital Budget	57.85	52.85	91.4%
Recurrent Budget	857.86	737.89	86%

Special Projects Undertaken by the CEA

Name of the Project	Allocation for 2017 (Rs. Mn.)	Progress as at 31.12.2017 (Rs. Mn.)	Financial Progress as a %	Physical progress as a %
Pilisaru” National Solid Waste Management project	290	223.56	77%	80%
National Environmental Pioneer Program (EPP)	20	19.45	97%	97%
Strengthening of Laboratories of CEA	10	9.03	90%	91%
Education Awareness and Green Awards	17.15	13.89	81%	84%
JICA Project	31.5	31.5	100%	98%
EDCF Project	553.5	167.78	30%	30%
Total	922.15	465.21	50.45%	80%

“Punurudaya” Environmental Protection Programme

Activity	Financial Allocation for 2017 (Rs.)	Financial progress 2017/12/31 (Rs.)	Financial progress as a %	Physical progress as a %
Strengthening National Environmental Pioneers Programs (EPP)	11,200,000	11,051,373.58	99	100
Media Coverage for environmental programmes under Pilisaru project	5,000,000	4,950,850	99	100
Preparation of Zoning plan for Welioya Sub Watershed	552,625	356,230.52	65	100
Development of environmental section in school libraries	1,000,000	992,823.26	99	100
Implementation of new polythene regulations	20,000,000	20,000,000	100	100
Foreign tour for Environmental Pioneers	1,800,000	1,800,000	100	100
Total	39,552,625	39,151,277.36	99	100

Environnemental Pollution Control Division

The main legal tool for the pollution control of industrial activities is implementation of the Environmental Protection License scheme. All prescribed activities have to obtain EPL for operation of the each activity. Investigation of public complaints, evaluation of pollution control systems adopted by industrial activities (by wastewater analytical reports, noise & vibration measurements etc.) are also carried out by EPC unit.

Physical progress of the activities carried out during the year 2017

- Investigation and provide solutions for the complaints regarding the industrial activities for BOI and non BOI industries.
- EPC unit has conducted 10 training programmes for officers of Local Authorities and CEA officers respectively.
- Compliance monitoring is very important and essential for industries to maintain the standards and compliance of the EPL conditions. Therefore comprehensive monitoring plan was prepared by EPC unit to monitor high and medium polluting industries island wide. The implementation of the monitoring plan was conducted jointly with provincial and district offices.
- The CEA is being conducting an annual registration programme for environmental consultants and analytical laboratories to obtain quality service from them. Accordingly, 28 laboratories and 45 consultants were registered for the year 2017/2018 to provide better consultancy/ laboratory service for industrialists. The lists of laboratories and consultants were printed and uploaded to the CEA website for the use of industrialists.
- A Committee was formed to determine the siting of High and Medium Polluting Industries outside the Industrial Estates and Export Processing Zones.

85 chemical sector industries were monitored and two awareness workshops were conducted for the introduction of Global Harmonized System (GHS) for chemical labeling and handling.

Presidential Environmental Awards / National Green Awards Program

The “Presidential Environmental Awards 2017” ceremony was successfully held at the Bandaranaike Memorial International Conference Hall on 16th October 2017 under the patronage of his Excellency the President, Honorable minister of Environment and other distinguished guests. More than 1500 guests were participated in the event. The purpose of the programme is to provide recognition for the individuals, institutions, organization and activities which have made unique contribution to the field of environmental conservation and protection.



Presidential Environmental Awards 2017 at BMICH

Presidential Environmental Awards were awarded under the Social, Cultural and Institutions Sector and 06 Gold Awards, 08 Silver Awards, 13 Bronze Awards & 17 Merit Awards were awarded as National Green Awards under Industries and Business Sector for the higher performance.



Presidential Environmental Awards 2017 at BMICH

Lab Services Unit

All technical and management requirements relevant to get the accreditation for CEA laboratory were completed and were submitted to the Sri Lanka Accreditation board (SLAB) on conformity assessment for processing in February 2017.

Air Resource Management and Monitoring Unit (ARM&M) and Water Quality monitoring Unit are sub sections of the Laboratory functions. Progress of activities and duties performed by those units are briefly explained below.

Air Resource Management and Monitoring Unit (ARM&M)

(a) Source Emission Control standards

The Central Environmental Authority has finalized a set of regulations for controlling source emissions and publishing of the gazette is pending.

(b) Amending of the National Environmental (Noise Control) Regulations

The CEA was able to determine scope of new regulation and the process of amending regulations is ongoing on expecting completion of the task in 2018.

(c) High Way Noise Control Regulations

The CEA has finalized a new set of regulations; the National Environmental (High Way Noise Control) Regulation and publishing of the gazette is pending.

(d) Ambient air quality monitoring

During 2017 the ARM&M unit could be able to collect and analyze 107 samples of SO₂ and NO₂ and 55 samples of PM₁₀ at Colombo port.

(e) Indoor air quality monitoring

Indoor air quality monitoring was carried out at six schools in Kandy.

(f) Functions as National Implementation agency for Malé programme

The Central Environmental Authority is the National Implementing Agency for the implementation of Malé activities of Declaration on Control and Prevention of Air Pollution and its likely Trans boundary Effects for South Asia. The CEA participated and actively contributed sixth Taskforce Meeting and the second expert group meeting conducted by the Malé Secretariat at Katmandu, Nepal.

(g) Providing technological guidance & assistance for handling complaints

The Air Resource Management and Monitoring unit involves issuing compliance monitoring reports for air quality and noise levels for issuing EPL, investigating complaints, regular monitoring on commercial basis and legal requirements.

Water Quality Monitoring Unit

This Unit has been assigned to monitor the quality of industrial effluents in western province as well as the monitoring of the selected water bodies in several provinces. The laboratory could be able to collect and analyzes 968 water and wastewater samples for different parameters in 2017. Mainly monitoring surface waters and ground waters were carried for regular trend analysis. Total 9321 tests were carried out for different parameters.

(a) Monitoring of ground water and industrial effluent in Gampha district

The EPC division of CEA has initiated a project on ground water quality monitoring in Gampha district with the help of Water Environmental Partnership Association (WEPA) in Japan. Under this, the quality of ground water in Gampha district has been carried out by the central laboratory.

Waste Management Division

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

- a) Implementing the regulations related to Hazardous Waste Management,
- b) To deal with the international treaties and
- c) To implement the requisite projects/programmes related to both hazardous waste and solid waste management as identified in the Action Plan 2017.

Physical progress of the activities carried out during the year 2017

➤ Implementation of Hazardous Waste Management regulations in Sri Lanka

As a part of the implementing the Hazardous Waste Management regulations (No. 01 of 2008 by the extra ordinary gazette notification No 1534/18 dated 01.02.2008), 185 licenses were issued during year 2017.

➤ Implementation of Basel Convention

The National Coordinating Committee (NCC) for the Implementation of Basel Convention, functioning under the Ministry of Environment & Natural Resources (MENR) has appointed a Technical Expert Committee (TEC) to support the CEA in sound decision making on matters related to technical aspects of managing Hazardous Waste in the country. 158 numbers of clearances were issued with respect to the importation of hazardous chemicals and hazardous waste materials to the country.

➤ Trans-boundary movement of hazardous waste

Being the competent authority for the implementation of Basel Convention in Sri Lanka, during the year 2017 CEA has given the approvals for 21 transits and 13 exportations (trans boundary movement) of waste materials listed in the List “A” of the Basel Convention.

➤ Chemical Management

As a part of implementing chemical management issued 36 environmental recommendations for chemical storages and issued 90 clearances for certain chemical importations.

➤ Implementation of Rotterdam Convention

During the year 2017, six Prior Informed Consents were issued with respect to the importation of chemicals and three Technical Advisory committee meetings for industrial chemicals were held for the management of chemicals.

➤ Electronic Waste Management

Waste Management Unit has planned to conduct awareness campaigns in the Local authority level with at the in order to make aware the people engage in informal sector electronic waste management.

➤ *Guideline for Construction and Demolition (C&D) Waste*

This guideline was prepared with the objective of managing C & D waste generated in the process of construction and demolition of buildings in an efficient and environmentally friendly manner as well as saving of natural environmental resources by reusing them whenever possible.

➤ *Preparation of awareness materials*

Following brochure and booklets are printed in 2017.

- 10000 copies of Brochure on Healthcare Waste Management in Sinhala & English Medium.
- Hazardous Biomedical/Health Care wastes should be managed so as to prevent environmental contamination by entering into the municipal waste streams and to minimize the risks to public and eco-systems.
- 2000 booklets on Guidelines on Sustainable Management of Waste Matter Generated in the Construction and Demolishing Waste in English & Sinhala Medium.
- 7000 copies of booklet on Asbestos Management
- 5000 copies of booklet on Chemical Management

➤ *New Polythene Regulations*

Considering the environment is pollution especially due to the mismanagement of polythene and polythene related litter, an action plan on proper management of polythene was submitted to the cabinet and approval was granted. According to the cabinet decision No. 17/1405/704/022 dated 19.07.2017, on Proper management of the use of polythene to minimize environmental issues caused by polythene, relevant regulations were published in the gazette notifications no 2034/33, 2034/34, 2034/35, 2034/36, 2034/37 and 2034/38 on 01st September 2017.

Workshops were also held to make aware the Police Officers, Public Health Inspectors, and the Environmental Officers of the Provincial offices of CEA.



Workshop conducted for Police Officers and Public Health Inspectors

Green Park Waste Management Center

Green park Integrated waste management center which located in Dompe Kirindiwelais the 1st ever Sri Lanka experienced Land Fill Site managed by the CEA. This center consists with sanitary landfill site, composting site and training center. Landfill site and training center were constructed by Korean Cooperation Agency (KOICA) with their financial and technical supports. In 2017 land fill site accepted, 912 tons from Dompe PS together 1,820 tons from Colombo Municipal Council as government institutions and, nearly 626 tons of non-hazardous industrial wastes from Dompe PS area also were dumped to the land fill site. In addition to general wastes dumping, 6.15 tons of glass wool dumping from electricity generating institutions was also facilitated in 2017.

Environnemental Management & Assessment Division

This division consists with three main units called Environmental Impact Assessment Unit, Natural Resources Management Unit and Research and Development Unit.

Physical progress of the activities carried out during the year 2017

Environmental Impact Assessment Unit (EIA Unit)

➤ EIA/IEE Process

During the year 2017, EIA unit of the CEA, have received a total number of 88 applications requesting environmental approval, of which 33 projects were processed within the EIA unit while 55 projects were referred to other designated Project Approving Agencies (PAA) or to regional offices of the CEA for processing. Scoping was carried out for 33 projects and Terms of References (ToRs) for EIA/IEE studies were issued for 26 projects.

The EIA unit has received 37 number of EIA/IEE reports for evaluation of which 13 number of reports were opened for public review. Technical evaluations have been carried out for all 37 projects and 21 projects have been granted approval while 1 project has been rejected granting approval. 15 projects were pending decision.

Natural Resources Management Unit (NRM Unit)

Protection of catchment areas in Horana & Ingiriya Divisions of Kalutara District has been initiated by the NRM unit and a project proposal (stage I) for management and conservation of water sources and catchments in Ingiriya Division was approved and received funds for implementation. 2 meeting were held with Horana DS and Ingiriya DS, in this regard.



Awareness Programm on NRM

Awareness and Education on natural resources management.

The NRM Unit, giving due attention on the necessity of awareness and education on natural resources management, and on the accepted procedures for extraction of resources, has organized and conducted several programmes and workshops in the year 2017.

➤ Educational materials

The following educational materials have been prepared within the year 2017, by the NRM unit.

- “ThethbimAsiriya” a hand book on Wetlands
- 2 chapters of the NRM Guide Book
- Trainers Manual on “ Sustainable use of Sand Resources” translation in to Tamil language.
- Waluwewatte-Wathurana leaflet was re-printed.
- Draft leaflet on the Pansalatenna-Maussawa EPA has been finalized.

➤ **Declaration & management of Environmental Protection Areas (EPA)s.**

The NRM Unit, takes action in declaring areas with unique environmental features and severely threatened as Environmental Protection Areas (EPA)s. Under the provisions on the NEA, the CEA has declared 8 EPAs up to 2016. During the year 2017, the NRM Unit has taken actions to declare Warathenna-Hakkinda as an Environmental Protection Area.

➤ **547 Waterfalls identified by the Survey on waterfalls.**

An island wide survey has been carried out by officers of the CEA, and selected 547 waterfalls, which are planned to be declared as EPAs.



Awareness programme at Walawwewatte-waturana EPA

➤ **Revision of Gazettes of declared EPAs (Bolgoda /Hanthan /Maragala EPAs)**

Working hand in hand with the Ministry of Mahaweli Development & environment in obtaining cabinet approval for amendment of Gazette notification for Hanthana EPA.

➤ **National Wetland steering committee Meetings**

2 NWSC meetings, chaired by the Secretary, Ministry of Mahaweli Development and Environment, were held. Several important decisions were taken pertaining to sound management and conservation of wetlands, as indicated in the National Wetland Policy and Strategies.

➤ **World Wetland Day programmes**

National Program to commemorate the World Wetlands Day was held on 2nd February 2017, at Waters Edge Hotel, Battaramulla. Hon. Minister of Sustainable Development and Wildlife, Mr. Gamini Jayawickrama Perera was participated as the chief guest of this ceremony.

- The Central Environmental Authority in association with the Department of Wildlife Conservation and Ministry of Education, organized an island wide wetland related Art competition.
- Puzzle Competition among the readers of Wijaya Newspaper was also organized.
- Wetland related documentary competition was held targeting the School children from grade 10-13.
- In addition to World Wetland Day National Programme, 18 programmes to commemorate the World Wetland day were also held at Provincial and District level, organized by the CEA.

Research and Development Unit (R&D Unit)

➤ *Building up of Trans-Disciplinary research team*

- In order to improve the statistical knowledge of the research team of the CEA, a “Training programme on Statistical Analysis” was conducted on 30th -31st March, 2017 at National Institute of Plantation Management, Athurugiriya.

➤ *Identification of research priority areas relevant to the mandate of the CEA*

Workshop on “Identification of research priority areas relevant to the mandate of the CEA” was conducted on 28th September 2017 at the Center for Housing Planning & Building (CHPB), Pelawatta.

➤ *Spatial analysis of ground water distribution and quality using GIS and RS techniques ,Case study of Bolgoda River Basin*

➤ *Identification of Degraded lands of Sri Lanka using RS Techniques in Central Province*

➤ *Identification of changes of wetland in Colombo flood detention areas and Gampaha and Colombo flood detention area*

➤ *Development of Online Spatial Database for Sustainable Management o*

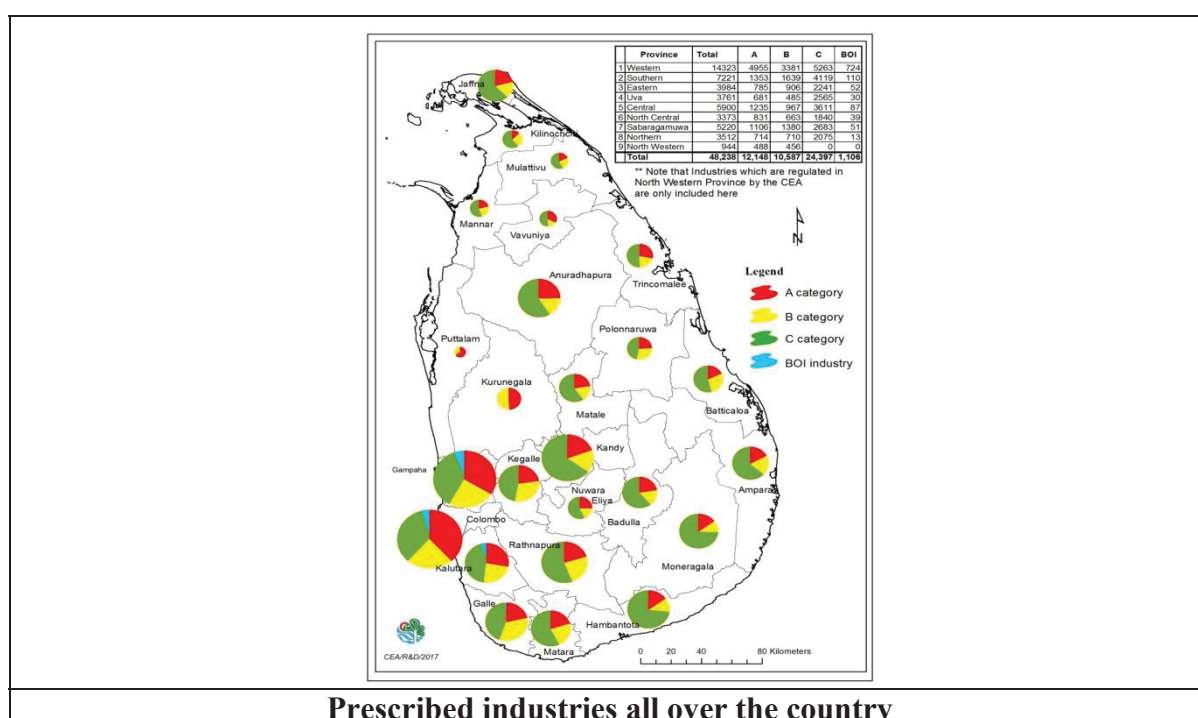
Online Spatial Database System for Management of Environmental Resources is being developed by the R&D unit to share & update databases in an online interface to improve the efficiency of planning & decision making process of the CEA. This has been built on the Arc GIS Online facility that comes with Arc GIS Software.

➤ *Preparation of maps of Environmental Protection Areas in Sri Lanka to publish in CEA website*

Maps of Environmental Protection Areas (9) declared under the provisions of the NEA National Environment Act was prepared to upload to the CEA website for the information of general public.

➤ *Updating of Spatially Referenced Database on Prescribed Industries*

Geo-spatial database on prescribed industries is being updated monthly by the R&D unit.



Prescribed industries all over the country

➤ ***Preparation & Printing of Digital District Resources Profile CDs***

Digital District Resources Profile contains environmentally related information and Socio economic data of a District at Divisional Secretariat Division level. During the year 2017, District resource profiles of Anuradhapura, Trincomalee and Colombo Districts have been printed into CD media.

Environmental Education & Awareness (EE&A) Division

Physical progress of the activities carried out during the year 2017

➤ **Develop and Reprint of Educational materials (Posters, Leaflets & Booklets)**

Reprinted 93,000 leaflets in five subject areas are given below.

Leaflets printed on different subjects

No.	Subjects	Sinhala Medium leaflets	Tamil Medium Leaflets
01	Wetlands	20,000	3000
02	Dengue	20,000	3000
03	Landslides	10,000	2000
04	Environment Pioneer Program (EPP)	20,000	3000
05	Environment Eco club	10,000	2000
	Total	80,000	13,000

➤ **Establishment of Network of NGO at provincial level**

Registration of non government organizations is one of the tasks of media unit. In 2017, 21 NGO's have been registered

➤ **Exhibitions to improve awareness of general public**

During this period 27 no of exhibitions were participated. Through this activity EE&A division expects to disseminate environmental knowledge and to demonstrate the issues through exhibiting models, posters and distribute leaflets for general public, school children, public Officers and NGOs

➤ **Implement Nature Field Centers**

Nature Field Centers (NFC) implement various environmental activities and to providing knowledge through libraries of NFC's and thereby to improve the environmental consciousness among various target groups.

➤ **Conduct Awareness programs on current issues for school children**

EE & A Division conducts education and awareness programs on Contemporary Issues to school children and to various stakeholders.

➤ **Conduct awareness programs on Dengue and Waste Management**

EE & A Division conducted Dengue Prevention Campaign in Denzil Kobbekaduwa Mawatha and Robert Gunawardena Mawatha at Battaramulla and different districts with the participation of the various government and non government organizations.

➤ **Conducting environmental awareness program during cultural events (Nallur, Annuradapura, Polonnaruwa, Kandy, Thalavila & Katharagama)**

The environmental pioneers participated to various cultural events to improve the awareness of general public specially the pilgrims on protecting and conserving the environment especially employing environmentally friendly solid waste disposal practices.

➤ **World Environment Day**

Various activities have been organized in accordance with the theme of the World Environment Day of the respective year. Two E-waste collections and promoting of organic farming program were organized by the Uva provincial office. Further, 28 no of awareness program and tree planting programs were done in each district to mark this event.

➤ **National Tree planting program**

Tree planting is highly promoted in order to keep towards clean and green environment.

➤ **Student of Blue Green Era**

Poster competition was conducted for the program on "Sri Lanka - Next", Blue Green Era and Winners were selected in national level. This program was carried out in collaboration with National Green Awards.

➤ **Sobaketha Radio Program**

The Sobaketha radio programs have been broadcasted on Sri Lanka Broadcasting Cooperation under frequency FM 94.3/ FM 94.5 on every Thursday at 6.30 p.m. to make the public aware on the environmental issues.

➤ **Environment programme Covering**

Audio visual unit makes extensive contribution to cover projects, programs and events which are put into effect in accordance with the CEA's objectives. In the line of duty, audio visual unit has covered 90 events.

➤ **Information Centre**

The National Environmental Information Centre is one of the focal point to disseminate the environmental information throughout the Sri Lanka.

Compliance Monitoring Unit

In the year 2017, 2,633 numbers of complaints were received directly to the CEA, 1,899; 72.12% of total were resolved, and others are in the process of resolving

Progress of complaints – 2017

	Unit /Office		Complaints received		Complaints resolved	
			Number	%	Number	%
1.	Western Province	Colombo District	420	43.37	295	70.24
		Gampaha District	419		222	52.98
		Kalutara District	303		206	67.99
2.	Southern Province	Galle District	206	14.36	192	93.20
		Matara District	101		69	68.32
		Hambanthota District	71		54	76.06
3.	Uwa Province	Badulla District	38	4.41	35	92.11
		Monaragala District	78		73	93.59
4.	North Western Province		112	4.25	65	58.04
5.	Sabaragamuwa Province	Rathanapura District	175	12.80	145	82.86
		Kegalle District	162		151	93.21
6.	North Central Province	Anuradhapura District	22	1.44	18	81.82
		Polonnaruwa District	16		08	50.00
7.	Central Province	Kandy and Nuwaraeliya	310	15.12	225	72.58
		Matale District	88		54	61.36
8.	Eastern Province	Trincomalee District	06	1.52	06	100.00
		Ampara District	22		21	95.45
		Batticaloa District	12		07	58.33
9.	Northern Province		26	0.99	20	76.92
10.	Environmental Pollution Control Unit		14	0.53	12	85.71
11.	Waste Management Unit		09	0.34	05	55.56
12.	Environmental Impact Assessment Unit		15	0.57	11	73.33
13.	Natural Resources Management Unit		08	0.30	05	62.50
	Total		2633		1899	72.12

Legal Unit

The Legal Unit has filed and finalized a number of cases during the year 2017. Accordingly, four hundred and thirty seven (437) cases were handled by the Legal Unit and that indicates the cases filed against the CEA and the cases filed by the CEA. More than one hundred and forty four (144) cases have been freshly filed during the year 2017. The total amount of fine collected from those cases is Rs. 810,333/-.

➤ **Cases filed against the CEA**

One hundred (100) cases were pending against the CEA in year 2017 in Magistrate Courts, District Courts, High Courts, Supreme Court and Court of Appeal.

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

Considering the environmental nuisance caused by the industries, the CEA has taken steps to cancel the Environmental Protection License (EPL) issued to forty eight (48) industries and one hundred and forty one (141) letters have been sent refusing to issue the EPL.

➤ **Legal Notices**

Legal Notices were sent to one hundred and sixteen (116) industries which had been causing environmental pollution.

➤ **Amendments to the National Environmental Act**

The Legal Unit of the CEA has taken steps to introduce the novel concepts such as the “Polluter Pays Principle” by introducing Load Based Licensing Scheme and chapters on Wetland and Hazardous Waste to the proposed NEA amendments and also the penalty provisions also have been improved. The CEA is in the process of discussing and finalizing the draft Cabinet Paper in order to obtain the approval of the Cabinet.

Special Projects Undertaken by the CEA

Pilisaru” National Solid Waste Management project

During the year 2017, following activities were carried out by the project, in order to achieve its objectives.

- 07 numbers of new compost sites, 02 numbers of new bio gas plants and 01 number of new Plastic Recycling Centers were funded to establish based on LAs requests.
- Previously started 25 numbers of compost sites, 06 numbers of Bio gas plants & 02 numbers of Plastic Recycling Centers were funded to complete in the year 2017.
- 18 numbers of compost plants were funded for improvements and expansions.

The Pilisaru Project procured and distributed 09 Compost Sieving Machines, 01 Bobcat, 02 Compost mesh & 02 wheel barrow among local authorities at the end of year 2017.

During the reporting period, Pilisaru project conducted 19 Awareness and Educational Programs, 07 Training Programs for relevant personnel and 08 Special Events coverings.

National Environmental Pioneer Program (EPP)

Under this program, several activities were carried out to make environmental conscious next generation

➤ **Awarding the Presidential Medals**

President’s Medal is the highest ranked medal of Environmental Pioneer Program. Forty Presidential medallists were awarded in 2017 under the distinguish patronage of His Excellency the President Maithripala Sirisena at Presidents House on 13th September. Further, best performing Environment Pioneer teachers and best performing officers in the CEA have also been awarded at this ceremony.



Awarding the Presidential medals

➤ **Selection of the best schools in clean and green environment
(Suwasara Thaksalawa)**

This program was organized to build clean and green environment within the school premises. In 2017 this program was conducted island wide and 3 schools have been selected out of 25 districts where they carried out best green practice. Seventy five schools were awarded by the cash price.



“Suwasara Thaksalawa” school competition

➤ **Providing Foreign Exposure and Training for Best Performing Presidential Medalists**

The Presidential Medalists were given foreign exposure at the coordination of Centre for Environment and Science at New Delli, India. This activity was partly supported by “Punurudaya” national program by providing financial assistance.



Foreign exposure and training for best performing Presidential Medalists

EEA division has also organized a local tour for the presidential medalists who did not participate for the foreign tour in 2016 and they visited Nature Secrets (pvt) Ltd and Weligama Barbareen Ayurvedic Hotel. 12 presidential medalists, 8 teachers, 13 CEA officers participated in the event.

Strengthening of Laboratories of CEA

During the past year, seven provincial laboratories and one district laboratory in Gampha district were established by providing the basic requirements to test regular parameters.

Rs 10.00 million had been allocated for the project on strengthening of the CEA laboratories. Using these funds the laboratory procured a Vibrometer for the air Quality monitoring division. In addition to that several other requirements for the air quality division were provided by utilizing the funds.

JICA Project on Monitoring of Major Water Quality of in Sri Lanka and Capacity Building of Laboratory and Enforcement Officers in the CEA.

The project prepared the ambient water quality standard for managing the river water and river basin and Classification of Kelani river water in line with ambient water quality standard. It has been approved by the department of legal draftsman.

Preparation of the inspection guideline for standardization of inspection works were completed with the assistance of JICA projects in order to harmonies the inspection procedure to be carried out effectively and efficiently.

Members of JICA project team and CEA staff established a new data base to introduce new EPL/PSI online system that incorporated all industrial information including input data and information on wastewater etc for the management of EPL

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

The project provided the infrastructure facilities such as fencing, water supply and electricity to the four sites (Anuradapura, Polonnaruwa, Jaffna & Galle) , through the Government Agencies of the respective provinces. Initial works such as publishing the bid, Pre-bid meeting, Bid Opening for selecting contractors to start the construction of landfills were done. Bid evaluation is started in December 2017.

“Punurudaya” Environmental Protection Programme

CEA has initiated six projects and successfully completed 6 suggested projects. Total financial allocation 39.55 million (SLR) and financial progress 39.15 million (SLR) 99% while 100% physical achievements.

Following projects were successfully completed in the year of 2017.

Strengthening National Environmental Pioneers Programs (EPP)in school network

This program was conducted covering all island school networks as main objective to enhance environmental friendly future generation. In order to achieve that purpose, hundred thousand of environmental pioneer caps, first medal and note books were produced within this year.

Environmental Pioneer President Medal Awarding Ceremony was also partly assisted by “Punurudaya” program providing Rs. 260,000.

Media Coverage for environmental programmes under Pilisaru project

This project achieved 100 % physically progress while achieving 99% of financial progress. Special promotional media coverage program was conducted with reference to the solid waste management in Sri Pada (Adam’s peak) pilgrimage season.

Preparation of zoning plan for Welioya Sub Watershed

Identification of sensitive areas and preparation of maps (Land use maps, Environmental sensitive area maps, Land use types in different land slide hazard zone maps, Slope Classes Map) were achieved as initial activities of this project.

Development of environmental section in school libraries

Five schools which have poor facilities and pioneer program is implemented actively were selected to implement this project. This project achieved 100% physical progress whereas the financial progress is 99%. The school libraries as mentioned below were developed by developing the environmental section of the school including library materials (environmental books, magazines, Videos) and infrastructure.

✓ Vivekananda Vidyalaya,	- Kilinochchi
✓ Dimbu/Medagama Maha Vidyalaya	- Polonnaruwa
✓ Tri/Kan Ganthalawa Maha Vidyalaya	- Trincomalee
✓ Poramba Kanishta Vidyalaya	- Matara
✓ Morapitiya Veediya Bandara Vidyalaya	- Kalutara

Implementation of new polythene regulations

This task was carried out by the Waste Management unit and partly supported by the PUNURUDAYA program. In order to make the public aware about the new regulation, Media coverage programs were conducted in printed media (News papers) and electric Medias (Radio, Television). No. of awareness programs were held to introduce new polythene regulations such as awareness programs for Police Officers who are assigned for environmental police, Public Health Inspectors and Environmental officers in provincial office. This program achieved 100 % physical and financial progress.

5. NATIONAL GEM AND JEWELLERY AUTHORITY

Major Achievement during the year 2017

“PUNARUDAYA” three years Acton Plan

Aligning with the “PUNARUDAYA” programme, it has been taken steps to fill abandoned gem pits

- Bagawanthalawa – Chaplton
- Palmadulla/Madiththawala/ Katuwa mines
- Thibbotuwawa
- Niwithigala Doloswatta, Pahalawatta
- Opanayake Samupakara Land
- Kuruwita Hunugaldeniya

Maintaining environmental friendly gem mining methods

Following Lands have been auctioned for Green mining.

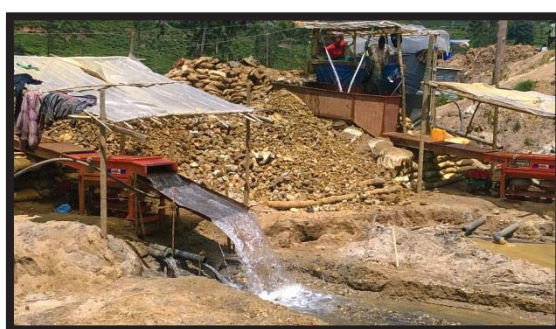
- | | |
|---|--|
| ▪ St.Jokim Watta Tender- 2 in Ratnapura, | ▪ Monaragala – Badalkubura illam |
| ▪ Bagawanthalawa Land Auction | ▪ Pottani ara lot 567 illam auction |
| ▪ Dasgiriya Land Auction – Naula | ▪ Gabbela and rakwana illam auction |
| ▪ Kolomba Kella – Naula | ▪ Bagawantalawa illam auction |
| ▪ Lunugala Illam Tender | ▪ Gatahatta, Neelagama and Divrumpitiya illam auctions |
| ▪ Laggala-Kajuwatta Illam Auction | ▪ Rathri wewa illam auction |
| ▪ Rakwana gaga panapitiya illam Auction | ▪ Monaragala- Badulugammana |
| ▪ Kajuwatta matuwagala illam auction | ▪ Galahawatta, Maligawila tender |
| ▪ Bagawanthalawa – Karkoswall Illam auction | ▪ Laggala police station illam tender |
| ▪ Eheliyagoda Wewili road Illam auction | ▪ Dewaladeniya illam |
| ▪ Tammannawa sadungama illam auction | ▪ Lunugala illam tender |
| ▪ Koul ara- wathtota ara | ▪ Norwood, Chapelton and Maskeliya illam auction |
| | ▪ Hidurangala miyangaha liyadda , Boraluwa Tender |

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	(2017/03/6)	18,699,689.02	4,788,680.02
Seethawaka and Other	(2017/03/29)	28,192,191.82	19,008,952.83
Hadduwa and Other	(2017/08/17)	37,397,833.73	18,257,508.10
Bagawanthalawa and Other	(2017/09/28)	25,915,790.11	7,553,572.92
Hadduwa and Other	(2017/12/21)	20,698,586.47	8,606,108.09



Seethawaka Pilot Project



Bagawanthalawa Pilot Project

- It had been taken steps to provide consultancy service for gem mining community local as well as global level.
- Conducted rehabilitate activities in below stated destructed areas.
 - ★ Niwithigala - Doloswatta
 - ★ Udakarawita
 - ★ Tibbotuwawa and Katuwa Land
 - ★ Kuruwita Hunugaldeniya Land
 - ★ Openayake Samupakara Land
 - ★ Bagawanthalawa Land
 - ★ Matara Kekanadura Wijayaba School

Securing Market Opportunities in Sri Lanka and Overseas for Gems & Jewellery

Conducted Awareness Programme and Exhibitions

Conciliate in existing markets & entering new markets, it had been taken steps to participate in the National as well as International Gem & Jewellery exhibitions and has organized “Sri Lankan Pavilion” in below stated exhibition. 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
- II. Hong Kong International Diamond, gem & Pearl Show
- III. JCK TUCSON
- IV. Bangkok Gem & Jewellery Fair
- V. JCK Las Vegas Show, USA
- VI. South & South East Asia commodity expo and investment Fair(SSACEIF)
- VII. Shanghai Jewellery show
- VIII. 10th Jakarta international jewellery fair
- IX. International Jewellery London
- X. Hong Kong Jewellery & Gem fair - September
- XI. Single country exhibition - Sri Lanka Gem Fest , Tokyo
- XII. The Munich Show (new Market) Germany
- XIII. China international Gold , Jewellery , & Gem Fair (Shanghai),
- XIV. China international Jewellery Fair Beijing,
- XV. China south expo Nepal



Shanghai Jewellery show



International Jewellery Tokyo



JCK Las Vegas Show



Bangkok Gem & Jewellery Fair

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

- I. Exhibition in president collage Embilipitiya
- II. Kegalu Vidyalaya
- III. Godakawela Kularathne Central Collage
- IV. "රට වෙනුවෙන් පිබිඳෙන පුලතිසි යොවනය" Polonnaruwa Royal Collage
- V. දිස්ත්‍රික් විදුලි-සියක්වස් අභිමන Rathnapura Fergazen High School Educational Exhibition
- VI. Trade and educational exhibition Kalawana national school
- VII. International symposium on earth resources management & environment mini ex; at blue water hotel wadduwa
- VIII. Facets Sri Lanka International Exhibition
- IX. Exhibition to celebrate completion of 40 years for the open economy
- X. ICAN 2017 Local Exhibition
- XI. Jewels Exhibition

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. Awareness Programme for Jewellery manufactures based on Mulatiyana
- Offered Jewellery Manufacturing tools and equipment for Small and Medium Scale Jewellery Manufacturers based rural areas

Haritha Lanka – A Gem testing Center of International Standard

- Established a Mobile Gem & Jewellery testing Laboratory.
- It has been planned to establish High-Technological Advanced Gem testing Laboratory. Initial work has been done in the year 2017.
- Carrying out the purchasing of items and the training of staff necessary for starting an international level gem testing and certification laboratory.

Financial Performance

Description	2017 Rs.Mn	2016 Rs.Mn	2015 Rs.Mn	2014 Rs.Mn
INCOME	666	698.155	716	679
EXPENDITURE	537	510.950	372	364
SURPLUS BEFORE TAXES	129	187.205	344	315

6. GEM AND JEWELLERY RESEARCH AND TRAINING INSTITUTE

Administration and Human Resource Division

Human Resources & Admin Division of GJRTI mainly facilitates the Research & Training Division in order to achieve organizational goals & objectives efficiently & effectively. We engaged in positive HR Development and Training which value the efforts and skills to appreciate and retain our most important asset - Human Resources, essentially required for the organizational growth and realization of its objectives aligned with our Corporate Mission and Vision. During the year 2017 we have recruited below mentioned staff in order to fulfill our cadre requirement.

#	Designation	Salary Scale	No of employees
01	Senior Research Officer	AR-2	02
02	Assistant Director	MM 1-1	04
03	Research Officer	AR-1	06
04	GIS Assistant	MA 2-2	01
05	Technical Assistant	MA 2-2	04
06	Research Assistant	MA 2-2	01
07	Training Officer	MA 2-2	12
08	Management Assistant	MA 1-2	01
09	Driver	PL-3	03
10	Field and Lab Assistant	PL-1	02
Total no of employees			36

In 2017 we have invested in more than 1.2 million in Human Resources Advancement activities. This included technical training, soft skills development trainings, foreign trainings and motivational training programmes. Summarized training opportunities granted to our employees during the last year (2017) are mentioned as follows.

	Name of the training programme	No of participants
Local Trainings		
1	Workshop on "Public procurement"	02
2	Workshop on "Control of office equipment"	03
3	Workshop on "Personal file management"	01
4	Workshop on "How to reduce audit quarries of the government institute"	02
5	Workshop on "Work-Life balance for scientists: key to success"	02
6	Workshop on "Utilize Information Technology in Special Libraries of Departments"	01
7	02-day residential training Motivation and Industrial knowledge	All Staff

International Trainings		
8	Executive competency development training programme in Malaysia	01
9	Gem and Jewellery industrial experience gaining programme in Myanmar	03

Description		2017 (Rs.000)	2017 (Rs.000)	2016 (Rs.000)	2016 (Rs.000)
ASSETS					
Non-Current Assets					
Property, Plant & Equipment	Sch.20	122,084		124,814	
Contribution (LT)					
Gratuity Fund		1,436		502	
			123,520		125,315
Current Assets					
Stock & Consumables	Sch.21	1,368		2,313	
Books for Sale				2	
Loan and Advances	Sch.22	2,067		2,631	
Fixed Deposit	Sch.23	4,547		4,095	
Deposits	Sch.23	710		2,810	
Poverty Alleviation Project (NGJA)	Sch.24	6,654			
Trade & Other receivables	Sch.25	4,078		2,088	
Prepayments	Sch.26	780		496	
Bank & Cash Equivalents		205	20,410	839	15,274
Total Assets			143,930		140,589
Liabilities					
Current Liabilities					
Payable	Sch.27	235		408	
Accrued Expenses	Sch.28	2,656		2,147	
			2,892		2,555
Non- Current Liabilities					
Control Account - NGJA				3,179	
Grants-Other Institutions-WUSE		232		232	
Provisions for Gratuity	Sch.29	11,135		10,110	
Staff Security Deposit				10	
NSF		3,932			
			15,298		13,531
Total Liabilities			18,190		16,086
Total Net Assets			125,740		124,503
Net Assets / Equity					
Contributed Capital		50,000		50,000	
Revaluation reserves for gemstone		186		-	
Other Contribution		850		850	
Staff Circulating Fund		1,121		978	
Differed Income-Capital Grants (a)	Sch.30	110,815		114,652	
Accumulated Fund		(37,233)		(41,977)	

Description		Budget 2017	Rs.000	2017 (Rs.000)	Rs.000	2016 (Rs.000)
Recurrent Grants - Treasury		65,000.00		62,440.00		58,627.00
Other Income						
Income from Training Courses	Sch.01	9,348.00		8,318.48		9,445.40
Income from Geological Research		200		-		50.3
Geuda Heat Treatment Service Charges	Sch.02	250		20		0
Interest Income	Sch.03	300		506.2		342.6
Sundry Income	Sch.04	500		1,849.25		837
Total Income		75,598.00		73,133.93		69,302.20
Less: Operating Expenses						
Personnel Emoluments	Sch.05	45,864.00		43,542.46		35,477.30
Traveling	Sch.06	400		425.92		316.7
Supplies and Consumable used	Sch.07	1,355.00		2,531.44		2,983.40
Maintenance	Sch.08	4,184.00		4,176.38		4,054.70
Contractual Services	Sch.09	18,220.00		21,684.43		18,428.80
Training Programme Expenses	Sch.10	1,000.00		3,236.28		6,345.80
Other Operating Expenses	Sch.11	4,575.00		1,740.12		825.2
Total Operating Expenses		75,598.00		77,337.03		68,431.90
Surplus / (Deficit) From Operating Activities				-4,203.09		870.3
Less: Finance Cost	Sch.12			-26.05		-35.9
Grants- Capital Expenditure Portion	Sch.13		26,836.48		26,131.50	
Other Receipts						
			26,836.48		26,131.50	
Less: Depreciation and Amortization Expenses	Sch.14		-23,948.43	2,888.05	-20,378.20	5,753.30
Other Capital Investment Grants	Sch.15		11,905.77		7,391.20	
Less: Capital Investment Expenditure	Sch.16		-11,005.26		-6,064.90	
Improvements of Capital Assets	Sch.17		-900.51		-1,326.30	
NET Expenditure on Other Capital Investment						
Total Non-Operating Revenue				2,862.01		5,717.50
Add: Gain on Sales of Assets				29.96		
Net Surplus (Deficit) Before Extra-Ordinary Items				-1,311.10		6,587.80
Extra Ordinary Items						
Net Surplus / (deficit) for the period				-1,311.12		6,587.80
Add:						
Net Surplus / (Deficit) from previous years			-41,976.60		-70,086.70	
Less: Prior year Adj.	Sch.31			6,054.50		21,522.30
Net Surplus / (Deficit) C/F				-37,233.24		-41,976.60

Statement of Changes in Net Assets For the year ended 31st December 2017			
			(Rs'000)
Description	Contributed Capital	Revaluation Reserve	Accumulated Fund
Balance as at 1st January 2016	50,000.00	-	-70,086.70
Surplus/(Deficit) For the Period (2016)			28,110.10
Balance as at 31st December 2016	50,000.00	-	-41,976.60
Balance as at 1st January 2017	50,000.00	-	-41,976.60
Surplus/(Deficit) For the Period (2017)			-1,311.10
Revaluation of fixed assets		186.5	
Prior year Adjustment			6054.5
Balance as at 31 December 2017	50,000.00	186.5	-37,233.20

Description	Rs. 000	Rs. 000
Cash Flows from operating Activities		
Surplus/(Deficit) from Ordinary Activities		-1,311.10
Non-Cash Movements		
Depreciation	23,948.40	
Interest	-506.2	
Profit from sale of Property, plant & Equipment	-30	
Writeoff Capital Expenses	11,905.80	
Differed Capital provision	-38,742.30	
Lease rental	-473.5	
Adjustment for fixed assets	-11.4	
Prior Year Adjustment	6,054.50	2,145.40
Increase in Payables	336.7	
Increase in other Non-Current Liabilities	1,767.50	
Increase in other Current Assets	-5,770.20	-3,666.10
Net Cash Flows from Operating Activities (a)		-1,520.70
Cash Flows from Investment Activities		
Purchase of Property Plant and Equipment	-20,734.30	
Decrease of Gratuity Fund	-933.8	
Increase of contribution to reserves	143.2	
Other Capital nature expenses	-11,905.80	
Proceeds from Sale of Property Plant and Equipment	30	
Increase of reserves	186.5	
Net Cash Flows from Investing Activities (b)		-33,214.20
Cash Flows from Financing Activities		
Capital Grant	34,906.00	
Interest	506.2	
Net Cash Flows from Financing Activities (c)		35,412.20
Net Increase / (Decrease) in Cash and Cash Equivalents (a)+(b)+(c)		-634
Cash and Cash Equivalents at Beginning of Period		839
Cash and Cash Equivalents at End of Period		205

Training Division

Student intake in the year 2017 to the courses

#	Training Programme	No of Student
01	Gemmology	69
02	Basic Gemmology	113
03	Geuda Heat Treatment	111
04	Gem Cuttong & Polishing	381
05	Colour Grading & Marketing	87
06	Gem Carving	4
07	Jewellery Designing	95
08	Jewellery Manufacturing	116
09	Costume Jewellery Manufacturing	104
10	Stone Setting	47
11	CAD	22
12	Rough Gem Identification	20
13	Short Course in Basic Lapidary Techniques	21
14	Short Course in Gemmology	5
15	Special Foreign Trainings	5
Grand Total		1200

Records of student progress achieved in last consecutive 6 years.

	Training Programme	Year & Student Pass out						
		2011	2012	2013	2014	2015	2016	2017
01	Gemmology	13	30	43	105	134	97	69
02	Basic Gemmology	-	-	-	-	-	31	113
04	Geuda heat treatment	25	51	64	84	96	96	111
05	Gem cutting and polishing	43	61	76	109	190	213	381
06	Gem colour grading and marketing	72	48	118	175	157	73	87
07	Gem Carving	-	-	-	-	-	12	4
08	Jewellery Designing	30	16	44	18	37	30	95
09	Jewellery Manufacturing	21	37	40	49	42	63	116
10	Costume Jewellery Marking	-	-	21	-	18	48	104
11	Jewellery Stone Setting	8	-	9	-	-	26	47
12	CAD	-	-	-	-	-	20	22
13	Rough Gem Identification	-	-	-	-	-	27	20
14	Short Course in Basic Lapidary Techniques	-	-	-	-	-	21	21
15	Short Course in Gemmology	-	-	-	-	-	-	5
16	Special Foreign Trainings	-	-	-	-	-	-	5
Total		212	243	415	540	674	757	1200

1.2 Bibile Divisional Secretariat Division (Monaragala district, Uva province)

Bibile is located on the boundary between Highland and Vijayan complexes. The source of Bibile gems is the Dorapode mountain range which lies adjacent to Lunugala at the eastern rim of the central massif. Corundum and other gem crystals had been originated here. Then these deposits have been weathered, eroded and transported by the Gala oya (Gala oya) drainage system and deposited on the Vijayan plains.

According to field and laboratory studies, the Gala oya gem field is created by the erosion, transportation and deposition of the said primary gem deposits at Dorapode on the flood plains of the river. This can be classified as alluvial type secondary gem deposits. Ibbanna oya, Mudiyaal kandura, Kotagama oya and Mallehewa oya are the major agents that transport and supply sediments to the Gala oya gem field. Badullagammana, Mudiyaal, Kotagama, Hewelwala-Unagolla, Yalkumbura, Herathgedara are the localities with high gem potentiality.

The Bibile gem potential map is completed and tabled for the reviews of the board of directors, GJRTI and the report of the study is at the final stage and undergoing certain revisions.

However, according to the conclusions of the research, Bibile division holds only a moderate potentiality for gem occurrence despite its large land area and blue sapphires, yellow sapphires, the geuda forms of the above two corundum varieties (ottu, milky geuda, kowangu pushparaga, mostly), tourmaline, spinel, zircon are among prominent gem species encountered. These are flawed most often.

1.3 Thanamalwila Divisional Secretariat Division (Monaragala district, Uva province)

The field investigations of the Thanamalwila DSD is completed. Apart from that two students of Uva Wellasa university were trained to carry out field investigations of the Kataragama and Siyanmbalanduwa DSDs. The gem potential map preparation and sample analysis of the Thanamalwila division is under progress.

1.4 Haputale Divisional Secretariat Division (Badulla district, Uva province)

Literature surveying, base map preparation, preliminary and detailed field investigations are completed so far. Also, auger sampling is completed and analysis of samples at the laboratory is under progress. Coming into conclusions on the gem potentiality of area is possible only after the completion of laboratory studies and then only a draft of gem potential map could be producible. The report compilation has been started.

The rivers of Mathetilla oya, Haputala oya and Weli oya were targeted during the field investigations. In that regard, Ellagama, Aluthwela, Pitarathmale, Horadorowwa, Kitulgahawaka, Bombuhinna, Welanhinna, Helakadurugamuwa, Kahagolla and Madawalakapolla areas were examined and sampled.

A special attention was paid to the Menik kanda and Wewa localities in Ranjallawa area which exhibit the characteristics of a primary deposit.

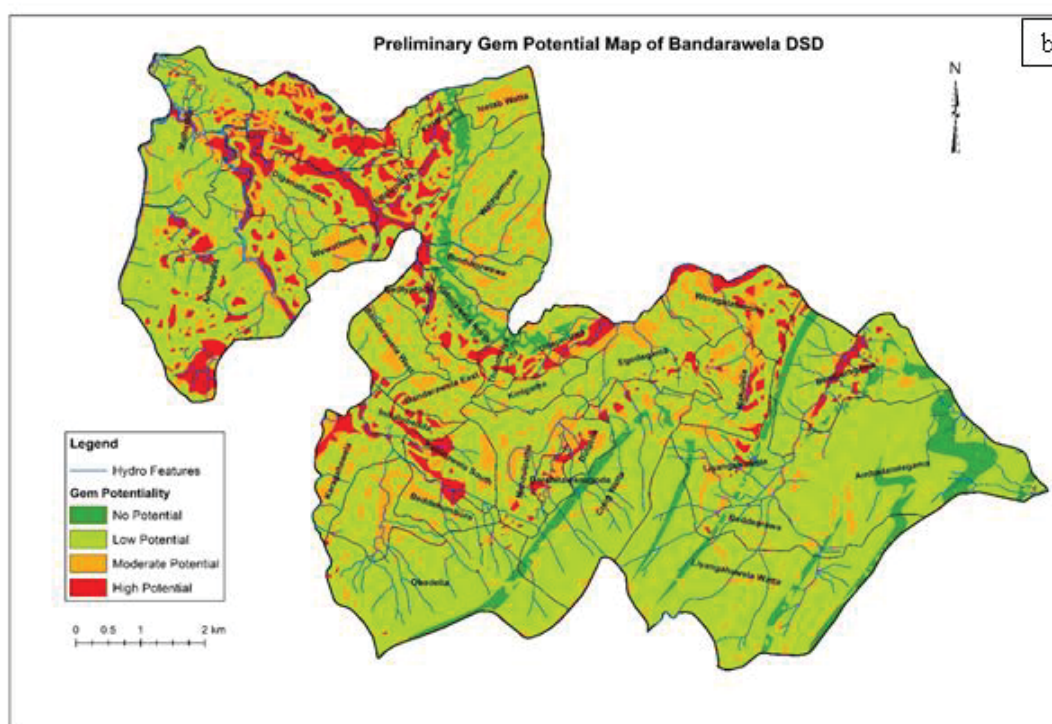
When consider the lithological background of Haputale, charnockite, khondalite, quartzite, quartzofeldspathic gneiss occur predominantly. Also, shear zones, fault zones are plentiful there while haputale is located at the neighbourhood of an escarpment and all these indicate a high degree of tectonic activities in the geologic past.

Though this structural and lithological set up promotes the occurrence of gem deposits into some extent but however the general observation was the area holds a moderate potentiality due to certain factors unfavourable for gem occurrence. Due to urbanization and tea plantations, the

access to gem deposits in hapuats is limited considerably and it is noteworthy that this limits the amount of extractable deposits.

Bandarawela Divisional Secretariat Division (Badulla district, Uva province)

Bandarawela DSD is located in the Badulla district. It is 71 sq.km in area and consists of 36 Grama Niladhari Divisions. When consider the progress of the project base map preparation and field exploration is completed. Auger samples collected are under laboratory studies. Demarcation of gem potential areas by GIS analysis is ongoing. Detailed technical report and final map is to be submitted to the Board at end of the June 2018.



Prepared preliminary gem potential map for the Bandarawela DSD.

Research No. 02

Development of Treatment Methods to Enhance the color and clarity of low quality Gems stone of Sri Lanka – 1000

2.1 Thermal enhancement of inferior quality corundum variety called “Kiri Kottara”, “Rathu Kottara” and Zircon

During the mining, in most of the Sri Lankan deposits, we find inferior quality corundum variety called “Kottara”. Miners generally discard these materials because they consider it has no value at all. The only value of this material is that they could be used as an abrasive material since its hardness reaches 9 in Mohr Scale. Therefore, it is important to develop a novel method to enhance the colour and clarity of these materials up to some extent and. Here comprehensive study has been conducted on applicability toward the commercial purposes. The heat treatment of low gem quality zircon and Kiri kottara was carried out under this project.

During that translucent green zircon was converted into transparent green zircon and the chemical analysis of the treated zircon is in progress.

Samples of inferior quality Whitish corundum (Kiri Kottara) and Reddish corundum (Rathu Kottara) were collected and pre-cleaned. Then Oven dried samples were used for Heat Treatment.

Three temperature conditions were used as 1850°C – 1950°C, 1750°C – 1850°C and 1650°C-1750°C for a one hour of holding time.

Blue colour was observed in the selected Kiri Kottara sample at three Temperature ranges, however the Optimum Temperature range was 1850°C-1920°C under reducing condition for one hour of soaking period. Although reddish brown colour of Rathu kottara samples were changed into pink colour during the heat treatment, most part of the stone got chalk like (death) property.

Therefore, only the Kiri Kottara sample show value added product after heat treatment under above mentioned conditions although their clarity remains unchanged. These treated stones are ideal for silver jewellery intended for middle income consumers.

As future activities it is expected to do Physical and chemical characterization of treated and untreated samples of Whitish corundum and Find out Value addition method for Reddish inferior quality corundum.

2.2 Development of a novel value addition method for low quality Moon Stone

Moonstone belongs family of minerals called Feldspar group mineral. In Sri Lanka, Moonstone has been found mostly in the regions of Meethiyagoda and Matale. Common chemical formula of Moonstone is $(\text{Na,K})\text{AlSi}_3\text{O}_8$.

In this project, we have revealed a novel method to add value to moonstone. Deposition of nano-film onto stone yielded blue appearance to the gem without sacrificing its intrinsic optical sheen endowed by nature. Such a value addition to moonstones has not previously been reported. This color development method by epitaxial growth is the by far the most felicitous method to add a value to moonstones. Our novel technique gives long lasting blue tint without sacrificing its intrinsic sheen.

Moonstone is alumino silicate mineral whose surface is chemically resistant to coordinate the dye molecules. The presence of Al as is in $(\text{Na,K})\text{AlSi}_3\text{O}_8$ can be considered as a disguised boon for activating the surface to coordinate the 3-d metal ions. On the other hand, the presence of Al in moonstone render a modest index of hardness. Ability of modulating of the surface is critical for coordinating the dye molecules onto it. Dye precursor molecules can be incorporated in 3-D in all directions and form a coordination polymer as is seen in Moonstone itself. It had been displayed the jewelry set which was made out of these colored moonstones in “2017 Jewels” exhibition.

Careful control of the temperature, duration, precursor concentrations and reaction condition permit us to make color gradations in semi-precious gems according to artisan’s discretion. Further, the technique invented here is scalable, eco-friendly and cost-effective. In future this will help to add coffers to our economy.



2.3 Establishing of Heat Treatment Condition for low gem quality black Zircon

- The results clearly indicate that; gemmy green color zircon was obtained by heat treatment in reducing atmospheric at 900 °C.
- Result further demonstrated that the green color is formed due to aggregate effects U^{4+} ion and defects or color center in zircon after recrystallized by heat treatment.
- Finally, this underutilize gem material shows a high potential to be used as valuable green color gemmy zircon.
- A manuscript has prepared based on these newel findings to submit for a SCI Journal.

2.4 Optimization of Geuda Heat Treatment Methods

Following findings were obtained based on preliminary study,

- Transparency of the stone is mainly controlled by maximum temperature and its time
- Cooling time and reducing condition of the cooling time directly effect on blue coloration of geuda.
- Feeding of reducing gases (H_2 and N_2) is optimized the blue coloration process in heat treatment of geuda.
- Air tit closing of all holes in LAKMINI furnace is more important.

 <p>Un-Heated Young Geuda Sri Lanka</p> <p>1st Step Heat Treatment</p> <p>2nd Step Heat Treatment with Reducing Gas</p> <p>Gem Treatment Service Center, Gem and Jewellery Research and Training Institute, Ratnapura. 045-2228801</p>	
Blue color improving with different methods	Heated and unheated zircon samples

2.5 People perception and knowledge on gem treatment in Ratnapura area

A questioner survey was carried out using randomly selected 100 people engaged gem trade in the Ratnapura area. Following findings obtained based on this study.

- More respondents (70%) not involved any value addition activity and they directly only involved selling of gemstones.
- However, 81% of respondents were well known on geuda heat treatment.
- 60% of respondents shown spinal is the low gem quality stone in the market.

2.6 Heat Treatment of Madagascar Low Gem Quality Sapphire

Major findings of this project summarized as follows.

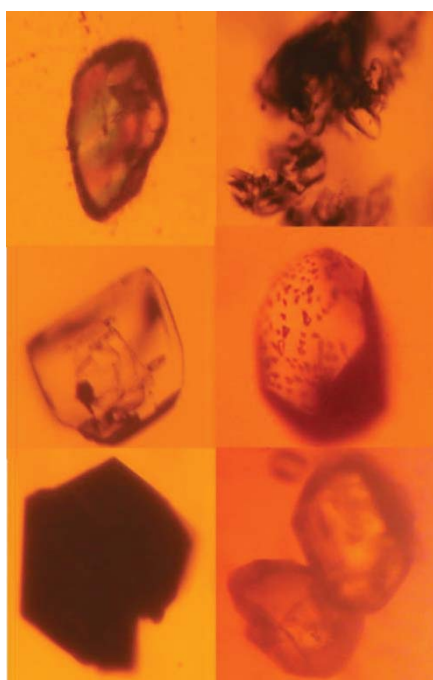
- Blue tint of ruby is removed by heat treatment in oxidizing condition 1200-1250 OC
- Dark blue color is formed heat treated at 1850 °C in reducing atmospheric condition of green geuda Madagascar sapphires.
- Fe content of the Madagascar sapphires is comparatively high with Sri Lankan sapphire.
- Hydroxyl is content in unheated Madagascar sapphires.



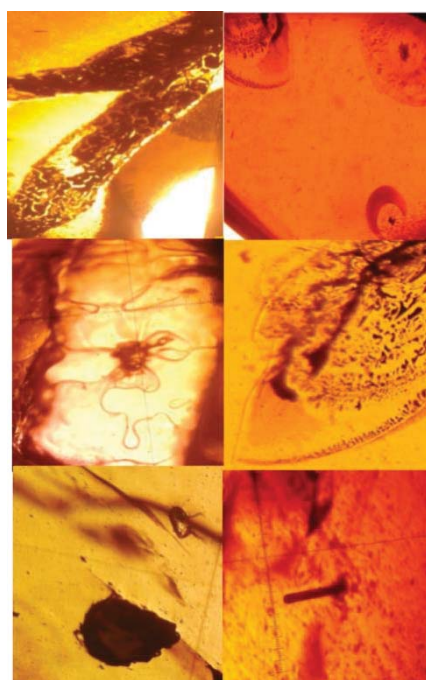
Removing of blue tint of pink Madagascar sapphire

Heat Treatment of Manngu tourmaline

- Manngu tourmaline of Sri Lanka heat treated in different temperature in oxidizing condition. The results clearly showing that, heat treatment in 850 °C in long time period is slightly effect on color of tourmaline.
- FTIR results shows there is no structural changes in heat treatment process.
- Trace element composition results shown that, Fe is most abundant trace element in the sample.
- In addition to that, inclusion changes during the heat treatment process was studied



Inclusion in unheated samples



Inclusion in heated samples

Research No. 03

Preparation Of Nano-Tourmaline out of low quality tourmaline gems – 1000

3.1 Preparation of the far infrared emitting polymer composite using t powder.

Tourmaline is a naturally-occurring semi-precious borosilicate mineral with complex and variable compositions. Also, it's generates a weak electrical charge. This electrical charge enables tourmaline to produce far infrared photon energy, negative ions, and alpha waves.

This character of tourmaline combines to provide many benefits to our health, such as prevention of cholesterol build up, purification of the blood, an improvement in blood circulation, stimulation

of the autonomic nerves, calming of overly-excited sympathetic nerves, stress relief, stimulation of cell metabolism, and enhancement of the immune system, so that tourmaline/ polymer composite has especially been a representative example for the crystal therapy applications.

As a preliminary approach, When the tourmaline/polymer composite preparation tourmaline content was changed viz. 5, 10, 15, and 20% (wt.) and the particle sizes was varied according 50, 110, 125 and 200 mesh sizes. Properties of the composite matrix were checked by using microscopic images. The results clearly state that the perfect polymer composite matrix was achieved with $< 125 \mu\text{m}$ tourmaline powder and the optimum tourmaline weight percentage in the composite is the 20%. The far infrared emitting capacity was measured using ice cube test according to the result tourmaline embedded natural rubber thin film emitted the far infrared radiation. The dissolving rate of the ice cube which kept on the tourmaline /NR composite thin film was high. As an outcome of the current study inner sole for shoe and the slipper has been designed and a patent application was submitted (LK/P/1/19677).

3.2 Investigation of naturally occurring minerals as novel adsorbents and their applicability toward waste water treatment.

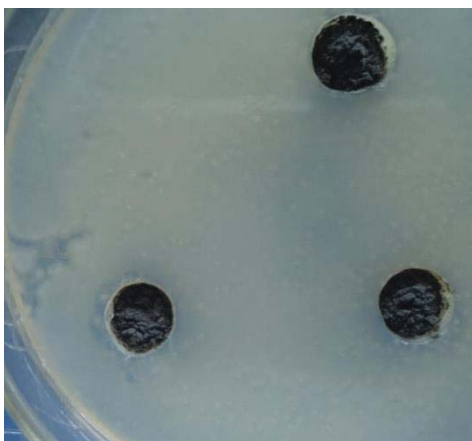
Heavy metal pollution has become one of the serious environmental problems of worldwide concern. Toxic heavy metals are considered as metal ions derived from p, d- and f blocks. They are not necessarily metals with high atomic number. Bioaccumulation and biomagnification lead to deleterious side effects that could later exacerbate into an incurable state. Especially, the exposure to heavy metals can cause for adverse health effects such as kidney diseases, cancers, mental and nervous system disorders. It has been proposed that kidney disease of unknown etiology has some connection to the consumption of contaminated water with heavy metal ions.

So various water treatment methods have been introduced to overcome the aforementioned problem. Such water treatment methods include chemical oxidation, membrane separation, electrochemical treatment, microbial degradation, reverse osmosis, bioaccumulation and filtration. However most of these techniques have several disadvantages. Therefore, identification and development of an effective sorbent for simultaneous removal of toxic heavy metal from water sources has gained a wide attention among scientific community.

In this research, study about the applicability of low quality gem stones such as tourmaline, topaz, hessonite garnet and mineral mica as sorbent materials. As a preliminary approach, adsorption affinities of tourmaline powder ($<63\mu\text{m}$) to synthetic solutions of $\text{As}^{3+}/\text{AsO}_4^{3-}$, Cd^{2+} , Cr^{3+} and Pb^{2+} were investigated by batch experiments. The removal parentage of As, Cd, Cr and Pb at 2 hours contact time, varies as 20%, 19%, 21% and 36% accordingly. Similarly, at pH of 4 the removal percentage of As, Cd, Cr and Pb varies as 24%, 20%, 37% and 41% respectively. The results clearly state that the tourmaline can absorb considerable amount of toxic heavy metals irrespective of the pH level in which adsorption studies were conducted. Similarly, the adsorptions of Cd^{2+} and Pb^{2+} on to those mineral crystals in the size range of $850 \mu\text{m} - 4 \text{ mm}$ were also investigated. It further confirmed that mineral could hold heavy metal ions to in its structure. This concerted effort made through our collaborators paved a way to design a filter cartridge. Such filter cartridge offers repeated uses, after the adsorbents materials saturated once were backwashed. A patent was applied for this new discovery 2017 (Patent No: LK/P/1/19644).

3.3 Study of tourmaline particle effect on bacterial growth

- Five (5) pathogen bacteria were used for this study
- The results shown that, well-diffused method for this study was not suitable.
- Therefore, broth solution method will be performed in year 2018.



Testing of anti-bacterial property of tourmaline

Research No. 04.

Establishment and Implementation of cartographic unit.

This project was initiated under the ongoing project of Exploration and Assessment of Gem Deposits in Sri Lanka (EAGSDL). The main objective of this project is to publish standard gem potential map layout and index. The map is still processing at the Survey department of Sri Lanka and several discussions were made with them for the finalized the prepared map layout. Final layout and detail report will be submitted end of the April 2018.

Research No. 05.

Research No. 06.

Development of a simple geochemical method to delineate fertile terrains and barren areas with respect to gems and to prepare a database.

The basis of this project is geochemistry. It is expected mining processes which are random, non-eco friendly and causing financial losses most often could be minimized using the data developed by this research. River basin maps are prepared by now and 7 samples from kelani river (getahethi oya/seetawaka ganga) and 21 samples from kalu ganga(Ratnapura) have been taken. The samples from kalu ganga were prepared and sent to the National building research organization for testing the COD, inorganic and organic matter amount, water soluble sulphate amount, water soluble chloride amount and pH value. Also the samples are under microscopic analysis after sieve analysis.

Research No. 07.

Development of Mapping Methodology using GIS & Remote Sensing techniques.

Madagama, Bibila and Bandarawela DS divisions were selected for the study and they are situated at Monaragala and Badulla district respectively. Initial model was developed for the Madagama DSD and prepared model was applied for the other areas. Several publications were done under this project. Final report of developed model was submitted to the Head of the Research division.

Research No. 08.

The progress summery of Introduce most effective and efficient color and clarity. Enhancement methods for Semi-precious gem minerals found in gem gravel beds in Sri Lanka

Under this project gem treatment methods such as Heat treatment, diffusion and Dying method have tested using inferior quality Zircon, Moonstone, Garnet and Spinel. The observed results as follows,

	Sample	Method	Color Change	Clarity enhancement
01	Moonstone	800°C/ Reducing	White to transparent	Yes
02	Garnet	800°C/ Reducing	No color change	No
03	Zircon (Brown colour)	1100°C	Brown to blue color	Yes
04	Zircon (Green colour)	1000°C	Dark green to light green	Yes
05	Zircon (Purplish color)	(500-700) °C/ Oxidation	Purplish to orangy red color	Yes
06	Zircon (Purplish color)	(500-600) °C/ Reducing	Purplish to yellow color	Yes
07	Zircon (Light green color)	(950-1035) °C / Reducing	Light green to light blue color	Yes
08	Spinel (Dark purple)	(500 -1000) °C	No color change	No
09	Moonstone	Cu diffusion	No color change	No
10	Moonstone	Dying (crystal violet)	Transparent to pink color	Yes
11	Moonstone	Dying (safranin)	Transparent to purple color	Yes

B (Workshops)

Two workshops organized and conducted for gem trade people.

1. Kahawatta
2. Avissawella

(Publications)

- ශ්‍රී ලංකාවේ මැණික් වල අගය ඉහළ නැංවීමේ ක්‍රමාංශය
 කතෘ මණ්ඩලය -ආර්.එම්.එන්.පී.කේ. ජයසිංහ මයා, එම්.කේ.සී.ජයමාලි මිය,
 එස්. විජේවර්ධන මෙය, ජී.ජී.එම්.එස්. වික්‍රමසිංහ මයා, ආර්.
 එම්. එස්. ධර්මසිරි මිය
 සංස්කරණය හා උපදෙස් -ආචාර්ය ප්‍රශාන් ග්‍රැන්සිස්
- Value Addition of Sri Lankan Gemstones
 Authors - Mr.R.M.N.P.K.Jayasinghe, Ms.M.S.C.K.Jayamali,
 Ms.S.Wijewardane, Mr.G.G.M.S.Wickremesinghe,
 Ms. R.M.S. Dharmasiri
 Reviewed by - Dr. Prashan Francis



Publication

The research papers below were presented at the conference for publishing the researches on mineral resources which was held parallel to the **Sri Lanka NEXT 2017 – A blue-green era** programme.

- Wewegedara W.G.C.N., Jayasinghe R.M.N.P.K., **Assessment of Gem Occurrences in Moneragala Divisional Secretariat Division**, Moneragala District, Research Symposium Proceedings, Mineral Resources of Sri Lanka, Prospects and Challenges, 2017.
- W.G.C.N. Wewegedara, N.P.W.D.S.D. Rodrigo, A.U. Wijenayake, Prashan Francis, **Thermal Enhancement of Inferior Quality Corundum Variety Called ‘Kiri Kottara’**, Research Symposium Proceedings, Mineral Resources of Sri Lanka, Prospects and Challenges, 2017.
- **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 (2017).
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Geotechnical Investigations)

Under the agreement made with CECB, the geotechnical investigation works started in first quarter of year 2017. Geotechnical investigation works and standard penetration test was initiated at the site of Electricity board close to the Fort city. During that project preparation of engineering logs, field cure handling, performance of laboratory tests and preparation of geotechnical investigation report was done.

7. MARINE ENVIRONMENT PROTECTION AUTHORITY

Controlling and prevention of marine pollution

Minimizing the marine pollution caused by oil spills.

In the year 2017, Marine Environment Protection Authority has conducted 13 no of awareness programs and 6 meetings to aware all stakeholder agencies regularly for responsibility given under NOSCOP, 3 training programs for Incident Management Team and 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. A four day workshop for first respondents of NOSCOP was conducted in August 2017.



Training sessions at work shops

“SPILEX 2017” National Oil Spill Exercise was held on 14th and 15th December 2017 at Disaster Management Center with Sri Lanka Ports Authority, Petroleum Corporation, SL Navy, Army, Air Force, Sri Lanka Police and other relevant government agencies. Marine Environment Protection Authority is the responsible government agency for the implementation of National Oil Spill Contingency Plan (NOSCOP) in accordance with the Marine Pollution Prevention Act No. 35 of 2008. The purpose of conducting such exercises is to test the plan, equipment, capabilities of the response team, resources that are available with stakeholder agencies, cooperation among stakeholder agencies and to test all aspects of the oil spill response operations. Practical programmes on way of responding to a chemical spill, ship burning and rescuing crew from a damaged ship were conducted first time at Sri Lanka Ports authority premises and Wallawatta beach area.





NOSCOPE exercise - SPILEX 2017

In 2017, five oil spill events have been occurred and necessary actions have been taken to minimize the environmental damages due to the spill.

SUDDEN OIL SPILL EVENTS OCCURRED IN 2017

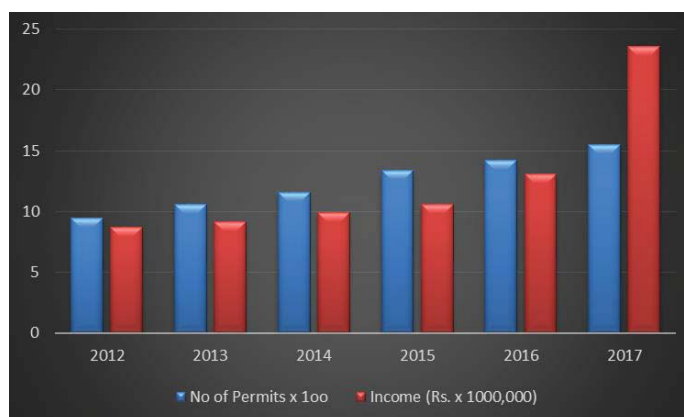
Date	Place where the oil spill occurred	Type and amount
02 nd Jan 2017	Walallawita area of Nilawala river	< 1 Ton of Gasoline
18 th May 2017	Galle Face	2 Tons of Heavy oil
24 th May 2017	Water purification plant of National Water Supply and Drainage Board, Pattiwila	< 1 Ton of Diesel
1 st June 2017	SPBM, Colombo	< 2 tons of Crude oil
Nov 2017	Colombo Port	< 1 Ton of Palm oil

Providing reception facilities for ship generated wastes

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 through the registered service providers. A new online system was introduced to ensure proper and efficient functioning of this service.

Progress on providing Waste Reception Services (WRS)

In the year 2017, 1549 no of permits have been issued and Rs. Mn 23.56 as income has been generated in WRS provided by MEPA.



The graph of illustrating the comparison of income generated and permits issued in 2012 to 2017

Issue of bunker license to 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	2017
Income Rs. Mn.	0.3	0.4	1.75	1.807
No of Permits	10	10	11	11

Controlling and preventing coastal pollution.

Implementing regulation for disposal in to 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 Mannar, Batticaloa, Jaffna for issuing dumping permits under this.

By the year 2017, 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	2017
Income Rs. Mn.	0.71	2.9	3.79
No of permits	39	95	177

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 has inspected and monitored fishery harbours in Sri Lanka. Furthermore several awareness programs for fishery communities & other fishery harbor stakeholders have been conducted throughout the year 2017.

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. 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 at Bathing Sites in each quarter of 2017 in Sri Lanka

District	Bathing Site	Q1	Q2	Q3	Q4
Colombo	Mt. Lavinia	67	78	48	66.96
	Wellawatte	45	85	40	49.05
Kaluthara	Moragalla	76	100	85	100
Gampaha	Negombo Beach Park	49	77	48	66.9
Chilaw	Chilaw Beach Park	56	77	85	70
	Wennappuwa	100	100	76	70
Galle	Hikkaduwa	100	100	100	
	Unawatuna				70
Matara	Polhena	100	100	100	100
Hambantota	Tangalle	100	100	100	90
Tricomalee	Tricomalee	100	100	100	100
	Marble beach				100
	Gopalapuram				100
	Nilaweli beach				100
	Allesgarden				100
Ampara	Arugambe	100	100	100	100
Jaffna	Chatty	100			100
	Thondamanaru	100			100
	Pannai	100			
	Fort beach				100
Mannar	Talaimannar		100	100	95.81
	Pesalai		100	100	100
	Keeri		100	100	100
Batticaloa	Passikudah				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

Marine debris surveys were conducted at Trincomalee and Kirinda beaches. Mapping marine ecosystems in Mulativu, Mirissa, Hambantota, Kilinochchi, Batticaloa and Jaffna have been conducted. Monitoring valuable marine ecosystems, assessing coral cover in Matara and Diversity assessment of Southern coast were completed.

Poverty alleviation programme

According to the concept developed by His Excellency the president 2017 has been named as Poverty Eradication year. To accomplish this goal MEPA has conducted several workshops to sustain the livelihood of the people who are engaging in marine related occupations. 49 participants from Trincomalee and 25 no of participants from Puttalam districts were trained covering following areas; Marine ecosystems and environment protection, Site tourist guide training and Lifesaving to sustain their occupation through proper education. Furthermore basic equipment for their livelihood also have been donated. Based on this competence and given recognition the participants will be able to sustain their livelihood as eco tourist guides.



Training sessions of workshops for eco tourist guides

Clean Beach City Program

To create healthy beaches with minimum pollution and attract many tourists while improving the livelihood and life style of Trincomalee citizens several successful activities were conducted in Trincomalee district in 2017. One of the commendable activity was placing nets to cover the openings of main drainages which controlled the direct entering of debris or wastes in to the sea. As an initiation, 20 main locations were selected and nets were placed in drainages with the collaboration of urban council Trincomalee and the district secretariat. Furthermore distribution of dustbins to 8 selected coastal schools aiming to change attitudes of school children on disposing wastes properly by categorizing. 8 schools were selected for wall paintings on the school walls illustrating importance of marine environment and marine pollution. Apart from these activities placing awareness boards, environmental week programmes have been conducted.



Placing nets to cover the openings of main drainages

Working in liaison with the International Convention and Strengthen Regulatory regime

For improving marine pollution preventive measures MEPA ,2017 in onducted a workshop for incorporating Annex VI in MARPOL convention with the aim of reducing air pollution caused by

ships. Several workshops have been conducted and necessary actions have been carried out for gazetting 3 regulations cited below,

- i. Specifying the manner and method of compilation of the initial and the Final Environmental Examination report and the particulars to be specified in such report, the criteria required of the persons who are to be engaged in the compilation of such reports.
- ii. Specifying the procedure to be followed in conducting an investigation in respect of any causalities arising out of the discharge of any pollutant or pollutants by ships.
- iii. Specifying the type of equipment to be fitted in the ships for the prevention of pollution

Organizing and conducting National Events

National Coastal & Marine Resources Conservation Week and National Beach Cleaning Programme, 15- 22 Sep 2017



Marine Environmental Protection Authority (MEPA) and Department of Coast Conservation and Coastal Resources Management (CC&CRM) were jointly organised the 9th National Coastal Cleanup main programme on 15th September 2017 at "Crow Island Beach Park", at Mattakkuliya. This year government declared a week from 15th 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 district during this week.

Hon Mahinda Amaraweera, State Minister of Mahaweli Development, Hon Anuradha Jayaratne, Deputy Minister of Mahaweli Development & Environment, Isura Devapriya, Chief Minister of the Western Province participated as chief guests for the main programme. Mr. Pujith Jayasundara Inspector-General of Police and Mr. B.K. Prabath Chandrakeerthi, Director General, Department of Coast Conservation & Coastal Resource Management also participated to grace the event. Total of 1700 participants representing Sri Lanka Navy, Army, Air Force, Department of Coast Guard, Civil Defense Forces, Department of Police, School and University students, and various other government and non-government institutes participated to the programme.

In addition to that total of 16,800 participants in 14 coastal districts participated in 76 island wide coastal cleanup programs and awareness programs have been conducted also. The district level summary of the program is cited below.

Participation for district level cleanup programs

District	Participation
Colombo	2700
Gampaha	1200
Puttalam	950
Mannar	800
Kilinochchi	350
Jaffna	850
Mulativu	500
Trincomalee	1400
Batticaloa	2300
Ampara	1000
Hambantota	850
Matara	1100
Galle	1975
Kalutara	850

Underwater cleaning programmes have been conducted in coastal waters at Pigeon island national marine park and Allas Garden Trincomalee within ICC week 2017. Around 50 participants representing Sri Lanka Navy, Diving societies and MEPA have joined to each site to clean plastics, polythene, ropes, other damaged parts of fishing gears and etc. trapped within coral reef and other coastal benthic habitats.

MEPA has also conducted awareness programs in order to prevent Dengue disease in coastal districts of Sri Lanka parallel to the National Coastal and Marine Resources Conservation Week.

DEGREE PREVENTION AWARENESS PROGRAMMES

District	Place	Date
Colombo	Ratmalana	18/09/2017
Gampaha	Negambo	17/09/2017
Puttalam	puttalam	16/09/2017
Mannar	Pesalai	23/09/2017
Jaffna	Welwetithurei	23/09/2017
Trincomalee	Kinniya	16/09/2017
Ampara	Kalmunai	23/09/2017

Baticoloa	Palmeen Madu	16/09/2017
Hambanthota	Hambanthota	16/09/2017
	Kirinda	17/09/2017
Mathara	Polhena	16/09/2017
	Thotamuna	17/09/2017
Galle	Dewata	16/09/2017
	Maha Modara	17/09/2017
Kaluthara	Beruwala	16/09/2017

Walk to celebrate World Ocean Day

Marine Environment Protection Authority organized the walk on June 08th 2017, under the theme "Healthy Oceans, Healthy Planet" to raise awareness of the people about the importance of protecting the marine environment. Inspector General of the Police Mr. Pujith Jayasundara took part as the chief guest and Secretary to the Ministry of Mahaweli Development and Environment Mr. Udaya R. Senevirathne, also participated in this event. About 1,800 members representing schools, universities, ministries, security forces, public institutes and NGO's were participated to the programme. The walk was winded up successfully with 2 two beach cleanup programmes held at Crow Island beach, Mattakkuliya and Wellawatta beach.

YEOSU Project- Building Capacity to Manage Marine Debris in Sri Lanka

Since marine debris cause a huge impact on natural ecosystems, food webs, human health, marine tourism and food etc., 90% of marine debris is coming from land based sources. The threat of marine debris is increasing in Sri Lanka due to growing population, accelerated urbanization, lack of proper waste disposal facilities and lack of public awareness. The purpose of the YEOSU project is to reduce the impact of the inflow of waste in coastal areas and to manage marine debris dumped into the ocean. Identifying pollutant sources of lagoon areas, their quantities and their adverse effects have been studied and the report on Marine Debris Management Plan in Negombolagoon has been prepared in September 2017.



Data Collection survey

Third National Symposium on Marine Environment

The Marine Environment Protection Authority conducted the Third National Marine Symposium in Sri Lanka on 17th October 2017 at BMICH, Colombo 07 with the participation of scientists, researchers, legal draughtsmen and officers from state and non-state institutions with a view to creating a dialogue for protecting the marine environment and eliminating threats to the marine environment. The chief guest was the Ambassador of the Republic of Cuba to Sri Lanka Ms. Juana Elena Ramos Rodriguez. 19 research findings were published in research symposium which was conducted under five sessions namely;

- Marine Living and Non Living Resources
- Marine Pollution Prevention and Related Techniques
- Tourism and Marine Environment
- Effects of Fishing on marine ecosystems
- Poster session

Wanaropa National Programme

HE the President Maithripala Sirisena declared that October 2017 is “Vana Ropa” month. An island-wide planting programme has been launched by Ministry of Mahaweli Development and Environment during the month. This programme intends to increase the current forest cover of 29% by further 180,000 hectares to 32% through a three year national programme during 2016-2018.

- In 2017 MEPA has conducted tree plantation programmes at selected schools at coastal districts namely Galle, Matara, Colombo, Gampaha, Kalutara, Puttalam, Batticaloa, Ampara, Hambantota and Trincomalee. Total of 2844 of fruit plants and tree plants with timber value were distributed to plant under this programme.



Distributing plants to schools



Coconut cultivation program at Vakarei

- Moreover, Coconut cultivation program has been conducted by MEPA with the help of Sri Lanka Navy staff at SLNS Kashyapa, Vakarei and MEPA staff to cultivate about 160 coconut plants in SLNS Kashyapa, Vakarai in 2nd of November 2017 for the Wanaropa national event with the expectation of expanding the cultivation for 5 more acres.

Financial Allocation and Progress -2017

Description	Financial Allocation – 2017	Actual Expenditure – 2017	Percentage
Recurrent	153.78	143.32	93%
Capital	90.00	79.55	88%
Projects			
Capacity Building Marine Debris Management (YEOSU Project)	1.00	0.642	64%

8. STATE TIMBER CORPORATION

The State Timber Corporation was established in April 1968, under the State Industrial Corporation Act No 49 of 1957. The objectives and function of the STC as per Gazette notification no.14796 of 4th April 1968 and 178/10 of 5th February 1982 and 11907 of 26th June 2001 are as follows.

STATE TIMBER CORPORATION - (From 01.01.2017 to 31.12.2017)

Activity	Target		Progress	
	Physical	Financial Rs.'000	Physical	Financial Rs.'000
Logs M ³	146,568	2,617,613	146,094	3,653,693
Sawn Timber M ³	5,250	291,652	4,654	241,083
Imported Sawn Timber M ³	1,500	181,125	255	49,132
Transmission Poles No.	24,400	243,512	20,186	197,756
Sleepers No.	61,500	552,885	7,416	153,115
Round Poles No.	85,200	6,590	141,790	21,316
Fence Posts No.	56,550	3,393	114,681	13,859
Firewood M ³	68,070	33,840	126,861	64,514
Furniture Rs.Mill.	351.0	501,333	335.6	445,038
Elephant Poles No.	59,500	150,535	33,424	88,930
other	25		15.6	

SOURCES OF TIMBER FOR PRODUCTION (From 01.01.2017 to 31.12.2017)

	Crown Land	Private Land
Production of Logs (m ³)	104,875	2,892
Production of Sawn Timber (m ³)	4,423	66
Production of Transmission Poles (No.)	16,300	3,780
Production of Sleepers (No.)	5,620	1,251
Production of Round Poles (No.)	129,015	656
Production of Fence Posts (No.)	85,770	966
Production of Elephant Poles (No.)	18,954	14,229
Production of Firewood (m ³)	99,397	372

Capital Investment

- Land Improvement Rs. M.12.6
- Building Rs. M.15.9
- Plant and Machinery Rs. M.23.2
- Electrical appliances Rs. M.1.8
- Vehical Rs. M.28.9
- Furnitures Rs. M.3.9
- Office equipments Rs. M.1.3
- Computer and equipments Rs. M.4.0
- Various assets Rs. M.1.7

To actively contribute to the "Wanapura" National Tree Planting Program.

Distributing nearly 45,000 plants to 40 institutions, including schools, universities, government agencies, tri-forces and other agencies.

To mark the World Environmental Day, Several Programme were conducted.

- Donation of 6 Agric. Equipment sets for schools in Matara, Monaragala, Rathnaoura, Bandarawela, and Nuwara eliya districts through “Thurujana Sisu Bank tree planting program”
- Distribution of necessary items for flood affected area in Kalutara district.
- Distribution of 50 tree guards.
- Provide Timber Name Boards to the National Plantation Management Institution.
- For the National Plantation Management Institute
- Provision of timber name boards.
- Tree Plantation programme for Moragahakanda Kaluganga Project.

➤ Awareness program on wood products and sustainable use in 2017

- Conducting about 14 awareness programs for school teachers on sustainable use of timber and timber products and distribution of 500 leaflets related to timber.
- 42 lectures on Teachers and conducted by three day workshops.
 - Six TV Programme and one Radio Programme

Preparation of detailed reports for Green Building Concepts and preparation of relevant leaflets and related documents for green building certification.

- Contribute active participation to "Sri Lanka Next" Blue Green Era programme conducted by the Ministry of Mahaweli Development & Environment
- Research articles, newspaper articles and magazine articles related to the timber & wood industry which were written and published by the STC Officers

Research Papers

- Finger Joint Timber Products for Effective Utilization of Natural Resources: An Analysis of Physical Properties, Economic Factors and Consumers' Perception. (Sandhika A.L., Pathirana G.P.D.S. Muthumala C.K. – *International Symposium on Agriculture and Environment - 2017*)
- Consumer Performance for Various Colors of Selected timber (Perera W.H.E.^{1*}, Sandhika A.L.², Ruwanpathirana N.³ – *Department of Crop Science, Faculty of Agriculture, University of Ruhuna, Sri Lanka & Research Development and Training division of State Timber Corporation*)

- Study on Wood Rays and Fiber Characteristics and Their Relationship with Wood Density of Selected Non-Traditional Wood Species in Sri Lanka– (*Rathnayeka G.K.V.H.^{1*}, Amarasekara D.A.B.N.², Kumara K.K.I.U.A.², Ruwanpathirana N.³- Crop Science, Faculty of Agriculture, University of Ruhuna, Sri Lanka, & Research Development and Training division of State Timber Corporation*)
- Study on Vessel Characteristics and Their Relationships with Wood Density and Texture of Selected Uncommon Timber Species in Sri Lanka(*Madhurangi W.J.^{1*}, De Silva Sudhira², De Silva Subashi GHMJ³ and Muthumala⁴ - Amarasekara D.A.B.N.², Kumara K.K.I.U.A.², Ruwanpathirana N.³- Crop Science, Faculty of Agriculture, University of Ruhuna, Sri Lanka, & Research Development and Training division of State Timber Corporation*)

Newspaper Articles were published as follow

Know your Timber (*Standard needed for timber identification – C.K. Muthumala – The Nation – 2017/06/25*)- (English)

Magazine Articles were published as follows

- Timber is the best suitable product for green building. Why??(2017- Sinhala) – *Dr. NimalRuwanpathirana (Deputy General manager – Research Development and Training) – Soba*
- Furniture Production using Wasted Timber Materials (2017- Sinhala) – *C.K. Muthumala (Manager- Research and Training) - Soba*

➤ Timber Identification reports were issued as follows

○ Spp. Identification	-115
○ Moisture content	-22
○ Timber Density	-11
○ Boron Treatment Test ඉය	-12
○ CCA/CCB Treatment Test	-04
○ Timber Mechanical P roperty Reports	-09
○ Technical Reports	-07

➤ **Training programmes were conducted by Timber Technology Training Institute (TTTI)**

- TTTI was established in 2007 at the Kaldemulla in Ratmalana. TTTI is comprised of 25 internal staff members of the academic staff and visiting lectures
- The TTTI often encourages its employees according to the corporate plan. It will provide economic and social benefits institutions to the employees as well as to the socie
- Training programs are organized for employees in different fields. Accordingly 188 training programs were launched in 2017. The total expenditure incurred was Rs. 1.0 million.

The conducted training programs in TTTI are mentioned as follows

○ Trainings for newly recruits	-25	} 188
○ Trainings of timber grading	-16	
○ Trainings of Asst Regional Managers	-11	
○ Computer training programs	-38	
○ Training courses on furniture production	-47	
○ Training programme of maintain Sawing Mills	-51	
○ Other various training programs in external training institutions	-342	

- Under the first phase of the Poverty Reduction program, 35 low income carpenters were trained on the production of home based products.

9. GEOLOGICAL SURVEY AND MINES BUREAU

The Geological Survey & Mines Bureau (GSMB) is a statutory body established under the Mines and Minerals Act.No.33 of 1992 and the Head office is situated at, No. 569, Epitamulla Road, Pitakotte. There are sixteen regional offices at Matara, Kandy, Kurunegala, Rathnapura, Anuradhapura, Polonnaruwa, Badulla, Monaragala, Ampara&Hambantota, Trincomalee, Kanthale, Batticaloa, Jaffna, Kaluthara and Gampaha.

Progress Report of the Geology Division

Construction Raw Material Survey

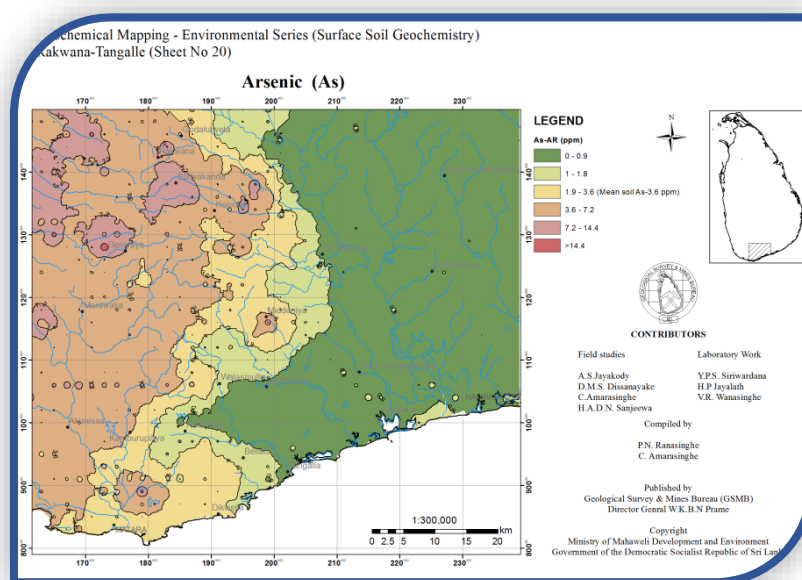
In order to cater the huge demand of construction raw materials generated due to on-going accelerated development projects in Sri Lanka and to fulfill their future requirements, Geology Division of GSMB started a qualitative and quantitative construction raw material survey for and demands, since end of February 2017. This survey is carried out on the request of the Department of National Planning with their sponsorship of Rs. Sixty Million (Rs. 60 Million).

Progress of the Survey

	District	Progress during Year 2017
1	Colombo	Field Work Completed
2	Trincomalee	Field Work Completed
3	Kalutara	Field Work Completed
4	Kegalle	Field Work Completed
5	Monaragala	Field Work Completed
6	Anuradhapura	Field Work Completed
7	Puttalam	Field Work Completed
8	Matara	Field Work Completed
9	Hambantota	Field Work Completed
10	Kurunagala	Field Work Completed
11	Gampaha	Field Work Completed
12	Galle	Field Work was Commenced at the end of the year

Soil Geochemical Mapping Programme Compilation and Printing of Soil Geochemical Mapping Programme

Printing of the Geochemical Atlas of Sheet No 20 (Rakwana- Tangalle) using analytical data of six 1,50,000 sheets Thimbolketiya, Matara, Rakwana, Tangalle, Morawaka and Hambantota has been completed and the Atlas is available for sale.



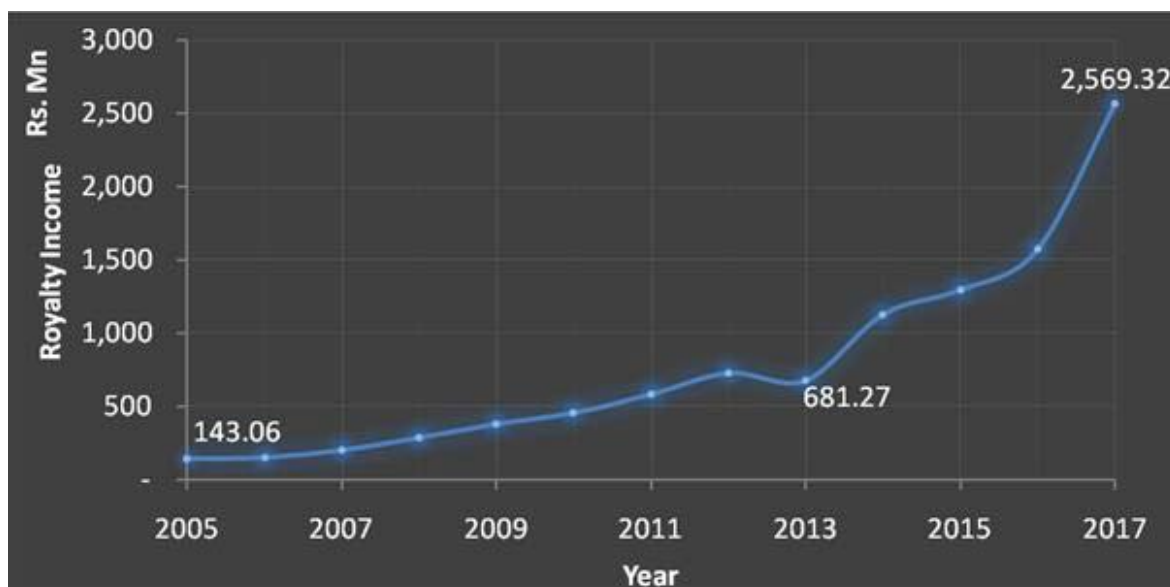
Special activities done by Mines Division and contribution to the national economy

As an effective movement of capacity building and awareness of particularly blasting forams & 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 are been conducted under regional level to aware the mining license holders in order to enhance the knowledge and understanding in blasting, minesafety, minemanagement, environment and sociological aspects .In the exercise of eradication of illicit mining activities, series of raids wereconducted 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 strengthen 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 mineraltransport 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.

INCOME GENERATED THROUGH ISSUING LICENSES

Royalty – (Income)

Following chart shows the royalty income collected by the GSMB. It clearly shows a general increase of royalty collection.

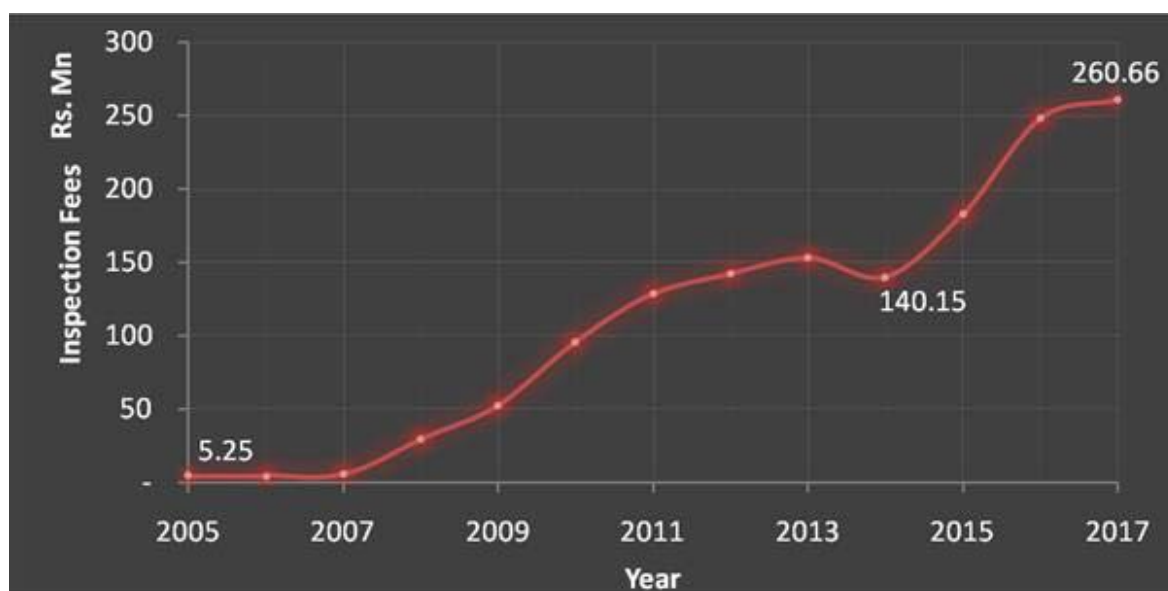


Royalty income during the period of 2005 to 2017

Year	Royalty Income (Rs. Mn.)	Year	Royalty Income (Rs. Mn.)
2005	143.06	2012	732.71
2006	150.26	2013	681.27
2007	199.66	2014	1,128.46
2008	284.05	2015	1,293.43
2009	378.29	2016	1,578.58
2010	453.85	2017	2,569.32
2011	586.89		

Income generated by Mines Inspections

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

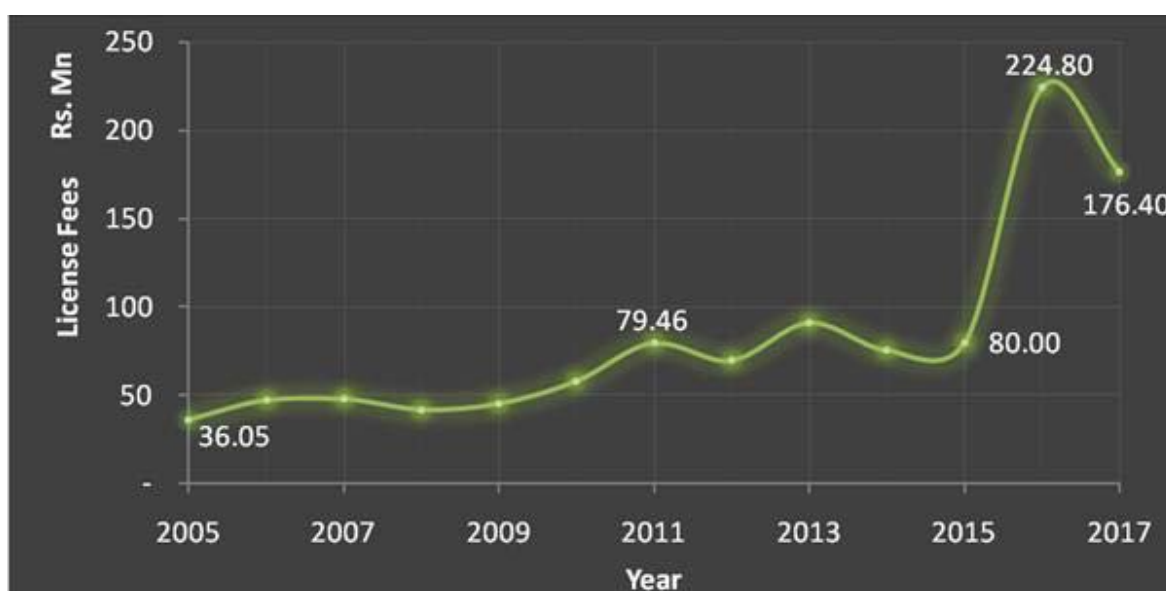


Income generated by mines inspection during the period of 2005 to 2017

Year	Inspection Fees (Rs. Mn.)	Year	Inspection Fees (Rs. Mn.)
2005	5.25	2012	142.52
2006	4.43	2013	153.23
2007	5.61	2014	140.15
2008	30.07	2015	182.94
2009	52.76	2016	247.95
2010	95.45	2017	260.66
2011	128.42		

Income generated by issuing Licenses

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



Income generated by issuing licenses during the period of 2005 to 2017

Year	License Fees (Rs. Mn.)	Year	License Fees (Rs. Mn.)
2005	36.05	2012	69.82
2006	47.04	2013	91.15
2007	48.04	2014	75.60
2008	41.90	2015	80.00
2009	45.07	2016	224.80
2010	57.64	2017	176.40
2011	79.46		

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2017

ASSETS	2017 ACTUAL Rs.	2016 ACTUAL Rs.
Non Current Assets	459,028,084.12	528,026,895.13
Investment	4,000,000.00	4,000,000.00
Current Assets	2,872,552,708.93	1,948,484,004.73
Total Assets	3,335,580,793.05	2,480,510,899.86
EQUITY & LIABILITIES		
Equity	1,902,670,291.06	1,877,099,491.73
Foreign Fund	13,691,615.02	16,968,107.86
Local Grants	0	10,399.80
Distress Fund	28,109,799.00	8,592,291.67
Non Current Liabilities	118,775,502.50	131,042,055.66
Current Liabilities	615,321,030.94	446,798,553.14
Total Equity & Liabilities	3,335,580,793.05	2,480,510,899.86

STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED 31 DECEMBER 2017

	2017 ACTUAL	2016 ACTUAL
	Rs.	Rs.
Income	5,188,535,575.16	2,087,912,668.07
Other Income	100,148,439.17	79,632,423.60
Operating Expenses	-325,780,790.51	-306,977,448.55
Administration Expenses	-415,920,677.96	-385,188,483.01
Operating Profit	4,546,982,545.86	1,475,379,160.11
Net Finance Income	281,010,362.65	115,963,666.35
Profit Before Tax	4,827,992,908.51	1,591,342,826.46
Income Tax Expenses	75,714,400.00	27,315,639.00
Profit for the Year	4,752,278,508.51	1,564,027,187.46

10. CENTRAL ENGINEERING CONSULTANCY BUREAU

SUMMARY OF PERFORMANCE OF THE CENTRAL ENGINEERING CONSULTANCY BUREAU IN THE YEAR 2017

A. CONSULTANCY PROJECTS

- Number of new consultancy projects undertaken in the year 2017 – 83
Total value of consultancy services – LKR 1,574 Million
- Numbers of consultancy projects completed in the year 2017 - 238
Total value of consultancy services – LKR 1,381 Million

B. CONSTRUCTION PROJECTS

- Number of new construction (on the basis of design and construction) projects undertaken in the year 2017 - 107
Total contract value of the projects – LKR 7,387 Million
- Number of construction (on the basis of design and construction) projects completed in the year 2017 - 168
Total contract value of the projects – LKR 11,598 Million

A Few Major Projects Secured in 2017

Consultancy Projects :

	Consultancy Projects	Value of Consultancy Contract (Rs. M)
1.	Employers Quality Representative (EQR) for Infrastructure Development of Port City	250
2.	Metro Colombo Solid Waste Management Project at Aruwakkalu	180
3.	Proposed 20MW Seethawaka Hydro Power Project	124
4.	Proposed Luxury Seafront Hotel for Melwa Hotels & Resorts at Negombo	35
5.	Colombo Port City Development Project – Infrastructure and Landscape Works	272

Construction Projects :

	Construction Projects	Total Project Cost (Rs. M)
1.	Construction of Academic & Administration Building of the Nursing Training School at Anuradhapura.	652
2.	Construction of the New Building complex for the Base Hospital Nindavur – Ampara	2,887
3.	Construction of a Specialized Paediatric wards complex in the General Hospital – Ampara	876



PROPOSED NATIONAL SCHOOL POLONNARUWA WORK IN PROGRESS Achievements up to the end of December 2017

Details of a Few Completed & Ongoing Major Projects Consultancy Division

#	Project	The total cost of this project	Progress end of year 2017
1	Extension of Southern Expressway Project (ESEP) – Matara to Beliatta and Mattala to Hambantota	Rs.225 Billion	55%
2	Defence Headquarters Complex (DHQC) at Akuregoda	Rs.43 billion	77.25%
3	Matara – Katharagama Railway Extension Project	Rs.40 Billion.	Matara – Beliatta Sector: 80% completed
4	Design of a Jetty at Naval Dockyard, Trincomalee	Rs.3, 000 Million	80%
5	Broadland Hydropower Project	Rs. 11,480 Million.	44%
6	Kaluganga Head Works Development Project	Rs. 12,000 Million.	85% ක්.
7	Colombo District Secretariat Building Complex	Rs. 2,515 Million.	65%
8	National Stroke Center Building Complex at Base Hospital, Mulleriyawa	Rs.1,220 Million	55%
9	Moragahakanda Development Project – Elahera	Rs. 33,000 Million.	Successfully Completed
10	Uma Oya Development Project	Rs.71, 400 Million	52%.
11	Shifting of Manning Market to Paliyagoda	Rs. 4,000 Million.	58%.
12	Construction of Proposed Prison Complex at Angunakolapelassa	Rs.3,000 Million.	Successfully Completed
13	Construction of New Building for Attorney General's Department	Rs. 900 Million.	33%.
14	Central Expressway Project – Stage 2	Rs. 137 Billion.	13.44%.
15	Construction of National School in Polonnaruwa Stage 1	Rs. 8.5 Million.	99%
	Construction of National School in Polonnaruwa Stage 2	Rs. 15 Million.	55 %
16	Construction of District Level Sports Complex at Polonnaruwa.	Rs. 81 Million.	Successfully Completed
17	Construction of AVIC Residential Project, Colombo 3	Rs.25 Billion	Successfully Completed



CENTRAL EXPRESSWAY PROJECT – STAGE 2



MATARA – BELIATTA RAILWAY EXTENSION PROJECT



BROADLAND HYDROPOWER PROJECT



DEFENCE HEADQUARTERS COMPLEX



UMA OYA DEVELOPMENT PROJECT



DISTRICT SECRETARIAT - COLOMBO



District Level Sports Complex at Polonnaruwa



AVIC Astoria Luxury Residences

Construction Division

1. Construction of Morana Reservoir

- Progress achieved is 82%. The total cost of this project is Rs. 1,210 Million.

2. 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 75%. The total cost of this project is Rs. 1,005 Million.

3. National Environment Secretariat Building at Battaramulla

- The total cost of this project is Rs. 1,126 Million. This project was successfully completed in 2017.

4. Construction of Head Office Building for Ministry of Health, Colombo

- Progress achieved is 19%. The total cost of this project is Rs. 5,199 Million.



Ministry of Mahaweli Development and Environment



Head Office Building for Ministry of Health

5. Construction of proposed Nephrology, Dialysis & Transplant Unit at Teaching Hospital, Karapitiya

- Progress achieved is 42%. The total cost of this project is Rs. 790 Million.

6. Construction of Accident & Emergency Treatment Unit, Teaching Hospital, Jaffna

- Progress achieved is 67%. The total cost of this project is Rs. 501 Million.

7. Establishment of Emergency & Accident Center at Teaching hospital, Batticaloa

- Progress achieved is 49%. The total cost of this project is Rs. 773 Million.

8. Construction of Maternity Ward Complex at General Hospital, Kurunegala (Stage -111)

- Progress achieved is 41%. The total cost of this project is Rs. 915 Million.

9. Construction of Proposed Cancer Treatment Center - Stage II, General Hospital (Teaching) – Kandy

- The total cost of this project is Rs. 1,279 Million. Progress achieved is 8%.

10. Construction of Proposed Museum & Resource Center at Polonnaruwa – Phase 1

- The total cost is Rs. 167 Million. This project was successfully completed in 2017.

11. Proposed Prison Complex in Jaffna – Stage 2

- Progress achieved is 34%. The total cost is Rs. 447 Million.

12. Construction of Vidyalankara International Buddhist Conference Hall at Vidyalankara Pirivena, Kelaniya.

- The total cost of this project is Rs. 685 Million. Progress achieved is 73%.

13. Proposed Design and Construction of Proposed Administrative Complex at new Town, Polonnaruwa.

- The total cost of this project is Rs. 1,304 Million. Progress achieved is 20%.

14. Proposed Government officers' Quarters Complex at new town Polonnaruwa

- The total cost of this project is Rs. 1,737 Million. Progress achieved is 14%.

15. Provincial Level Sports Complex at Rathnapura

- The total cost of this project is Rs. 406 Million. Progress achieved is 70%.

16. Construction of Proposed Road Projects at Polonnaruwa District – Package 1

- The total cost of this project is Rs. 1,828 Million. Progress achieved is 95%



**VIDYALANKARA INTERNATIONAL BUDDHIST
CONFERENCE HALL, KELANIYA**



**MATERNITY WARD COMPLEX AT KURUNEGALA
GENERAL HOSPITAL**



MUSEUM IN POLONNARUWA – PHASE 1

International Division

1. **Renovation and Refurbishment of Staff Quarters of Sri Lankan High Commissioner in London.**
 - The total cost of this work is Rs. 86 Million. Progress achieved at the end of 2017 is 60%. The work is in progress.
2. **Proposed Extension and Refurbishment of Sri Lankan High Commissioners Residence in Malaysia.**
 - The total cost of this work is Rs. 56 Million. This project was successfully completed at the end of the year 2017.

11. MAHAWELI CONSULTANCY BUREAU (PVT) LTD

Mahaweli Consultancy Bureau (Pvt) Ltd, which is a limited liability company established under the Companies Act No 17 of 1982 of the Democratic Socialist Republic of Sri Lanka and re-registered under the Companies Act No. 07 of 2007. The company was incorporated on 18th June 1998. The Mahaweli Consultancy Bureau (Pvt) limited is now in the process of converting some of the Mahaweli activities which are commercially viable, to be run on private sector lines. The Company provides a Comprehensive range of Consultancy Services from Preparation of Prefeasibility and Feasibility Studies in Land Water Resources Development, Environmental and Social Studies to Project Management.

ENGINEERING DIVISION - 2017 Ongoing Projects

No	Project	Original Contract Value (Rs.)	Total work done (Million)	Total Expenditure including overheads (Million)	Payment received from the client (Million)
01	Proposed Circuit Bungalow at Moragahakanda – Moragahakanda Kaluganga Development Project	82,935,966.63	21 M	54.6 M	34.5 M
02	Proposed Visitors Information Center at Moragahakanda	137,053,875.00	5 M	26.6 M	23.1 M
03	Construction of Proposed Community Based Bank Building - Hingurakgoda	10,812,971.47	6 M	2.1 M	3.9 M
04	Reconstruction of Kanewela Anicut - Horana	34,601,101.72	-	-	-

No	Project	Original Contract Value (Rs.)	Extra work done (Rs.)	Total work done (RS.)	Total Expenditure including overheads (Million)	Payment received from the client (Million)	Pending Payments (Million)
01	Rehabilitation of Somaweera wewa Down Stream in Madirigiriya Divisional Secretariat Division	3,817,000.00	2,954,981.92	6,771,981.92 (100% Completed)	19.5	14.5	2.1 (Retention Money)
02	Rehabilitation of Somaweera wewa in Madirigiriya Divisional Secretariat Division	7,988,700.00	3,521,755.78	11,510,455.78 (100% Completed)			
03	Rehabilitation of Pathola Kotuwa wewa in Madirigiriya Divisional	5,218,240.00		3,816,822.69 (100% Completed)			

No	Project	Original Contract Value (Rs.)	Extra work done (Rs.)	Total work done (RS.)	Total Expenditure including overheads (Million)	Payment received from the client (Million)	Pending Payments (Million)
	Secretariat Division						
04	Rehabilitation of Ekamuthugama-Dimuthu wewa (37-1) in Madirigiriya Divisional Secretariat Division	5,622,040.00		4,996,260.01 (100% Completed)			
05	Rehabilitation of Ekamuthugama – Dimuthu wewa (37) in Madirigiriya Divisional Secretariat Division	7,620,955.00	2,079,884.20	9,700,839.20 (100% Completed)			

Project Management / Consultancy Division

Project Progress of Project Manahement/ Consultancy Division in 2017

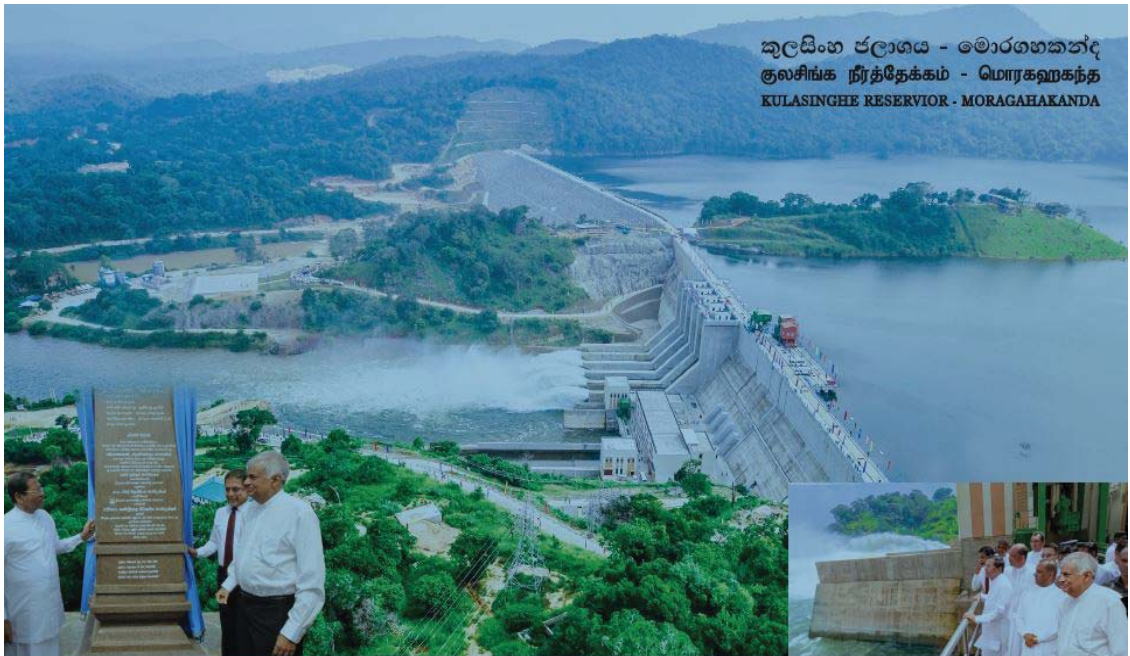
No	Project Name	Project Value (Rs.)	Completed / Ongoing	Progress (%)	Remarks
01	Consultancy Services for the study of water resources development in Northern Province	34,452,520.00	Completed	100%	-
02	Contract on Compliance Monitoring, Auditing and Reporting the Implementation of EMP prepared for the Uma Oya Project (Head Works)	10,879,000.00	Completed	100%	Contract Extend for the year 2018
03	Consultancy Services for SEA for Water Resources and Irrigation Development in Sri Lanka	37,750,625.00	Ongoing	70%	-
04	Consultancy Services for the Preparation of EIA Report for the MaduruOya Right Bank Development Project (China CAMCI)	20,331,500.00	Ongoing	95%	-
05	Consultancy Services for the EIA Study of Proposed Gin-Nilwala Diversion Project	22,138,000.00	Ongoing	10%	Client (MIWRM) is in the process of finalizing the revised project layout
06	Consultancy Services for the EIA study of Proposed Lower MalwathuOya Reservoir Project	8,940,250.00	Ongoing	90%	-

CONSULTANCY RECRUITMENTS 2017.

- 1) PROVISION OF SERVICES FOR MORAGAHAKNDA RESERVOIR HEADWORKS
PROJECT BETWEEN SINOHYDRO CORPORATION LIMITED CHINA AND
MAHAWELI CONSULTANCY BUREAU (PVT) LIMITED.
CONTRACT VALUE – RS. 670M
CLAIMED VALUE – RS. 209.7M (EXCLUDING NBT AND VAT)
TOTAL RECEIVED AFTER DEDUCTING MOBILIZATION ADVANCE – RS. 205.5M
(EXCLUDING NBT AND VAT)
- 2) CONSULTANCY SERVICES FOR DESIGN REVIEW AND CONSTRUCTION
SUPERVISION OF CONSTRUCTION OF HEADWORK OF MORAGAHAKANDA.
CONTRACT VALUE – RS. 167.1M (EXCLUDING NBT AND VAT)
CLAIMED VALUE – RS. 161.1M (EXCLUDING NBT AND VAT)
TOTAL RECEIVED AFTER DEDUCTING MOBILIZATION ADVANCE – RS. 158M
(EXCLUDING NBT AND VAT)

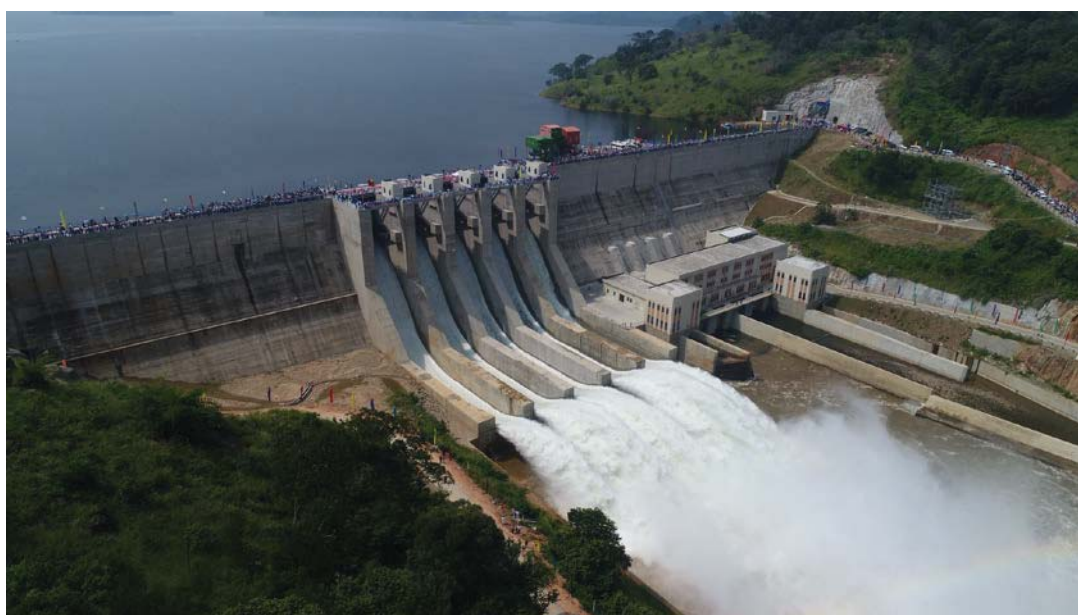
PART II

Progress of Multipurpose Development Projects.



1. MORAGAHAKANDA – KALUGANGA DEVELOPMENT PROJECT

The Moragahakanda - Kaluganga Development Project was formulated under the Mahaweli Master Programme during 1964 - 1968 by UNDP of FAO, but commencement had been delayed by nearly four decades due to many reasons. Later this project has been inaugurated with an enthusiastic effort by the current president His Excellency Maithripala Sirisena on 25th January 2007, when he was the minister of Agricultural Development and Agrarian Services, to resolve the problem of inadequacy of water for cultivation which was the crucial and burning issue of Rajarata People.



Benefits of the Project;

- **Agriculture:** Cropping intensity will be enhanced from 100% to 154% in the Development Area. With the implementation of the project it will increased up to 181% on the average. Direct benefits include increased rice yield per hectare with an additional agricultural production of 123,000 tons annually. The net annual agricultural benefits will be Rs. Mn. 4000 in monitory term.
- **Power generation:** Annual fuel cost savings with the hydro power production (25 MW) will be around Rs. Mn. 1545
- **Inland fish Production:** The average annual fish production potential of the reservoir is estimated to be around 4,700 tons per year, representing a net benefits Rs. Mn. 940 annually.
- **Flood control:** Controlling the flood damages caused in Somawathiya & Mannampitiya.
- **Enhancing Ecotourism:** Expecting to enhance the eco-tourism by developing Wasgamuwa Nation Park, Minneria National Park & Riverston etc. Moragahakanda and Kaluganga have a great ecotourism potential.
- **Enhancing employment opportunities:** 650 no of people are directly deployed in the Project. Further youth are trained by conducting/ arranging Gem & Jewelry courses, Hotel Management course, Self-employment trainings etc.

The Moragahakanda / Kaluganga Development Project consists the following main activities under phase 1 development;

1. 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)
2. 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.
3. 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.
4. Land acquisition and resettlement of affected families (nearly 3000 families)
5. 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 2017 are given below.

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. In addition to the initial contract value, there are 2 variation claims to be paid to the contractor. USD 10.94 Mn has to be paid for the power house variation and the saddle dam excavation variation yet to be finalized.

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

Item no.	Description of Works	Work done during year 2017 (%)	Cumulative work done up to end of year 2017 (%)	Financial Progress during 2017 (Rs. Mn)
1.0	Construction of main dam	6.0	100.0	3,936.62
2.0	Saddle dam 1 (including apparent structures such as EMC, EUC, Power House, Spillway etc)	13.0	100.0	
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 the Government of Sri Lanka.

The contract of Kaluganga reservoir construction was awarded to the Sinohydro Corporation Limited of China on 12th march 2014. Contract value is US \$ 124.94 Mn. 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 2017 (%)	Cumulative work done up to end of year 2017 (%)	Financial Progress during 2017 (Rs. Mn)
1.0	Construction of main dam	32.3	85.0	4,532.33
2.0	Saddle dam	31.3	56.0	



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 item are described below.

Right Bank of Kaluganga

Nos.	Activity	Work done during 2017	Cumulative work done
1	Buildings	33 Nos completed	108 Nos completed
2	Roads		
2.1	Main Roads	1 km completed	10 km completed
2.2	Market Roads	9.5 km completed	19 km completed
2.3	Hamlet Roads	9.3 km completed	31.4 km completed
3	Irrigation works		
3.1	D & F Canals	7 km completed	45 km completed
3.2	Small tanks	-	9 Nos completed
3.3	Level crossings	12% completed of 3 level crossings	26% completed of 3 level crossings

Left bank of Kaluganga

Nos.	Activity	Work done during 2017	Cumulative work done
1	Buildings	17 Nos completed	105 Nos completed
2	Roads		
2.1	Main Roads	6 km completed	27.96 km completed
2.2	Market Roads	7 km completed	14.24 km completed
2.3	Hamlet Roads	6 km completed	36.63 km completed
3	Irrigation works		
3.1	Main Canal	30% completed out of 2.9 km	30% completed out of 2.9 km
3.2	Branch & Sub Branch Canals	1 km completed	4.71 km completed
3.3	D & F Canals	20 km completed	81.53 km completed
3.4	Small tanks	-	2 Nos completed

Medirigiriya development area in system D

Nos.	Activity	Work done during 2017	Cumulative work done
1	Buildings	16 Nos completed	38 Nos completed
2	Roads		
2.1	Main Roads	8 km completed	8 km completed
2.2	Market Roads	40% completed of 23.6 km	40% completed of 23.6 km
2.3	Hamlet Roads	14 km completed	25 km completed
3	Irrigation works		
3.1	Main Canal	-	6.5 km completed
3.2	Branch & Sub Branch Canals	4.9 km completed	12.23 km completed
3.3	D & F Canals	Pre cast structures completed	Pre cast structures completed
3.4	Small tanks	1 completed	11 nos 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 affected families during the year 2017;

GN Division	No of families resettled		Families received Rs. 16 lakhs instead of irrigable and highlands		Families received Rs. 12 lakhs instead of Irrigable lands	
	During 2017	Cumulative (as the end of 2017)	During 2017	Cumulative (as the end of 2017)	During 2017	Cumulative (as the end of 2017)
Thalagoda	60	328	56	85	18	58
Kadawatha	34	253	28	68	12	96
Kambarawa	52	306	49	96	9	38
Galporugolla	25	160	19	69	5	29
Elagamuwa	34	242	25	89	9	50
Medhapihilla	31	180	23	130	6	32
Kongahawela	15	43	5	33	8	8
Maragamuwa	2	13	1	12	1	1
Millagahamulathenna	37	137	18	109	2	22
Rajawela	8	8	6	6	0	0
Total	298	1670	230	697	70	334

Resettlement activities related to Kaluganga reservoir effected families during the year 2017;

GN Division	No of families resettled		Families received Rs. 16 lakhs instead of irrigable and highlands		Families received Rs. 12 lakhs instead of Irrigable lands	
	During 2017	Cumulative (as the end of 2017)	During 2017		During 2017	Cumulative (as the end of 2017)
Karandamulla	33	210	8	8	9	12
Guruwela	0	10	0	0	0	0
Galgedawela	9	33	0	2	3	3
Rawanagama	12	94	3	14	4	12
Gonawela	8	81	3	10	3	6
Pallegama	21	181	5	22	6	24
Miniranketiya	27	160	7	11	13	28
Halminiya	35	36	0	0	1	1
Imaduwa	77	77	0	0	7	7
Gangahenwela	30	30	2	2	2	2
Rambukoluwa	58	58	5	5	2	2
Akrahediya	8	12	8	8	0	0
Total	318	982	41	82	50	97

Land Acquisition & compensation

The following table describes the compensation paid in each development area;

Development Area	Compensation paid during 2017 (Rs. Mn.)	Compensation paid (Cumulative – Rs. Mn.)	Provided land lots during 2017	Provided land lots (Cumulative)
Moragahakanda	1,435.00	3,752.78	1,389	5,959
Kaluganga	940.00	2,171.77	881	3,053
Medirigiriya	-	57.12	-	174
Total	2,375.00	5,981.67	2,270	9,186

Environmental Impact Mitigation and Implementation of Environmental recommendations

Moragahakanda Agricultural Development Project

In compliance with the recommendations stipulated in Comprehensive Watershed Protection Management Plan and Mitigatory Plan prepared for Moragahakanda Agricultural Development Project, the progress of the actions implemented on the ground during the year 2017 is given below;

100m buffer zone reservation

➤ Tree Planting – Moragahakanda reservoir

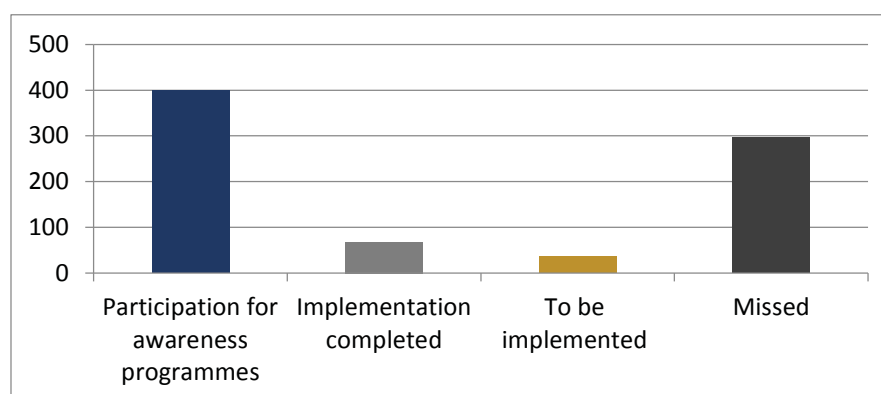
4617 plants belonging to species which found in dry monsoon forests in the area such as Kumbuk, mee, damba neem have been introduced for the immediate catchment and the buffer zone of Moragahakanda reservoir, which all have produced in the Central Plant Nursery, Moragahakanda.

➤ Fixing Demarcation Posts

Demarcation of 100 m buffer zone around Moragahakanda reservoir has completed in 2007 and fixing the boundary of the zone was started again on 03.07.2017 as part of maintenance of the buffer zone. In this process about 100 damaged posts were re-established and the number of posts newly established was approximately 40 covering 35 km. This second round of fixing demarcation posts was done giving priority to the areas where the threat of encroachment is possible due to adjacent settlements.

Implementation of Soil Conservation measures on-farm soil conservation

Among the targeted 130 farm lands, conservation measures have been implemented in 68 lands and have been eligible to receive the payments and another 36 lands are under process.



Forestry Development

Forest Department carries out forestry development activities on behalf of the MoU signed between Mahaweli Authority of Sri Lanka and Forest Department and Rs.15 Mn has been granted for the relevant activities.

➤ Upland Forest Conservation

44 ha have been identified for enrichment of forest plantation in upper-watershed area of Moragahakanda Reservoir for this year and preparation activities have been completed (seedling production, land survey and preparation). Maintenance of 21.7 ha of enrichment plantation established in previous years has also been carried out.

➤ Timber farms

Rs. 2.5 Mn has been provided for 35 farmers and total area of 20 Ha has been developed as timber farms in Naula D.S. Division.

➤ Tree planting in reservations

Totally 111 ha have been completed replanting in stream reservations in upper watershed area and 14 ha out of that have been done in 2017 and 82 ha have been maintained in addition.

Farm Production and Income generation activities

Plant nursery conductors from Opalgala, Andawela, Bomballa and Maragamuwa were selected based mainly on their knowledge and skills, past experiences, land and water availability with regards to conducting a nursery. After coming to an agreement on the plant species, amount of plants from each species they should produce and the payments now they are ready to supply the plants for the project.

Community Infrastructure Development

➤ Rehabilitation of agrowells

3 agro wells in Moragolla, 6 in Pubbiliya, 14 in Bambaragahawatha and 2 in Halambagahawatha have been rehabilitated by removing silt and by deepening further.

➤ Rehabilitation of small anicuts and field canals

Details of the small scale irrigation infrastructure rehabilitation works done are given in the table below.

Anicut/ Canal	work done/ to be done	Status
Uda-aswadduma field canal, Opalgala	concrete lining to a length of 43 m	completed
Udubowa anicut, Opalgala	10.5 m long 4.5 m wide anicut across Waragolla stream	completed
Mee gahagedara anicut and canal, Haduwela		
Lihinipitiya main canal, Lihinipitiya	raising concrete wall to a length of 138.6 m	completed
Waduawela field canal, Andawela	concrete lining to a length of 79 m & earth filling to 302 m along the canal	completed

➤ Rehabilitation of agri-roads

Rural roads are developed by the project for farmers to transport their harvest safely with minimum damaged to the market. Constructions of 4 agriculture roads have been implemented in 2017.

Road	Status
Maragamuwa - Kapukotuwa rural road	Completed
Millagahamulathanna rural road	Implementing
Kongahawela - Uda aswadduma rural road	Implementing

Kaluganga Project

Buffer Zone Development

1500 plants in 100 m reservation of Kaluganga reservoir were planted.

Tree planting program

➤ Implement by the project

- Tree planting in tank (tank 07,tank09,tank10) reservation- 12000 No. of plants were planted in the tank reservations of Kaluganga area.
- Avenue planting, tree planting & landscaping of
 - ✓ Pradeshieya saba building,
 - ✓ Divisional Secretary Office,
 - ✓ Library,
 - ✓ Divisional Forest Office,
 - ✓ Post Office,
 - ✓ CECB STAFF PREMISES were done.
- 05 No .of rural plant nurseries were established.
- Borrow pit rehabilitation – 4500 plants
- Agave planting in parell to the electric fence(Thorapitiya to Kirioya)-5600 nos of plants

Provision of planting materials for government institutions such as

- Divisional Secretary Office
- Samurdhi society -Laggala
- Agrarian Dept.(Illukkumbura branch)

➤ Implemented by the Forest Department

Rs 3 Mn 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, demarcation and maintenance of forest plantations.

- Maintenance of enrichment planting -60ha
- Maintenance of buffer zone – 90ha
- Maintenance of fire resistance plantation -20ha
- Maintenance of fire belts – 20km
- Maintenance of gliricidia plantation in the fire belt-20km

Plant Production in Central Plant Nursery

15000 Nos. of plants were produced in 2017 and 16000 plants were issued for tree planting program for the Kaluganga catchment.

Started the construction works for new office building, surround wall and water tank tower for central plant nursery

Soil Conservation Measures

08 Nos. of homesteads developed with soil conservation measures (14 acres) in the Kaluganga watershed.

Rehabilitation of Small Scale Irrigation System and Improvement of living condition in the watershed.

Rehabilitation of 06 no's .of anicutswere completed
Construction of 09 culverts karagama agriculture road.
Construction of 06 culverts velithuduwa agriculture road.

Wild life Conservation Progarmme

- Establishment of the live fence- Establishment of the live fence parallel to electric fence with agave planting ,citrus and Boganvila
- Establishment of the central elephant control unit in Guruwela with following facilities in 2015 and continued in the year 2017
 - 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 no's of committees (Laggalapallegama, Kajuwaththa, Thorapitiya, Imaduwa ,Devaladeniya, Guruvela (NO 34),Kabaragoimada,Mahapitiya ,& central control unit) established and continued.
- Maintenance of rest rooms and guard rooms of electric fence
- Maintenance of new settlement electric fence (60km) is being continued.

Biodiversity conservation programme

- Removal of invasive species in the project area – salvinia in the tank 04 was removed and commenced compost production unit of central plant nursery.
- Removal of *mimosa pigra* (Giant Mimosa) about 10ha in resettlement area

Training & capacity building for the officers

- Ten awareness progarmmes were completed including soil conservation & nursery management, solid waste management programmes.
- Four training programmes were conducted for school children on environmental conservation and farm management.

Sold waste management programme other environment Conservation

Solid waste management programs at Theligamuoya continued

Obtaining Environmental Licenses

Borrow pit licenses -04

Extension of Q1 – Quarry site license for the contractor of kaluganga dam constructions.

Obtain Q2 - Quarry site license for the contractor of kaluganga dam constructions.

Financial Performance

Finance code	2017 Budget (Rs. Mn)	Revised Budget (Rs. Mn.)	Expenditure (Rs. Mn)
DF-11	9,000.00	8,400.00	7,606.98
DFA-12	8,000.00	8,000.00	5,146.46
RFA-14	1,000.00	1,485.00	1,349.81
FARDF-17	1,950.00	1,899.00	1,821.02
Total	19,950.00	19,784.00	15,924.27

No	Activity	Revised Allocation (Rs. Mn.)	Expenditure (Rs. Mn.)	Physical Progress (%)
1.0	Dam Supervision & Construction			
	DF (11)	270.00	151.66	56.17
	DFA (12)	8,000.00	5,146.46	64.33
	RFA (14)	1,485.00	1,349.81	90.90
	FARDF (17)	1,899.00	1,821.02	95.89
1.1	Saddle dam balance work DF (11)	0.12	0.12	100.00
	Sub Total	11,654.12	8,469.07	72.67
2.0	Downstream Development			
2.1	Survey DF(11)	40.00	31.29	78.23
2.2	Buildings DF(11)	798.70	709.42	88.82
2.3	Roads DF(11)	1,465.00	1,347.01	91.95
2.4	Irrigation Infrastructure DF(11)	1,175.00	1,046.29	89.05
	Sub Total	3,478.70	3,134.01	90.09
3.0	Land Aq. & Resettlement DF(11)	3,750.00	3,551.61	94.71
4.0	Environment Mitigation DF(11)	250.18	153.09	61.19
5.0	Procurement of furniture & equipment	21.00	17.92	85.33
6.0	Capital Expenditure on General Overheads	630.00	598.57	95.01
	Total	19,784.00	15,924.27	80.49

via a new 23 km long 132 kV transmission line and the water diverted through the power station will be released to Alikota Ara Regulating Reservoir via the 3.6 km long Tail Race Tunnel for use in Kirindi Oya Basin.

Main Features of Downstream Development Works

A series of infrastructure is being built under the Downstream Development Component of the Project for the utilization of water so diverted in the upper Kirindi Oya Basin. They include construction of two new large reservoirs of 6.5 MCM and 29.0 MCM capacity across tributaries of Kirindi Oya at Alikota Ara and Kuda Oya, and enhancing capacity of existing Handapanagala Tank from 6.5 MCM to 14 MCM. Other infrastructure include construction of 48 km of transfer canals, provision of irrigation facilities to 1500 ha of new land in Handapanagala Tank and rehabilitation and upgrading of around 100 village tanks systems augmented by Uma Oya waters.

Progress of Head Works



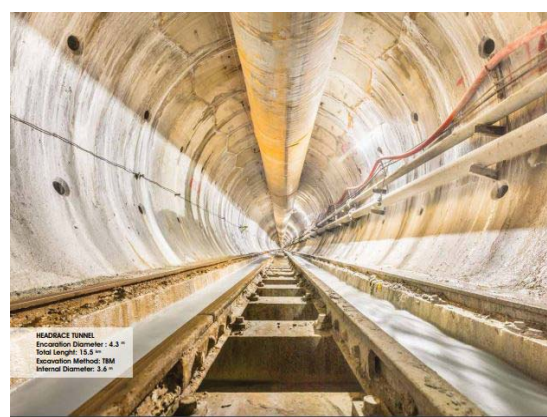
Puhulpola Dam



Dayraaba Dam



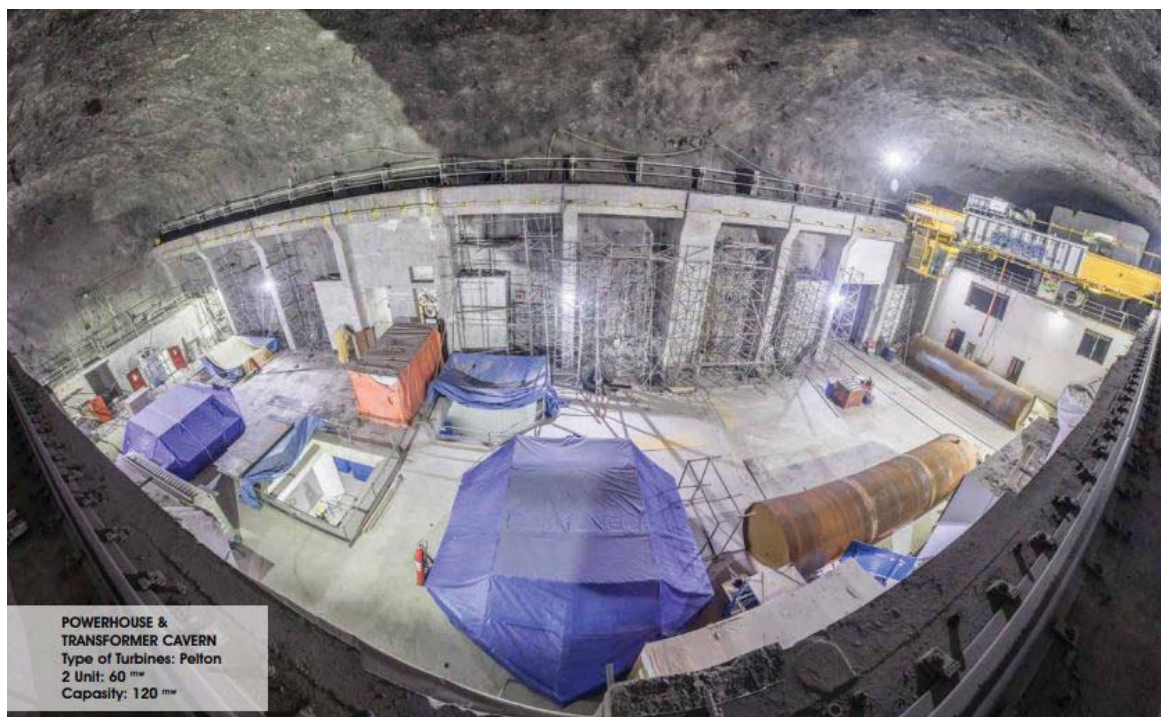
Link Tunnel



Head Race Tunnel

Construction of the Head Works was commenced in May 2011 and the overall physical progress by end of 2017 stands at nearly 83.13% with the Dyraaba Reservoir, the Link Tunnel and the Tailrace Tunnel being complete. Underground Power House including installation of turbines and associated works are nearly complete and the transmission line is expected to be complete by end

of this year. The balance major construction remains to be done is only the excavation of about 4 km of the Headrace Tunnel.



Underground Power House

Overall progress of Head Works by end of December 2017 was 83.13% and the detail activity-wise progress is given below:

UOMDP Head Works - Activity-wise Progress as at 31-12-2017	
Major Activity	Physical Progress
Puhulpola Dam	78.24%
Link Tunnel	87.35%
Dayraaba Dam	88.75%
Headrace Tunnel	62.99%
Surge Tank and Surge Shaft	51.68%
Vertical Pressure shaft	79.01%
Power House	90.56%
Main Access Tunnel and Other access tunnel	97.89%
Access roads and Relocation Road	78.51%
Transmission Line	69.98%
Tailrace Tunnel	95.86%
Overall Head Works	83.13%

Progress of Downstream Development Works

The work on Downstream Development component implemented by the Irrigation Department was commenced in October 2013 and the overall progress as at 31st December 2017 stands at 48.0% with the Alikota Ara Regulating Reservoir and work on Handapanagala Tank being nearly complete.



Alikota Ara Dam



Alikota Ara Reservoir Spillway



Transfer Canal



Village tanks being rehabilitated

Overall progress of Downstream Development Works by end 2017 was 48% and the activity-wise detail progress is given below:

UOMDP - Downstream Development: Activity-wise Progress by End 2017	
Major Activity	Physical Progress
Construction of Alikota Ara Reservoir	98.8%
Construction of Kuda Oya Reservoir	48.0%
Capacity Enhancement of Handapanagala Wewa	78.0%
Construction of LB Canal System in Handapanagala Scheme	30.2%
Alikota Ara - Kuda Oya Transfer Canal	13.2%
Kuda Oya - Sinhalayagama Transfer Canal	26.0%
Rehabilitation and upgrading of village Tank Systems	31.5%
Overall Downstream Development Works	48.0%

It is to be noted that already assured irrigation water supplies are provided to the existing command area under Handapanagala Tank with the current development even before the diversion of Uma Oya which is an interim benefit of the Project.

Overall Project Progress

Major Activity	Physical			Financial		
	End of 2016	End of 2017		End of 2016	End of 2017	
	Cum. Progress	Cum. Target	Cum. Achievement	Cum. Expenditure	Expenditure in 2017	Cum. Expenditure
	(%)	(%)	(%)	(Rs. Mn)	(Rs. Mn)	(Rs. Mn)
1. Head Works	70.29	88.12	83.13	47,276.90	10,261.40	57,537.94
2. Downstream Development	36.5	50.0	48.0	24,59.49	2,011.37	4,470.76
Overall	67.0	84.3	79.6	49,736.39	12,273.0	62,008.70

Problems and Issues

Two major water ingresses were encountered during the excavation of Headrace Tunnel (HRT), the first in December 2014 and the second in April 2017 causing social and environmental impacts at the ground level in the areas near the tunnel trace at those locations.

The first water ingress was encountered at a distance of 3.8 km upstream from the power house end which was through the weak rock at this reach and the water flow recorded initially at the tunnel portal was about 450 l/sec. Immediately following this event, lowering of the water level in domestic wells, drying up of natural springs and development of cracks on walls and floors of houses and on the ground were reported in Makul Ella Weheragalatenna, Uda Peruwa, Bambaragama and Heel Oya GN areas in Bandarawela Divisional Secretary Division. Crop damages including loss of yield and loss of cultivation season were also reported in the area later.

As the sealing of water ingress in a tunnel is a challenging and complicated process and needs specialized professionals, people, specific materials, and equipment, this operation was sub contracted to a world reputed Swiss contractor for grouting works in connection with water ingresses in tunnels, after receiving advice from local and foreign experts on the remedial measures to be done. It was possible to successfully mitigate the water ingress to a satisfactory level by mid December 2015 reducing it to 47 lit/sec. On completion of sealing, the excavation of the tunnel proceeded with only a very few problems.

However, a second major water ingress was encountered from tunnel face on 17th April 2017 while excavation was progressing at 8.1 km distance in upstream direction. The tunnel face at this location was fresh hard rock with a high degree of jointing and most of the joints were open with clear water coming out at high pressure. Though the length of the water ingress area was around 50 m, the total flow in this section was over 1200 l/s a relatively very high value compared to the previous occurrence where the maximum ingress was around 450 l/s.

With this water ingress, similar effects as in the previous occasion were observed in the areas of Udaperuwa, Thanthiriya, Bindunuwewa, Kinigama GN areas in Bandarawela Divisional Secretary Division; Heel Oya, Palleperuwa and Dowa GN areas in Ella DS Division and Eranawela GN area in Haputale DS Division expanding the area affected.

Remedial Measures taken

Excavation work of tunnel was immediately stopped and advice was sought from experts from Switzerland and Norway on the initiative of HE the President. The remedial measures proposed by these experts aimed at limiting the rate of water ingress into the tunnel to a value as low as 20 liters per minute per 100 m length of tunnel in order to avoid any environmental consequences at ground level.

In order to achieve this target, the Tunnel Boring Machine (TBM)s were further modified so that the coverage and interlacing of pre-grouting for sealing is enhanced. Number of probes in the TBM face were increased to more than double i.e. from 12 incorporated at the previous occasion to 27 covering the entire perimeter of tunnel face. The grout pumping pressure was increased up to 100 bars with new equipment being brought in and more effective grout mixes including Micro-fine Cement and other additives were used to improve the penetration and quicken the sealing process under wet and high pressures prevalent.

In addition, the following investigative and monitoring measures were taken to facilitate the sealing process and the relief provided to the people affected:

- (1) Analysis of observed data and information and mapping to locate the affected area in relation to the Headrace Tunnel Trace.
- (2) Measurement of water levels of the boreholes along the Headrace Tunnel
- (3) Daily monitoring of water levels in wells
- (4) Crack surveys to monitor development of cracks in houses.
- (5) Consulting National Building Research Organization (NBRO) and obtaining reports on the probability of landslides in the affected area.
- (6) Tunnel Seismic Prediction Surveys and assessment of quality of rock in front prior to excavation followed by probing.
- (7) Geological mapping and drilling of deep bore-holes to obtain rock profile and
- (8) Supplementary geological investigations to obtain additional information on ground water status and the quality of rock.

The Way Forward

The current method adopted for sealing rock mass prior to excavation was found to be satisfactory and the accepted levels of water ingress has been achieved with the flow at tunnel portal reduced to around 200 l/s by end of December 2017. Accordingly, the construction of balance section of the tunnel has been commenced with pre- excavation grouting in place found to be required during test probing.

The aim is to have "Nearly Zero Environmental Damage" in the balance section of the tunnel with excavation being done in grouted face in water bearing sections and continue the sealing of already excavated sections by post grouting until acceptable limits of ingress are achieved.

However, in view of the rigorous procedures involved in the process now, the anticipated project completion date is likely to get extended till mid 2020 compared to the earlier anticipated date of 30th June 2019 for same.

3. DAM SAFETY AND WATER RESOURCES PLANNING PROJECT

At the completion of the DSWRP original credit the Government of Sri Lanka made a request to the World Bank for additional financing support to continue to the scope of the DSWRP project. Accordingly, the World Bank grant another 83 USD million to continue the remaining activities related to the Project objectives. The main objective of the DSWRPP AF is

- i. Establish long term sustainable arrangement for operation and maintenance (O&M) of large dams
- ii. Improve water resources planning.

The proposed additional credit would help to finance the costs associated with

- i. Cost overruns to complete the original DSWRP project scope;
- ii. Scale-up of successful project activities, including rehabilitation and modernization of dams in parts of the east and north of the country that could not be included in the original project.

Basic Project Parameters

Effective date of the Project	: 23 rd October 2014
Closing data of the Project	: 15 th May 2018
Financial Closing date of the Project	: 30 th September 2018
Project Duration	: 4 years

The 100% of Additional Financing is funded by IDA-WB. In addition GOSL agreed to provide USD 1.5 Mn to cover the allowances for the project management and implementation team.

The Project consists of 4 main components. They are

Component 01 : Dam Safety and Operational Efficiency Improvement. To complete 14 dams from the original project under cost overrun and carry out remedial works at 31 dams, provide selective maintenance equipment and prepare operation and maintenance manual and emergency action plan

Component 02 : Hydro-meteorological Information System Improvement. Development of about 46 hydro meteorological stations and expansion of seven pilot ground water monitoring networks, developed under original project, continuation of monitoring of groundwater parameters in these seven areas and development of one additional groundwater pilot area

Component 03 : Multi Sector Water Resources Planning. Preparation of feasibility studies for priority water resources development and improvements and irrigation training centers at Kotmale and Galgamuwa so that the training program on various aspects of dam safety and water resources planning and management for staff of the Irrigation Department and Mahaweli Authority of Sri Lanka and other water management agencies can be carried out in house.

Component 04: Project Management, Monitoring and Evaluation. Support to project management and coordination and monitoring and evaluation through an already established project management unit within Ministry of Mahaweli Development & Environment.

1. The main activities coming under DSWRPP-AF are:

Project received financial assistance from World Bank in various aspects. Those are

1. Fund requirement to meet cost overrun : this component consist the items included in the original dam safety project but unable to complete or execute during the time period of the original DSWRP Project
2. Fund requirement to meet proposed WRB new activities and establishment of 46 new HMIS stations: seven pilots were identified and monitoring network was establish to identify the quality of the groundwater in the selected critical areas. Under the additional financing of the DSWRP, these pilots area are expand to adjoin areas and new pilot area with high intensity of Chronical Kidney Diseases was selected to conduct the water quality study.
46 new stations to be establish in the area, not covered under the 122 stations installed under the original project
3. Fund required to meet proposed new activities under the Additional Financing of the DSWRPP; another 31 dams which need immediate rehabilitation was included under this component. The dam selection was done by the respective implementation agencies. Further to that all the implementation agencies are getting the new equipment to improve the operational efficiency of the operational and maintenance of the dam with strengthening the quality controlling facilities, capacity building, and other incremental operation cost etc.

Some of the items in the initial cost allocation were subjected to change with the current requirement of implementation agencies.

2. Progress of the balance work coming under original DSWRP Project

Most of the balance payment of additional work of the original project is over and remaining are few retention to be pay. 31 rehabilitation contracts have been awarded and out of 31 contract 16 contracts completed including Victoria. Progress of the 31 contracts are given below



**Upgraded gate operation system in
Bambarawana Reservoir**



**Rehabilitated Rip rap in Bambarawana
Reservoir**

Implementation and Monitoring of EMP

Monitoring matrix has developed by the PMU for each site based on the respective EMP and responsibility has been given to contractor to fill this matrix and submit it to respective Implementation agency in monthly basis. The implementation agency has to conduct a field inspection and the matrix has to be certified signed and send to PMU whether the Implementation Agency is satisfied with the implementation of EMP. Environmental Specialist of the PMU often visits the dam sites and monitoring the EMP implementation process. Implementation process of EMP has connected with the payment procedure and therefore, Implementation Agency only can release payments for the construction work if the implementation of EMP is satisfied. Current Progress of the Monitoring of EMP is given below

Issues identified in the EMP implementation during the period

1. Majority of contractors selected by DSWRP/AF projects are medium level new contractors. They have poor knowledge in implementing EMP of the dam sites. In this sense the PMU conducted onsite awareness programme on environment safe guard and important of implementing EMP with maintaining report.
2. Field officers attached to supervise the dam rehabilitation under the AF are new officers who do not care about the Environmental concerns and requirement of EMP implementation. Therefore all field officers had to be fully aware the EMP implementation process and reporting
3. Newly identified activities as extra work or variation were not included in to the EAs, but these activities concerned in the implementation stage at the field level and modify the EMP matrix accordingly.
4. It is identified that the obtaining approval for borrowing earth needed for rehabilitation activities is difficult and time consuming process due to prevailing rules and regulation. In fact, delaying earth is directly involve the progress of the remedial work and also to the environmental safe guard programme.

Social Safeguard Management programme

Livelihood Support Assistance Plan implemented under the Social Safeguard Management Programme

- To mitigate possible negative impacts on livelihood of the people within during a Yala 2016 season due to the rehabilitation of Mahakanadarawa, Mahavilachiya and Muthiyankaddu Tanks, a Livelihood Support Assistance Plan has been prepared
- Under the SSMP, a systematic and extensive IEC campaign was conducted, carried out Socio-Economic Baseline Survey and assessing the impacts the Livelihood of the affected community.
- 03 sub plans were implemented.
 - Wage Assistance Plan (WAP)
 - Drinking Water Supply Plan (DWSP)
 - Gender Assistance Plan (GAP)

Tank	Affected farmer families	Fishing families	Agriculture labours	Total affected families	Total affected population
Mahakanadarawa	2,765	86	-	2851	11,062
Mahavilachchiya	1,778	-	-	1778	7,645
Muthiyankaddu	1,663	52	505	2,220	7,650
	6206	138	505	6,987	26,357

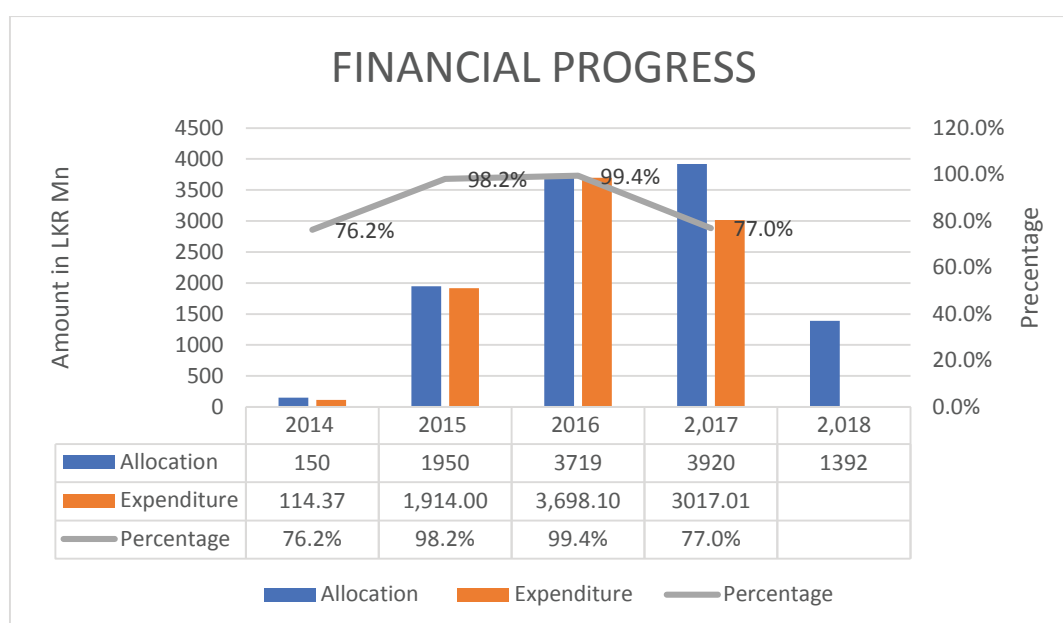
- The project commenced of LSA implementation of the all 3dams from June 2016 up to October 2016.

Total allocation for LSA programme

Plan	Mahakanadarawa	Mahavilachchiya	Muthiyankaddu	Total
Wage Assistance Plan	75.8	44.75	54.7	175.25
Domestic Water Supply Plan	5.65	4.41	3.14	13.2
Gender Action Plan	1.2	1	0.6	2.8
Replenishing fish stock with fingerlings	1.6	0.8	0.6	3
Total	84.25	50.96	59.04	194.25

The LSA programme was successfully completed and saving has utilized for the renovation of Irrigation Management Division building in Anuradhapura

Financial Progress of the Project





Janaranaja Rip Rap rehabilitation



Spillway Down stream protection –
Janaranjana wewa

Monitoring & Evaluation of the Project

Special Construction project management programme is implementing with the assistance of Dam Safety Review Panel to monitor the quality assurance of construction sites. Basically DSRP help the IAs in following aspects

1. Present progress of work and to assess the likelihood of achieving the targets both financial and physical within the stipulated contract period
2. Proposed rehabilitation works are executed as per agreed items of work, agreed/standard methodology confirming to stand quality control procedures and practices
3. Identification of any unforeseen problem that are likely to hinder the progress and to assist the dam Owners/ project Manager to solve them
4. Assist in sorting out technical and administrative problem arising in the execution of contract



Toe filter and Toe drain in Wan Ela



Strengthen Dam bund Thoppur



Ulhitya Rathkinda after rehabilitation



Improved Gate operation system in Ulhitya Rathkinda

4. MAHAWELI WATER SECURITY INVESTMENT PROGRAM

Mahaweli Water Security Investment Program (MWSIP) will implement North Central Province Canal Program (NCPCP) Phase 1 using the Asian Development Bank's (ADB's) multi-tranche financing facility (MFF) modality, loaned to the government in three tranches. The cost of MWSIP is estimated at \$675 million, inclusive of taxes and duties, and financing charges during implementation. The MFF will be financed from loans from ADB's ordinary capital resources (OCR) \$262 million and Special Funds resources (ADF) \$191 million, amounting up to \$453 million equivalent from ADB's resources. Various bilateral development partners shall participate as co-financers to provide an amount of approximately \$114 million. The contribution from GOSL will be \$108 million.



North Central Province Canal Program (NCPCP) Phase 1

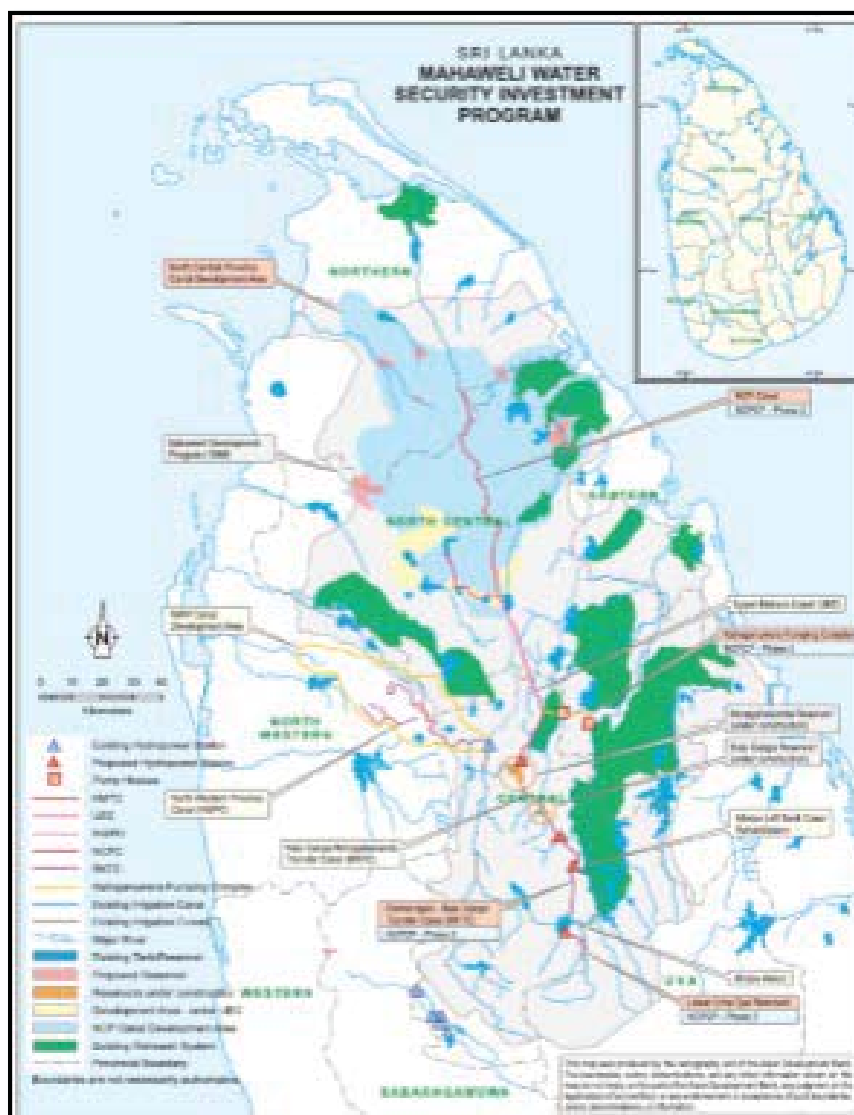
The MWSIP will raise paddy production in 32,800 ha of existing command area by increasing cropping intensities from 130% to 180% and yields from about 3 ton/ha to 6 ton/ha. Cropping intensities, yields and command areas may be further increased through water use efficiency initiatives identified under the ISEWP package, which will also encourage diversification into less water consuming and higher value crops. The NCPCP will also annually convey 92 MCM for non-agricultural users under Phase 1.

NCPCP Phase 1 comprises three main individual projects. These will be constructed in stages under each tranche of MWSIP.

- (i) The Upper Elahera Canal Project (UECP)
- (ii) The North Western Province Canal Project (NWPCP)
- (iii) Minipe Left Bank Canal Rehabilitation Project (MLBCRP)

MWSIP will address other key sector priorities through two consulting packages:

- (a) improving system efficiencies and water productivity (ISEWP); and
- (b) strengthening integrated water resources management (SIWRM).



Map of Program Overview

North Central Province Canal Program (NCPCP) Phase 2

The full benefits of the investment program will only be achieved once NCPCP Phase 2 is also implemented. Additional benefits will arise from increased drainage return flows within the existing cascade systems that downstream communities will use. Once NCPCP Phase 2 is completed, the irrigated area commanded by the NCPCP will increase up to 103,400 ha. Further 70 MCM will be annually conveyed for non-agricultural users to the North Province under Phase 2. There will also be hydropower benefits through construction of three new hydropower projects (HPPs) in Phase 2, and optimization of hydropower generation for peak period generation throughout the existing and planned HPPs in the Mahaweli System.

NCPCP Phase 2 will allow transfer of additional excess water (up to 555 MCM/annum) from the Mahaweli River to the Moragahakanda Reservoir. From there, it will be conveyed via the UEC to the planned North Central Province Canal (NCPC). The NCPC will convey 640 MCM/annum to command about 87,000 ha of cascade systems in the North Central Province, and will terminate at the Chemadukulam Reservoir. From there, about 100 MCM/annum will flow via natural drainage channels to the existing Iranamadu Reservoir for local irrigation and drinking users.

Two route options are to be reviewed by the PMDSC before selecting the preferred route and then preparing the associated investments to feasibility level:

- a) Option 1 will transfer water from the Randenigala Reservoir to the Kalu Ganga Reservoir via the planned Randenigala – Kalu Ganga Transfer Canal (RKTC)
- b) Option 2 will transfer water from Polgolla Barrage to the Moragahakanda Reservoir via a new tunnel and enlarged tailrace canal to the Bowatenna Reservoir.

NCPCP Phase 2 investments will also comprise:

- (i) Lower Uma Oya Project comprising a 75 m tall roller-compacted concrete (RCC) dam, a 6km tunnel to Randenigala Reservoir.
- (ii) NCPCP which is an 80km open canal that will convey water from the UEC to Chemmadukulam in the Northern Province.

Construction of NCPCP Phase 2 is not financed under MWSIP. It will be considered by the ADB Board as a possible future financing under another program.

PROJECT ACTIVITIES: BREIF DESCRIPTIONS

Project Activities

- (a) Minipe Left Bank Canal Rehabilitation Project (MLBCRP)
- (b) Upper Elahera Canal Project (UECP)
- (c) North Western Province Canal Project (NWPCP)
- (d) Consulting Services (PMDSC, ISEWP & Expert Panels)
- (e) PMU & PIU Operations and Maintenance

Minipe Left Bank Canal Rehabilitation Project (MLBCRP)

Minipe Left Bank Canal Rehabilitation Project (MLBCRP), located downstream of the Mahaweli Hydro Power Complex on the Mahaweli River, will:

- (a) add upstream storage by heightening the headwork's weir by 3.5 m to regulate generation inflows;
- (b) construct new automatic downstream-controlled intake gates to the left bank canal;
- (c) construct new emergency spill weirs to both left and right bank canals; and
- (d) rehabilitate the 74 km Minipe Left Bank Canal, including regulator and spill structures, to improve conveyance and reliability of service to existing farmers.



Minipe Left Bank Canal Rehabilitation

The sub-activities are identified as follows:

- (i) Rehabilitation of Minipe LB Canal (0+000 km to 30+140 km) - Stage 1
- (ii) Rehabilitation of Minipe LB Canal (30+140 km to 49+820 km) - Stage 2
- (iii) Rehabilitation of Minipe LB Canal (49+820 km to 63+650 km) - Stage 3
- (iv) Rehabilitation of Minipe LB Canal (63+650 km to 73+960 km) - Stage 4
- (v) Rehabilitation & Electrification of 8 Nos. Radial Gated Structures and Improvements to 2 Nos. Cross Regulators of Minipe LB Canal
- (vi) Heightening of Minipe Anicut Including Water Control and Measurement Facilities for Left Bank and Right Bank Canals

Upper Elahera Canal Project (UECP)

The Upper Elahera Canal Project (UECP) comprises two main components. The first component is the 9 km Kalu Ganga-Moragahakanda Transfer Canal [KMTC] (including about 8 km of tunnels) that will convey up to 771 MCM of water annually between Kalu Ganga and Moragahakanda Reservoirs, both of which are currently under construction. The second component is the 65.5 km Upper Elahera Canal (UEC) that will annually convey up to 974 MCM northwards from Moragahakanda Reservoir to the existing Huruluwewa Reservoir, and a further 16.7 km of canals to supply the existing Manankattiya, Eruwewa and Mahakanadarawa Reservoirs; these existing reservoirs supply existing irrigation and water supply schemes.

The sub-activities are identified as follows:

- (i) Construction of Upper Elahera Canal (0+100 km to 6+226 km)
- (ii) Construction of Upper Elahera Canal (27+509 km to 54+249 km) and Kaluganga - Moragahakanda Transfer Canal (0+292km to 9+161km)
- (iii) Construction of Upper Elahera Canal (6+226 km to 27+509 km)
- (iv) Construction of Upper Elahera Canal (54+249 km to 65+500 km)
- (v) Construction of Feeder Canal from UEC to Manankattiya-Eruwewa Stream & Widening the Eruwewa-Mahakanadarawa Stream.





Upper Elahera Canal

North Western Province Canal Project (NWPCP)

The North Western Province Canal Project (NWPCP) will construct 96 km of new and upgraded canals, including a new 940 m tunnel and two new 25 m tall earth gravity dams impounding the planned Mahakithula and Mahakirula Reservoirs to annually withdraw 130 MCM from DambuluOya River and the existing Nalanda Reservoir (via the existing Wemedilla Reservoir) to command new and existing irrigation and water supply reservoirs located throughout North Western Province.

The sub-activities are identified as follows:

- (i) Construction of Main Canal from Wemedilla LBMC to NebadagahawattaWewa (0+000 km to 5+250 km) and New Sluice & Tail Canal(0+000 km to 0+600 km)
- (ii) Construction of Mahakithula Inlet Tunnel, Mahakithula and Mahakirula Reservoirs, Feeder Canal Length 3.66 km from Mahakithula to Mahakirula Reservoir
- (iii) Construction of Main Canal from NabadagahawattaWewa to Mahakithula Reservoir Inlet Tunnel (5+250 km to 22+460 km)
- (iv) Construction of MiOya RB1 Canal from Mahakirula to Galgiriya (0+00 km to 13+731 km)
- (v) Construction of MiOya RB2 Main Canal from Galgiriya to Kaduruwewa (13+731 km to 21+232 km)
- (vi) Construction of Main Canal from Mahakithula Reservoir to Potuwila Tank (0+000 km to 1+491 km) and Potuwila Tank to Upper Mediyawa (0+000 km to 19+980 km)
- (vii) Construction of Yapahuwa Canal From Mediyawa Canal (0+000 km to 11+200 km)
- (viii) Construction of Main Canal from Dambuluoya to Wemedilla LBMC including Dambuluoyadiversion structure (0+000 km to 8+590 km)

Consulting Services (PMDSC, ISEWP & Expert Panels)

The sub-activities are identified as follows:

- (a) Consulting Services for Program Management, Design and Supervision Consultant
- (b) Consulting Services for “Improving System Efficiencies and Water Productivity” Consultants (ISEWP)
- (c) Expert panel and other specialist assistance as required

Program Management, Design and Supervision Consultants (PMDSC)

The PMDSC will support the PMU for five years under Tranche 1 and the contract will be signed for the same period. The PMDSC will be responsible for assisting the PMU to:

- (i) finalize designs for all packages and the bid documents of the remaining contract packages to be awarded under Project 1, and all contract packages of Project 2 and Project 3;
- (ii) procure, mobilize, and manage the contractors for Project 1, Project 2 and Project 3;
- (iii) recruit, mobilize, and manage the consultant for the ISEWP consulting services package;
- (iv) finalize the terms of reference, recruitment and management of a consulting firm to undertake the SIWRM consulting services package;
- (v) manage and supervise all civil works contracts and act as the “Engineer”;
- (vi) prepare Phase 2 investments and necessary ADB financing documents;
- (vii) provide technical and management advice, as required;
- (viii) manage and administer the investment program; and
- (ix) prepare draft periodic financing requests for subsequent tranches, and routine reporting requirements of ADB.

The PMDSC will also assist MMDE with preparations, logistics and reporting for missions fielded by ADB and other co-financiers, as necessary, throughout the investment program. A total of 1,420 person-months of consulting services have been provided for the PMDSC, of which 260 person-months will be for international key specialists and 1,160 person-months will be for national key specialists.





Construction of Main Canal from Wemedilla

“Improving System Efficiencies and Water Productivity” Consultants (ISEWP)

The “improving system efficiencies and water productivity” (ISEWP) consulting services package will seek to increase water availability to all areas within the NCPCP project area through investigating current water management and application practices, and identifying areas for improvements. The objective is to maximize overall systems efficiencies and productivity of water within the planned, expanded Mahaweli System being financed by this investment program and under Phase 2. The investment program will construct the main conveyance system which supplies water to existing reservoirs that supply the cascade irrigation systems. The cascade systems comprise major and minor tanks supplying distribution and tertiary canal systems which are largely operated by Provincial Councils and Farmer Organizations (FOs). The systems are characterized by predominately paddy rice cultivation, gross water application rates of approximately 30,000 m³/ha per annum and distribution efficiencies in the order of 50%. This package will consider how water is managed within these cascade systems. It will study and identify options for improvement of the system’s infrastructure and management.

Expert panel and other specialist assistance as required

MMDE, upon ADB’s requests, will recruit and engage a panel of individual experts with qualifications, experience and terms of reference acceptable to ADB, to review, analyse and advise on the detailed engineering designs, contract documents, and implementation of the dam and tunnel components of the investment program and its projects.

Environment and Social Mitigation

The work under this sub activity includes

- (i) Overseeing of construction contractors for monitoring and implementing mitigation measures
- (ii) Preparing and implementing environment policy guidelines and environmental good practices
- (iii) Liaising with the environmental agencies and seeking their help to solve the environment-related issues of project implementation
- (iv) Providing awareness training on environmental and social issues related to the program and
- (v) Preparation of environmental monitoring reports every 6 months for EIAs and once a year for IEEs (as required by ADB).

Overall Financial and Physical Progress

The program total expenditure was reported Rs 1972.02 Mn (38%) for the reporting period of 01 January 2017 to 31st December 2017. Revised annual budget is Rs 4851 Mn 1st December 2015 to 31st December 2017 period cumulative financial expenditure was Rs 3582.90Mn. End of December 2017 six contracts were awarded and construction started.

Financial Progress

Financer	Allocation 2017 Rs.Mn	Expenditure 01.January to 31st December 2017 Rs.Mn	%	Cumulative Expenditure Rs.Mn
Asian Development Bank (ADB) (12)	4,120.00	1,538.43	37	2,833.72
Government of Sri Lanka (GOSL) (17)	1,030.00	433.59	42	749.09
Total	5,150.00	1,972.02	38	3,582.81

Annual Expenditure by Main Item –Rs. Mn

Activity	Allocation	Achievement as at 31.12.2017	%
Minipe Left bank Canal Rehabilitation Project	1,212.91	549.54	45.31
North Western Province Canal Project	1,995.1	128.89	6.46
Ihala Elahara Canal Project	758.44	351.67	46.37
Other Civil works	84.43	33.4	39.56
Environmental activities	61.6	14.6	23.70
Resettlement and land acquisition	185.39	5.07	2.73
Communication	13.63	3.47	25.46
Consultancy	573.41	685.04	119.09
Training	43.79	12.17	27.79
Mechanical and elct. Equipment	82.9	14.99	18.08
Salaries O&M	138.4	173.14	125.10
Total	5,150	1,972.04	38.25
Revised Total	4,851	1,972.02	40.61

Other facilities provide by the Project

Rehabilitation of 13 fields of reforestation has been handed over to 'Farmers' Organizations at Minipe and 80% of physical progress was achieved as at December 31, 2017. Rs 20 Mn. were allocated for this purpose.

Rehabilitation of Essential Fertilizer Fields at Minipe Farm

Rehabilitation of Minipe LB Canal

1. Rehabilitation of Minipe Left Bank Canals.
2. Planting 140 hectares of new forest reserve, instead of 25 hectares of submerged land in the Randenigala forest. Due to raising the Minipe anicut by 5.3m (Pandulasaya, Pamunupura, Kodigala)

Performance of Environmental Activities

Activities	Progress of 2017
1. Solving Environmental Issues to the Public during the Construction Period	Set up Grama Niladhari, Divisional Secretary And project level grevences Minipe LB Project - 8 Committee N W P Canal Project - 13 Committee Awereness Programme Minipe LB Project - 12 N W P Canal Project - 23 Upper Elahara Canal Project -8
3. Reforesting Targets Minipe LB Project -145 ha. N W P Canal Project -350 ha. Upper Elahara Canal Project - 500 ha.	<ul style="list-style-type: none"> • 31 ha identified in Minipe Project and start cultivation from January 2018, rest 114 ha are to be identified. • Identified 350 ha. of N W P Canal Project and 500 ha of Upper Elahara Canal Project • 20 ha of N W P Canal Project and 25 ha of Upper Elahara Canal Project are to be plant in 2018
3. Proposed activities to reduce the impact on wildlife and control human-elephant conflict <ul style="list-style-type: none"> • Satellite saturation of the collar - to identify the paths for 60 elephants • Preparation of Elepahant Path way N W P Canal Project -3 Upper Elahara Canal Project - 10 <ul style="list-style-type: none"> • Construction of specialized bridges, stairs and fences to protect wildlife with streams and reservoirs. 	N W P Canal Project and Upper Elahara Canal Project - 95% has been completed of wildlife management plan

Performance of Resettlement Activities

Main Activity	Sub Activity	Estimated Cost Rs. Mn.	As at 31 st December 2017		Expected date for completion
			Expenditure Rs. Mn.	Physical Progress %	
Resettlement activities of the Upper Elahera Canal project	UEC-ICB-3 • 90 land plots to be acquired. (21 Household to be Resettle are included.)	100	-	50 (Stage 5 Completed)	June 2018
Resettlement activities of the N W P Canal Project	NWPC – NCB – 01 Stage 1 11 land plots to be acquired	4.0	3.5	100	Completed
	NWPC – NCB – 01 Stage 2 • Number of plots of land to be acquired - 141 (Affected Households - 175)	300	-	60% (Under Stage 6)	April 2018
	NWPC – ICB – 02 • Land Plots to be acquired - 500 (Affected Households 264 10 resettled Households are included)	1400	1.0	80 (Stage 6 – 10.1 has been completed)	April 2018

5. ECOSYSTEM CONSERVATION AND MANAGEMENT PROJECT

The Project Development Objective (PDO) is to improve the management of ecosystems in selected locations in Sri Lanka for conservation and community benefits. The project is designed to achieve few specific objectives such as, enhanced biodiversity protection, livelihood improvement of communities living adjacent to the Protected Areas (PAs), developed strategies for human-elephant co-existence, developed pilot level landscape management plans and institutional capacity development of implementing agencies, Forest Department (FD) and Department of Wildlife Conservation (DWC).

Project Description

The Project will be financed through a US\$ 45.0 million International Development Association (IDA) Credit. Following table illustrates the project costs by major components of the project.

#	Project Components	Project cost (US\$ Mn.)
1	Pilot Landscape Planning and Management	2.8
2	Sustainable Use of Natural Resources and Human-Elephant Co-existence	17.0
3	Protected Area Management and Institutional Capacity	24.2
4	Project Management	1.0
	Total	45.0

Component 1 (Pilot Landscape Planning and Management) will facilitate planning and implementation of activities in two selected biodiversity rich landscapes (a wet zone and a dry zone as a model exercise) with unique ecological, cultural and socio-economic characteristics.

Component 2 (Sustainable Use of Natural Resources and Human-Elephant Co-Existence) will promote productive biodiversity compatible livelihood activities to reduce forest destruction. Planning the use of natural resources and aiming to transform Human Elephant Conflict into Human Elephant Co-existence by addressing the needs of the communities living in close association with the wildlife in the adjacent areas of PAs.

Component 3 (Protected Area Management and Institutional Capacity) will support demand-driven interventions in PAs in accordance with the Fauna & Flora Protection Ordinance, and Forest Ordinance; strengthen institutional capacity and investment capability for conservation and management; and provide assistance to develop the long-term financial sustainability for managing PAs.

Component 4 will finance the Project Management Unit (PMU) and Implementing Agencies (FD & DWC) in project implementation, project management, technical assistance and monitoring & evaluation.

The project has designed to implement from 2017-2021. Executing agencies of the project are Ministry of Mahaweli Development and Environment and Ministry of Sustainable Development and Wildlife. Forest Department and Department of Wildlife Conservation are responsible to implement activities. Wildlife living in and around the PAs, communities living adjacent to the

PAs, families facing human-elephant conflict adjoining the PAs, institutes responsible for natural resources management and stakeholders in eco-tourism industry are the main beneficiaries of the project.

Action plan for 2017 was developed with the participation with all stakeholder agencies. PMU has established after 6 months as original scheduled date and appointing of some key officers was delayed. Initially, the total budget for 2017 of ESCAMP was Rs. Mn. 818. This original budget was revised by PMU in line with implementing mechanism and by the amended budget was Rs. Mn. 145. However, the PMU was capable to achieve financial target of Rs. Mn. 200 during 2017. Implementation of project activities was planned based on the proportion of revised budget amounts available for each sub-component.

Physical progress

Component 1

Component 1 is aimed at preparing Pilot Landscape Management Plans for two (2) selected sites in Dry Zone (DZ) and Wet Zone (WZ).

Two project sites were selected based on criteria developed such as rich of biodiversity, heterogeneity of ecosystem, land use pattern, development activities, population pressure, national & international recognition etc. Hurulu-Anawulundawa-Kawdulla complex (Mahaweli Basin) in DZ and Singharaja Forest Complex (Rakwana Range) in WZ selected. Site selection was done with the concurrence of Expert committee appointed for the component. Stakeholder workshop was held and Scope and management planning process was discussed. Regional planning committees was appointed and awareness workshop was held to strength the capacities on 'Landscape'.

The collection of primary data will be commenced in 14 DS divisions with the assistance of CBOs established by FD and DWC during February and March 2018.



Measuring of the Sinharaja Rain Forest



Basic survey of Digampellessa tank

Component 2(a)

Overall Progress

Component 2(a) will establish livelihood enhancement interventions as secondary income generating sources among communities living adjacent to PAs. It has planned to enhance livelihood options of 10,000 households by closing phase of the project. Participatory Rural Appraisals (PRAs) are done in selected villages to assess the livelihood needs of communities.

PMU organized 01-day workshop for two implementing agencies to streamline the PRA process and developing of PRA finding reports and developing CAPs for FD officials (DFOs-District Forest Offices, RFOs – Regional Forest Offices) of above mentioned 09 project sites. All community action plans developed were reviewed by Technical Review Committee (TRC) appointed for sub-component 2(a).

PMU has drafted monitoring indicators for this sub-component and it has been sent for the revision of implementing agencies. Further, PMU has planned to conduct baseline assessment for this sub-component within the first quarter of 2018.



Participatory approach in Pitadeniya area



Commencement of construction work In the ecological park Gallvila

Progress of FD activities

Nine sub-project proposals submitted by the FD for this sub-component has been cleared by the WB for implementation. According to the Action Plan 2017, FD was expected to implement activities such as survey and demarcation of forest boundaries, seedling production and adopt the restoration programs such as Assisted Natural Regeneration (ANR) under this sub-component. However, the activities listed in following table (Table 2) were implemented by FD.

Major activities performed under sub-component 3(a) by FD

Activity	Physical Target	Physical Progress	Physical Progress (%)	Project Locations
(1) Surveying and Demarcation of Forests boundaries	697 kms	709 kms	102%	Matara - Sinharaja PA, Rathnapura - Sinharaja, Kandy - Knuckles, Matale - Knuckles and Anuradhapura - Hurulu.
(2) Adopt Assisted Natural Regeneration (ANR)	98 ha	86 ha	87%	Matara - Sinharaja, Galle - KDN (Kanneliya, Dediyaagala and Nakiyadeniya), Rathnapura - Sinharaja, Kandy-Knuckles and Puttlam - Galwila.

(3) Seedling production to carry out the enrichment planting	23,850 seedlings	20,000 seedlings	84%	Matara – Sinharaja, Kandy-Knuckles, Matale – Knuckles and Galle – KDN
(4) Under planting Pinus Plantation with suitable plant Species	7,000 plants	7,000 plants	100%	Kandy – Knuckles, Rathnapura – Sinharaja and Matale - Knuckles
(5) Fire Belts Opening	134 kms	138 kms	104%	Galle - KDN, Kandy-Knuckles, Matale - Knuckles, Polonnaruwa - Hurulu and Anuradhapura - Hurulu
(6) Control of Invasive Aliens Species (IAS)	415 ha	396 ha	95%	Matara - Sinharaja, Galle - KDN, Rathnapura - Sinharaja, Kandy-Knuckles, Matale - Knuckles, Polonnaruwa - Hurulu, Anuradhapura - Hurulu and Puttlam - Galwila

Construction and improvement works for several infrastructures were attended to support the PA management in Galwila Forest. It includes, construction of new causeways (2), construction of culverts (2), renovation of existing water bodies/weirs (2), renovation of small scale tanks (3) and improving the feeding ground.

Component 3(b)

This sub-component will support to improve the nature based tourism infrastructure and services of priority PAs of DWC and FD.

Project Steering Committee (PSC) has endorsed in hiring an individual consultant to develop Systematic Nature Based Tourism Plans for 4 priority PAs of DWC and FD. He will commence his assignment on mid-January 2018 and the first visit to Sri Lanka is scheduled on 26th February 2018.



Discussing with the people of Habarana



Informing stakeholders

Component (4) - Project Management

Component 4 will finance the Project Management Unit (PMU) and Implementing Agencies (FD & DWC) in project implementation, project management, technical assistance and monitoring & evaluation. Procurement of the Management Information System (MIS) is in progress. The contract was awarded to consultancy firm and scheduled to be completed by mid-January 2018. Out of the approved carder, about 90% has already been recruited.

In addition to that, an Internal Auditor position and Community Development Specialist position has also created with the approval of the Department of Management Services. Ministry has already initiated actions to publish the required paper advertisement on these vacancies.



Increase the water capacity of Yala Park



Other local planting under pine forest

Project Steering Committee Meetings

Three Project Steering Committee (PSC) meetings were held during 2017. Third PSC meeting was held on 12th October 2017.

Financial progress

Cumulative financial progress for 2017

Component/sub-component	Implementing Agency	Planned Expenditure (LKR)	Actual Expenditure (LKR)	Financial Progress (%)
Component 1	PMU	2,000,000	1,906,512	95%
Sub-component 2(a)	PMU	150,000	149,860	100%
	FD	9,850,000	11,514,895	117%
	DWC	3,000,000	945,846	32%
Sub-component 2(b)	PMU	500,000	420,281	84%
	FD	-	-	-
	DWC	1,500,000	235,182	16%
Sub-component 3(a)	PMU	6,000,000	6,169,621	103%
	FD	65,000,000	79,482,814	122%
	DWC	19,000,000	3,058,052	16%
Sub-component 3(b)	PMU	3,700,000	3,486,193	94%
	FD	9,300,000	12,087,461	130%
	DWC	2,000,000	-	-
Sub-component 3(c)	PMU	10,000,000	11,544,442	115%
	FD	13,580,000	12,122,699	89%
	DWC	14,500,000	13,336,151	92%
Component 4	PMU	40,000,000	43,443,451	109%
Total		200,080,000	199,903,461	100%

PART III

Progress of each Division of the
Ministry of Mahaweli Development and
Environment

1. AIR RESOURCE MANAGEMENT & NATIONAL OZONE UNIT

Air Resources Management

Air pollution is one of the most serious problems facing today's world, which has far reaching health, environmental and economic impacts. In Sri Lanka air pollution is an increasing problem due to rapid expansion in the industrial and commercial sectors and expanding living standards of the population following the country's economic growth. Mobile source emissions & stationary source emissions are the major contributors for air pollution in the country. Rapid expansion of economic activities results in increasing use of energy which comes largely from fossil fuel sources imported to the country. When considering the Sri Lankan scenario the transport sector is contributing about 60% to the air pollution especially in Colombo City. Others such as thermal power plants already established within the Colombo Metropolitan Area has aggravated this situation. Also other regional cities are increasingly threatened by air pollution and Kandy City being located in a valley takes the lead in this regard. Indoor air pollution is another area of concern mainly because of high level of biomass use in domestic cooking.

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

➤ Awareness Programmes on Air Quality Management

The rewards of addressing air pollution include improved human health, increased productivity and reduced health costs and a healthier, more productive environment. In turn, these benefits will result in a healthier, more sustainable economy. Although the Sri Lankan Government is working to improve air quality through legislation, policies, new programs and specific actions, general public seems unaware on the extent of the air pollution in the country and its adverse impacts. Every human plays a part in polluting the air. Equally, there are so much individual can do to become part of the environmental solution.

On behalf of the Sri Lankan Government the Ministry of Mahaweli Development and Environment plays key role on creating awareness and changing attitude among public communities on air pollution issues, precautionary methods and environmentally friendly technologies. It is necessary to conduct massive programme to aware general public since it was not effective or efficient method to address general public by aware selected social groups. It has been identified that the mass media is the most suitable mode to address community on these issues.

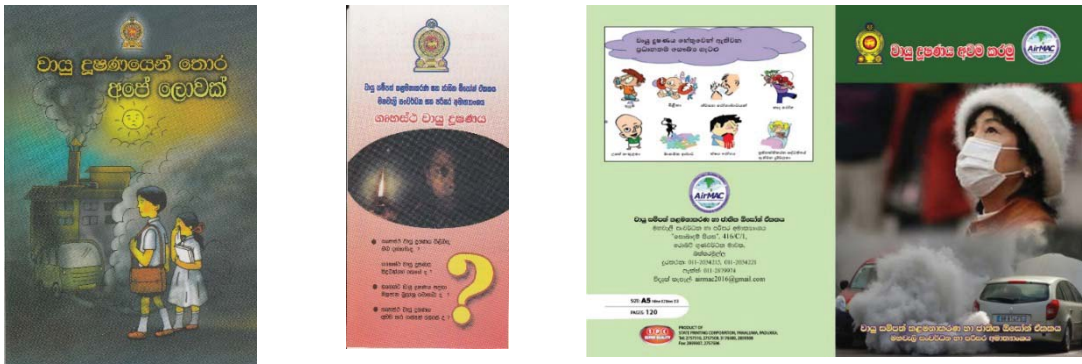
Therefore Air Resource Management & National Ozone Unit of this Ministry was organized and successfully conducted a two days residential awareness program for 35 media personals to enhance public awareness on air pollution and associated health and environmental issues, and increase public concern towards the better air quality, green and sustainable environment through their creations and publications, on 6th and 7th of December 2017 at Laya Leisure Kukuleganga, Mathugama. Success and Milestone of Air Resource Management in Sri Lanka, Impacts on Ozone Layer Depletion, Global regulatory approach to protecting the ozone layer & its domestic contribution, Progress of Vehicle Emission Testing Programme and way forward, Fuel Efficiency of Vehicles and Fuel Quality Road Map in Sri Lanka, Indoor Air Quality Management, Health Impacts of Air Pollution, Ambient Air Quality monitoring technologies & Sri Lanka status, Concept of Environmentally Sustainable Transport, Stationary

Source Emission control Strategies, Waste Management and Air Pollution and Introduction of Proposed Green Building Guidelines were some of the key topics discussed at the workshop .

- Eight school awareness programs were in successfully conducted on air pollution, air quality management and it's adverse health and environment impacts covering schools in Homagama, Kandy, Ibbagamuwa, Sri Jayawardenepura Kotte and Kaluthara educational zones on 29th May, 29th & 30th June, 17th, 24th, 30th & 31st October for about 2500 students.



Awareness leaflet on indoor air quality management, awareness booklet on air quality management “Wayu dushanayen thora ape lowak” and a exercise book containing with a message on air quality management were printed during the year 2017 to distribute among workshop participants.



➤ Air Quality Monitoring

Information on air quality is a very important factor in evaluation of environmental impacts of new development activities of the country. It is therefore a prime importance to monitor the ambient air quality at least in major cities in the country taking into consideration the emission data and meteorological, topographical & geographical parameters. Also, it is very important and helpful to monitor the ambient air quality at selected towns at least once in every two years to update this data for the purpose of decision making. This updated set of data is also important as historical data in future.

Three meetings have been conducted in order to review previous details on air quality monitoring activities conducted in Sri Lanka and to prepare comprehensive air quality monitoring mechanism for Sri Lanka.

The Memorandum of Understanding(MoU) was signed to obtain data on air quality monitoring activities which was conducted by National Building Research Organization(NBRO) since year

2012 and to expand the air quality monitoring activities of Kandy city and to initiate monitoring activities of the Puttalam town using passive sampling technique as an interim monitoring system. First and second instalments were made according to MoU in 2017. It is also proposed to maintain a database on the data obtained here.

Also, discussions were held during Global Environment Centre Foundation-Japan mission visit here in Sri Lanka, and the proposal was prepared and submitted for JICA on Technical Assistance project on Air Pollution Control Measures regarding Automobile for the country through Department of National Planning.

➤ **Fuel quality Improvement for Air Quality Management in Sri Lanka**

As the emission characteristics of a vehicle fleet in an urban environment and resulting ambient air quality degradation are very complex in nature. In consideration of the adverse effects of fossil fuel usage on air quality, particularly in the transport sector, and their relation the quality of fuels, the development process of the roadmap was initiated. A Roadmap for Cleaner Fuels and Vehicles in Sri Lanka is designed to provide decision makers with up-to-date information on how to clean up fuels in Sri Lanka by implementing a set of activities with time-bound targets giving due consideration for regional and international trends in the subject, while addressing the local concerns. Implementation of this road map would help in establishing environmentally sustainable transport (EST) system that lead to a better air quality management in Sri Lanka. In this regard Air Resource Management & National Ozone Unit of this ministry was conducted a technical committee meeting to finalize the fuel quality roads map on 20th February 2017.

➤ **Electrification of 250 two stroke three wheels**

Vehicle emissions contribute 60% of air pollution in Sri Lanka and three wheels are the major components of this. There are 1.2 billion three wheels running on the roads out of 0.2 billion are two stroke three wheels. After finding the two strokes three wheels are heavily polluted the environment by the researches, importation of the two stroke three wheels and its engines were banded in 2008. However 0.2 billion of two stroke three wheels are running with maintaining currently.

Under the poverty alleviation programme in 2017, Air Resource Management and National Ozone Unit of the Ministry have planned a pilot project to electrify 250 no of two stroke three wheels for improving the air quality and enhancing the income level of the three wheel owners. A meeting was conducted to identify the contributions to introduce green technologies with representatives of government and private banks on 21 February 2017. Accordingly, paper advertisements were published to find out suitable institutes for electrification of three wheels. Three Technical Evaluation Committee Meetings were conducted to evaluate the price and systems of these institutes on 13/06/2017, 20/08/2017 and 09/11/2017. Technical evaluation committee requested views on environment, social and legal aspects this process, from relevant agencies including Department of Motor Traffic, Department of Sri Lanka police & Import Export Control Department. Final decision will be made after reviewing their views.

➤ **Programme for minimizing of air pollution in Kandy City**

Accordingly research on air quality, percentage of adverse air concentration was reported higher than the standard value. It effect on the matters of geographical area, heavy traffic jam and density of people around the city. If around the Kandy City which was published the world heritage city, would not control the air pollution with giving proper solutions, according to the expert idea it will effect on series of problems in future.

Considering these points, under the “Punarudaya” Programme and National Environmental Conservation Programme of the His Excellency the President, Air Resource Management and National Ozone Unit of the Ministry was conducted an initial meeting with relevant key stakeholders for managing air quality around the Kandy city. Short, medium and long term activities have been initially recognized at this meeting and further meetings will be arranged to implementation of the actions.

National Ozone Unit

During last 24 years after establishing NOU following are the landmark achievements gained by the NOU.

- Donated over a Rs. 60 million worth of training equipment to technical colleges island-wide during several years for training of ozone friendly technology.
- Donated ozone friendly technological equipment to over 300 Ref/AC workshops island-wide
- Converted 118 Milk Chilling Tanks working on CFC that were installed in 40 Milk collecting centres.
- Sri Lanka was the first country to phase- out methyl bromide from tea sector through introducing alternative technologies invented by conducting several researches. As a propaganda of this extraordinary achievement, Sri Lanka Tea Board under its leadership the ‘OZONE FRIENDLY TEA was introduce in 2011.
- Sri Lanka has been received approximately Rupees 900 million (US\$ 8 million) since 1994 and utilizing these funds, Sri Lanka was able to implement many projects to protect and conserve the ozone layer.
- After the implementation of Hydrochlorofluorocarbons (HCFC) phasing out programme from 2013, HCFC refrigerant for services and maintenance of equipment would be short supplied in future. For lessening the inconvenience, 8 refrigerant Reclaim Centres covering entire island are being established jointly with the following Technical Colleges to purify (Reclaim) and reuse of used HCFC

1.Ceylon German Technical Training Institute, Moratuwa	2. College of Technology – Galle
3.College of Technology - Kandy	4. Technical College - Batticaloa
5.Technical College - Badulla	6. Technical College - Polonnaruwa
7.Vocational Training Authority - Vauvnia	8. Wayamba Technical College - Kurunegala

Effective recovery, recycling and reclamation of used refrigerants greatly reduce the emission in the refrigeration and air conditioning industries so that they can be reprocessed for further commercial use or destroyed

Present Situation and responsibilities

At present, 55 out of 96 ODSs have been completely phased out on time complying with the Phase-out schedule. Rest of the chemicals which are Hydrochlorofluorocarbons (HCFCs) are being phased out gradually since 2013 and will be completed by 2030. Quota system has been introduced to import HCFC and under the recommendation provide by the NOU, Import & Export Control Department issue Import Licence to import HCFCs. In the meantime, the Cabinet of Ministers has approved new regulations to terminate the import of HCFC based brand new equipment from

01.01.2018 onwards and necessary legislative measures are being taken to issue gazette notification.

The Kigali Amendment (2016)

197 countries including Sri Lanka adopted an amendment to phase down HFCs under the Montreal Protocol in Kigali, Rwanda on October 15, 2016. Under the amendment, countries committed to cut the production and consumption of HFCs by more than 80 percent over the next 30 years. The ambitious phase down schedule will avoid more than 80 billion metric tons of carbon dioxide equivalent emissions by 2050—avoiding up to 0.5° Celsius warming by the end of the century—while continuing to protect the ozone layer. Under the amendment, developed countries will reduce HFC consumption beginning in 2019. Most developing countries will freeze consumption in 2024, with a small number of developing countries with unique circumstances freezing consumption in 2028. The plan also provides financing to certain countries, to help them transition to climate-friendly alternatives.

Discussions are going on globally to limit the use of Hydrofluorocarbons (HFCs) to certain extent, because HFCs which have been introduced as alternatives for CFC and HCFC do not harm ozone layer but have high Global Warming Potential. Therefore, HFCs contribute much on climate change. Cabinet of Ministers approved the Ratification by Sri Lanka to Kigali Amendment and proposal was handed over to the Parliament for the notification of Hon. Members of Parliament.

Reporting annual ozone depleting consumption data

Reporting annual consumption data of ozone depleting substances to Ozone and Multilateral Fund secretariats are mandatory as per the article 7 of the Montreal protocol. It is one of the main obligations of the Montreal protocol and it was implemented from the inception of the protocol by Sri Lanka. Accordingly 2016 report were submitted to the relevant secretariats. Secretariats utilize these data receive from all parties to prevent illegal imports of ODSs to particular country

Preparation of report on the island-wide survey conducted under the UNEP to verify the use of alternative refrigerants for Ozone depleting substances.

Hydrofluorocarbons (HFCs), Ammonia, Carbon dioxide, and Hydrocarbons are the alternative refrigerants for ODSs. The objective of this Survey was to determine the quantity of such alternatives that have been penetrated into Sri Lanka and to prepare a database in order to get an idea about the consumption pattern. This was an important survey, because decisions of granting of funds to Sri Lanka in future will be decided based on survey report. Survey was completed in June 2017 and the Final Report was submitted to the UNEP, Regional Office of Asia Pacific in Bangkok, Thailand in October 2017.

Incentive payment programme for purchasing of Air Conditioning working with zero Ozone Depleting Potential (0 ODP) and Low Global Warming Potential (Low GWP)

At present, most of the Split and Package Air conditioners are working with HCFC 22 (R 22) and it is an ODS having high GWP. Therefore, in parallel to the global effort to minimize the climate change effect cause due to Air Conditioners, Sri Lanka formulated measures to impose ban on import of equipment working with R 22 from 01 January 2018.

To encourage the purchase of Air Conditioners working with 0 ODP and Low GWP refrigerant (R 32 and R 290) and having capacity of 9,000 to 24,000 Btu/h, special Incentive Programme has been implemented as a pilot project by the National Ozone Unit in collaboration with United Nations Development Programme (UNDP).

Accordingly, incentive payment is being paid as follows for the purchase of such environment friendly Air Conditioners. Five Government institutes have been paid under this programme to purchase 62 units of ACs in 2017.

System for controlling the import of ozone depleting substances

It is mandatory to establish a government control Mechanism for controlling ozone depleting substances as per the article 4B of the protocol. Accordingly, National ozone unit (NOU), Import and Export control Department and Sri Lanka Customs are the stakeholders of this mechanism and NOU issue quota for eligible importers to import ODSs and take actions with respective stakeholders to prevent illegal imports. Arrangements have been made to implement an online network system with respective stakeholders in order to implement the licensing system efficiently. Current practice for issuing license is obtaining the issues recommendations to eligible importers by NOU and Import and Export Controller issues the license. Customs release the goods after inspect refrigerants that comply with the license conditions. Importers sale refrigerants to ref/ac service sector.

Introducing Green Technologies for REF/AC Service sector

95% of the Ozone Depleting Substances that have been used in Sri Lanka is R-22 refrigerant and it uses in Ref/AC service sector. Releasing of refrigerants to the atmosphere is a general practice while repairing ref/ac equipment adapted by most technicians. This practice is not acceptable and caused for depletion of ozone layer. Therefore new technologies are introduced to ref/ac service sector to prevent such practices through recovery of refrigerant programme. Under this system no refrigerants are released to the atmosphere while repairing ref/ac equipment and therefore, this technology is known as a green technology. Trainers were trained by United Nations Environment Programme to disseminate this technology in national level.



Air Resource Management and National Ozone unit conducts workshops for students, teachers and government officers to provide sufficient knowledge about Ozone Layer and its depletion, biodiversity depletion and assorted global issues island wide.

International Ozone Day 2017

From 1994, World Ozone Day Celebration was held continuously at 16th of September of each year. In this year Montreal Protocol celebrated its 30th Anniversary and Sri Lanka celebrated World Ozone Day on 18th September 2018 by planting 2000 plants of mangroves in 5 acre land close to lagoon at Kudawa Grama Sevaka Division in Kalpitiya. The objective of the World Ozone Day of this year is to make aware and give a message to all public on the importance of protecting mangroves ecosystem.

Capacity Building Workshop for Customs Officers and Technician in Refrigeration & Air Conditioning (RAC) Service Sector

National Ozone unit conducts several training programmes on ‘Good Practices in Refrigeration’ island-wide annually in collaboration with UNEP and UNDP to train service technicians and customs officers to have the necessary training and information to implement the licensing system, control legal ODS trade, and prevent illegal ODS trade.

‘Green Building Guidelines & Rating Systems’

As a result of adaptation to the habits and practices in modern construction, there is an urgent need to address the great challenges of our times: climate change, natural resource depletion, pollution, and energy demand. These issues are all accelerating rapidly, and all have strong links with the building industry. The built environment is also responsible for significant amounts of air, soil and water pollution, and millions of tons of landfill waste. This is a situation that clearly needs to be changed. Therefore the concept of green buildings have been introduced to make a healthy environment in buildings and to minimize the use of utilities such as energy and water. That enables to build a healthy, pleasurable environment by minimizing the emission of greenhouse gases.

As a first step of greening the construction of State and Semi- state buildings and maintaining as environment friendly buildings from 2017, under the guidance of Presidential Secretariat, Ministry of Mahaweli Development & Environment in collaboration with the Urban Development Authority (UDA) has prepared ‘Green Building Guidelines & Rating Systems’ which is one of the main objectives of ‘Punarudaya’ Environmental Conservation National Programme.

These Guidelines and rating system launched under the patronage of H.E. Maithripala Sirisena, President of Sri Lanka on 9th January 2017 at the BMICH

Green Rating System

Rating of buildings constructed following guidelines will be carried out according to the under-mentioned criteria and marking system.

1. Energy Efficiency	- 27
2. Sustainable Site Planning and Management	- 23
3. Raw Materials & Resources Management	- 20
4. Indoor Environment Quality	- 13
5. Water Efficiency	- 10
6. Green Innovation	- 05
7. Social and Cultural Compliance	- 02
Total Marks	- 100

Accordingly, Green Rating Classification will be offered as follows;

- Platinum - 70 or more
- Gold - 60 to 69
- Silver - 50 to 59
- Merit - 40 to 49

The new office building of Ministry of Mahawali Development and Environment was awarded as the first green building golden award in 2017.



2. BIODIVERSITY SECRETARIAT

Biodiversity Secretariat

Biodiversity division is one of the technical division purview under the Ministry of Mahaweli Development and Environment. Mission of this division is to create an enabling environment for conservation & sustainable use of biodiversity and its component in order to achieve the sustainable development. In year 2017, Biodiversity Secretariat carried out and monitored the activities related to three foreign funded projects in addition to the activities implemented through consolidated funds.

- **Fieldwork of Project on Protecting Environment Sensitive Areas (EAS)**

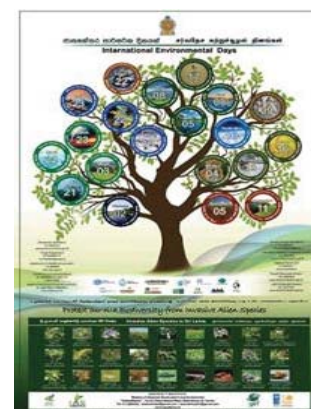
This project conducted the field observation on Biodiversity Baseline survey on 28 February and 04 March 2017 at Kalaoya area and selected expert group was conducted the baseline survey and field visit of Bar reef wave. All the expertise were decided this coastal ecosystem should be conserved.



Baseline survey field visit of Bar reef - Kalaoya area

- **Create New Poster on Commemoration of Internationally Important Environment Days**

Biodiversity Division was launched a Poster on Commemoration of Internationally Important Environment Days.



- **National Steering Committee meeting on National Biodiversity Strategic Action Plan (NBSAP)**

National Steering Committee meeting on monitoring of the implementation of the NBSAP for biodiversity conservation and sustainable use was held on 16 March 2017. That meeting was chaired by the Mr. Udaya R Senevirathna, Secretary of the Ministry of Mahaweli Development and Environment and National Biodiversity Clearing House Mechanism was introduced at the meeting.

- **Workshop & Field visit on Mangroves**

Biodiversity Secretariat has organized a one day Workshop on Conservation and Management of Mangrove Ecosystem for government officers in Jaffna District on 24 March 2017 at the District Secretariat, Jaffna. Field visit has been organized to visit the areas of Sarasalai, Mandaithevu and Thondamanaru lagoon in Jaffna district.



Mangrove workshop

- **Workshop on Preparation of Sabaragamuwa Provincial Biodiversity Profile & Conservation Action Plan**

Biodiversity Secretariat was conducted a workshop for getting ideas and suggestions to prepare Sabaragamuwa Provincial Biodiversity Profile & Conservation Action Plan with the relevant stakeholders in Sabaragamuwa Province. This workshop was held on 27 March 2017 at Ratnapura.

- **Awareness program for school children on Insect Pollinators of Sri Lanka and their Conservation**

Awareness programme was conducted regarding the insect pollinators of Sri Lanka, their conservation and their benefits to our lives for school students. That programme was held on 16 May 2017 at the Nalanda Boys School, Minuwangoda.



Pollinator Workshop

- **Celebration on International Biodiversity Day – 22 May 2017**

In every year, 22 May commemorate the International Biodiversity Day and this year theme was “Biodiversity and Sustainable Tourism”. This year celebration of the Biodiversity Day under this theme provided an opportunity to raise awareness and action towards the important contribution of sustainable tourism both to economic growth and to the conservation and sustainable use of biodiversity. Furthermore, the theme also provided an opportunity to promote the CBD Guidelines on Biodiversity and Tourism Development.

Therefore, the Biodiversity Secretariat was organized a training workshop on “Sustainable Eco-tourism at the Runakanda Rainforest Reserve Centre in collaboration with the Friends of Biodiversity Runakanda Conservation in Kalutara and Sri Lanka Institute of National Tourist Guide Lecturers Association. It was held from 03 - 04 July 2017.



Celebration of the Biodiversity Day

- **Updating National Red List-Conservation status of Fauna and Flora.**

Sri Lanka is considered as a biodiversity hotspot due to richness in flora and fauna and threats to their survival and it is very important to identify and prioritize the species for conservation activities. Accordingly, as per the convention of Biological Diversity, Biodiversity division of this Ministry is in the process of evaluation of conservation status of fauna and flora in accordance with the assessment process. In order to achieve above target, Biodiversity division has initiated a series of expert meetings and data evaluation workshops with the relevant stakeholders.

Hence biodiversity division already finalized the floral species conservation status within 13 floral families together with the National Herbarium of the Department of National Botanic Gardens. Further to that there were preparatory meetings of faunal groups to be evaluated using the existing data for faunal assessments. Currently this activity is ongoing.

- **World Environment Day – 05th June 2017**

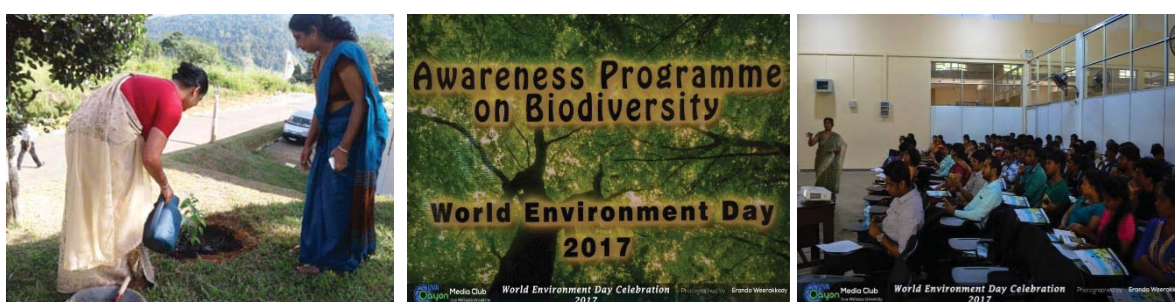
Biodiversity Division of the Ministry of Mahawellie Development & Environment Celebrated World Environment Day and Organized Several National Programs on Environment Related as follows.

- Conducted awareness programs on Biodiversity and Environment Conservation to the Kiriwanagama Central College of Haldummulla Divisional Secretariat and Kahagolla National School of Haputhalle Divisional Secretariat in Badulla District. In addition to the above programmes, established underutilized fruit garden in each school.
- Awareness program at UVa Wellassa University, Badulla

The program was initiated with establishment of a under-utilized fruit garden in the university premises with the name boards for each fruit crop consisting the information of botanical details, nutritional value and health benefits to introduce and increase utilization of 30 underutilized fruits.



under-utilized fruit garden in the university premises



Awareness program & Tree Planting UVA Wellassa University

- **National Symposium on Invasive Alien Species (IAS) -2017**

Symposium on Invasive Alien Species was conducted on 20 January 2017 at the Waters' Edge, Battaramulla to share the research information related to manage the IAS.

- **The following activities were done under the Project on “Mainstreaming Biodiversity Conservation and Sustainable use for Improved Human Nutrition and Well-being” (BFN)**

- 1) Establishment of a model garden for local root & tuber crops and underutilized fruits in the Niraviya Mahaweli farm.
- 2) Promoted root and tuber crops among smallholder growers and home garden diversification for improved nutrition & livelihood in the Aranayaka area.
- 3) Consultation services were obtained to identify and develop new marketing options and guidelines for agro - biodiversity and food with high nutritional value.
- 4) Proposal for multiple Media Approach to Promote Conservation & Utilization of Local Agro biodiversity for Improved Human Nutrition & Wellbeing.

- **Mainstreaming Agro biodiversity Conservation and use in Sri Lankan agro – ecosystem for livelihoods and adaptation to Climate Change project (BACC)**

BACC and BFN projects were jointly organized a workshop on 28th February & 01st March 2017 at Milleniya village. Ten Bee boxes were distributing to among the farmers in “Ovita ecosystem to increase the yield and in order to increase their income.

- **Training workshop and knowledge sharing program on Participatory Plant Breeding/ Client Oriented Breeding**

Training workshop and knowledge sharing program on Participatory Plant Breeding/ Client Oriented Breeding was held from 24th to 27th April 2017 at Plant Genetic Resources Center, Gannoruwa. That Training programme was made the path for farmers to get a clear idea about crop breeding and the importance of their role in Crop Improvement. The objective of the programme was trained farmers regarding the improvement of crops by introducing plant breeding techniques.

- **Pilot-project “Home garden diversification” at the Niunhella pilot site**

The workshop for initiation of the sub- project on Home Garden Diversification was held on 3rd June 2017 at the Niunhella village with the participation of 50 villagers selected for the home garden diversification project. The workshop was conducted by the officers at the Department of Agriculture, Assistant Director’s office, Ruwanwella. Presentations were done mainly based on biodiversity for food and nutrition through home garden diversification.



Awareness program-Niunhella

- ✓ **Expert Consultation Workshop on “New Marketing Options and Guidelines for Agro Biodiversity and Food with High Nutritional Value Identified and Developed”**

The expert consultation workshop for developing new marketing options and guidelines for agro-biodiversity and food with high nutritional value identified and developed, was held on 16th June 2017.



Discussion on “New Marketing Options and Guidelines for Agro Biodiversity and Food with High Nutritional Value Identified and Developed”

The main objective of the workshop was to identify the demand and supply for high value agro-biodiversity products of different crops to determine the priority issues related to food product development and understand potential challengers and opportunities for establishment of agro biodiversity marketing system.



- **Workshop on National Biodiversity Strategic Action Plan 2022 – 2016 (NBSAP)**

Biodiversity Secretariat prepared the National Biodiversity Strategic Action Plan 2016 -2022 to achieve 12 NBSAP targets and it was based on 20 AICHI targets and 17 Sustainable Development Goals.

Biodiversity Secretariat was conducted a workshop for relevant stakeholders to aware and make necessary arrangements to implement the responsible actions identified in NBSAP by incorporating into their annual action plans. It was held on 12 September 2017 at the Centre for Banking Studies, Rajagiriya.

- **National Biodiversity Expert Committee Meeting**



At the National Biodiversity Expert Committee Meeting

Biodiversity Secretariat was conducted National Biodiversity Expert Committee meeting on 22 September 2017. The Committee was discussed following importance points at the meeting;

- ✓ Release of *Wolbachia* – infected *Aedes aegypti* mosquitoes into the environment as effort to control dengue has been given the approval to implement doing the trial with risk assessment.
- ✓ Importation of construction materials such as stone and sand for development activities of the country.
- ✓ Discussed threats to the Biodiversity and ground water due to Oil Palm cultivation.

- **Awareness Workshop on Palaeobiodiversity Conservation & Protection for Government Officers.**
- **Workshop on Conservation and Sustainable Use of Mangroves**

The mangroves in the Batticaloa and the Puttalam Districts are endangered due to various human activities. Therefore, awareness programs on conservation and sustainable use of mangroves were held on 07th December 2017 at the Batticaloa Residency premises, Batticaloa and on 27th December 2017 at the premises of the Small Fishers Federation, Chillaw. At the workshops, briefed the current issues and threats of mangroves, and legal and other remedial measures have been taken for conservation of mangroves.



Awareness program and Field visit held in Batticaloa



Awareness program & Field visit held in Puttalam District

- **Conservation of Wetland Biodiversity**

Currently wetlands have been threatened due to several anthropogenic activities in areas of the Colombo City and the Administrative Capital in Kotte.

There are many remarkable wetland ecosystems in Colombo Municipal Councils and Kotte Urban Councils. The existing urban wetlands consists of high biodiversity and high ecosystem variations. Therefore, these wetlands home too many endemic plant and animal species in Sri Lanka. The Biodiversity Division organized an awareness workshop on conservation and importance of wetlands around Colombo with a field visit on 22 December 2017 in Beddagana Biodiversity Wetland Park.

The field work was organized to demonstrate the importance of urban wetland, its associated biodiversity, conservation methods, and awareness of the participants in the field of study and field knowledge.

- **Commemoration on World Mountain Day – 11 December 2017**

Series of programs were organized by the Biodiversity Secretariat and the District Secretariat, Matale to commemorate the International Mountain Day this year under the theme of “***Mountains Under Pressure: Climate, Hunger Migration***”. It was held on 11 December 2017 in Matale District based on the Knuckles Conservation Forest (KCF).

Awareness program was conducted for school children and government officers regarding the importance of conserving mountains at the Knuckles Conservation Center, Riverstone and name boards with the messages on protection of mountain biological diversity were placed at the two main access roads to the Dumbara Hills, Matale District. In addition to that, five awareness boards were placed on the top of Riverston mountain,, “ Sudu Ganga junction, near Thellgamuwa Oya, Sera Ella and Wadda Penna Ella.



Awareness, Field Demonstration and Removal of Invasive Alien Spp. in Pitawala Patana

- **Training Workshop on Crab Conservation through Awareness Creation of Endangered Crab Species**

According to the National Red List 2012 there are 52 species of fresh water crabs that live in Sri Lanka, 51 of which are endemic to the country. Of these, 41 species are found in the wet zone and 90% of them are at present threatened. Among them, several species of endemic crab species in the Galle district have been identified. Two places in Galle are found in *Pastilla ruhuna*. In particular, rapid urbanization has caused the destruction of optimal habitat for those species, and freshwater shoots are at risk from current invasive organisms, use of fertilizers, fertilizers, climatic conditions and acid rain.

Due to soil erosion, the mudslides in the reservoirs also adversely affect the fresh water crabs. Therefore, the existence of crabs live in those places, the adverse effects on breeding places, the identification of human activities and the conservation methods have become a timely need.

The Biodiversity Secretariat and the Galle District Biodiversity Education & Exploration Society which is conducting research on fresh water crabs in Sri Lanka, was organized a workshop from 04 - 05 December 2017 at Jetwing Light House Hotel in Galle.

In this workshop, a researcher and expert on freshwater crabs, Mr. M. M.Bahir, practically conducted the demonstration on freshwater crabs. Lecture on interactions between the lifestyle, the man and the crab and the conservation' were conducted. Special observations and field study were conducted in various locations in the district. The field officers, university students, government officers, Director of the Biodiversity Secretariat, Assistant Directors, and Officers were participated.

- **Two day Residential Workshop on Paleobiodiversity in Anuradhapura, to Study the Ancient Biodiversity and Past Human Activities**

Sri Lanka rich in biodiversity as well as the paleobiodiversity too. As a result of various human activities affecting the past and present biological diversity. Biodiversity Secretariat and the Postgraduate Institute of Archeology of the University of Kelaniya jointly organized the workshop from 20 - 21 December 2017 at the Vijayarama Meditation Center in Anuradhapura to identify and preserve them.





Awareness Programme and Field Visit on Abeya Wewa,

Mihintale Rajagiriya Cave and Kaludiya Pokuna

Past and present students of Post Graduate Institute of Archeology, University of Kelaniya were participated to the above programme. Awareness program was carried out to study the ancient biodiversity and past human activities in Anuradhapura. Special attention given to how, it was managed by the oldest urban society in Sri Lanka and it was affected with the construction of the tanks system. Lectures were comprised on field excursions related to the tank system, human settlement, relationship with the environment and past and present status of the biodiversity.

Field visit were conducted to observe current and past biodiversity in the Abhayagiriya , Kaludiya Pokuna, Isurumuniya Ranmasu Uyana and Mihintale Rajagiri Lena.

3. CLIMATE CHANGE SECRETARIAT

Meeting the Challenges of Climate Change

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 cause sea level rise, increase 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 not 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.

Preparation of National Adaptation Plan (NAP) for Climate Change Impacts in Sri Lanka

National Adaptation Plan is the country's roadmap 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 the 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 timelines 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, Cross-cutting national issues and areas of interest.

Sectoral workshops have been conducted on Agriculture, Water, Ecosystems and Biodiversity, Tourism and Recreation, Health and Disasters, Human Settlement and Infrastructure, Industry, Energy, Transportation and Export, Agriculture and Plantation sectors and discussed the cross-cutting issues with related to preparation of the NAP. NAP document printed and launched at “*Sri Lanka NEXT - A Blue Green Era*” programme and 5th Asia Pacific Adaptation Forum 2016. The NAP document published in Climate Change Secretariat web site (www.climatechange.lk) as well.

During the progress reporting period in 2017,

- a. Obtained the approval of the Cabinet of Ministers for implementing the National Adaptation Plan.
- b. Two workshops were conducted to prepare Provincial Climate Change Adaptation Plans for Western and Southern Provinces.
- c. Established the National Steering Committee and Committee meeting was conducted on 07th September 2017.

Prepared the Sinhala translation of National Adaptation Plan.

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).

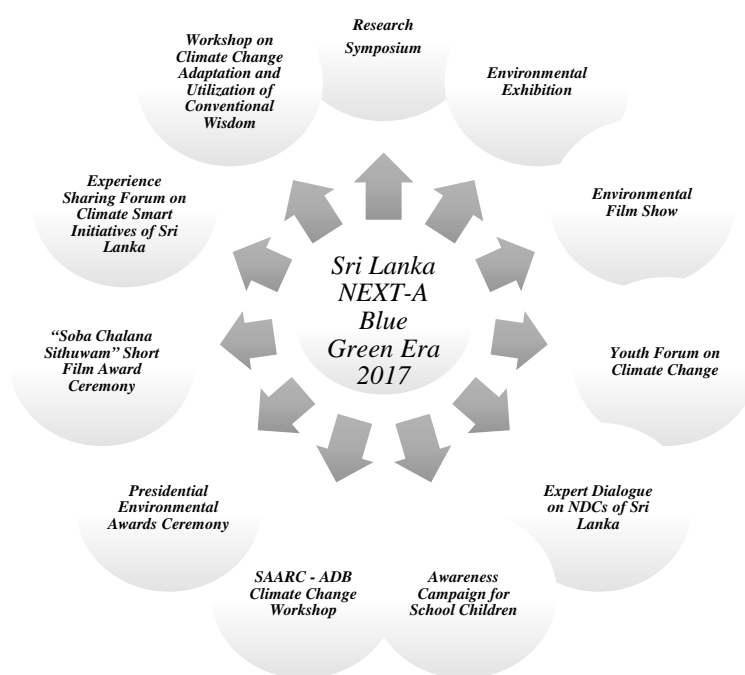
Being a party to the UNFCCC, Sri Lanka has prepared and submitted the country's INDCs which consists of mitigation, adaptation, means of implementation (finance, technology development and transfer, capacity building) and loss and damage. Ministry of Mahaweli Development and Environment is the national focal point for the UNFCCC and also the driving agency for coordination of INDCs implementation in the country targeting year 2020-2030 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 in charge 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 at the UN Headquarters in New York. H.E. the President handed over Sri Lanka’s instrument of ratification on the Paris Agreement on Climate Change, at the United Nations General Assembly at the UN headquarters. Sri Lanka’s first Nationally Determined Contributions submitted to UNFCCC. During the progress reporting period, A National Steering Committee meeting was conducted on 28th February 2017 to discussed implementation of Readiness plan of INDCs of Sri Lanka and establishment of NAMA Institutional Framework for Sri Lanka.

“Sri Lanka NEXT-A Blue Green Era” Programme and Exhibition 2017



“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. The objective of the programme 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.

In this context, the first *“Sri Lanka NEXT-A Blue Green Era”* environmental conference & exhibition including 5th Asia Pacific Adaptation Forum was held on 2016. Accordingly, the second *“Sri Lanka NEXT-A Blue Green Era”* environmental conference& exhibition was held on 16-17 October, 2017. The programs conducted at the event were as follows,

Awareness and Capacity Building on Climate Change

During the progress reporting period in 2017, the following awareness programs were conducted and awareness materials were printed. Awareness materials published in Climate Change Secretariat web site as well.

Awareness workshop for media community

An awareness workshop was conducted on 20th April 2017 at “Saptha Parisara Mandapaya”, Sampathpaya, Battaramulla, for media community targeting “Earth Day 2017” which celebrating every 22nd April. The main objective of this workshop was to building public awareness in the concepts of climate change and aware of its unprecedented threat to our planet and to empower environmental protection.

Awareness meeting for students of Rajarata University of Sri Lanka

An Awareness meeting for final year student those who are following B.Sc Degree in Environment Management in Rajarata University of Sri Lanka was held on 5th May 2017 at the Conference Hall, Ministry of Agriculture, Battaramulla.

Awareness programme for School childrens

An awareness programme was conducted for school childrens of Bulathsinhala Vidyalaya, Bulathsinhala on 24th May 2017 targeting Environment day 2017.

Awareness programme for School Teachers

An awareness programme was conducted for science teachers of Chilaw Educational Zone on 4th October 2017 at Joseph Vaz College, Wennappuwa.

Implementation of appropriate technologies for climate change adaptation and mitigation under Climate Technology Center and Network (CTCN)

Review Committee on Climate Change Technology Development and Transfer established by the Ministry of Mahaweli Development and Environment is evaluating and make recommendations for project proposals before submitting to the CTCN.

During the progress reporting period in 2017, The 2nd Review committee was conducted on 28th June 2017 at the Ministry of Mahaweli Development and Environment. Reviewed and discussed the project proposals on,

- Climate change impact to lagoons and coastal status and characteristic in Sri Lanka.
- Designing a Climate Smart City for Municipal Council, Kurunagala.
- Study on impact of salinity intrusion to estuarine and rivers ecology and drinking water.

Poster on “Vulnerability Assessment on Climate Change Impacts”



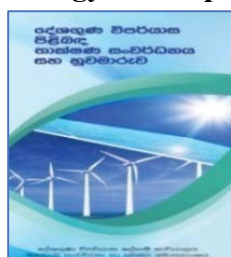
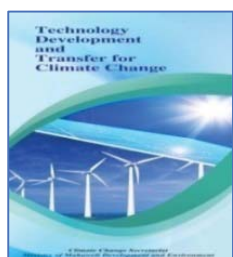
This poster aim to make aware on why climate change vulnerability assessment is important, how it's carrying out and what are the components of its and to give an idea on previous and ongoing study by the Climate Change Secretariat.

Printing the 2nd volume of Climate Change Magazine “NeelaHaritha”



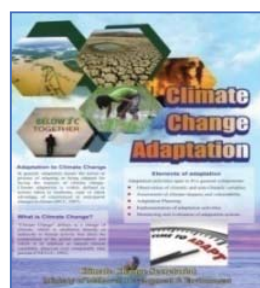
The main aim of this publication is to educate and create awareness on this critical and important subject. Some articles in this volume contain various aspects of climate change. Some of them are research based, while others are based on field experience.

Leaflets on “Technology Development and Transfer for Climate Change”



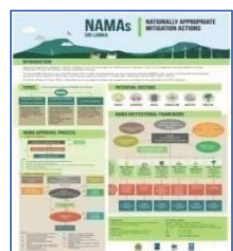
This leaflet was printed to aware about the Technology Development & Transfer for Climate Change.

Leaflet on “Climate Change Adaptation”



This leaflet was printed to aware general public, school children and other interested parties on Climate Change Adaptation.

Poster on “Nationally Appropriate Mitigation Actions (NAMAs)”



This poster explains the Introduction, Potential Sectors, Institutional Framework and Project Approval Procedure of NAMAs in Sri Lanka.

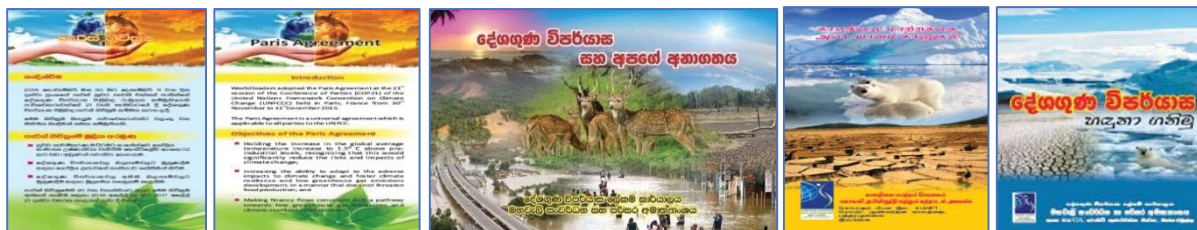
Booklet on “Implementation of NAMA in Sri Lanka”



This booklet consists of NAMA Institutional Framework, NAMA Project Approval Procedure, Roles and Key responsibilities of relevant institutions in the NAMA Institutional Framework.

Reprinting of Awareness Materials

Five awareness materials such as Leaflets on “Paris Agreement”, Booklet on “දේශගුණ විපර්යාස සහ අපගේ අනාගතය”, Tamil language Leaflet on Climate Change and Leaflet on “දේශගුණ විපර්යාස හඳුනා ගනිමු” were reprinted.



National Committees on Climate Change

Inter Agency Coordinating Committee meetings on Climate Change (IACCCC)

Inter Agency Committee on Climate Change was established September in 2012, 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 that recommended by two expert committees on climate change adaptation and mitigation. There are 30 agencies represent this committee including Ministry of Mahaweli Development & Environment.

Last two Inter-Agency Coordinating Committee meetings were held on 22nd December 2016 & 27th April 2017. The committee discussed on decisions taken at previous expert committee meetings, outcomes of COP 22 and follow ups, actions taken by the country after the Paris Agreement and upgraded the Climate Change Expert Committees.

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

National Expert Committee on Climate Change Adaptation was established in September 2012, 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,

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.
- 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.

8th National Expert Committee on Climate Change Adaptation meeting was held on 23rd January 2017 and 9th and 10th meetings were held on 04th April 2017 and 1st November 2017 respectively. Three committee meetings were held during the reporting period and discussed the following areas.

- Provide guidance for
 - Implementation of the National Adaptation Plan (NAPs)
 - Implementation of Technical Assistant project on Updating Climate Change Vulnerability Assessment and Piloting Mainstreaming Climate Change Adaptation into National Development Activities
 - Preparation of Vulnerability and Adaptation Measures for the Third National Communication Report to be submitted to UNFCCC
 - IUCN Proposal submission to GCF on “Building Climate-Resilient Coastal Communities and Ecosystems in Asia”
- Make recommendations for country position and Climate Change Negotiations at COP Meetings.
- Sri Lanka’s Submission on Adaptation Communications to UNFCCC and Adaptation Committee (AC) and Least Developed Countries Expert Group (LEG) mandates stemming from decision 1/CP.21.

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

National Expert Committee on Climate Change Mitigation was established in 2013, for providing guidance on issues pertaining to mitigate of Climate Change in 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.

Last two National Expert Committee-Mitigation meetings were held on 30th March 2017 and 24th August 2017 and discussed the following areas.

- a. Incorporation of key information in order to calculate the carbon footprint in the EPL license.
- b. Formulation of a NAMA Institutional Framework for approval of the Cabinet.
- c. Presentations were made on,
 - proposal for Partnership for Market Readiness (PMR)
 - Initiative for Climate Action Transparency
 - technical feasibility of electrical conversion of two stroke three wheelers

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 a responsibility or duty for mitigation of greenhouse gas emission. However traditionally the developing countries had been exempted to a certain extent from this responsibility. But with time, pressure developed and the idea of developing countries also doing mitigation at least voluntarily came in to the focus. In the Climate Change summit held in Bali 2007, under the Bali roadmap, 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 verifiable manner and would be supported and enabled by technology, financing and capacity building (from developed countries).

Preparation of NAMAs for Energy Sector

The NAMA project on appropriate mitigation actions in energy generation and end-use sectors in Sri Lanka commenced in 2015. This project has 4 major components. Components 1, 2 & 3 are implemented by the Sri Lanka Sustainable Energy Authority of Ministry of Power and Renewable Energy and forth component of the project "Monitoring, Reporting and Verification (MRV) system and national registry for mitigation actions in the energy generation and end-use sectors" is implemented by the Climate Change Secretariat of Ministry of Mahaweli Development and Environment.

NAMA Institutional Framework, NAMA Approval Procedure, National NAMA Registry, Monitoring, Reporting and Verification (MRV) Framework for Energy Sector, MRV Protocols for three pilot projects (Bio Gas, Variable Frequency Drivers (VFDs) and Solar PV), NAMA web site, web portal for Online application of NAMA Projects, Capacity Building and Awareness Materials on NAMAs are the major outputs of Component 4 of this project.

In accordance with the project outputs, the major achievements up to 31st December 2017 are as follows;

- a. NAMA Institutional Framework and NAMA Approval Procedure were prepared and approval of Cabinet of Ministers was obtained on 11th July 2017.
- b. The approved mechanism has been printed as a booklet to create awareness of the relevant stakeholders in this regard.
- c. MRV framework for Energy sector and three monitoring protocols were developed.
- d. NAMA web site, NAMA web portal and web based NAMA registry system is being developed.
- e. Poster and leaflet on NAMAs were printed.
- f. A Resource Pool to conduct MRV assessments was established.

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

The Project of Sri Lanka's Third National Communication on Climate Change document was signed with UNDP and Ministry of Mahaweli Development and Environment on 18th March 2016.

The approval of the cabinet ministers was obtained for implementation of Sri Lanka's Third National Communication (TNC) Project within three years from 2016-2018.

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 United Nations Framework Convention on Climate Change (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 using country's existing technical and human resources capacity. This would require creating and disseminating information on climate change to stakeholders and policy maker's across the country. In particular, there is a need to determine the current GHG emissions and the potential vulnerabilities associated with these emissions that are relevant to Sri Lanka.

Therefore, the preparation of the TNC has shown potential to enhance understanding on vulnerabilities, relevant adaptation measures and mitigation options in the application of national, provincial, district and divisional level development planning. Preparation of the TNC report will take place of US\$ 500,000 with a grant of GEF through UNDP.

Accordingly,

- The suitable experts and expert teams were appointed and 2nd deliverables for the key components were submitted to the Project Management Unit.
- An Independent Review Panel was established and 03 progress meetings were held. Accordingly, inputs given by the Panel were incorporated to the draft chapters and data collection.
- International Consultant has been selected and training programme was held for GHG Inventory preparation and other aspect related to TNC.
- A Service Provider has been selected for Organizing Workshops, Symposiums, Seminars, Knowledge Products & Communication Campaigns for TNC.

In order for implementing the activities of TNC, Project Board was held to ensure the project is focused, effectiveness of throughout the project cycle, on achieving noted in the Project's Strategic Results Framework in the most innovative, cost effective and replicated manner and agreeable to the actions identified in the TNC Project.



Sri Lanka's Third National Communication (TNC) Project

Technical Assistant Project on “Updating Climate Change Vulnerability Assessment and Piloting Mainstreaming Climate Change Adaptation into National Development Activities in Sri Lanka”

Sri Lanka is a highly vulnerable island to adverse impacts of climate change. Taking that into consideration in 2009, this Ministry has carried out a vulnerability mapping and assessment with the Technical Assistance of the ADB. As a continuation of assessing the vulnerability of the country, a technical assistance has been extended by the ADB to upgrade existing profiles incorporating new areas.

The Technical Assistance activities in Sri Lanka will help to achieve,

- a. Increased resilience to climate change impacts through improved government capacity in mainstreaming climate change adaptation into national development policies.
- b. Improved ecosystem planning for the Northern and Eastern coastal regions and for the Mountain region. More specifically, the proposed activities will help improve capacity in conducting climate change vulnerability assessment, climate risk identification, and impact assessment.
- c. Prepare a set of tools for climate change adaptation policy and planning for the subproject areas.

During the progress reporting period, a team of consultants namely Strategic Planning Specialist cum Team leader, GIS Specialist, Mountain Ecologist and Coastal Ecologist was appointed and the project implementation started in January 2017. Presently data gathering and mapping exercise are in progress.



Updating Climate Change Vulnerability Assessment

Preparation of National Low Carbon Development Strategy

At the 21st Conference of Parties (COP 21) in Paris, Parties to the United Nations Convention on Climate Change (UNFCCC) reached a historic agreement to combat climate change and to accelerate the actions and investments needed for a sustainable low carbon future. Sri Lanka also signed this agreement on 23rd April 2016 in New York.

Accordingly, member countries of the United Nations have consented to follow the strategies to mitigate the rise of global temperature by publishing their National Determined Contributions (NDCs). Sri Lanka also submitted INDCs and it will support to achieve an ambition level to limit global warming.

In order to implement mitigation NDCs, and contribute the global efforts to reduce GHG emissions in the context of sustainable development, preparation of a Low Carbon Development Strategy

(LCDS) is timely needed. Therefore, Climate Change Secretariat of the Ministry of Mahaweli Development & Environment committed to develop Low Carbon Development Strategy (LCDS) for Sri Lanka.

During the progress reporting period in 2017,

- a. One stakeholder workshop conducted to obtain expert input for the development of LCDS.
- b. Conducted sectoral meetings for Energy, Transport, Industry and Waste sector to obtain expert inputs for further enrich of drafted strategy.
- c. Improved the draft strategy technically.



Preparation of National Low Carbon Development Strategy

4. LAND RESOURCE DIVISION

Sri Lanka is nourished with waste number of water bodies, most of the surface as well as ground water bodies are contaminated due to heavy environmental pollution. Solid waste is one of the major problems of pollute surface water bodies in many areas in the country.

Beach cleaning programme for removing of solid waste to commemorate World Water Day at Gurunagar – Jaffna.

Fresh water bodies are limited resource in the Northern area of the Island. Salinity is increased in inland water bodies due to shallow lime stone intrusion and sea water. Pollution of water bodies due to solid waste is mostly occurring in Jaffna peninsula due to large population and improper disposal of solid waste. “Gurunagar” is a dominant area to observe polluted water bodies and the large no of solid waste collected at the edge of the lagoonal area. By improper handling of solid waste spread epidemic diseases and un pleasant odours.



In addition to that, ground water table in that area is highly contaminated by leachate of collecting of solid waste. The Ministry of Mahaweli Development and Environment had organised a programme to aware general public on value of protection of water resources and beach cleaning programme in Gurunagar area. This Programme was successfully conducted through the assistance with Marine Environment Protection Authority (MEPA), Land Resources Division of the Ministry of Mahaweli Development & Environment (MOMD&E), Coast Conservation Department (CCD), Central Environmental Authority (CEA), Public health Inspectors (PHI), Three Forces and the District Secretary of the District Secretariat and the participants of non- government organizations were present at the event.



Commemoration of the world Soil day – 2017

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 this year is “Caring for the planet starts from the Ground”. Soil can be considered as a major component of the natural ecosystem and it also be a part of a food security for all organisms to their survival. To fulfil that target, the celebration of the World Soil Day in this year mainly focuses on the creation awareness among global community on sustainable agricultural management through the correct measures of soil conservation activities.

Accordingly awareness creation programme was held at the Ruwanpura Village in Nuwaraeliya and 150 villages were present at the event. This programme was organized by Natural Resource Management Centre (NRMC), Department of Agriculture with the collaboration of Ministry of Mahaweli Development and Environment and Provincial Department of Agriculture-Central Province and Rehabilitation of Degraded agricultural Lands in Kandy, Badulla and Nuwara Eliya Districts in Central Highlands Project. This programme consisted with demonstration of soil conservation sessions and field observation programme. And also open discussion was held for the farmers to discuss their agricultural problems at the end of the field programme.



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 was initiate the 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) collaboration with the Ministry of Mahaweli Development and Environment.

This project is involved to minimize the repetition of data in government and non-government sector and create the efficiency and form the best platform for sharing existing data, updated data and collecting data as well as the revised data. 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 Deduction. Ministry of Disaster Management act as a 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 was held on 14th to 15th March 2015 in Sendai, Japan) and it paid the attention the way of disaster risk reduction further.

The Ministry of Mahaweli Development and Environment act as a National Focal Point for the UNCCD and this Ministry has the responsibility to implementation of NAPs. Not only NAPs for combating land degradation in Sri Lanka but other NAPs also related to the Conventions of CBD & UNFCCC. In addition to that, Steering Committee was formed to advice and provide technical knowledge successful implementation of the NAP. Accordingly this project facilitate the identification of data/information, ability to share data, sustainable way of using the existing data and data used for preparing Rio reports.

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 above 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 preparation of 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 in to Sinhala and Tamil languages as well (Sinhala -500 hard copies and 500 CD's, Tamil- 200 hard copies and 200 CD's.)



Awareness Programmes on Sustainable Land Management for school teachers & Children

At the present Sri Lanka, land degradation is highly occurred due to various reasons. Land Resources Division of the Mahaweli Development and Environment has a major responsibility to implement various activities to reduce land degradation in the country and various programmes are conducted annually to aware school children, teachers, rural communities and different agencies. Kegalle District was identified as a landslide, flood as well as other natural disasters prone area, therefore this Ministry was selected Kegalle District to conduct awareness programme in this year.

Objective of the programme is to reduce land degradation due to natural disasters as well as to maintain different environmental sectors in sustainable manner and conservation of sustainable land management. The awareness programme was held on 28th April 2017 at Swarna Jayanthi Maha Vidyalaya- Kegalle. For that event, 100 of teachers were participated representing 40 schools in Kegalle Education Zone. Second awareness program was held on 29th June 2017 at the auditorium of the Wadduwa Central College This Program mainly aimed for school teachers of the Kalutara Educational Zone and 95 teachers were participated. Third awareness programme was held on 04th December 2017 at the main hall of the H/Lunugamwehera Abhayapura K.V. For the event 300 students were participated. Resource persons and ministerial officers were also participated to that events.





Soil conservation under slope conservation program in Rankethgama model village belongs to Suduwella Grama Niladari Division, Divisional Secretariat - Delthota

Slope Conservation in model villages is directly involved to the Sustainable Land Management activities under annual action program in the Land Resources Division. Ministry of Mahaweli Development & Environment has paid the attention for implementing the soil conservation activities in 3 selected sites of the model villages located in Awissawella, Palindanuware & Delthota. Rankethgama model village belongs to Suduwella Grama Niladari Division and Divisional Secretariat, Delthota and it is included 25 houses which was built under the financial assistance of Housing Development Authority.

Field inspection has been done at this village on 13th June 2017 for inspecting the current situation with the team of the officers of Housing Development Authority, Natural Resources Management Center of the Department of Agriculture and the Land Resources Division of the Ministry of Mahaweli Development & Environment. For this program, technical assistance and resource contribution has been done by the Natural Resources Management Center of the Department of Agriculture and Coordination and Allocations provided by the Land Resources Division of the Ministry of Mahaweli Development & Environment.

Before implementing this soil conservation activity, awareness programme was conducted for the whole Villages in Rankethgama Model Village, under the coordination of Housing Development Authority, Natural Resources Management Center of the Department of Agriculture and the Land Resources Division of this Ministry. Accordingly, 25 house owners and government officers have been participated in that event represent from Housing Development Authority Natural Resources Management Center and the Land Resources Division of this ministry.



Issue soil for development works in Polonnaruwa and Matale Districts

Conducted a field visit to identify suitable locations for mining soil, for the constructional works of government foremost development activities in Polonnaruwa and Matale districts with the participation of expert officers of Central Environmental Authority, Geological Survey and Mines Bureau, Department of Forest, Sri Lanka Mahaweli authority, District Secretarial of Polonnaruwa, Matale Districts.

According to the field observations made by the officials, Elahara and Konduruwewasites were selected for supplying soil and gravel for government development projects.



Preparing the National Mineral Policy for Sri Lanka

The mineral policy has been already prepared by the Ministry of science, technology and Research and this policy is being review to avoid the defects and streamline the policy statements with the collaboration of Geological Survey and Mines Bureau and other government agencies.

Field visit- Southern Highway project, Hambantota

A field visit was conducted in Southern Province to identify lands for supplying soil/gravel for the construction purposes of Southern Highway. Following sites were identified and forwarded the recommendation to get the approvals from secretary to the Ministry.



1. Proposed land for mine soil at Hondawel Pokuna.
2. Land reserved for grassland in Walsapugala.
3. Purposed land for the excavation of soil in Karambagaha Mukalana.
4. Purposed the land for the excavation of soil within the purposed wild elephant management zone (Elallakelaya, Elalla Mukalana, Gonnoruyaya)
5. Suitable lands for excavating soil in Nimalawa(Sithulpawwa road)

Field Visit- Yan Oya Sand Mining area

By constructing a dam through Yanoya which, is streaming through Anuradhapura and Trincomalee Districts, government was implemented Yan oya wewa Project at Wahalkada area, with the broad aspect of providing irrigation and other water requirement of people living in area from collection rain waters



Sand extraction survey in wilgamuwa

The construction industry plays major role in the rapid development phase in Sri Lanka. This has inevitably increased the demand for river sand. The construction industry is supplied with this river sand extracted from the areas such as Mahiyanganaya, Wilgamuwa, etc. Because of this reason, river sand extraction in this area has been increased in faults by creating number of socio-economic and political issues. Also this sand extraction which is aimed to supply for sand for the ever increasing demand of sand exert and enormous pressure on extraction sites and to the respective rivers. This pressure created various negative scenarios in the social and political backdrop in the area thereby eventually affect the socio-economic situation and for the political reconciliation. In order to correct this negativity, the secretary of the Ministry of Mahaweli Development and Environment has given instructions to the Land Resources Division to conduct a survey to forward necessary recommendations to formalize this sand extraction activity in wilgamuwa area and create a harmonious situation in soil extraction in Wilgamuwa area. Therefore, as per the instructions given by the the Secretary, a survey has been carried out covering 324 sand extraction sites in 7 Grama Niladari Divisions such as Sonuththa, Perakanaththa, Guruwelayaya, Maraka, Malgammana, Randunewewa and Dunuwilapitiya. The Land Resources Division has completed this survey and recommendations were forwarded to the Secretary.



Solutions for the problems regarding the usage of Natural Resources

Field inspections have been done for nearly 200 public complains and relevant agencies regarding the environmental problems are coming daily to the Secretary, Ministry of Mahaweli Development & Environment. According to that necessary actions have been taken to carry out the field inspections, solving the problems and give the advices and orders to the Secretary coming under line agencies.

Agreement for the Mineral Investment

Mineral investment agreement has been prepared and implemented with the aspect of the exportation of limited mineral resources in Sri Lanka through proper mechanism with three private institutions. Sri Lanka will expect to bring 30 million dollars of foreign investment regarding the mineral resources within this year.

Field inspection in Palindanuwara

According to the request given by the National Housing Development Authority, a field inspection was held on 27th April 2017 and 02nd May 2017 regarding the Land/Soil Conservation in slopy areas in Weediabandaragama model village, Palindanuwara. This field inspection was done by the Ministry of Mahaweli Development & Environment with the collaboration of Land Use Policy Planning Department and National Housing Development Authority. According to the observations made at the field visit, Land Resources division submitted recommendations to the National Housing Development Authority to take technical advice and support from the Land Use Policy Planning Department (LUPPD) at the organizing stage of every model village projects in future. With the Ministry request has submitted detailed Report on Soil/Land Conservation of the Weediabandaragama and total cost with structural constructions for this programme is nearly 40 million rupees and Land Resources Division's allocations are not sufficient to carry out this program.

Total cost estimated for soil conservation programme at Weediabandaragama including structural constructions was nearly 40 million rupees and it is observed that Land Resources Division's allocation were not sufficient of carry out this program within 2017. Therefore, this project proposal was forwarded to the Presidential Secretariat to seek the financial assistance through the Punarudaya Environmental Conservation Program.

“ Dhampal Uyana” model project on Soil Conservation in Pannipitiya Dharmapala Vidyalaya

This project is initiated by the Past Pupil's Association of Dharmapala Vidyalaya, collaboration with the Divisional Secretariat- Maharagama, Land Use Policy Planning Department and the Land Resources Division of the Ministry of Mahaweli Development and Environment. Total financial assistance and the consultation is provided by the Ministry of Mahaweli Development and Environment. This project completed with the end of 2017 by fulfilling the aim of top-up the practical knowledge of school children regarding the Soil Conservation.



Construction of Land Use model for the prevention of land Degradation at Mahara prison premises

The responsibility of the Land Resources Division of the Ministry of Mahaweli Development & Environment is providing leadership & contribution for the sustainable Land Management in Sri Lanka. It is a basic need for conducting programmes for establishing Soil Conservation models for land degradation prevention. To full fill that aim, Land Resources Division had allocated the funds to implement this programme under the annual Action Plan in year 2017.

Heavy usage of chemicals for the agricultural Lands mainly affects for lowering the soil fertility, reduction of crop cover and harvest, formation of salty condition in soil, increasing soil erosion and agricultural lands highly become marginal lands. Because of this land degradation directly affected to the national economy & reducing the agricultural productivity. Public awareness is most important factor for minimizing the land degradation, soil conservation in the formation of sustainable land use models in the selected degraded lands, introducing the biological and mechanical methods, increasing the productivity of agricultural crops and the direction of the civil society for the usage of competitive lands.

Mahara prison premises in Gampaha Divisional Secretariat was selected as a site to implement one of this projects and prisoners were actively involved to carry out this soil conservation activities inside the prison. This programme will give a good opportunity to generate jobs for women prisoners and live as meaningful citizens when they left from the prison.



Awareness programme for school children related to the subject of environment – Soba Danuma

Organizing the awareness programmes for school children related to the subject of environment is one of the main responsibilities of the Land Resources Division of the Ministry of Mahaweli Development and Environment.

Accordingly, Environment Education is one of the most effective strategies for increasing the environment knowledge of the public, developing skills for solving environmental problems and maintaining and improving the quality of life and the environment. Therefore, environment education has to be modified in a sustainable manner and promoted it globally to create sustainable societies. Ministry of Mahaweli Development and Environment has already taken some steps to conduct awareness programme for especially school children and teachers and include the environment education to introduce new curriculum for school education in year 2016 as well.

It is important to aware the general public regarding the natural disasters and how it can be prevent. According to that school children and teachers were selected as the best target group to forward this message to the society. Hence, awareness creation workshop on environment related subjects was conducted by the Ministry of Mahaweli Development and Environment on 16th October 2017 at the BMICH with parallel to the Sri Lanka NEXT Programme. This workshop was included the three lectures under the topics of importance of establishment of urban green canopies, land degradation and importance of soil conservation and importance of preservation of Ozone Layer and Air Resources Management. Five hundred school children, teachers, resource persons and the officers of the Ministry of Mahaweli Development and Environment were participated to this event.



Mineral Symposium – 2017

Challenges and the future of the Mineral Field

To reviewing the challenges and the future of the minerals in Sri Lanka, Mineral Symposium was conducted on 17 October 2017 at the Bandaranayke Memorial International Conference Hall (BMICH) with parallel to the Sri Lanka Next – Blue Green Era Programme. Further, this programme was highlighting the sustainable usage of mineral resources and top-up the National Economy by increasing the associated products of minerals and revising the social, economic and environment development process through the dialog forum of the people who are engage in the mineral sector.

Twenty two research papers were selected out of thirty eight research papers were received and all the research papers were selected under the editorial board with experts. Twelve research papers

were presented at this symposium out of the twenty two research papers and nine researches were displayed at the poster exhibition.

Three hundred participants were participated at the symposium representing from local and foreign mineral industrialists, universities and government organizations such as Geological Survey Mines Bureau, Gem and Jewelry Authority, Gem and Jewelry Research and Training Institute, etc.



Revising the National Environmental Action Plan

Land Resources Division was conducted the series of workshops to revise the mission 04 under the theme of Wise Use of Coastal Belt and Sea Around, mission 5 under the theme of Sustainable Land Management and the mission 7 under the theme of Water for All and Always according to the National Environment Action Plan.

Plant distribution programme under the National Tree Planting Programme

Land Resources Division of the Ministry of Mahaweli Development and Environment was organized a plant distribution programme with parallel to the National Tree planting Programme. This programme was based on housing schemes developed under the National Housing Development Authority. Two hundred and fifty household were participated at this programme representing in Rankethgama, Ahaspokunawatta, Kirimatiyawatta and Meetotahena housing schemes. This types of programs are frequently conducting by the Land Resources Division of the Ministry of Mahaweli Development and Environment to increasing the knowledge of general public on importance of soil conservation, increasing the forest cover and which will indirectly increase the economic status of the households as well.

National Steering Committee (NSC) and Technical Coordinating Committees for the implementation of revised and aligned National Action Programme (NAP) for combating Land Degradation in Sri Lanka

Combating Land Degradation in Sri Lanka has been prepared to implement from 2015-2024. In addition, progress of the drought, Land Degradation & Desertification (DLDD) has to be submitted to UNCCD secretariat each year under the Rio – Convention. In this regard the creation of an institutional mechanism is an essential requirement for proper coordination, monitoring & evaluation of the progress of the NAP Land Resource Division of the Ministry of Mahaweli Development and Environment Act as a focal point to the convention on United Nations combat Desertification (UNCCD), in order to facilitate the implementation of the NAP monitor and to report in progress this ministry has decided to appoint a Technical Coordinating Committee (TCC) National Steering Committee (NSC) has established for coordinating the implementation of the NAP at national level and this National Steering Committee will carryout under the guidance of the Secretary of the Ministry of Mahaweli Development and Environment.

Land Degradation Neutrality (LDN) Target Setting Programme

Land degradation which leads to increased poverty, reduced land productivity and loss of biodiversity is a serious issue in Sri Lanka. Therefore, reversing this trend is important to assure ecosystem services and food security of the nation. In order to achieve the above, the Land Resources Division of the Ministry of Mahaweli Development and Environment, the National Focal Point of the United Nations Convention on Combat Desertification (UNCCD) , requested the support of the UNCCD on 25th April 2016 to help develop Land Degradation Neutrality targets and measures.

Setting the LDN baseline is important in deciding the LDN targets. Verification of Global data provided by the Global Mechanism of the UNCCD with the locally available information has indicated that global data can be used to set the baseline on three LDN indicators, i.e. land cover, Soil Organic Carbon and Land Productivity Dynamics. The Universal Soil Loss Equation was used to identify the targets for soil conservation especially within the “Conservation Areas” of the country. The LDN targets were decided on the baseline line data and through a multi-stakeholder, inclusive process, the Sri Lanka has identified following specific LDN targets to be achieved by 2030;

- Halt the conversion of forests and wetlands to other land cover classes.
- Restore and improve degraded forest (80% in the dry zone and 20% in the wet zone).
- Increase forest cover from 29% to 32%.
- Reduce rate of soil degradation to improve land productivity and Soil Organic Carbon (SOC) stocks.
- Reduce soil erosion of lands cultivated with annual and plantation crops.



5. ENVIRONMENT POLLUTION CONTROL AND CHEMICAL MANAGEMENT DIVISION

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

In addition training and awareness programmes are conducted to different categories of the community to enhance good practices on chemical management and minimize environmental pollution in the country. Most of the activities are in line with the “Haritha Lanka Action Plan” under Mission 06- “Doing Away with Dumps”.

As the National focal point for International Conventions on Basel, Stockholm and Minamata. Respective National Steering Committees are conducted by the division in order to take collective decisions on trans-boundary movement of hazardous waste, Persistent Organic Pollutants (POPs), Mercury management and also the industrial chemicals addressed through Rotterdam Convention.

The following are the major achievements of the Environmental Pollution Control & Chemical Management Division

1. Completion of the Updating of 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 (POPs- PBDEs). The reports were completed and printed.
2. Under the “Environmentally Sound Management & Disposal of Polychlorinated Biphenyls (PCBs) Waste & PCB contaminated equipment” project preparation of awareness material (leaflets, caps and T shirts etc) and conducting awareness and training programmes on POPs & PCBs were completed.
3. Consultants were appointed under the above project for development of curriculum, preparation of Inventory on Polychlorinated Biphenyle, legal gap analysis of PCBs, development of a web site on Persistent Organic Pollutants (POPs).
4. PCB web site was completed and launched. This web site serves as a information dissemination site for the general public as well as an information exchange facility for the stakeholders on PCB project and on other chemical management activities.
5. Legal gap analysis on POPs including PCB was completed and submitted for consideration for formulation of legislation.
6. Draft curriculum for universities, and other relevant courses on POPs and alike chemicals were developed and it is expected to incorporate them to the existing curriculum once it is finalized.
7. Technical Training Manuals on PCB was prepared for different categories of staff of the Ceylon Electricity Board.
8. Laboratory test kits were procured for testing of PCB in transformers and a training was conducted by a foreign consultant for relevant staff of the Ceylon Electricity Board including laboratory technicians.
9. PCB inventory of welding transformers is almost completed at national level and transformers belonging to CEB is in progress.
10. Two days Toolkit training programme for Minamata Initial Assessment (MIA) project team was conducted by UNIDO and BRI experts.



Toolkit training workshop for project team was conducted by UNIDO and BRI experts.

11. Under the project “Initial Assessment of Mercury under Minamata Convention” conducted island wide survey on Mercury use in Education, Health and Industrial sectors and draft inventories prepared based on the survey data, where Steering Committee on MIA monitored the progress of the activities.
12. Conducted an awareness programme for 500 persons including school children (Environmental Brigades) and Environment Officers of CEA on safe use of Mercury , phasing out mercury, safe storage & safe disposal of mercury.
13. Conducted National Steering Committees on Basel, Rotterdam, Stockholm and Minamata conventions.
14. Institutional Gap analysis report on Mercury usage, storage and disposal was completed and submitted to United Nations Industrial Development Organization.
15. Created awareness on “Electronic Waste management and its Health Impacts” and a policy was drafted.
16. Training programmes on “ Healthcare Waste Management” was conducted in the following hospitals.
 - (i) National Hospital of Sri Lanka – 02 programmes
 - (ii) Castle Street Hospital for Women – 01 programme
 - (iii) Sri Jayawardenapura hospitals- 01 programme
 - (iv) Institute of Mental Health – Angoda
 - (v) Laboratory Technicians of Ministry of Health
17. Organized programmes for waste inspection and introduction of environmental friendly bags for “ Mithuru Siripa Samaya”



18. The following activities were carried out to commemorate ‘ World Environment Day’.

- Awareness programmes were conducted on Hazardous and Solid waste management in schools and General Hospital in Kalutara and Uva Wellassa University Badulla to commemorate World Environment Day.
- An event was conducted for promoting organic farming and management of empty agrochemical containers in Welimada Divisional Secretariat area.
- Electronic waste collection programme was organized in Badulla district in order to commemorate World Environment Day 2017 in collaboration with Central Environmental Authority. 05 metric tons of e-waste were collected.
- Participated in the exhibition and walk organized by Sri Lanka Medical Association to commemorate **World Environment Day**, World No-Tobacco Day & World Asthma Day

19. Concept paper developed for the “Dhara TV” documentary program on Persistent Organic Pollutants.
20. Extended Producer /Consumer Responsibility concept was developed and discussions were held with relevant stakeholders and chamber of commerce, to initiate implementation.
21. Initiated obtaining mercury monitoring equipment from Asia Pacific Mercury Monitoring Network (APMMN) to be utilized by the University of Peradeniya for rain water monitoring purposes. The equipment will be received in early 2018.
22. Initiated updating “ National Policy on Solid Waste Management “ , 01 workshop and 02 committee meetings were held.
23. Initial workshop on preparation of “ National Chemical Management” was held.



Training on Hazardous Waste Management at
General Hospital – Kalutara



Discussion on preparation of inventories of
PCB containing transformers.



Curriculum Development Programme for Universities & NVQ on Chemicals Management with special emphasis to Persistent Organic Pollutants.



Handing over the organic fertilizers to farmers



Handing over bins for collection of empty agrochemical container



Alternatives for Polythene & Plastics



Launching of the PCB web site



Training Laboratory Technicians



E-Waste Collection Programme

6. FOREST RESOURCE DIVISION

“Wana Ropa” National Tree Planting Ceremony

Wana Ropa is a National Tree Planting Programme, which is implemented with the active participation of all sectors of public, private organisations and civil societies to achieve the target of reaching the 32% forest cover in Sri Lanka by 2030. Under this programme, month of October is named as the ‘Wana Ropa’ tree planting month in every year. This year, Wana Ropa National Ceremony was held in Delthota, Kandethanna Reservation, of Mahanuwara District in 11 October 2017 under the patronage of H.E. the President. In this event, 2000 forest plants have been planted by the Department of Forest in 2 ha of the reserve, and 1200 forest plants have been planted by the Mahaweli Authority, Hadabima Authority, and Land Use Policy Planning Department together in 2.5 ha of the same reserve. At the same time, around 269,085 of different types of plants have been planted with the active participation of governmental, non-governmental organisations and general public in island wide.



‘Wana Ropa’ National Tree Planting Ceremony –
Delthota Kandethanna Reservation,
Mahanuwara District

Providing fruit plants for the island-wide tree planting programmes

Rs. 6.708 million has been allocated to the Department of Agriculture to provide fruit plants for the tree planting programs held in several places of the country and under this programme, 53,305 fruit plants have been planted in island wide with the participation of District and Divisional Secretariats, Tri-Forces, Schools and other government organizations. This programme is monitored and coordinated by the Forest Resources Division of the Ministry.

Programme of Urban Green Canopy Development

This programme is implemented in three components.

1. Preparation of the Hand Book with scientific and technical information

Even if the national interest is to increase the forest cover of the country upto 32% of the land area, it is important to identify other promotional programmes for tree planting to face the environmental challenges due to the limitation of land area, urbanization, and development targets. Therefore the objective of this hand book is to encourage tree planting in available limited land area of urban people and to provide all relevant information.

Important factors to be considered in tree planting, selection of suitable plants for the relevant sites, plants with special importance and places where the planting materials can be bought, are included in this book. 1000 copies have been printed as the first print in 2017.

2. Three training programmes of Nursery Management

Three training programmes were conducted with the technical support of Department of Agriculture, Department of Forest, and Mahaweli Authority. Trainees selected from green villages. Kalawawa (Madirigiriya/Siyambalangamuwa), Gannoruwa (Walapane), Bindunuwawa (Badulla).

Under the programme of Poverty Eradication, 120 villagers have been given a nursery management training conducted by the Department of Forest Conservation.

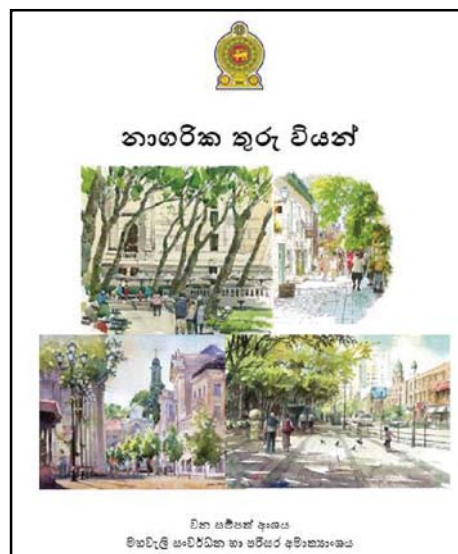
3. Four Awareness training of Urban Green Canopy Concept

Four awareness training of Urban Green Canopy concept for the government officials and for urban people have been conducted in Hanbanthota, Kurunagala, Colombo, and Anuradhapura districts.

Request for implementation of this project have been received already, from the North Western, and North Central Provincial Councils and from some government organizations.



Leaflet



Hand book

Tree planting programmes with other institutions

84 programmes (Ministry of Health and Indigenous Medicine, Ministry of Education, Department of Railway, Housing Authority) have been conducted under this programme. In 11 hospitals, and 4 nursing schools, 790 plants (forest and fruit plants) have been planted. A circular has been issued by the Ministry of Education to encourage schools in developing fruit gardens, on request of this

Ministry and expected to assist selected schools in developing fruit gardens especially with under-utilized fruits.

5,505 forest plants have been given to the Department of Indigenous Medicine for conservation and protection of medicinal gardens. 361 forest plants and 1336 fruit plants have been planted in quarters and stations of Railway Department. Tree planting programmes in 35 new housing schemes of Housing Development Authority have been conducted.

School awareness programme to commemorate International Forest Day

Three tree planting programmes and one school awareness training programme to commemorate the International Forest Day -21st March have been held.-

➤ Rajanganaya Yaya 15 Vidyalaya – Anuradapura District, 2017 March 07th

170 students in 7-11 grades and teachers participated at this programme . Two ‘Na’ plants have been planted in the school premises. 50 Mango plants, which were produced in the Nirawiya Farm of the Mahaweli Authority have been given for planting in the school garden by the provision of this division.



Students are involving in promotional activities of environment sensitivity.

➤ Pannipitiya Dharmapala Vidyalaya, November 17th 2017 –Colombo District

400 students of grade 7-11 and teachers participated in this programme. 70 wooden name boards have been provided to ‘name’ the planted trees by the provision of this division. 10 Araliya plants, 132 medicinal plants, are planted in the school premises to restore the ‘Dampal Uyana’ the ancient garden of the school under this programme.



➤ **School awareness creation and tree planting programme at Wevita Maithree Maha Vidyalaya in Kalutara District**

Around 350 students from 8-10 grades and school teachers participated at the event. 27 trees, mainly fruit trees were planted at the school premises. For proper disposal of waste, 20 waste bins were provided to the school.

With a view to achieving the objective of increasing the forest cover qualitatively and quantitatively in the country by planting of trees through a multi-faceted subject-oriented approach, the main objective of this program was to generate positive attitudes among school children on

conservation of forests, tree planting, and provision of new knowledge on biodiversity conservation, and waste management in school premises and homes.

Acquisition of land for forest conservation

Acquisition of land for forest conservation is carried out under 3 zones.

- I. Acquisition of land for conservation at Knuckles mountain range
- II. Acquisition of land for conservation of Sinharaja Forest
- III. Acquisition of land for other forest plantations

Under acquisition of lands for forest conservation, there were around 600 land files and 500 files that were not updated. Therefore, around 320 files and database was updated through Divisional Secretariat Offices related to Knuckles and Sinharaja. 22 recommendations were issued under Article 4 for land acquisition. Examinations were held regarding protests at Pannila, Trincowatta, Kolonna and Kotapola Divisional Secretariat offices and mangrove sites at Beruwala. Acquisition of 91 lands, and acquisition of 09 lands under the Article 50 was completed.

Coordination of public complaints

Field observations were done and observations given for public complaints regarding forest lands and mini hydro projects in Kaluthara, Mulathiv and Rathnapura districts. This division has been involved in the activities related to Environment Impact Assessment under Forest Department and Central Environment Authority. Around 100 public complaints have been coordinated. (Ex. Marichchaattu land issue, Wattamadu land issue, etc)



Mediation at court orders, court cases, environment sensitive issues

Tree felling in government and private lands

Advisory letter on Tree Felling No. 03/02/02/TF dated 2017.03.31 was issued under the guidance of Hon. Minister of Mahaweli Development and Environment in order to regularize tree felling procedure. Therefore, tree felling requests to this division were dealt accordingly, and around 250 requests have been handled in the year 2017.

Laws/Regulations enacted in the year 2017.

Laws/Regulations	Description
“Wanaropa” programme - 2017 Environment Circular 01/2017	Provision of advice on objectives, strategies, methodology and coordination on conducting tree planting programmes under the “Wanaropa” national tree planting programme and the main function.
Tree felling in government lands File No. 03/02/02/TF	<p>After obtaining all necessary approvals relevant for tree felling from law enforcing agencies, approval should be sought from this Ministry only for instances where; area of land exceed 01 hectare which involve felling of more than 300 trees in government land under;</p> <ol style="list-style-type: none"> 1. Lands governed under the Forest Ordinance 2. Lands governed under the Fauna and Flora Protection Ordinance 3. Protected areas declared under National Environment Act 4. Lands under Mahawali Authority 5. Lands under Land Commissioner General 6. Lands under Land Reclamation Commission 7. Lands under Vihara Dewalagam Act 8. Lands under plantation corporations and plantation companies

7. ENVIRONMENT PLANNING AND ECONOMIC DIVISION

Environment Planning and Economic division has established in 2016 with combination of Sustainable Environment & the Sustainable development division. Nine main programmes and 02 main projects are functioning under this division.

Main Programmes

- | | |
|--|-----------------------|
| 01. Green Village | 02. Green Procurement |
| 03. Green Reporting | 04. Green Accounting |
| 05. Cleaner Production | 06. Haritha Lanka |
| 07. Sustainable Development Goals | 08. Environment Lanes |
| 09. Post Graduate Diploma /MSc. Degree programme on Environment planning | |

Projects:

01. SWITCH-Asia Sustainable Consumption and Production National Policy Support Component for Sri Lanka.
02. Enhancing Biodiversity Conservation and Sustenance of Ecosystem services in Environmentally Sensitive Areas

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.

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

01. Participatory Rural Appraisal trainings were conducted in three districts (Badulla, Kaluthara, Kegalle) for the government Officials at district secretariat office
02. Participatory Rural Appraisal Programmes were conducted in for districts to develop the Village Development Plans (Jaffna, Kegalle, Polonnaruwa, Mathale) under supervision of MoMDE
03. Tree planting programme was conducted in Siyambalangamuwa village
04. Four Plant nursery trainings were held in Kala wewa , Bandarawela, Gannoruwa for the Green village farmers.

Participatory Rural Appraisal trainings



Badulla District



Kaluthara District



Kegalle District

Establishment of Green Accounting Mechanism in Sri Lanka

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) in to the UN sponsored System of Economic Accounting. (UN-SEEA)

Following activities were done under the Green Accounting Mechanism

01. A National workshop on “Green Accounting” was held.
02. A discussion on Green Accounting with expert committee was held on 23.08.2017
03. A discussion regarding Green Accounting was held with officials of Census & Statistics department on 22.11.2017.



National workshop on “Green Accounting”

Formulation of Public Green Procurement Policy and Guidelines

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

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 implement by a government which could encourage the economy and society towards environmentally consumption and production patterns, being an example and delivering key policy objectives using its procurement opportunity by including environment criteria in to the procurement process. In long terms it could create a green economy converting the supply chain in to green.

The approval of the Cabinet of Ministers obtained in 2012 (අමැ/12/1081/527/020) to formulate the Green Procurement Policy and Guidelines by taking action by Ministry of Finance and Ministry of Mahaweli Development. 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.

Following activities were done under the Green Procurement Mechanism

01. Comments were forwarded to the National Procurement Commission for the 2nd draft of the National Procurement Guidelines.(file: National Green procurement Policy)

Popularization of Environment Lanes

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 of 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 are done under this programme in Year 2017

01. An Environment lane was established in “Wanathawilluwa” in Puttlam district.
02. An Environment lane was established in “Digana” in Kandy district.

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 thereby depletion of natural resources, pollution and production cost. This in turn will facilitate industrial and service sectors to be competitive in the international market.

Accordingly, the National Policy and Strategy for Cleaner Production was developed in collaboration with all relevant stakeholders including the National Cleaner Production Centre in year 2005. The National Policy on Cleaner Production aims at achieving sustainable development, enhanced environmental quality, improved eco-efficiency, improved living standards and poverty alleviation. Later on, The National Policy and Strategy on Cleaner Production for Health Sector was developed in 2007 and National Policy and strategy on Cleaner Production for Tourism Sector

and National Policy and strategy on Cleaner Production for Fisheries Sector were developed in year 2008 and policy and strategy on the Agriculture sector was developed in Year 2010.

Following activities were carried out under the promotion of resource efficiency Cleaner Production Concept

01. Held a meeting with CEO of the National Cleaner Production Center and senior officials of the MoMD&E. (file; steering committee on cleaner production)
02. A discussion was had with Addl. Secretary, Ministry of Plantation Industries on the Draft Policy on National Cleaner Production Policy and Strategy for Plantation Sector.
03. A workshop was conducted with the Ministry of Plantation Industries to upgrade the Draft Policy on National Cleaner Production Policy and Strategy for Plantation Sector and the National Cleaner Production Action Plan for Plantation Sector. (file: National Cleaner Production Policy and Strategy for Plantation Sector)

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.

01. The capacity building programme was held on 28th March 2017 for the registered companies under Tier 2 level.
02. Paper advertisements were published in “Daily News” and “Dinamina” Newspapers to invite new companies to register under NGRS in Sri Lanka and obtaining NGRS reports from the companies who were already registered under this system.
03. 05 NGRS reports were submitted by the companies. The evaluation committee was established and evaluated the reports. EB Creasy and Company was awarded by HE Mithreepala Sirisena, president democratic, socialist republic of Sri Lanka at the Sri Lanka NEXT event for the Best reporter under tier 3.

Harihartha Lanka Programme :

According to the discussion, which was held on 12th December 2017, the strategies and activities of the green industries were updated.

Activities related to sustainable Development Goals:

Activities conducted by the Ministry and Institutes under the Ministry related to the SDGs were recorded and compiled. Time report submitted to the subcommittee at parliament.

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

The project “Enhancing Biodiversity Conservation and Sustenance of Ecosystems services in Environmentally sensitive areas (ESAs)” is funded by GEF, implemented by the Ministry of Mahaweli Development & Environment (MoMDE) & supported by UNDP. The project would contribute to safeguarding globally significant Biodiversity on production lands of high interest for

conservation. Project activities will provide a vehicle for safeguarding globally significant biodiversity on multiple-use lands of high conservation values.

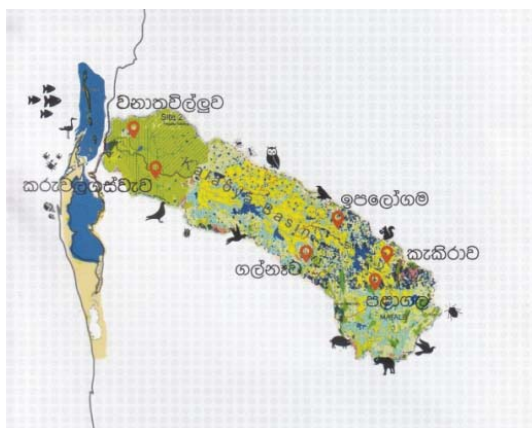
The national policy, strategy and national scale up plan for ESAs and national institutional capacity to foster inter-sectorial partnerships to be developed to support ESA identification, management and monitoring. The project proposes to use land use planning and management frame work as the key entry point to optimize land management in ESAs to ensure conservation of biodiversity and other natural resources while allowing the ESAs for sustainable economic activities under proper management. This guideline is expected to build capacity of the national and divisional level planning teams and provide overall guidance to undertake the integrated, cross-sectorial participatory planning exercise to develop a spatial land use management plan for each site of the Kala Oya Project area.

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.



Project Sites

Following activities are done under the project in Year 2017

01. Prepared a sustainable tourism plan for Manewakanda reservation
02. Completed a survey at “Bar Reef Sanctuary”, identified core area and the management plan development.
03. Promotion of Ecological Farming – ongoing with 420 farmer families
04. Developed ESA Communication Strategy, and prepared Teachers guide on ESA.
05. Completed Biodiversity Baseline Survey
06. Completed review of National Wild Elephant Conservation & Management Policy
07. Maps of land use plans in kalawewa basin including with Biodiversity indicators were prepared.
08. Completed survey to identify critical biodiversity habitats outside protected areas in ESA Site 1, Prepared and validated 04 management plans

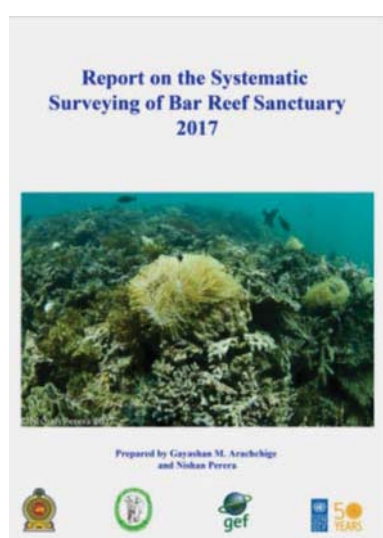
09. “Habarawatta” Cascade System was Rehabilitation of (Kanupichchiyagama wewa, Wetakoluwegama wewa, Pahala Habarawatta wewa, Ihala habarawatta wewa)



Display Boards



Biodiversity Baseline Survey



Current situation Of the Coral reef of Kalpitiya



review of National Wild Elephant Conservation & Management Policy

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 MoMDE, 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.

The overall objective of this project is to support the Sri Lankan Government in selecting, adapting and implementing suitable economic and regulatory policy instruments to promote sustainable consumption and production, thereby enhancing the long-term sustainability of consumption and production patterns.

Following activities are done under the project in Year 2017

01. National SCP Education Plan including a SCP Resource Pack for the use of lectures of University and Tertiary education system
02. Twelve (12) awareness/ training programmes on SCP were conducted for 604 participants of key organizations, such as MoMDE , Sri Lanka Institute for Development Administration (SLIDA), Institute of Engineers Sri Lanka (IESL) and University of Kelaniya during the 5th semester.
03. An officer from MoMDE commenced postgraduate studies (MSc in SCP Policy) at Lund University, Sweden.
04. Four (04) state sector officials underwent a 3 day training in Bangkok in May 2017 on Measuring and reporting of SWITCH- Asia Project's Result and Blending Mechanisms of Financial Instruments.



Awareness workshop and training

Post Graduate Diploma /MSc. Degree programme on Environment planning:

This postgraduate Degree programme offers a range of modules including Environmental planning techniques, planning theory and strategic intervention, eco sensitive planning, infrastructure planning, governance, planning and Environment law, Environment Economics, Environmental Management systems, project financing & management, advanced GIS & RS for environmental planners, environmental assessment (EIA/SEA), project study, water resources planning and management, planning for climate change, risk & uncertainty.

Following activities were done under this programme in Year 2017

01. Actions to be taken for the promotion of this Diploma/MSc programme were done with Town Country Planning department, university of Moratuwa.
 02. The approval of university grant commission for this programme has obtained on December 2017. Inauguration of this programme is to be held on 2018.
- A workshop was conducted in collaboration with the University of Sri Jayawardenapura on Green Development Approaches.

8. INVESTMENT PROMOTION DIVISION

AN ADDRESSING CLIMATE CHANGE IMPACT ON MARGINALIZED AGRICULTURAL COMMUNITIES LIVING IN THE MAHAWELI RIVER BASIN OF SRI LANKA

Funding Agency : Adaptation Fund
Amount of Financing Requested : Rs. Mn 1193 (US \$ Mn 7.9)
Project Period : 2015 – 2019
Financial Progress of Project : Rs. Mn. 472.5 (40%)
Target Area : Madirigiriya , Lankapura , Walapane Divisional Secretariats

- There are 26 Grama Niladharee Divisions and 69 Farmer Organizations, under Madirigiriya, Lankapura Divisional Secretariats
- There are 103 Grama Niladharee Divisions and 117 Farmer Organizations, Walapane, Munwaththa, Nilandahinna, Theripaha, Rupaha Agrarian Services Divisions

Madirigiriya, Lankapura Divisional Secretariats

- Rehabilitation of 28 Minor Tanks/anicut/Irrigations canals and 23 Agri Roads (Dept of Agrarians services/ Divisional Secretariat Office, Mahaweli Construction Bureau)



Pathok Wewa (Polonnaruwa)



Diulankadawala Agri Road (Polonnaruwa)

- Other Programmes conducted in Madirigiriya, Lankapura Divisional Secretariats
Distribution of Rain Water Harvesting Tanks(5000L) – 330
Constructed 40 cultivation wells
Inland fisheries Programme – 430,000 fingerlings release for 10 tanks
- Agro forestry Programme – Trained and promote perineal crops for selected Farmers

Walapane Divisional Secretariat

- Rehabilitation of 05 Minor Tanks, 27 anicuts/Irrigations canals and 16 Agri Roads (Dept of Agrarians services/ Divisional Secretariat Office, Mahaweli Construction Bureau)



Kiriwanamadiththa Wewa (Walapane)



Rehabilitation of anicuts/Irrigations canals

Other Programmes conducted in Walapane

Introduced optional Income sources

- Distributed 500 Bee boxes
- Distributed Dairy Cattle Farm/ Instruments



Distributed Dairy Cattle Farm/ Instruments

- Tree planting programmes conducted in micro catchment reservation and conducting micro catchment conservations, stabilization of slopes, using ditches to control soil erosion
- Agro forestry Programme
- Planned and Introduced crop varieties needed for home gardens under all farmer organizations and 25 model home gardens
- Constructed 05 soil conservation models (Department of Export Agriculture, Department of Agriculture, Provincial Agriculture Department)
- Distributed 7500 Agri Tools (Rs. Mn. 40) for sustainable agriculture
- Training conducted on Export Agriculture (Department of Export Agriculture, Department of Agriculture, Provincial Agriculture Department)
- Training for 540 farmer families on crop varieties and harvest, perennial crops, intermediate crop models with Institute of Post-Harvest Technology and researches and conduct small agri product markets
- Cash for work Programmes, Poverty Alleviation Programme



Cash for work Programmes, Poverty Alleviation Programme

- Self-employment programme (Walapane DS) and introducing market Mushroom production (50 beneficiaries) - distribution of raw materials, organized training programmes
- Established early warning system – early warning system on landslides for communities in 24 grama niladharee divisions of Walapane DS (National Building and Research Organizations)
- Hazard Land Using Mapping in (District Secretariat Office, Land Use Department)
- Conducted research on household food consumption in projected area and prepared data base (Hector Kobbakaduwa Agrarian Research Institute)

9. ENVIRONMENT EDUCATION AND PROMOTION DIVISION

Commemoration of World Environment Day – 2017

It was Planned to Celebrate World Environment Day 2017 in Kalutara District, but due to unexpected bad weather condition (specially floods) in June, it was decided to celebrate it with compatible to the existing situation and had been celebrated more than thoughtful way. Accordingly being consider the National responsibility, His Excellency the President Mithreepala Sirisena and Deputy Minister of Ministry of Mahaweli Development and Environment Hon.Anuradha Jayaratne a shramadana programme and delivery of essential goods for the people affected in Kalutara District, was conducted for the World Environment Day.

“Soba Chalana Short Film” competition

Being object to build social dialogue to develop environment conservation concept among young film producers. “Soba Chalana” short film competition was organized in parallel to the World Environment Day. Creations of the producers were judged and selected by the expert panel. An award ceremony was held with parallel to the Sri Lanka NEXT “A Blue Green Era” programme by the Secretary, Ministry of Mahaweli Development and Environment with the participation of the Expert panel and the competitors at the BMICH Colombo on 17.10.2017. To build qualitative producers a dialogue was made among judge panel and the producers of the film at the award ceremony.

Coordination of Media on Environment issues

Environment issues telecast on seven television channels and publish in News papers are being conducted with the relevant agencies. Specially present environment issues to be understand and to find the solutions to mitigate is the main objective of the activity.

Organise Media Conference

Two press conferences were held in 2017 to deliver the various programmes organized by the Ministry, development projects carried and by the agencies under the Ministry and as well on the current environment issues.

Conducting Environment awareness programme

Island wide awareness programmes were conducted to enhance environment knowledge and among government officers, school children and General public.

By creating environment sensitive generation it is expected to conserve and to mitigate the environment issues. There were 10 programmes for nearly 3,109 school children and government officers conducted in 2017.

Promotion of Green jobs

The main objective of this programme is to drive small and medium entrepreneurs for green jobs. An awareness for younger generation and practical training on green jobs is conducted in the programme. Six programmes were conducted in Kegalle, Nuwara Eliya, Matale, Ampara and Matara and nearly 453 entrepreneurs were trained in 2017.

Publishing on “Soba” Environment publication and “Soba News Letter”

With the objective of solving present Global Environment issues to build Environment conservation knowledge and environment sensitive community “Soba” magazine published in every year. Accordingly one issue of “Soba” magazine was published with the theme of Green Building concept in 2017. Two issues of “Soba News Letter” was published including Ministerial current events and on periodically organized programmes. These publications was distributed among general public in island wide awareness programmes.

Project for Creation of Awareness for the Government Teachers on Environment Education Introduced under the New Syllabus (2017-2021)

The above project has been implement under the direct supervision and financial support of the Presidential Secretariat under the "Punarudaya" National Environment Conservation Programme with the aim off effect an attitudinal change in the school children by educating the teachers on theoretical and practical aspects of environment issues targeting the Government Teachers who are teaching the science subject from grade 6-11. Twelve workshops were held and trained 1,424 teachers in island wide in 2017.

10. POLICY PLANNING AND MONITORING DIVISION

In 2003 the Environment Policy had published and initiating to update with the current necessities in year 2017. According to this, the updated draft policy was documented at present by including specifically identified innovative areas with the identified gaps filling in prevailing Environment Policy. The imminent agenda to the preparation of Environment Policy concern with the awareness creation on other line ministries, government institutions, NGOs and general public.

At present the updating of National Environment Action Plan is initiated in accordance with the new Environment Policy. During this process there were several workshops have conducted to updating Missions on face to challenges create by climate change, protection of fauna, flora and ecosystems, wise use of seas and coastal area, liable land use, awareness and accuracy of selection.

Year 2017 there were 22 project proposals submitted to the National Planning Department for the approvals. The approvals granted to implement 6 proposals under consolidated funds and 4 proposals under foreign funds by the submitted projects.

Cabinet Papers submitted for the new 16 projects and granted approval for 11 projects only.

Even though the preparation of ministry Action Plan for the implementation of activities and projects under approved consolidated funds by National Budget and dispersed the funds to the relevant implementing institutions and divisions. According to this, inquire progress and reporting the progress from stakeholders for the activities and projects implemented by the funds from National Budget Department. Among than this coordination of institutions and divisions has been implemented relevant projects under Punarudaya programme funded by Presidential Secretariat and review the progress of it.

In spite of this identification of the data requirement by take place in several coordination meetings with all divisions of the ministry. Hence, by compiling data on green accounting and information required for sustainable development goals for the preparation of document is as an access data source. The data based on indicators of environment sector sustainable development goals were prepared by coordination of relevant institutions. When the data has not prepared for these indicators in Sri Lanka, at this instances to prepare a proxy indicators instead of these indicators. Further to this the fulfilment of activities targeted to environment sector facilitate by the participation of meetings on sustainable development goals.

11. INTERNATIONAL RELATION DIVISION

Facilitate the Government of Sri Lanka for signing bi-lateral and multi-lateral environmental agreements and assist to implement relevant provisions;

i) Proposed MoU on the cooperation in the field of environment between Sri Lanka and Viet Nam

A draft MoU had been submitted to the Embassy of Sri Lanka in Viet Nam by then Ministry of Environment in 2011 to obtain comments and observations from the Viet Nam counterpart. The embassy of Sri Lanka in Viet Nam pursued the views and suggestions of the Government of Sri Lanka to proceed and make necessary arrangements to sign this MoU during the state visit of Hon. Prime Minister of Sri Lanka in mid April 2017. As this Ministry is interested in pursuing this line of cooperation in the field of environment between Sri Lanka and Viet Nam, the Ministry reviewed, amended and submitted the proposed draft MoU with relevant agencies.

ii) State Visit of H.E. the President to Indonesia from March 06-09, 2017

A working document was prepared in consultation with relevant agencies which contained areas identified for mutual cooperation in the field of Environment between two countries. The items proposed, in the said document, for bilateral cooperation/MOU has significant importance in achieving sustainable development goals which comes under the purview of the Ministry of Mahaweli Development & Environment.

iii) Memorandum of Understanding (MoU) on Technical Cooperation between the Democratic Socialist Republic of Sri Lanka and the Republic of Colombia

A draft text was submitted by the Embassy of Colombia in New Delhi on the MOU on Technical Cooperation between the Democratic Socialist Republic of Sri Lanka and the Republic of Columbia. The draft text of the MOU relevant to the subject of Climate change was reviewed and sent necessary comments to the Ministry of Foreign Affairs.

On the initiative of this MoU under the area of Climate Change, several matters were considered, such as experience sharing, lessons learnt and good practices on national level

iv) Memorandum of Understanding on Scientific and Technical Cooperation between GeoScience Australia of the Government of Australia and Geological Survey and Mines Bureau of the Government of Sri Lanka

The MoU submitted by the GeoScience Australia has been discussed with all stakeholders and finalized the final draft and forward to Ministry of Foreign Affairs.

v) Memorandum of Understanding Between The Gem and Jewellery Research and Training Institute Sri Lanka and The Gem and Jewellery Institute of Thailand

The draft MoU has been forwarded to the Legal Office of the Ministry for comments.

vi) The 3rd Foreign Office Consultation (FOC) between Sri Lanka and Bangladesh in Dhaka, Bangladesh

The indicative list suggested for cooperation between Bangladesh and Sri Lanka on mineral resources was amended and discussions points were prepared for the FOC in consultation with relevant agencies.

Identify, facilitate and execute projects relevant to environmental conservation/protection in Sri Lanka

i) Global Environmental Facility (GEF) projects

The following two project, project information format (PIFs) are awaiting GEF VI assistance.

- a. Managing together: Integrating community-centered, ecosystem-based approaches into forestry and tourism sectors
- b. Promoting Sustainable Forest Management and Improving Livelihoods through Integrated Land Use Planning and Forest Landscape Restoration

Due to the shortfall of funds the GEF OFP Sri Lanka had to endorse only (ia) above out of the two proposals.

Following key points were considered while prioritizing the project proposals;

- accessibility of additional resources of Sustainable Forest Management(SFM)
- whether the proposal is technically cleared by the GEF.

Provide comments and observations for United Nations Ministerial level documents and other policy documents

- i. Re-submission of UNDP's Country program (2018-2022) for Government Clearance
- ii. United Nations Sustainable Development Framework (UNSDF) 2018-2022
- iii. Proposed WFP Country Strategic Plan 2018-2022

During the preparation of National Environmental Policy, relevant policy strategies were prepared for the chapter under international Relations.

Third Session on United Nations Environment Assembly (UNEA), Nairobi, Kenya 27th Nov to 6th Dec – 2017

- ***Open ended Committee of Permanent Representatives (OCPR) - from 29th Nov to 01st Dec 2017***
23 Resolutions were negotiated during OCPR. Sri Lankan delegation made pertinent interventions at negotiations considering local environmental concerns and context. It significant that two resolutions, Environment and Health as well as Marine Litter and Microplastics, were co-sponsored by GoSL that were adopted during the Assembly.
- ***The Executive Board Meeting of the Special Programme,***
Submitted a nomination for Executive Board of the special programme to strengthen institutional implementation of the Basel, Rotterdam, Stockholm, and Minamata Conventions by representing the Asia Pacific group. There were eight nominations were submitted from this regions namely India, Pakistan, Palestine, Iran, Thailand, Maldives, Vietnam, Bahrain.
- ***UN Environment Assemble held from 4 – 6 Dec 2017***

- a. Secretary delivered the Country Statement outlining environmental achievements and roadmap to achieving future commitments including 'Blue Green Enterprise Sri Lanka' Budget.
- **Clean Seas Campaign**
 - a. At a side event organized by UNEP, Sri Lanka joined the 'Clean Seas Campaign' alongside Chile, Oman and South Africa.

Facilitating Environment Conventions ,Protocols and Organizations

- Settled the Contribution payments for the year 2017 for Stockholm, Basel, United Nations Convention to Combat Desertification (UNCCD), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention on Biological Diversity (CBD) conventions, Kyoto Protocol, IUCN, host facility to SACEP and Annual Country Contribution Payments of SACEP&SACEP-SASP.

Finance progress in 2017

Annual Country Contribution Payments for Environment Conventions and International Agencies	Financial (Rs.)
Annual Country Contribution Payment for Kyoto Protocol	572,174.38
Annual Country Contribution Payment for Biological Diversity	745,625.10
Annual Country Contribution Payment for Biosafety Protocol	187,186.10
Annual Country Contribution Payment for SACEP-SASP	2,256,671.80
Annual Country Contribution Payment for SACEP	2,744,991.70
Host facility for SACEP	8,000,000.00

12. LEGAL DIVISION

Progress of Legal Division 2017			
No	Main Activity	Sub Activity	Physical Progress
1	Examination of appeals	1.1. Examination of appeals under the National Environmental Act	52
		1.2 Examination of appeals in the Mines and Minerals Act	61
		1.3. Examination of appeals in the National Gem and Jewellery Authority Act	34
		1.4. Examination of appeals in the Coast Conservation and Coastal Resources Management Act	21
2	Cases related to Ministry/ Support for human rights cases	—	34
3	Assist the Legal Draftsman / Attorney General's Department regarding the drafting of Acts / Gazettes	—	12
4	Formulation / Inspection of contracts relevant to the Ministry	—	51
5	Taking action regarding public complaints	—	49

13. ADMINISTRATION DIVISION

Administration Division of the Ministry of Mahaweli Development and Environment was carried out administrative activities of 306 total staff of the ministry. The approved cadre was 432 belong to the Sri Lanka Administrative Service, Sri Lanka Scientific Service, Sri Lanka Engineering Service, Sri Lanka Planning Service, Sri Lanka Accountant Service and Department Senior Level, Tertiary Level, Secondary Level, Primary Level Officers and Temporary Officers.

In addition to that 68 fleet of vehical was properly maintained with Rs. 3.08 million for Fuel, Rs. 6.30 million for repair and service expences and Rs. 783,620 for tires and tubes. The total maintained cost Rs. 12.31 million was met in 2017.

14. INVESTIGATION DIVISION

The actions taken regarding the public complaints received by the Investigation Division of the Ministry from 01 January 2017 to 31 December 2017.

institution	Number of complaints received	Number of reports assing to call	The number of respondents	Number investigated
Department of Forest Conservation	65	55	35	10
Department of Coast Conservation and Coastal Resource Management	10	10	10	-
Mahaweli Authority of Sri Lanka	01	-	-	01
Central Environmental Authority	86	82	63	04
National Gem & Jewellery Authority	40	34	30	06
Marine Environment Protection Authority	04	03	03	01
Geological Survey & Mines Bureau	98	94	87	04
State Timber Corporation	21	17	13	04
Gem & Jewellery Research & Training Institute	01	-	-	01
Complaints received by the Ministry	02	-	-	02

15. HUMAN RESOURCE DEVELOPMENT DIVISION

Human Resource Development Division was directed staff offices for local and foreign training programmes. 1108 officers were participated for local training programme in 2017.

Details are given below.

	Detail of the workshop	Number of local training workshop	Number of offices
01	Outbound training (Drivers, Staff Assistant, Management assistants, Development officers, Research assistants, Program assistants / Staff officers)	05	168
02	Induction training (KKS / Management Assistants, Development Officers, Research Assistant, Program Assistant / Assistant Director)	11	145
03	Subject related workshop	13	795
Total		29	1108



PART IV

Financial Analysis and Summary of Accounts 2017

Financial Analysis and Summary of Accounts 2017

Ministry of Mahaweli Development and 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	65,089,000	50,458,874	78	50,410,500	48,349,910	96
Project 02						
Ministry Administration	287,068,000	268,071,775	93	139,700,000	77,197,043	55
Programme 02						
Project 03						
Environment Protection				2,638,980,145	1,009,269,598	38
Project 04						
Public Institutions	3,365,686,000	3,350,009,620	100	1,801,284,000	1,435,683,620	80
Project 05						
Mahaweli Development				46,183,300,000	36,616,799,248	79
Total	3,717,843,000	3,668,540,269	99	50,813,674,645	39,187,299,419	77

Recurrent Expenditure -2017

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	65,089,000	50,458,874	78
		Personal Emoluments	30,895,000	26,252,435	85
1001		Salaries and Wages	16,200,000	14,526,825	90
1002		Overtime and Holiday Payments	2,785,000	2,596,840	93
1003		Other Allowance	11,910,000	9,128,770	77
		Travelling Expenditure	4,710,000	2,991,249	64
1101		Domestic	1,210,000	735,472	61
1102		Foreign	3,500,000	2,255,777	64
		Supplies	9,520,000	7,281,920	76
1201		Stationery and Office Requisites	2,515,000	1,423,139	57
1202		Fuel	7,000,000	5,858,791	84
1203		Diets and Uniforms	5,000		0

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
		Maintenance Expenditure	10,040,000	6,012,340	60
1301		Vehicles	8,865,000	5,687,527	64
1302		Plant and Machinery	1,000,000	324,813	32
1303		Building and Structures	175,000		0
		Service	9,924,000	7,920,927	80
1402		Postal and Communication	4,355,000	2,353,046	54
1403		Electricity & Water	3,900,000	3,899,177	100
1404		Rent and Local Taxes	325,000	325,000	100
1409		Other	1,344,000	1,343,703	100

Capital Expenditure- 2017

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)	%
		Capital Expenditure	50,410,500	48,349,910	96
		Rehabilitation and Improvement of Capital Assets	5,410,500	4,200,393	78
2001	11	Building & Structures	500,000		0
2002	11	Plant, Machinery	538,500	109,287	20
2003	11	Vehicles	4,372,000	4,091,105	94
		Acquisition of Capital Assets	45,000,000	44,149,517	98
2101	11	Vehicles	43,000,000	43,000,000	100
2102	11	Furniture	1,000,000	224,567	22
2103	11	Plant, Machinery	1,000,000	924,950	92

Recurrent Expenditure- 2017

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	287,068,000	268,071,775	93
		Personal Emoluments	182,112,000	173,695,877	95
1001		Salaries and Wages	105,000,000	102,385,298	98
1002		Overtime and Holiday Payments	5,912,000	5,652,766	96
1003		Other Allowance	71,200,000	65,657,812	92
		Travelling Expenditure	4,200,000	3,885,994	93
1101		Domestic	1,200,000	928,828	77
1102		Foreign	3,000,000	2,957,165	99
		Supplies	16,250,000	15,818,099	97

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
1201		Stationery and Office Requisites	6,000,000	5,633,165	94
1202		Fuel	10,000,000	9,937,493	99
1203		Diets and Uniforms	250,000	247,439	99
		Maintenance Expenditure	12,400,000	11,807,391	95
1301		Vehicles	10,000,000	9,990,623	100
1302		Plant and Machinery	2,200,000	1,812,177	82
1303		Building and Structures	200,000	4,590	2
		Service	45,880,000	45,786,624	100
1402		Postal and Communication	8,350,000	8,321,937	100
1403		Electricity & Water	12,700,000	12,699,988	100
1404		Rent and Local Taxes	12,360,000	12,352,125	100
1405		Other	12,470,000	12,412,572	100
		Transfers	26,226,000	17,077,789	65
1505		Subscriptions and Contributions Fee	22,240,000	14,506,649	65
1506		Property Loan Interest to Public Servants	3,986,000	2,571,139	65
1701					

Capital Expenditure - 2017**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)	%
		1. Formulation, Review & Gap Analysis of Environmental Policies			
2507	11	Investments	2,000,000	1,974,399.00	99
		2. Adaptation & Mitigation of Climate Change Impacts			
2507	11	Investments	2,000,000	1,831,506	92
		3. Commemoration of Major Environment Events			
2502	11	Investments	5,000,000	2,353,935	47
		4. Education & Awareness Creation on Environment			
2502	11	Investments	3,100,000	2,972,568	96
		5. Environmental Protection & Conservation			
2507	11	Investments	15,000,000	12,857,127	86
		6. School Environmental Pioneer Programme(HarithaNiyamu)			
2502	11	Investments	20,000,000	19,451,176	97
		7. Implementation of the Montreal			

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
		Protocol (GOSL/UNDP)			
2502	13	Investments	20,490,000	20,000,000	98
2502	17	Investments			
		9. National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants			
2507	13	Investments	1,926,800	1,677,250	87
		13. Effective Management of Invasive Alien Species (GOSL/UNDP)			
2507	13	Staff Training	16,000,000	15,012,896	94
		18. Pilisar Programme			
2506	11	Investments	290,000,000	223,560,000	77
		58. Mainstreaming biodiversity Conservation and Sustainable use for Improved Human Nutrition & Wellbeing			
2507	13	Investments	28,100,000	27,876,850	99
		60. Mainstreaming Agrobiodiversity Conservation and use in Sri Lankan agroecosystem for Livelihood and adaptation to Climate Change			
2507	13	Investments	29,000,000	26,636,796	92
		63. Strengthening of the laboratory of the CEA			
2506	11	Investments	10,000,000	9,025,797	90
		69. Construction of Solid Waste Disposal Facility -Anuradapura, Hikkaduwa, Udunuwara&Panadura (GOSL/Korea)			
2506	12	Investments	1,257,000,000	63,199,007	5
2506	17	Investments	64,410,000	62,478,000	97
		74. Mechanism for Reducing Emission from Deforestation and Degradation(GOSL/UNDP			
2202	13	Investments	17,847,825	17,847,825	100
		97. Addressing Climate Change Impacts on Marginalized Agricultural Communities at Mahaweli River Basin of Sri Lanka (GOSL/WFP)			
2202	13	Investments	463,747,520	150,971,292	33
		101. Monitoring Of the Water Quality of Major Water Bodies (GOSL/JAPAN			
2507	13	Investments	26,500,000	26,500,000	100
2507	17	Investments	5,000,000	4,000,000	80
		104. Sustainable Management of Biodiversity & Natural Resources			

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2507	11	Investments	10,000,000	9,511,921	95
		105.Popularization of Environment lanes/ParisaraMawatha			
2202	11	Investments	5,000,000	15,430	0
		106. Enhancing Biodiversity and Sustenance of Ecosystem Seervices in Environmentaly Sensitive Areas (GEF)			
2202	13	Investments	69,600,000	59,526,081	86
		107. YEOSU Project Building Capacity to Manage Marine Debris in Sri Lanka			
2507	13	Investments	1,000,000	641,970	64
		108. Project on Environmentally Sound Management and Disposal of Polychlorinated Biphenyls (PCBs) Wastes and PCB Contaminated Equipment in Sri Lanka			
2202	13	Investments	21,600,000	18,867,199	87
		109 Minamata Conservation Initial Assessment in Sri Lanka (UNIDO)			
2507	13	Research and Development	3,970,000	1,782,852	45
		110 Education, Awareness and Green Award Impemented by Central Environment Authority			
2507	11	Research and Development	17,150,000	13,892,248	81
		111. APFNet Collaborative International Training Workshop on Forestry &Livelihood Development			
2502	13	Research and Development	505,000	503,792	100
		112. Ecosystem Conservation and Management Project			
2506	12	Investments	200,000,000	199,738,826	100
2506	17	Investments	10,000,000	3,692,416	37
		113. Construction of Sanitary Land Fill for Waste Mangement for Gampaha District			
2506	11	Infrastructure Development	10,000,000		0
		114 Preparation of Sri Lnaka's Third Natioanl Communucation Report on Climate Change (UNDP)			
2507	13	Research and Development	12,088,000	9,925,430	82
		115 Improving Industrial Waste and Waste water management in order to prevent ground water pollution in Gampaha District			
2507	13	Investments	945,000	945,000	100
		Total	2,638,980,145	1,009,269,589	38

Capital Expenditure – 2017**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)	%
		1. Moragahakanda and Kaluganga Reservoir Project (GOSL/China, Kuwait & Saudi)	19,774,000,000	17,855,774,557	90
2506	11	Investments	8,400,000,000	7,606,996,761	91
	12	Investments	8,000,000,000	7,013,720,832	88
	14	Investments	1,485,000,000	1,349,793,322	91
	17	Investments	1,889,000,000	1,885,263,640	100
		3. Mahaweli Consolidation Project (System B Rehabilitation)			
2506	11	Infrastructure Development	500,000,000	433,000,000	87
		4. Uma Oya Diversion Project (GOSL-Iran)			
2506	11	Infrastructure Development	13,600,000,000	12,272,312,983	90
		5. Rehabilitation of Major and Medium Irrigation Schemes Including Emergency Infrastructure Rehabilitation Works			
2506	11	Infrastructure Development	273,500,000	180,670,000	66
		6. Redeemaliyadda Integrated Development Project			
2506	11	Infrastructure Development	110,000,000	79,900,000	73
		7. Welioya Integrated Development Project			
2506	11	Infrastructure Development	400,000,000	316,420,000	79
		8. System B Maduru Oya RB Development			
2506	11	Infrastructure Development	150,000,000	109,000,000	73
		9. Feasibility Studies			
2506	11	Procurement Preparedness	50,000,000	18,043,156	36
		10. Implementing a mechanism to protect river bank of Mahaweli - Gatambe			
2506	11	Infrastructure Development	16,500,000	15,500,000	94
		11. Water Resources Development Investment Programme (GOSL/ADB)- Upper Elehera Canal, Moragahakanda, Kaluganga Transfer canal, Minipeancicut raising & LB Rehabilitation, North Western Province Canal	4,851,000,000	1,942,608,774	40
2506	12	Infrastructure Development	4,065,000,000	1,506,217,563	37

Object Code	Finance Code	Description of Items	Revised Provision (Rs)	Expenditure (Rs)	%
2506	17	Infrastructure Development	786,000,000	436,391,210	56
		12.Kalinganuwara-Angamadilla Minneriya Pumping Complex	2,165,000,000		0
2506	12	Infrastructure Development	1,975,000,000		0
2506	17	Infrastructure Development	190,000,000		0
		13.Additional Financing for Damsafety and Water Resources Planning Project(GOSL/W.B)	3,920,000,000	3,092,480,955	79
2506	12	Infrastructure Development	3,880,000,000	3,058,480,965	79
2506	17	Infrastructure Development	40,000,000	33,999,990	85
		14. Rambakan Oya Intergrated Development Project			
2506	11	Infrastructure Development	115,000,000	92,680,000	81
		15. Kivul Oya Reservoir Project			
2506	11	Infrastructure Development	25,000,000	16,130,000	65
		16. Agriculture and Livestock Programme Implemented by Sri Lanka Mahaweli Authority			
2506	11	Infrastructure Development	220,000,000	179,548,000	82
		18. Strengthening the Resiliennce of Smallholder farmers in the Dry Zone to Climate variability and extreme events through an intergrated approach to Water Management (GCF/UNDP)			
2202	13	Development Assistance	13,300,180	12,790,810	96

Capital Expenditure -2017**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)	%
		Central Environmental Authority			
2201	11	Public Institutions	57,850,000	52,130,000	90
		Marine Environment Protection Authority			
2201	11	Public Institutions	108,034,00	94,917,620	88
		Gem & Jewellery Research & Training Institute			
2201	11	Public Institutions	60,000,000	34,906,000	58
		Mahaweli Authority of Sri Lanka			
2201	11	Public Institutions	1,575,400,000	1,253,730,000	80
		Total	1,801,284,000	1,435,683,620	80

Recurrent Expenditure – 2017**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)	%
		Central Environmental Authority			
1503	11	Public Institution	562,642,000	562,642,000	100
		Marine Environment Protection Authority			
1503	11	Public Institution	108,034,000	94,917,620	88
		Gem & Jewellery Research & Training Institute			
1503	11	Public Institution	65,000,000	62,440,000	96
		Mahaweli Authority of Sri Lanka			
1503	11	Public Institution	2,630,010,000	2,630,010,000	100
		Total	3,365,686,000	3,350,009,620	100

PART V

Cabinet Memoranda

Cabinet Memoranda of Ministry of Mahaweli Development & Environment

#	Cabinet Paper No.	Head
1	17/0008/704/002	Creating Awareness on Environment Education of the Teachers in accordance with the New Syllabus introduced.
2	17/0071/704/002	Making relief to house owners who were affected by the Uma oya Multipurpose Development Project.
3	17/0166/704/003	Implementation of the Bibile Sugar Development Project.
4	17/0348/704/004	Expediting the additional compensation to be paid to the land owners affected by the Moragahakanda - Kaluganga Development Project
5	17/0366/704/005	Implementation of National Biosafety Framework Project Conforming to the Cartagena Protocol on Biosafety.
6	17/0414/704/006	Establishment of Floating Solar Power Energy Plants in the Mahaweli Reservoirs.
7	17/0414/704/007	Land for Agricultural Purposes - Sivemek Agro (Pvt) Ltd
8	17/0486/704/008/TBR	Awarding the Contract for Rehabilitation of Stage 3 of Minipe Left Bank Canal under the Mahaweli Water Security Investment Programme.
9	17/0530/704/009	Supplying of stone, sand, earth and gravel required for development activities from the area under the management of Institutions of Ministry of Mahaweli Development and Environment.
10	17/0575/704/010	To provide a risk allowance for the staff of the Central Environmental Authority.
11	17/0638/704/012	Strengthen the Management Mechanism for National Environmental Development and Conservation.
12	17/0629/704/011	Mining of Quartz Deposits in Kotikambokka Forest of Wellawaya impacted due to the construction of the Alikota Ara Reservoir.
13	17/0775/704/704/013	Implementation of Resettlement Plan for the Mahaweli Water Safety Investment Programme.
14	17/0776/704/014	Extension of compulsory retirement age limit up to 61 years for engineers serving in statutory bodies and corporations under the Ministry of Mahaweli Development and Environment.
15	17/1104/704/017	Measures taken to limit the usage of (Hydrofluorocarbons - HFC) for the protection of the Ozone Layer.
16	17/1103/704/016	Ratification of the Minamata Convention on Mercury.
17	17/1102/704/015	Sri Lanka Mahaweli Authority - Annual Report 2014
18	17/1211/704/018	Establishment of national mechanism for Greenhouse gas reduction in Sri Lanka.
19	17/1212/704/019	Central Engineering Consultancy Bureau (CECB) - Annual Report 2014
20	17/1280/704/020	Implementation of the National Adaptation Plan for the adverse Impacts of Climate Change.
21	17/1281/704/021	Marine Environment Protection Authority - Annual Report 2015.
22	17/1298/704/009/- I	Supplying of stone, sand, earth and gravel required for development activities from the area under the management of Institutions of Ministry of Mahaweli Development and Environment.

#	Cabinet Paper No.	Head
23	17/1476/704/023	Implementation of the measures to removal of Ozone Depletion hydro chlorofluorocarbon (HSFC) in Sri Lanka.
24	17/1477/704/024	Compensation for affected land owners due to acquire the lands to Moragahakanda Development Projects from the land obtained under the Wemedilla reservoir scheme.
25	17/1405/704/022	Proper Management of the use of Polythene to minimize environmental issues caused by Polythene.
26	17/2836/704/052	Implementation of Fire Prevention Programme for the control of Forest Fires in Sri Lanka
27	17/2832/704/051/TBR	Awarding the Contract of Heightening of Minipe Anicut including water control and measurement facilities for left bank and right bank canal under the Mahaweli water Security Investment Programme
28	17/2810/704/050/TBR	Obtaining Services of the Consultants for the Contract Managemnt, Construction Supervision, Commissioning and Operation of the construction of proposed Tunnels (additional work items) under the Mahaweli Water Security Investment Programm
29	17/3033/704/025-III	Providing under Emergency Disaster Conditions to Householders adversely affected by the water leaks of the Main Tunnel of the Uma Oya Multi Purpose Development Project
30	17/3006/704/054	Non provision of irrigation facilities from upper canal of Kaudulla reservoir for Maha season 2017/2018 since water collection has to be completed for structural investigations of the Moragahakanda Reservoir
31	17/2214/704/17-I	Ratification of the Kigali Amendment to the Montreal Protocol on Phase down of Hydrofluorocarbons (HFC) by Sri Lanka
32	17/2493/704/042-TBR	Extending the consultancy service contract for evaluation and approving of designs and supervisions of constructions to be done under the contract agreement for the construction of headwork Kalu Ganga Reservoir, with Central Engineering Consultancy Bureau (CECB)
33	17/2132/704/036	Recruitment of field officers including professionals on contract basis for efficient functioning of the Geological Survey and Mines Bureau
34	17/2126/704/034	Provision of Lands for Agricultural Purposes CIC Seeds (Pvt.) Limited Company
35	17/2127/704/035	Uma Oya Multi Purpose Development Project – Extension of service of Eng. G. A. Dayarathne- Deputy Project Director
36	17/2090/704/033	Procurement of vehicles for Mahaweli Water Security Investment Programme (NWSIP) and additional financing of Dam Safety water Resources Planning Project. (DSWRPP-AF) for field inspections and maintenance work
37	17/1939/704/022-I	Proper Management of the use of polythene and plastics to minimize environmental issues caused by polythene and plastics
38	17/1860/704/025-I	Providing Relief Under Emergency Disaster condition to householders adversely affected by the water leaks of the main tunnel of the Uma Oya Multi – purpose development Projects
39	17/1840/704/030	Implementation of the Southern Colombo Sand nourishment Project using sand engine methodology
40	17/1841/704/031	Longshore sediment transport (LST) study- East Coast Stage II and Southern and Western Coast Stage I and II
41	17/1829/704/029	Procurement of field vehicles for the Forest Department and Department of Wildlife Conservation

#	Cabinet Paper No.	Head
42	17/1780/704/028	Annual Report of the Geological Survey and Mines Bureau for the year 2014
43	17/1708/704/027	Display the ozone friendly tea logo on Sri Lanka cricket sports wear
44	17/1553/704/025	Report of the Cabinet subcommittee appointed in terms of the cabinet decision dated 2017-06-27 (item no. 78) to recommend expeditious remedial measures to resolve the issues arisen related to the Uma Oya Multi Purpose Development Project
45	17/1566/704/026	Annual Report of the Gem and Jewellery Research and Training Institute for the year 2014
46	17/2837/704/040-I	Constructions of building for the compost yard under the proposed consolidated solid waste management project – Gampaha District
47	17/1267/704/049	Extension of the period of time of the memorandum of understanding (MOU) between the Ministry of Mahaweli Development and Environment, Mahaweli Consultancy Bureau and Sinohydro Corporation Ltd. For the provision of consultancy Services for reviewing of designing and construction supervision pertaining to hard work to Moragakanda reservoir
48	17/2682/704/048	Implementation of the Sri Lanka Community Forestry Programme with the participation of the people to protect forest in the dry and intermediate zones
49	17/2327/704/025-II	Special disaster management plan associated with the affected areas of Uma Oya Multi Purpose Development Project
50	17/2326/704/039	Appointment of a programme director to implement the Mahaweli Water Security Investment programme
51	17/2500/704/044	To establish an integrated methodology for the management of hazardous wastes and chemicals
52	17/2538/704/045	Conversion of the pine plantation in Sri Lanka into indigenous plant species
53	17/2409/704/040	Construction of buildings for the Compost Yard under the proposed Consolidated Solid Waste Management Project, Gampaha District
54	17/2537/704/038-I	Joint Proposals of the Ministry of Mahaweli Development and Environment and the Ministry of Sustainable Development and wild life for the declaration of Mahaweli system “E” as special area of the Mahaweli Authority of Sri Lanka
55	17/2539/704/046	Post of Chairman of the National Gem & Jewellery Authority
56	17/2622/704/047	Implementing activities Tranche 2 of the Mahaweli water security investment Programme under the loan agreement with Asian Development Bank

